

M-SPACE

d100 roleplaying in the far future



clarence redd

MSPACE is a d100-based rules system for science fiction roleplaying. Everything needed to play sci-fi games is included here. With this book, a pencil and some paper, you will be able to create imaginary universes and play characters from a variety of cultures and careers. They can pilot starships, meet strange alien lifeforms and visit fantastic worlds.

The game engine used for all this is Mythras Imperative. If you are familiar with any closely related d100 game, you will feel right at home.

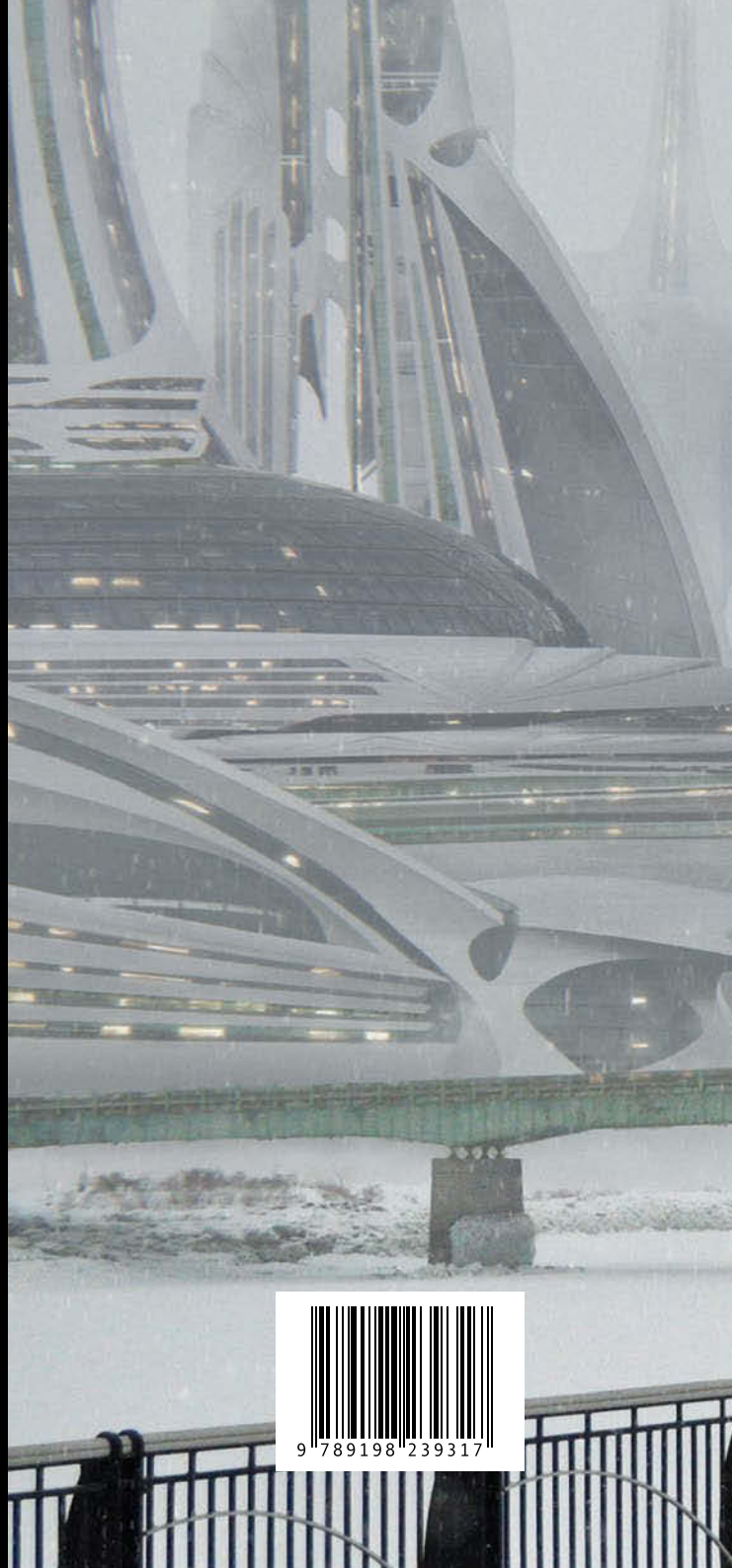
Mythras
GATEWAY



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M-SPACE 1.1

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ISBN: 978-91-982393-1-7

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Introduction

MSPACE is a d100-based rules system for science fiction roleplaying. Everything needed to play sci-fi games is included here; the book is a complete game in itself. With this book, a pencil and some paper, you are ready to tell amazing stories together with a few friends. You will be able to create imaginary universes and play characters from a variety of cultures and careers. They can pilot starships, meet strange alien life forms and visit beautiful (or terrifying) worlds.

The game engine used for all this is *Mythras Imperative*, created by The Design Mechanism. If you are familiar with any closely related d100 game, like Runequest, Call of Cthulhu or Open-Quest, you will probably feel right at home. They have a common heritage and share a lot of basic concepts and rules.

M-SPACE is mostly intended for heroic and mythic sci-fi games, but can be used for many other styles too with a few tweaks. You can emulate everything from contemporary near-realistic settings, to 1940s pulp-inspired heroes.



This book is a modular toolkit for sci-fi. Use whichever parts you need and leave the rest – the game system will not break down because of this. We have also taken great care to write the rules to help you create your own universe; no ready-made setting is holding back your creativity. Just like roleplaying games were meant to be when invented in the 1970s.

The stories are all yours here, and you can explore them in any way you want. You can create unique alien species, complex cultures and worlds. Let a planet orbit a binary star and put the star on a map. Chart ancient courses for traders and explorers; find out who's a friend and who's an enemy. And you have already started to play.

I write science fiction, and science fiction isn't about the future. I don't know any more about the future than you do, and very likely less. Ursula K Le Guin

Clarence Redd, August 2016 | www.frostbytebooks.com

A Note on Roleplaying Games

M-SPACE assumes that the reader is familiar with the concept of how roleplaying games work, the differences between the players, the Games Master (or referee), the use of characters and the use of polyhedral dice. If this is your first roleplaying game, we recommend that you take a look at:

<http://www.rpgamer.com/savingthrow/primer.html>

It offers an excellent overview of the different participants in roleplaying games and how a typical roleplaying game session is structured.

Characters

Every player in M-SPACE controls a character. A character is the player's alter-ego, and is usually very different, physically and mentally, to the player. M-SPACE characters can be everything from starship pilots and bounty hunters, to journalists and librarians! All depending on what type of scenarios you want to play.

The basic character is defined by a series of different elements that describe the character's capabilities. These elements are:

- » **Characteristics:** such as Strength or Charisma
- » **Attributes:** things like Hit Points or Movement
- » **Skills:** expertise in fundamental abilities

Most of these elements are described in terms of numbers, and some are dependent on or calculated by others. What each element means, and how they are determined, is described in the following sections.

Characters are usually recorded on a character sheet, which is a handy way of organizing all the information about the character. It is recommended that you first design your character using scratch paper, and then transfer the information to a character sheet once you have gone through each step of the process. Use a pencil and have an eraser handy; certain numbers such as skill values will change several times during the character creation process.

An empty character sheet is included at the end of the book and also as a free download from our website.

Character Creation Steps

1. Character Concept

Decide on the kind of character to play. Keep it simple for now. More will come.

2. Characteristics

If playing a human, 3d6 for STR, CON, DEX, POW and CHA. 2d6+6 for INT and SIZ. Allocate results to fit the concept.

Alternatively distribute 80 points amongst the characteristics. Minimum 3 (8 for INT and SIZ), maximum 18.

3. Calculate Attributes

Use the characteristics to determine Action Points, Damage Modifier, Experience Modifier, Healing Rate, Hit Points, Initiative, Luck Points, Movement.

4. Standard Skills

Calculate the base value of Standard Skills by adding together the appropriate characteristics.

5. Culture

Decide on a Cultural Background. Allocate 100 points amongst the listed Standard Skills, the chosen Professional Skills and the Combat Style (if any) for the chosen culture.

6. Career

Choose a Career from those available to the setting. Distribute 100 points amongst the career's listed Standard Skills and whatever Professional Skills were chosen.

7. Bonus Skill Points

Assign a final 150 points between any Standard skill or those Professional skills gained as part of Culture or Career.

8. Equipment

Determine Starting Equipment based on Culture and Career.

Rounding of Numbers and Results

On some occasions you will be required to divide numbers – typically the rating in a skill (such as for determining a critical success, which is $\frac{1}{10}$ th of the skill's value). Whenever a division result creates a fraction, always round up to the whole number. So, for instance, $\frac{1}{10}$ th of 64% is 6.4; this is rounded up to 7.

Character Concept

A good place to start is to have some idea of what sort of character you want to play; a hardened colonist for example, or a cunning thief. Your character concept does not need to be elaborate at this stage; simply an idea that will help guide certain choices such as profession. A few character ideas are listed in the sidebar to provoke your imagination.

Characteristics

Example Concepts

- » *Naive starship pilot*
- » *Backwater miner*
- » *Cosmopolitan psionic*
- » *Streetsmart smuggler*
- » *Adventurous scientist*
- » *Medical doctor on the run*
- » *Journalist standing up for the poor*
- » *Security agent betrayed by former employer*
- » *Mercenary without hope*
- » *Diplomat on a secret mission*

Everyone is defined by seven characteristics which tell you something about your character; how strong or fast he or she is; how clever or healthy. Characteristics are at the core of every M-SPACE character and form the basis for most of the other elements such as Attributes and Skills. The seven characteristics are:

- » **Strength (STR)**
- » **Constitution (CON)**
- » **Size (SIZ)**
- » **Dexterity (DEX)**
- » **Intelligence (INT)**
- » **Power (POW)**
- » **Charisma (CHA)**

Before calculating the characteristics, the following section explains what each represents.

Strength (STR)

STR represents physical strength: how much one can lift, how hard one can hit, and so on. STR is a component of the Damage Modifier (page 12). If a character is reduced to zero STR he lacks the ability to move or lift objects.

Constitution (CON)

CON is measure of health and hardiness. CON is a component in determining Hit Points (see page 14) and Healing Rate (see page 13). If CON falls to zero for any reason the character dies.

Size (SIZ)

SIZ measures mass, and helps indicate height and weight. SIZ is used to help figure Hit Points (see page 14), as larger, heavier creatures tend to have greater endurance against damage. SIZ can also be used to determine a character's Damage Modifier, since mass helps to increase the force of a blow.

Dexterity (DEX)

Agility, balance and reflexes are measured by DEX. It is an important aspect of Action Points (see page 12) and Initiative (see page 13). If a character is reduced to zero DEX they suffer functional paralysis.

Intelligence (INT)

INT is measurement of cognitive ability. Those with a lower INT score are not necessarily stupid, but they are likely to be constrained in how creatively they can employ their wits. INT is a factor in calculating Action Points and Initiative. If INT is reduced to zero the character becomes completely mindless.

Power (POW)

POW is a measurement of different things. It can be, for example, a measure of a character's soul, spirit, inner drive or capacity for psionics. POW governs a character's Power Points and Luck Points (see page 13). If a character's POW ever drops to zero they lose all independent will.

Charisma (CHA)

Charisma measures personality and is independent of physical appearance. CHA affects a character's Experience Modifier (page 12). If CHA ever falls to zero, the character can no longer socially interact with others, becoming so painfully shy or antisocial they are ignored or even driven away.

Calculating Characteristics

Each characteristic has a numerical value to determine how potent it is. Roll the indicated dice for STR, CON, SIZ, DEX, INT, POW and CHA taking each rolled score as it comes. Since the results of these rolls can be somewhat random, it is often better to decide on a character concept after the dice are rolled. Otherwise the final characteristics may preclude a preconceived role. Roll 3d6 for STR, CON, DEX, POW and CHA; then 2d6+6 for SIZ and INT. Other species may use different dice.

Your Games Master may want to calculate characteristics differently.

Alternate suggestions include:

Dice Roll, Assign: As per normal generation, except the player may exchange values between Characteristics with the same dice range.

Dice Pool: roll 19 six-sided dice and assign three rolls to each Characteristic, save SIZ and INT which only get two, but start with a base value of 6.

Points Build: players assign Characteristic scores from a pre-determined pool of 80 points. Characteristics cannot be lower than the minimum rolled value, nor higher than the maximum.

Games Masters are free to come up with their own methods or point values as desired.

Attributes

Each character also has a set of attributes. These are particular capabilities derived from the characteristics, or determined by them that are used to govern certain factors of game play. The attributes are:

- » **Action Points**
- » **Damage Modifier**
- » **Experience Modifier**
- » **Healing Rate**
- » **Hit Points**
- » **Initiative Bonus**
- » **Luck Points**
- » **Power Points**
- » **Movement Rate**

Damage Modifier

STR+SIZ	Modifier
5 or Less	-1d8
6-10	-1d6
11-15	-1d4
16-20	-1d2
21-25	+0
26-30	+1d2
31-35	+1d4
36-40	+1d6
41-45	+1d8
46-50	+1d10
51-60	+1d12
61-70	+2d6
71-80	+1d8+1d6
81-90	+2d8
91-100	+1d10+1d8
101-110	+2d10
111-120	+2d10+1d2

Each 10 points Continue Progression.

Action Points

How often a character can act in a combat round (page 54) is determined by Action Points. For simplicity, the M-SPACE rules grant all characters with 2 Action Points (the full Mythras rules can give characters a different number, depending on their DEX and INT).

Damage Modifier

The bonus amount of damage a character inflicts when physically striking or applying force. It is an extra die roll which is either added to, or subtracted from, the damage inflicted by a weapon or tool. If a negative damage modifier takes a weapon's damage to zero or below then no damage at all has been inflicted. Add together STR and SIZ and consult the Damage Modifier table in the sidebar.

Experience Modifier

Over the course of play characters improve their skills and capabilities. This is achieved through the use of Experience Rolls which are explained in more detail on page 38. A character's

CHA score may adjust the number of Experience Rolls the character has, reflecting the relationship he has with his peers and his reputation in his community.

Healing Rate

After receiving injuries, a character needs to recuperate. Healing Rate determines how quickly they naturally recover from wounds. Depending on the severity of the injury (page 36), the Healing Rate denotes how many Hit Points are recovered per day, week or month.

Hit Points

Hit Points represent how much injury an area of the body can withstand before it becomes useless, possibly resulting in incapacitation and ultimately the character's death. The body of every creature is divided into separate locations – humans for example have seven; the head, chest, abdomen, arms and legs – each location with its own hit points. To calculate the Hit Points of each location, add CON and SIZ together and cross-reference on the Hit Points table opposite.

It's also possible to run M-SPACE without hit locations; see Simplified Combat on page 75 for more details. For settings without much violence, this can be a good choice.

Initiative Bonus

The moment at which someone reacts in combat is governed by initiative. Initiative Bonus acts as a modifier to initiative rolls; the higher the bonus, the faster one responds in a combat situation, determining when you can act. Further factors – armor for example – modify it. Initiative Bonus is the average of the DEX and INT characteristics.

Luck Points

Luck Points represent that strange force differentiating adventuring heroes from everyday folk. Call it fate, karma or simple good fortune. Luck Points can be used to:

Experience Modifier

CHA	Exp. Modifier
6 or Less	-1
7-12	0
13-18	+1
Each 6 points	+1

Healing Rate

CON	Healing Rate
6 or Less	1
7-12	2
13-18	3
Each 6 points	+1

Luck Points

POW	Luck Points
6 or Less	1
7-12	2
13-18	3
Each 6 points	+1

- » Re-roll the dice, if they are unfavorable
- » Mitigate physical damage or other unfortunate circumstances
- » Gain an edge at a vital moment in combat

Exactly how they are used, and when, is described on page 36. Once a Luck Point is spent, the pool decreases; when one is out of Luck Points, no more are available – unless the Games Master makes an impromptu award – until the next game session when they replenish to their normal value.

Power Points

For those who can utilise such powers, a character's Power Points are equal to their POW. These points are used for psionics, the cost of which is dependent on the type of power used. When the psionic runs out of Power Points he has exhausted his ability to use any powers until they are replenished.

Movement Rate

Every creature has a Movement Rate – a number of meters that can be travelled during a specific period of time. Movement is not calculated from Characteristics but is a default value which differs from species to species. The base Movement Rate for humans is 6 meters.

Hit Points Per Location

CON+SIZ

	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	+5 pts
Leg	1	2	3	4	5	6	7	8	+1
Abdomen	2	3	4	5	6	7	8	9	+1
Chest	3	4	5	6	7	8	9	10	+1
Each Arm	1	1	2	3	4	5	6	7	+1
Head	1	2	3	4	5	6	7	8	+1

Skills

Skills fall into two classes. Everyone has Standard skills – things such as sneaking around or influencing others. Professional skills on the other hand, are those requiring specific training before they can be attempted – things such as tracking wild animals, piloting a spacecraft or understanding ancient languages. Characters are given three pools of points to spend on acquiring skills; the first pool for the Culture they grew up in, the second for the Career they adopt after childhood, and the last to further round out their skill set.

- » A novice character assigns 100 points to the Culture skill pool, 100 to the Career skill pool, and a further 150 points for rounding out.

Each Culture and Career has a defined range of standard and professional skills to which those skill points may be assigned.

Standard Skills

Standard skills cover a range of everyday activities and local knowledge which anyone can use without specialised training.

The basic score of each Standard skill is determined by the sum of two characteristics or a multiple of a single characteristic. The value represents the character's innate competence in a given area, before any points from the skill points pool are assigned. The score represents the percentage chance of success for a skill; so, an Athletics score of 25 is expressed as 25%. See next spread for descriptions of standard skills.

Professional Skills

Professional Skills represent more specialised forms of training and experience. They can only be picked up during Character Creation as part of a character's native culture or their career. Once play starts, new skills can be learned by seeking out teachers.

Standard Skills Basic Scores

Skill	Basic %
Athletics	STR+DEX
Boating	STR+CON
Brawn	STR+SIZ
Conceal	DEX+POW
Customs	INT x2 +40
Dance	DEX+CHA
Deceit	INT+CHA
Drive	DEX+POW
Endurance	CON x2
Evade	DEX x2
First Aid	INT+DEX
Influence	CHA x2
Insight	INT+POW
Locale	INT x2
Native Tongue	INT+CHA+40
Perception	INT+POW
Ride	DEX+POW
Sing	CHA+POW
Stealth	DEX+INT
Swim	STR+CON
Unarmed	STR+DEX
Willpower	POW x2
<i>Combat Style</i>	<i>STR+DEX</i>

Standard Skills

Athletics. STR+DEX. Athletics covers a range of physical activities, including climbing, jumping, throwing and running.

Boating. STR+CON. The Boating skill covers the operation of small floating craft on rivers, lakes and close inshore.

Brawn. STR+SIZ. Brawn is the efficient application of technique when using raw physical force. The skill covers lifting, breaking and contests of strength.

Conceal. DEX+POW. Conceal is the counterpoint to Stealth, being the concealment of large objects rather than the character themselves.

Customs. INTx2. Customs represents the character's knowledge of his own community; its social codes, rites, rituals, taboos and so on.

Dance. DEX+CHA. The Dance skill measures a character's ability to move rhythmically and accurately (to a reasonable degree) when called upon to do so. Just about every culture uses dance in some way – either as recreation or as part of important rituals.

Deceit. INT+CHA. Deceit covers all instances where a character attempts to mask the truth and offer a deceit of some kind; barefaced lying, misleading a guard or even bluffing (or cheating) during a card game. Deceit forms a counterpart to the Insight skill and can be

used to oppose Insight rolls when others are attempting to discern either truth or motive.

Drive. DEX+POW. Drive covers the control of wheeled or drawn vehicles. Drive rolls are needed when a character wants to do something out of the ordinary with a vehicle – traverse treacherous terrain, jump obstacles, chase another vehicle and so on.

Endurance. CONx2. Endurance is a character's capacity to endure physical stress, pain and fatigue. It is used in a number of ways, but most specifically to resist the possible effects of injuries, including harmful poisons and disease.

Evade. DEXx2. Evade is used to escape from observed, impending danger and can be used against ranged weapons (by diving for cover, for example), avoiding traps, changing the engagement distance in combat, and generally getting out of the way of a potential physical hazard.

First Aid. DEX+INT. First Aid measures a character's ability to treat minor injuries and stabilise more severe ones. First Aid may be applied only once per specific injury and heals 1d3 points of damage.

Influence. CHAx2. This is a measurement of a character's ability to persuade others, through personal charisma, into a desired way of behaving. It is used in a wide variety of situations; from changing someone's mind, through to bribing an official or guard.

Insight. INT+POW. Insight is the ability to read or intuitively define another's verbal and non-verbal behavior (such as body language or the manner of speech) to establish their motives and state of mind. Insight can be used to determine if someone is telling a lie.

Locale. INT x2. Locale measures a character's understanding of local flora, fauna, terrain and weather in the area where he has spent the majority of his life, usually within his community.

Native Tongue. INT+CHA. Native Tongue is the ability to speak one's own language, the one learned whilst growing up in one's home culture. It measures articulation, eloquence and the depth of the speaker's vocabulary.

Perception. INT+POW. Perception is used for both passive observation and focused detection; whether hunting for something specific, a general scan of an area or simple awareness of their surroundings.

Ride. DEX+POW. Ride covers the ability to control and remain mounted on those creatures that are trained to be ridden. The skill can be applied to a diverse range of beasts, everything from mules to elephants; even flying or swimming creatures or alien beasts.

Sing. POW+CHA. Carrying a tune is covered by Sing, anything from monotonous chants through to complex arias. Singing is an in-

herent part of most cultures, a prime source of entertainment and perhaps used in its rituals.

Stealth. DEX+INT. Hiding out of plain sight, or moving with minimal sound are covered by the Stealth skill.

Swim. STR+CON. Swim covers your ability to stay afloat, even if it is only a doggy paddle or treading water.

Unarmed. STR+DEX. Unarmed measures the ability to defend oneself without the aid of weapons.

Willpower. POW x2. Willpower is a measure of a character's ability to concentrate, channel his force of will in a particular direction, or harden his psyche to possible mental shock. It is also a measure of personal resolve.

Combat Style [*Specific Career or Cultural Style*]. STR+DEX. Each Combat Style is the skill to use the weapons expected of a career or culture in the setting. In addition they often assume a situational element, such as fighting as close order infantry or whilst mounted. Combat Styles can be very diverse, ranging from, for example, blaster hip shots all the way to starship gunnery.

Professional Skills

Acting. CHA x2. Acting governs the art of being able to impersonate and convey a completely different character, whether in a staged performance or in a social situation.

Acrobatics. STR+DEX. Acrobatics covers acts of balance, gymnastics, juggling and tumbling. The skill can be used in its own right as a way to impress an audience, but also to help mitigate damage from falls. Acrobatics can be substituted for Evade if the situation warrants it.

Art. POW+CHA. There are many specific art forms. Painting to Poetry; Literature to Sculpture. A character chooses an Art specialization when taking this skill. Subsequent Art forms are advanced in separately.

Astrogation. INT x2. Astrogation is equivalent to Navigation, save that it enables starship pilots to plot a course at stellar and interstellar distances.

Bureaucracy. INT x2. Understanding administrative procedures, records and unspoken conventions are covered by the Bureaucracy skill. It is used to interact with officials or discover pertinent civic information.

Commerce. INT+CHA. Commerce is used to evaluate the worth of goods and commodities and to trade them for the best possible price. It is also used to understand the intri-

cacies of business transactions in addition to securing a profit.

Comms. INT x2. This skill grants the ability to use communications equipment to detect, conceal or block comms traffic. It also grants a chance of cracking encrypted messages.

Computers. INT x2. Computers reflects the character's ability to solve complex problems or extract complex information, using computer systems – be it through programming code, detailed use of a particular piece of software, hacking, and even diagnosing/repairing software and hardware problems. General use of computers does not usually require a roll.

Courtesy. INT+CHA. This skill covers understanding how to act appropriately in a social or formal situation: modes of address, rituals and conventions of behavior and so forth. It includes everything from who to bow to and when, to how low; from when to use a particular title to when it is appropriate to act informally.

Craft. DEX+INT. Each Craft is a specialised form and there are as many crafts as there are professions for them. Like Art, Craft is used to create the subject item. How long it takes depends entirely on the nature of the product: weaving a rug takes longer than throwing a pot, for instance, but time is not

necessarily the most important factor: it is the skill of the crafter, the quality of the resources and attention to detail.

Culture. INT x2. Culture is the more specific form of the Standard Skill of Customs, relating instead to societies foreign to the character's own. Each Culture skill must be given a particular nation or society to which it applies. Mechanically it works in the same way as the Customs skill.

Demolitions. INT+POW. This skill permits a character to safely handle and utilise explosive materials.

Disguise. INT+CHA. Effecting a convincing disguise, using appropriate materials (costumes, cosmetics, wigs or hairpieces), is covered by the Disguise skill. Creating the disguise requires time and attention to detail, as well as access to the right materials to make it convincing.

Electronics. DEX+INT. This skill allows the user to tinker with, bypass or repair electronic devices. It has many applications, most often to temporarily patch up damaged equipment or replace broken circuits with spares. Designing and building new electronic devices is not covered by this skill and instead requires the Engineering skill.

Engineering. INT x2. The design and building of large-scale structures, from houses to bridges, gates to siege engines, is in the

remit of the Engineering skill. Rolls are necessary when planning large scale projects to ensure correct construction, but are also made when an engineer wants to assess a structure's integrity for whatever reason (state of repair or weak spots, for example).

Forgery. DEX+INT. The Forgery skill permits the creation or falsification of official documentation.

Gambling. INT+POW. The Gambling skill measures a character's competence in games of chance and especially where money is staked on the outcome. It is used to assess the odds of success or failure or spot when someone is cheating.

Knowledge. INT x2. Knowledge covers a specific body of knowledge which must be chosen when the skill is first learned. Astrology, History, Mythology, Strategy and Tactics: these are all typical examples of Knowledge skills. They mean the character understands its fundamentals, how it can be applied to immediate challenges and problems, and can use the Knowledge to recall useful information.

Language (*Specific Language*). INT+CHA. This skill covers the speaking and comprehension of a language other than the character's own. The skill is treated as a static representation of overall fluency. 1-25% a few basic words, 26-50% simple sentenc-

Continued...

Professional Skills (*continued*)

es, 51-75% fluent for general conversation, 76+% able to converse eloquently. Its value is used by the Games Master to limit the level of spoken interaction when the players converse with personalities in the game.

Lockpicking. DEXx2. Lockpicking is the ability to open a mechanical locking system without the aid of a key or other device made specifically for the lock. It includes the techniques of levering open bolted or barred doors and windows without causing damage.

Mechanics. DEX+INT. Mechanics represents the knowledge and skill to assemble and disassemble mechanical devices. The skill of Mechanics generally involves the creation of delicate contraptions with small working parts, as opposed to Engineering, which deals with massive constructions. This can be anything from the servicing of droid actuators to fixing moisture vapourators. The skill cannot repair something completely destroyed, but could permit a brief jury-rigged fix if enough spare parts are available. This skill also includes the maintenance and repair of starships. The design and building of new mechanical devices is not covered by this skill, but requires the Engineering skill instead.

Medicine. INT+POW. Medicine is the in-depth knowledge of medical procedures, based on

cultural practices. In a primitive culture, for instance, healing will be based on the knowledge of herbs and natural cures. In a civilised culture, drugs and more advanced treatments are used. In all cultures healing includes the ability to set bones, suture wounds and so forth. To use on an alien species, all rolls are *Formidable*. Add points from the skill Science (Astrobiology) to reduce penalty.

Musicianship. DEX+CHA. Musicianship covers the playing of musical instruments; from a simple reed pipe to a complex stringed instrument such as a harp. Each iteration of Musicianship is applied to a group of similar instruments. A musician who can play a reed pipe can also play a flute, panpipes or a recorder because the fundamentals are the same.

Navigation. INT+POW. Whether using prominent landmarks, the stars or the varying taste of seawater, the ability to accurately direct travel is covered by the Navigation skill. Each Navigation skill covers a specific region or environment, such as Open Seas or Underground for example. Rolls should be made during unusual journeys or when in completely unfamiliar territory.

Oratory. POW+CHA. Oratory is the art of delivering a speech to large group of people with the aim of conveying or swaying a point

of view. It is a skill frequently used by politicians to drive home a policy, but is also used by commanders to inspire troops and impose discipline on the battlefield. Wherever mass persuasion is needed, Oratory, rather than Influence, is used.

Pilot. DEX+INT. The Pilot skill permits the control of a specified class (such as gliders, starships, jet engines, and so on) of flying vehicles. It also covers the maintenance and upkeep of a ship: assessing when repairs are needed, where it is safe to land, the dangers of violent weather, and so forth.

Politics. INT+CHA. Characters possessing the Politics skill understand how to navigate and negotiate the corridors of government at local, national and interstellar levels.

Research. INT+POW. Research uses various resources (such as a library, newspaper archive, computer network, and so on), to discover desired pieces of information.

Science. INT x2. There are dozens of scientific disciplines and the Science skill, which can be taken multiple times, is always associated with a discipline: Science (Astronomy) or Science (Astrobiology), for example.

Seamanship. INT+CON. This skill is used in exactly the same way as Boating but is instead applied to large waterborne vessels powered by sails or mechanical means.

Seduction. INT+CHA. Seduction is the romantic or sexual persuasion of another person, a skill very different to Influence. It uses explicit signals – verbal and non-verbal – to elicit a sexually positive response. It also takes a significant amount of time: successful Seduction may take hours, days or weeks to achieve depending on the morals of the target, who always has the opportunity to resist a Seduction attempt with Willpower.

Sensors. INT+POW. This skill allows the accurate use and analysis of sensor devices from chemical sniffers up to a starship's long range scanners.

Sleight. DEX+CHA. Sleight covers attempts to palm or conceal small objects and includes attempts to pick pockets, cut purses or cause a visual distraction. Naturally it is an essential thieves' skill.

Streetwise. POW+CHA. Streetwise represents knowledge of places and social contacts within a settlement. It covers everything from identifying potentially dangerous neighborhoods, to finding local services – legal or illegal. How long a Streetwise attempt takes depends on what is sought. Finding a good bar will take less time than locating a fence for stolen goods or a fake trading permit.

Survival. CON+POW. This skill covers surviving in a rural or wilderness environment

Continued...

Optional Skills

In many mythic sci-fi settings vacuum suits and the lack of gravity in space are completely ignored. For slightly more realistic tales, add the optional skills below. Note that they are not included on the character sheet.

Vacc Suit. DEX+INT. This is the knowledge on how to use a vacuum suit and how to do missions outside of a starship in space.

Zero G. DEX x2. With this skill the character has been trained in handling zero G. Use it when performing complex maneuvers, like fighting.

where the benefits of civilization are absent: foraging, building a fire, finding shelter or a safe place to sleep. When properly equipped rolls are usually unnecessary since the character may be carrying a tent, food supplies and so on. Only when separated from their equipment or when environmental conditions turn bad does it become essential to utilise this skill. A roll is usually made once per day in such conditions.

Teach. INT+CHA. Teach allows the user to pass on their knowledge and techniques in an easy to understand and constructive manner. Without this skill even the most capable of masters will suffer problems instructing others.

Track. INT+CON. The Track skill is used for tracking any form of game or quarry. It uses signs of passing to remain on the quarry's trail, including footprints, bruised leaves, scattered pollen, displaced rocks and so on; small, tell-tale signs that are invisible to the nonskilled. Track rolls need to be made periodically, especially if conditions change abruptly (a rain shower, for example, will disturb certain signs). How often depends on how cunning the quarry has been.



Select a Culture

Culture determines the kind of society in which the character was raised, and so prescribes certain outlooks and philosophies he or she might have. More practically, culture helps augment the values of the various skills that shape your character's overall capabilities.

There are three basic cultures: **Rural**, **Urban** and **Orbit**. Together with the name of a character's home world (and perhaps its Tech Level), you will get a pretty good overview of their background. Each cultural background lists a range of Standard skills appropriate to it and invites the player to pick up to three of the presented Professional skills: in this way players from the same cultural background can ensure that their adventurers are different in the areas they have developed.

Distribute the Culture skill points amongst the career's listed Standard skills and whichever Professional skills were selected, increasing each skill by 1% for every point spent on improving it. Games Masters may wish to apply a cap to how many skill points can be applied to any particular skill.

Rural

This culture covers all types of harvesting and herding habitats, including the small village centers often associated with them – regardless of tech level. It can be deep sea harvesting of algae, exotic bird herders or plain old tilling. You can also use this Culture package for characters growing up in the wilderness.

Standard skills: Athletics, Brawn, Drive, Endurance, First Aid, Locale, Perception and Ride. In addition the player may also choose a cultural Combat Style.

Professional Skills: Craft (any), Mechanics, Knowledge (any), Musicianship, Navigate, Survival, Track.

Creating Planets & Cultures

See the chapters on alien creation and world building to develop your own detailed planets and cultures, both human and alien.

High and Low Gravity

Some characters may come from a world with higher or lower gravity than standard. Use these guidelines:

Low gravity: STR & CON -2 each, DEX & POW +2 each. Make a Hard Endurance roll every day spent in normal or higher gravity. If failed, apply a Hard penalty to all physical skills.

High gravity: STR & CON +2 each, DEX & CHA -2 each. On normal and low gravity worlds, they will be seen as clumsy.

Urban

This culture is for characters growing up in cities. They feel at home on the streets and know how to handle themselves in various social situations. Cities can differ a lot from each other; some are rough and dirty, while others are laden with tradition and wealth.

Standard Skills: Conceal, Deceit, Drive, Influence, Insight, Locale, Willpower. In addition the player may also choose a cultural Combat Style.

Professional Skills: Art (any), Commerce, Craft (any), Courtesy, Language (any), Knowledge (any), Musicianship, Streetwise.

Orbit

This culture covers all types of space habitats: Asteroids, space stations, orbiting factories, etcetera. Some habitats are just scruffy rocks, while others are high tech wonders of light and greenery (for really big space stations, the Urban package might be a better choice).

Standard Skills: Conceal, Deceit, Influence, Insight, Locale, Willpower. In addition the player may also choose a cultural Combat Style.

Professional Skills: Astrogation, Electronics, Knowledge (any), Language (any), Mechanics, Pilot, Streetwise.

Select a Career

Every M-SPACE character starts the game having been trained in a career. The occupation he chooses may not necessarily be the one the character continues to follow as he begins his adventuring life, but it is the career he embarked on as part of the transition to adulthood and it further defines his skill development.

Each career presents a range of Standard skills appropriate to it and permits the player to pick up to three of the listed Professional skills. Distribute the Career Skill points amongst the

career's listed Standard skills and whichever Professional skills were selected, increasing each skill by 1% for every point spent on improving it. As with cultures a Games Master may apply a cap to how many skill points can be applied to any particular skill.

Bonus Skill Points

As a final step, a last pool of skill points are assigned to round out the character. These may be applied to any Standard skill or those Professional skills gained as part of Culture or Career. Once again a Games Master may apply a cap to how many skill points can be applied to any particular skill.

Careers

Agent

Standard Skills: Conceal, Deceit, Evade, Insight, Perception, Stealth; Combat Style (any)

Professional Skills: Culture (any), Disguise, Language (any), Pilot, Sleight, Streetwise, Survival, Track

Belter

Standard Skills: Athletics, Brawn, Endurance, Locale, Perception, Willpower

Professional Skills: Commerce, Craft (Mining), Demolitions, Engineering, Science (Geology), Mechanics, Navigation (Underground), Pilot, Survival

Bounty Hunter

Standard Skills: Athletics, Endurance, Evade, Insight, Perception, Stealth; Combat Style (any), Combat Style (Gunnery)

Professional Skills: Bureaucracy, Commerce, Culture (any), Pilot, Streetwise, Survival, Track

Alien Cultures

There are only a few ready-made aliens and no alien cultures in this book. We want you to use these rules to shape your own fictional universe. It's back to the roots of roleplaying games!

Future setting books will include detailed alien species, worlds and cultures though. In the meantime, check our website for free examples:

www.frostbytebooks.com

Colonist

Standard Skills: Athletics, Brawn, Drive, Endurance, Locale, Perception, Ride; Combat Style (any)

Professional Skills: Commerce, Craft (any), Knowledge (Agriculture), Mechanics, Navigation, Pilot, Survival, Track

Criminal

Standard Skills: Athletics, Brawn, Deceit, Evade, Insight, Perception, Stealth; Combat Style (any)

Professional Skills: Acting, Commerce, Electronics, Gambling, Lockpicking, Sleight, Streetwise

Detective

Standard Skills: Customs, Drive, Evade, Influence, Insight, Perception, Stealth; Combat Style (any)

Professional Skills: Bureaucracy, Culture (any), Disguise, Knowledge (any), Research, Sleight, Streetwise

Gambler

Standard Skills: Athletics, Endurance, Locale, Perception, Willpower

Professional Skills: Acting, Bureaucracy, Commerce, Courtesy, Gambling, Research, Sleight, Streetwise

Journalist

Standard Skills: Customs, Deceit, Influence, Insight, Locale, Native Tongue, Perception

Professional Skills: Bureaucracy, Culture (any), Language (any), Knowledge (any), Oratory, Politics, Research, Streetwise

Engineer

Standard Skills: Brawn, Culture (any), Drive, Endurance, Influence, Locale, Willpower

Professional Skills: Commerce, Computers, Craft (any), Engineering, Electronics, Gambling, Mechanics, Streetwise

Medic

Standard Skills: First Aid, Influence, Insight, Locale, Perception, Willpower

Professional Skills: Commerce, Craft (Physiological Speciality), Medicine, Language (any), Knowledge (Psychology), Knowledge (any), Research, Science (Astrobiology)

Mercenary

Standard Skills: Athletics, Brawn, Endurance, Evade, Unarmed; Combat Style (any), Combat Style (Gunnery)

Professional Skills: Craft (any), Engineering, Gambling, Knowledge (Military History), Knowledge (Strategy and Tactics), Oratory, Survival

Merchant

Standard Skills: Drive, Deceit, Insight, Influence, Locale

Professional Skills: Astrogation, Bureaucracy, Commerce, Courtesy, Culture (any), Language (any), Pilot, Streetwise

Official

Standard Skills: Customs, Deceit, Influence, Insight, Locale, Perception, Willpower

Professional Skills: Bureaucracy, Commerce, Courtesy, Language (any), Knowledge (any), Oratory, Politics

Starship Pilot

Standard Skills: Drive, Endurance, Evade, Locale, Perception, Willpower; Combat Style (Gunnery)

Professional Skills: Astrogation, Comms, Culture (any), Science (Astronomy), Mechanics, Pilot, Sensors, Streetwise

Diplomat

Standard Skills: Customs, Deceit, Influence, Insight, Locale, Native Tongue, Perception

Professional Skills: Bureaucracy, Courtesy, Culture (any), Language (any), Knowledge (any), Oratory, Politics

Priest

Standard Skills: Customs, Deceit, Influence, Insight, Locale, Native Tongue, Willpower

Professional Skills: Bureaucracy, Courtesy, Customs, Knowledge (any), Musicianship, Oratory, Politics, Research

Scholar

Standard Skills: Influence, Insight, Locale, Native Tongue, Perception, Willpower

Professional Skills: Culture (any), Language (any), Knowledge (Primary), Knowledge (Secondary), Oratory, Research, Teach

Scout

Standard Skills: Athletics, Drive, Endurance, First Aid, Perception, Stealth, Swim; Combat Style (any), Combat Style (Gunnery)

Professional Skills: Astrogation, Comms, Culture (any), Medicine, Language (any), Knowledge (any), Navigation, Pilot, Sensors, Survival, Track

Smuggler

Standard Skills: Conceal, Customs, Deceit, Drive, Influence, Insight, Locale; Combat Style (any), Combat Style (Gunnery)

Professional Skills: Astrogation, Bureaucracy, Commerce, Comms, Customs (any), Language (any), Navigation, Pilot, Sensors, Streetwise

Thief

Standard Skills: Athletics, Deceit, Evade, Insight, Perception, Stealth; Combat Style (any)

Professional Skills: Acting, Commerce, Disguise, Electronics, Lockpicking, Sleight, Streetwise

Object of Passion	Base Characteristics
A person or family	POW+CHA
An organization or group	POW+INT
A race or species	POW x2
A place	POW+INT
An object or substance	POW x2
A concept or ideal	POW+INT

Select Passions

Passions are used to assist players and Games Masters in deepening the nature of the character, introducing plot hooks based on a character's desire or prejudices, and helping the player to understand who his character is, what drives him, and so on.

A Passion can be for anything – a person, an organization, an ideal, even an object. Passions are typically described by a verb such as: Desire, Despise, Destroy, Espouse, Fear, Flee, Foreswear, Hate, Love, Loyalty to, Protect, Repudiate, Respect, Seek, Subvert, Torment or Uphold.

Passions are measured in the same way as skills; they are rated between 1 and 100 (or higher). A Passion can be improved in the same way as a skill, or it can be increased or decreased by the referee depending on circumstances.

- » Beginning characters may start with up to three Passions, each based on two Characteristics, with a bonus of +40 to the first, +30 to the second and +20 to the third – the player deciding the order of importance.

These can be tied to his culture, profession or personal foibles. For example, the character might take: Hate (Loperians), Distrust (Psionics), and Desire (Alcohol); or the character might choose Loyalty (Emperor), Destroy (Aliens) and Uphold (the Law) instead.

Using Passions

Passions are any deeply held commitment that has the capacity to influence events during play. Although they are viewed as standalone abilities (to call them skills is to do them a disservice), passions can be used thus:

- » To augment another skill, reflecting the depth of one's feeling and how it drives action. When used in this regard the Passion adds 1/5 of its value to a skill being used, as long as the augmentation is thematically and dramatically important.

- » As an ability in its own right to drive choices, desires and emotional actions and responses. When used in this way a standard roll is made against a Passion to determine how strongly the character thinks and feels about something. If a roll is a success then the character acts in-line with what the Passion would dictate. If the roll fails then the character can act freely without feeling constrained by the Passion's drives.
- » To oppose other Passions – even those held by the same character. This is typically used where two Passions would conflict. For instance a personal love might dictate a course of action that would be contrary to an oath or loyalty. Here use an opposed roll between the two Passions with the more successful determining how the character acts.
- » As a general measure of depth of commitment, belief and loyalty to a cause. The higher the Passion's value, the more committed the character is. Characters with similar Passions can compare and contrast their ratings to determine who exhibits the deeper commitment.
- » To resist some form of psychological manipulation or psionic domination. In certain cases where a character is being forced into performing an act contrary to his Passions, he may use substitute his Passion for the usual Willpower in the opposed roll.

Equipment

Now that the character is almost finished, he or she needs some gear. This can include weapons, armor, or other important paraphernalia used for a particular profession. In the course of adventure there are many chances to get more equipment, but each starting character has in his or her immediate possession the equipment listed in the sidebar. See the Technology chapter for more detailed descriptions of various gear.

Deepening and Waning

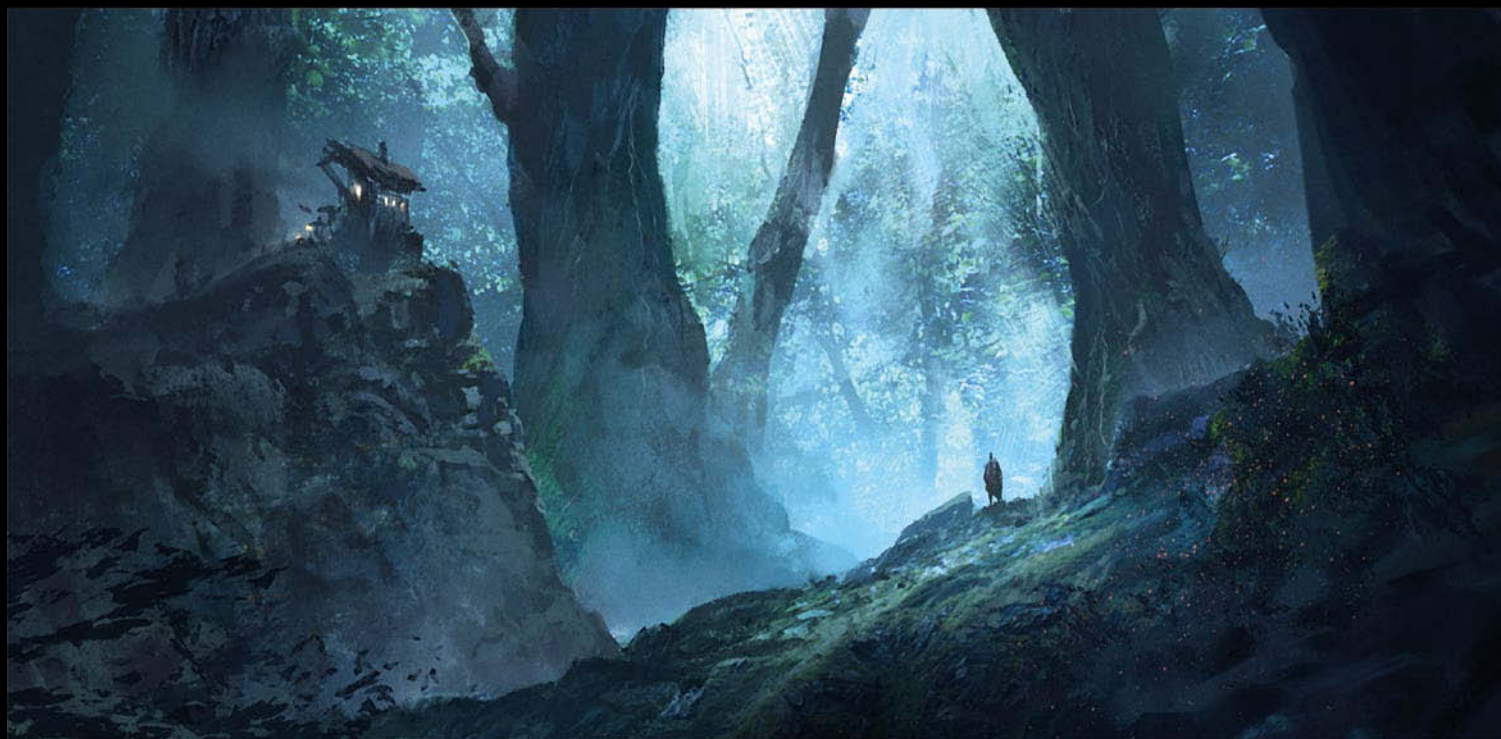
Passions can increase during a game independently of Experience Rolls, based on the strength of whatever occurred to trigger the increase. Also Passions can, and do, wane. A strongly held belief can be shaken by many things leading to that Passion being either reduced or, in more extreme circumstances, reversed completely. For instance, a character with 'Trust Chieftain' might, if his chieftain acts treacherously, either reduce his Passion or turn into 'Distrust Chieftain' at the same percentage. The Games Master needs to determine if a Passion reduces or reverses. If it reduces then it does so according to the strength of the source of the change. The Deepening and Waning table shows by how much the Passion changes.

Change	Score +/-
Weak	1d10
Moderate	1d10+5
Strong	1d10+10

Starting Equipment

- » *A set of clothing appropriate to the character's profession*
- » *A small amount of money; 2d6 x1000.*
- » *Any trade tools or transportable equipment suitable to the character's profession, if appropriate.*
- » *Any personal weapon for the character's Combat Style.*
- » *0*





Game System

Part of the fun and drama of M-SPACE comes in making a roll against a skill to see if success or failure is the outcome. It can be tempting to call for skill rolls for each and every challenge but there are some cases where rolls are not needed. However, when the action becomes dramatic or extraordinary, players and the Games Master should roll dice for the resolution. It is usually obvious when a skill roll is necessary, but if in doubt, consider the consequences of failure: are they crucial to the plot? Does the chance of failure heighten tension and make for an exciting possibility? Will a failure add fun to the game? If the answer is Yes to any of these, then have the character make a skill roll.

How Do I Succeed?

The most important question in a roleplaying game is “Do I succeed or do I fail?” Next is “How well did I succeed or fail?” M-SPACE provides an easy-to-understand system to measure these chances, using dice rolls to determine whether an action succeeds or fails. Some skills (especially combat skills) are inherently dramatic and dangerous, and are always rolled for.

Whenever a character is called upon to resolve some form of test, challenge or professional ability, 1d100 is rolled and the result compared with the skill’s value:

- » Equal to, or less than, the skill indicates a success. If the roll was equal or less than one tenth of the skill (rounded up) it is a critical success instead
- » Greater than the skill’s value indicates a failure. If the roll was 99 or 00 (or only 00 if the skill exceeds 100%), then the result is a fumble

Criticals and Fumbles represent spectacular successes and failures; those cases where a character has either excelled in his

attempt or failed miserably and utterly. There are certain special cases concerning success and failure that should be noted.

- » Any roll of 01-05 is always a success
- » Any roll of 96-00 is always a failure, irrespective of how high the skill's value

Modifying Skills

There are some occasions where a skill roll is required but the chances of success need to be adjusted to reflect particular conditions. Fleeing bandits, for instance, might require an Athletics roll. A wide variety of conditions such as weather, equipment or distractions can affect the difficulty of the roll, using a series of grades to determine how it is modified. These are listed in the sidebar.

Where a character is already suffering a penalty from other circumstances the hardest difficulty grade takes precedence.

What sort of modification is required for any particular skill or context is ultimately up to the Games Master to decide; according to the capabilities of the characters, his perception of the difficulty of the situation and the dramatic tension at that particular moment.

The chances for rolling a critical success or fumble are likewise adjusted after the effect of a difficulty grade has been applied. For instance a character with Pilot (Starship) 65% would normally gain a critical success with an 07 or lower, but this would be reduced to 05 if suffering a difficulty grade of *Hard*.

Reattempting Skills

In some situations a character will fail a skill attempt but be left in a situation where he could potentially try again. Example cases might be picking a lock or attempting to climb a sheer wall. Instead of simply denying any further attempts, kindly Games Masters may permit a follow-up, last-ditch attempt. However, the character will suffer some trepidation or lack of confidence which increases the difficulty of the skill roll by one grade.

Difficulty	Skill Modifier
Automatic	No need to roll
Very Easy	Double the skill value
Easy	Add half again to the skill value
Standard	No adjustment
Hard	Reduce the skill value by one third
Formidable	Reduce the skill value by half
Herculean	Reduce the skill value to one fifth
Hopeless	No attempt can be made

Simplified Difficulty Grade Table

Whilst difficulty grades are designed to scale with character skill, some Games Masters may find applying penalties results in the slowing down of their game. As an alternative the following option is provided:

Difficulty	Skill Modifier
Very Easy	+40%
Easy	+20%
Standard	None
Hard	-20%
Formidable	-40%
Herculean	-80%

Activity	Opposing Skill Examples
Bargaining/ Haggling	Commerce vs Commerce or Influence vs Commerce
Chasing/ Racing	Athletics vs Ath- letics, Athletics vs Endurance or Ride vs Ride
Deceiving	Deceit vs Insight or Sleight vs Perception
Getting out of the Way	Evade vs Athletics or Evade vs Mech- anisms or Evade vs Ride
Hiding or Sneaking	Stealth vs Per- ception or Stealth vs Track
Pulling Rank	Influence vs Will- power or Deceit vs Willpower
Staying the Course	Endurance vs Endurance or En- durance vs Brawn
Swaying a Crowd	Oratory vs Willpower
Test of Strength	Brawn vs Brawn or Brawn vs Endurance
Test of Wills	Willpower vs Will- power or Seduc- tion vs Willpower

If this second effort also ends in failure, the character is assumed to have given it his 'best shot' and cannot make any further attempts for the foreseeable future.

Opposed Rolls

Characters frequently find themselves pitting their skill against others. Examples of times where skills are matched against each other might be Stealth versus Perception when a thief attempts to cut a nobleman's purse; or Endurance versus the Potency of a Poison if the same thief is bitten by the snake within. These are known as Opposed Rolls and are used where a challenge will result in either win or lose, pass or fail.

An Opposed Roll is determined thus: both participants roll their respective skills. The winner is the one who gains the better level of success. If the participants score the same level of success (a standard success each, or a critical each), then the winner is the one who has the highest dice roll still within the success range of their skill.

If both participants fail in an Opposed Roll then either:

- » Describe the situation, leaving both sides hanging in dramatic tension, then re-roll the contest to establish a winner
- » Produce some explanation or circumstances that suit the mutual nature of the failure

Extended Conflicts

An optional use of opposed rolls in M-SPACE is to use them for Extended Conflicts. Here, several opposed rolls are used and the winner of each roll deals damage to a Conflict Pool derived from characteristics, similar to the way hit points are used in combat. A bargaining situation can, for example, use CHA as Conflict Pools. As one Pool reaches zero, that part has lost the argument. This way, almost any type of conflict can be run in a more detailed manner. See more in the chapter Extended Conflicts, on page 42.

Differential Rolls

Differential rolls are similar to Opposed rolls except that instead of a simple win or lose result, the difference in levels of success are calculated. They are primarily used for the resolution of combat (page 54).

A Differential Roll is determined in the following manner: Both participants roll against their respective skills and suffer the results of their roll as if tested in isolation. There is no outright 'winner' per se, but whoever gained the higher level of success gains an advantage equal to the difference in the success levels between them (assuming one participant gains at least a standard success or better). If both participants score the same level of success (a standard success each, or a critical each), then there is no additional effect. Cross reference the table below to determine the outcome of the rolls.

Opposed Skills Over 100%

If the highest skilled participant in an Opposed or Differential Roll has a skill in excess of 100%, that participant subtracts the difference between 100 and his skill value from the skill of everyone in the contest, including himself. This reduces the skill value of the opponents but leaves him retaining the advantage. The identification of who has the highest skill must be calculated after any other modifiers for circumstances have been applied.

Differential Roll Results

	Antagonist Critical	Antagonist Success	Antagonist Failure	Antagonist Fumble
Protagonist Critical	No Benefit	Prot. wins 1 lvl of Success	Prot. wins 2 lvls of Success	Prot. wins 3 lvls of Success
Protagonist Success	Ant. wins 1 lvl of Success	No Benefit	Prot. wins 1 lvl of Success	Prot. wins 2 lvls of Success
Protagonist Failure	Ant. wins 2 lvls of Success	Ant. wins 1 lvl of Success	No Benefit	No Benefit
Protagonist Fumble	Ant. wins 3 lvls of Success	Ant. wins 2 lvls of Success	No Benefit	No Benefit

Augmenting Skills

It is possible for one skill to aid another. This is called Augmenting. The following rules apply:

Characters can only augment the primary skill with a single other skill.

An augmenting skill increases the value of the primary skill by twice its Critical range (ie, 20% of the skill).

Characters can augment other character's skills to assist them. All the above rules apply, so a character being aided cannot augment himself in addition. Likewise a character can only contribute one of his skills to assist another. So, for example, trying to scale a high wall, a character could have his Athletics skill augmented by a companion's Brawn (representing a hitch-up).

For One Luck Point You Can:

Twist Fate

Characters can use a Luck Point to either re-roll any dice roll that affects them or swap the numbers already rolled, when rolling a d100 for example. This can be a skill roll, damage roll or anything else that has some effect.

Make a Desperate Effort

If a character has exhausted his Action Points during a fight and needs to find that last burst of desperate energy to perhaps avoid a messy demise, he may spend a Luck Point to gain an additional Action Point.

Mitigate Damage

A character who suffers a Major Wound may spend a Luck Point to downgrade the wound to a Serious Wound. This reduces the damage taken to one Hit Point less than what would be required to inflict a Major Wound.

Luck Points

Luck Points represent a character's ability to potentially turn failure into success and even cheat death. They are expended during play and, at the beginning of the next session, replenish to their usual value. Only one Luck Point can be used in support of a particular action. See the sidebar for some ways to spend a single Luck Point.

Game Time

In M-SPACE, time is an important factor, mostly to determine what happens in what order, so that game mechanics are applied when they should be. Remember that in-game time is usually not equivalent to time actually spent playing. Sometimes, the GM may need to summarize the events of many days in a single sentence, such as 'It takes you a week to reach Constantinople,' while at other times, particularly during combat, the actions of only a few seconds of time can take several minutes or longer to resolve. See the sidebar opposite for important distinctions of game time.

Injury and Healing

Characters in M-SPACE inevitably suffer damage. There are three categories of injury which can be inflicted, namely Minor Wounds, Serious Wounds and Major Wounds.

Minor Wound

Minor wounds are cuts, scratches, bruises and sprains. They hurt, may bleed, but are not significant enough to slow down or hamper the victim.

Serious Wound

If a location is reduced to zero Hit Points or below, the victim receives a Serious Wound. The location is scarred and they cannot

attack (but can still parry or evade) for their next 1d3 turns due to shock and pain.

A character suffering a Serious Wound must immediately make an opposed test of his Endurance versus the successful attack roll of his enemy. Failure results in a limb being rendered useless, or unconsciousness if the Abdomen, Chest or Head. This persists until the character is successfully treated with First Aid.

At the Games Master's discretion, even if the character remains functional, all tasks requiring use of that body location will suffer an ongoing penalty of one difficulty grade, until the injury is reduced to a Minor Wound.

Major Wound

If a location is reduced to a negative score equal or greater than its starting Hit Points, the character receives a Major Wound. The character is immediately incapacitated, unable to continue fighting.

As with Serious Wounds a character who suffers a Major Wound must immediately make an opposed test of his Endurance versus the successful attack roll of his enemy. Failure results in a limb being severed, shattered or ripped off, or instant death if the Abdomen, Chest or Head. If the character survives but treatment is not started within a number of minutes equal to twice his Healing Rate, he still dies from blood loss and shock.

Major Wounds require some form of surgery (using the Medicine skill) to heal, else the wounded location will be maimed.

Healing from Wounds

Natural healing from wounds and injuries is based on the character's Healing Rate. The Healing Rate dictates how many Hit Points are recovered depending on the injury's nature:

- » **Minor Wounds: Days**
- » **Serious Wounds: Weeks**
- » **Major Wounds: Months**

Combat Rounds

A Combat Round represents five seconds of real time. They are used to measure short, frenetic bursts of activity that take moments to complete or measuring very detailed activities that require a blow-by-blow resolution. For example, a chase between hunter and prey where each round determines the twists and turns of the pursuit.

Skill Time

Local Time represents a few minutes to a few hours and is used to measure activities that do not require the detailed attention of a Combat Round, but require a specific concentration of effort with a definite end result. Picking a lock might take five minutes and this is a measure of Skill Time. Whereas observing the patrols made by teams of guards around a high security lab might require several hours.

Narrative Time

This is the amount of time taken when the GM is narrating to the players, or when the players are discussing. Unless there is a specific reason for it, most actual roleplaying takes place in narrative time. When roleplaying, narrative time resembles real time, where a conversation takes as long to have as it takes to play. If a game session includes lengthy travel, or periods of activity where exact time is not of the essence, then time is compressed greatly to a few moments

First Aid Actions

Injury	Successful Treatment
Asphyxiated	The victim begins breathing again.
Bleeding	The blood flow is staunched.
Impaled	The impaling item is removed without causing further damage to the victim.
Unconsciousness	As long as the unconsciousness is not the result of poisons or narcotics then the injured party is restored to awareness.
Minor Injury	Treatment restores 1d3 hit points to the injury.
Serious Injury	Treatment restores the location to partial functionality.
Major Injury	A successful First Aid roll on a location suffering from a Major Injury does not return any Hit Points.

Thus a character with a Healing Rate of 3 who suffers a Serious Wound, will heal naturally at a rate of 3 Hit Points per week until his injury is downgraded to a Minor Wound, and then heal 3 Hit Points per day until fully recovered. The healing character cannot engage in strenuous activity: otherwise the Healing Rate is reduced by 1d3. Thus, a character recovering from even a Minor Wound could find his progress halted if he decides to engage any physical tasks that might exacerbate his injuries.

Permanent Injuries

Some Major Wounds inflict maiming injuries; for example horribly crushed and severed limbs, or the necrotic effects of venoms. The result of this damage permanently reduces the Hit Points on that location, forever weakening it. A location maimed in this way uses the diminished Hit Point value to calculate its new Serious and Major Wound thresholds.

For permanent injuries caused by accident or battle injury, roll a die of equivalent size to the original Hit Points of the location and permanently reduce the Hit Points by the amount rolled.

Character Improvement

Every character has the opportunity to improve their skills with time. The mechanism for most character improvement is the Experience Roll. Games Masters dispense Experience Rolls at an appropriate juncture in the campaign: at the end of every successful scenario or storyline; or after perhaps two or three sessions of play if the story is a long one which will take time to complete. The frequency is at the Games Master's discretion. A high frequency of Experience Rolls will lead to the characters developing at a faster rate.

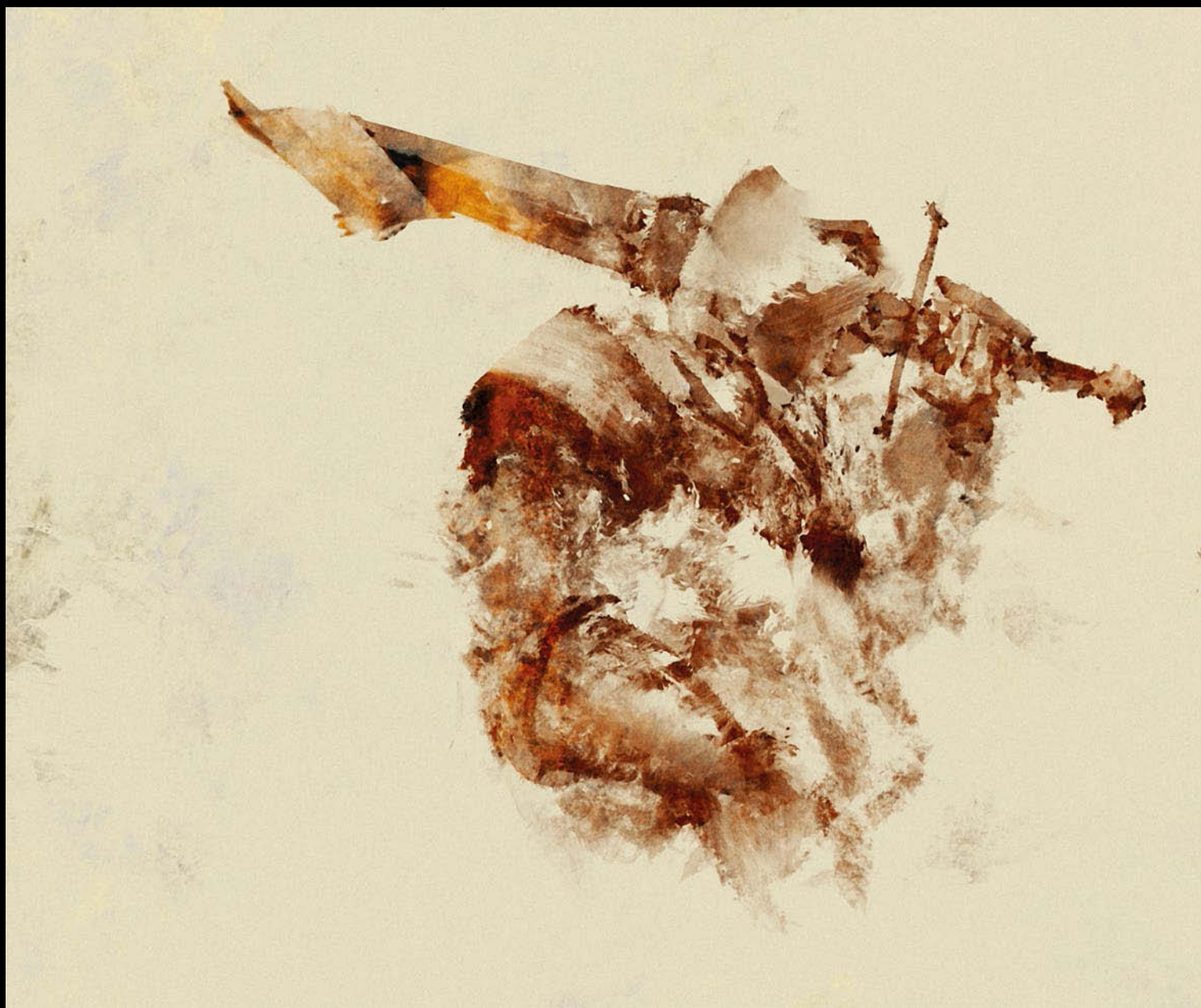
The number of Experience Rolls given in any one sitting should average between three and five, but it can be lower or higher depending on how long it has been since the last set of rolls and how well the characters performed or have been played.

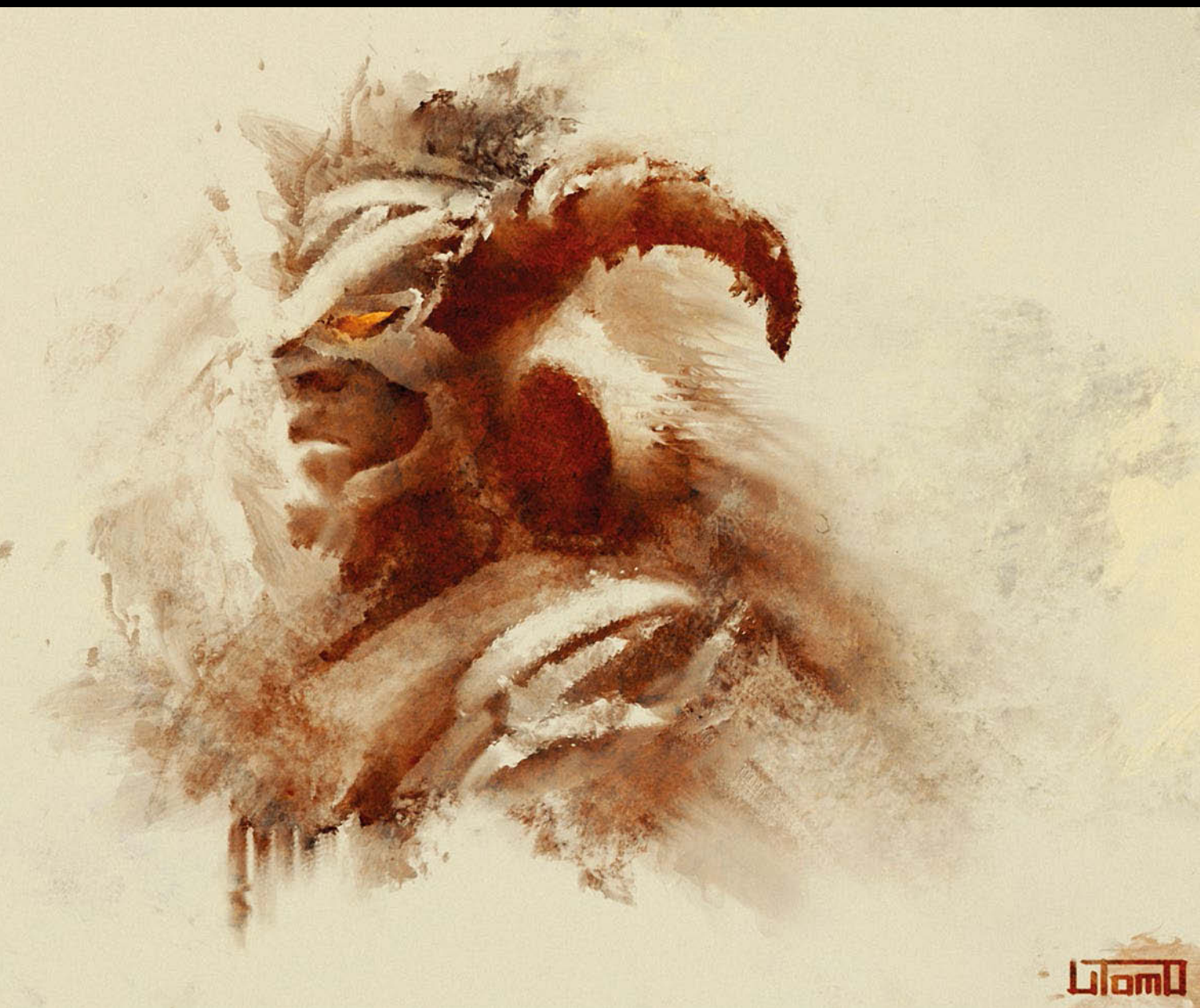
It is recommended that all characters be given the same number of Experience Rolls, which helps maintain fairness and parity in character progression. The only exception to this guideline is where a character gains an additional roll (or suffers a reduction in rolls) for their Experience Modifier (page 12) in those situations where the character can put their influence to good use or suffer its consequences.

Any skill on the character sheet, Standard or Professional, can be increased by spending one Experience Roll.

- » The player rolls 1d100 and compares it to the skill being increased. The character's INT is added to the roll.
- » If the number rolled is equal to or greater than the skill being improved it increases by 1d4+1%.
- » If the number rolled is less than the skill selected, the skill still increases but only by 1%.
- » If a character fumbles any skill during play, the fumbled skill gains a free increase of 1%.







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Extended Conflicts

Conflicts are the driving forces of most fictional works, and the same goes for roleplaying. It can be a locked door barring the way, a dense asteroid field to pilot through, a bargain with a trader or a regular fist fight. The Game System chapter covers single skill rolls, opposed rolls, and differential rolls. Here, the optional rules for extended conflicts are presented.

Extended Conflicts: Opposing forces use several skill rolls in multiple rounds. Damage is dealt to Conflict Pools based on characteristics. If, or when, a Conflict Pool reaches zero, that side has lost and is out of the conflict.

Example: Climbing a tree can be as easy as making a successful Climb roll. But if this part of the scene is a critical moment, the player may have to roll several times in an extended conflict (losing her DEX Conflict Pool gradually).

The more important the conflict is, the more time, energy and drama should be spent on it – and an extended conflict is often the best choice for that.

Also, a character that is not satisfied with the outcome of a single or opposed roll can always raise the intensity and determination by asking the GM for an extended conflict. Breaking out a conflict like this gives her another chance to succeed. But it is also riskier; more is at stake. Not only Conflict Pool points can be lost, but skills can also be temporarily lowered.

Using Opposed Rolls

Both extended and simple opposed conflicts use opposed rolls to determine the outcome. The concept is quick to learn: The highest successful roll wins.

Example: While trying to bargain for an antique scroll, Nedra rolls 53 on her Commerce at 65%. Her opponent, a greedy an-

Be careful not to bring too many extended conflicts upon the characters. This will deplete their resources long before a scenario is over. Try to find a good balance between the number of conflicts and the time it takes to restore conflict pools. Depending on the style of play, the exact number will vary and the GM will have to try things out as the group evolves. It's often a good idea to vary both the types of conflicts used and which characters are affected – that will bring more variation, pools last longer and everyone tends to get more involved.

tiquarian, rolls 47, and despite his skill being 70%, Nedra has rolled the highest success. Nedra gets the scroll for half the price.

Criticals always trump normal successes and if both opponents fail their rolls, nothing happens. A failed roll wins over a fumble though.

Conflict Pools

Conflict Pools work like hit points, but for any conflict. They are based on characteristics and are used one at a time (STR for arm wrestling for example) or several together (DEX+INT for a car race). Whenever damage is rolled in a conflict, it is subtracted from the current Conflict Pool. If, or when, a Conflict Pool reaches zero, that person is out of the conflict.

Example: Nedra is in a heated argument with Egil. It is not going very well - she's down to 2 in her CHA Conflict Pool. Egil rolls 1d6 for damage after a successful Influence and deals 4 points of damage. Nedra is out. Her physical health is untouched, but she has run out of arguments and lost the discussion. She leaves the room with a dark mind, already planning her next move.

Different conflicts use different characteristics, and it is up to the GM to see which one to use. The table in the sidebar provides a few guidelines.

Sometimes the task at hand is difficult to categorize into just one characteristic. Getting through a formal reception in an unfamiliar culture requires not only social skills (CHA) but also knowledge about the society (INT). In these cases, use the average of the two characteristics: $(CHA+INT)/2$. On rare occasions, you may need to combine three as well. But always try to minimize the number of characteristics used, or you will soon find that the same ones occur in every conflict.

Round Length

The length of a conflict round is highly flexible. For combat it will be about 5 seconds, while a journey can have a round lasting 24 hours. The basic rule is to make one skill roll per participant every round. See example conflicts below for estimates on round length.

Conflict Pool Examples

STR: Breaking something, arm wrestling, lifting objects

CON: Journeys, hard labor, combat, poisoning

SIZ: Only used to gain a bonus or penalty in other conflicts. SIZ pool is never reduced

DEX: Lockpicking, climbing, acrobatics, driving, untangling ropes or nets, tasks including fine manipulation, combat

INT: Reading a hard to decipher book, solving a puzzle, tracking, understanding unfamiliar machinery, inventing new gear, culture

POW: Psionics, situations involving a hefty amount of luck & mental health

CHA: Social conflicts, influence, oratory, commerce, commanding other people, performances, cocktail party, interview

(CON+SIZ)/2: Physical damage, combat

Resolving a Conflict

These are the steps for resolving an extended conflict:

1. Pick the skills necessary for the conflict and an approximate round length. If there is a set duration or number of skill rolls for the conflict, it should be declared by the GM now.
2. Choose a characteristic to base the Conflict Pools on.
3. The character with the highest pool declares her action and rolls 1d100 below her skill in an opposed roll. Everyone else involved follows in order from highest to lowest pool. Highest success wins.
4. The winner rolls 1d6 for damage to Conflict Pools. Write down any new pool values next to the characteristic on the character sheet.
5. Withdrawals can be declared.
6. If any pool is halved the GM asks if anyone wants to withdraw. If not, skills related to the Conflict Pool are at *Hard* for those with a halved pool.
7. Repeat step 3-6 until there is a winner; either through withdrawals, a time limit is reached or all pools but one are down to zero.

Using Multiple Conflict Pools

In some situations, you may want to use two separate pool values. Often it will be the main Conflict Pool, plus a pool for physical injuries.

Criticals & Fumbles

The general effects of criticals and fumbles are as follows:

Critical: Full damage.

Fumble: The roller is damaged, either 1d6 to the current pool or (if appropriate for the task) 1d4 hit points.

Example: At a court duel, with a small gathering of spectators, two pools are used: One for physical injuries and one for social damage. While lightsabers dazzle, the opponents take turns insulting each other. One person may win the physical battle, but the rival can win the hearts of the crowd – opening up a lot of interesting situations in the scenarios to follow.

Withdrawing From a Conflict

Most conflicts can be ended by one part just by declaring a withdrawal. In those cases, the remaining participant determines the outcome as if she was the winner.

When the first pool is halved, the GM should also ask whether anyone wants to withdraw. Everyone, including the GM, should take a moment to consider the importance of the conflict for their character(s) to see if there are any alternate solutions or compromises possible. As pool damage won't heal until the next day, characters need to think strategically about which conflicts are worth fighting.

Damage

Base damage is always 1d6, regardless of the type of conflict. (For quick combat, the damage values will vary slightly – see examples below). With a pool reduced to zero, that person has lost the conflict. In most situations the outcome will follow logically from the scene: The winner decides what to do next, reaches the goal first, gains the knowledge she was looking for, etcetera. The damage done to a pool will also carry over to the next conflict; a reduced CHA pool when attempting to bargain for a starship for example, right after a court duel.

When a pool is halved, the character is stressed. All skills corresponding to that characteristic are at Hard. They remain lowered until the pool is raised above half the initial value.

If two characteristics form the basis of a pool, the damage is distributed equally among them. For simplicity, this is done at the end of the conflict. Example: (INT+POW)/2 is used in a gaming contest. At the end of the match, the player redistributes the 6 points of damage. She reduces her INT pool by 3 and POW by 3. At least six hours of sleep is required to regain lost pool points. Half the amount can be restored after resting, light traveling or meditating for an hour. For conflicts taking several days to re-

Hit Points or Conflict pools?

Hit points and a CON+SIZ Conflict Pool are essentially the same thing. The gaming group has two choices here: Treat them as one OR use hit points for potentially deadly violence and the CON+SIZ pool for small injuries (only ending in unconsciousness at zero). When a combat draws near, the GM should communicate clearly which type of conflict it will be.

The same applies to Power points vs POW pool. Treat them as one or use Power points strictly for psionics, and the POW pool for mundane

Opponent Rating

The values of an opponent's conflict pool & skills are not always obvious. The easiest way to think about them is as a toughness rating of the situation. For non-living opponents (a storm, a book, etcetera), think of the skill value as the chance the opponent has to win or to damage the character. The pool will show how persistent it is. Use the values below as a guideline. Effortless, Normal and Difficult will be the values used most.

<i>Effortless</i>	<i>Pool 6</i>	<i>Skill 30%</i>
<i>Normal</i>	<i>Pool 11</i>	<i>Skill 50%</i>
<i>Difficult</i>	<i>Pool 16</i>	<i>Skill 70%</i>
<i>Very Difficult</i>	<i>Pool 20</i>	<i>Skill 90%</i>
<i>Heroic</i>	<i>Pool 24</i>	<i>Skill 110%</i>
<i>Impossible</i>	<i>Pool 28</i>	<i>Skill 130%</i>

You can also keep the skill levels from above, but roll 3d6 for pool values. That opens up a more complex gallery of NPCs that will be harder for the players to adapt to. This way, someone with a low skill but a high pool, can have a lucky strike and outperform a more experienced character.

solve, like a journey, replenishing can take up to half the time of the actual conflict.

While the basic concept of damage is very straightforward, some conflicts will be open to more options, especially when more people are involved. Portraying a cocktail party as an extended conflict will, for example, work better if several "winners" are allowed. Also, damage can be rolled individually, or just once (by the round's winner) and applied to all. See example conflicts below to get a feeling for how to use these options.

Other effects of damage are possible too. Social conflicts can result in lowered communication skills for a day for example. These effects are highly dependent on the specific situations.

Choosing Skills

Choosing the right skills to use in a conflict will be easy most of the time. Occasionally it may require some thinking to match the skills used by the opponent, especially if they lack the exact same skill as they are "attacked" with. There are two ways to solve this: Either use a skill that is reasonably similar (perhaps with a *Hard* penalty to reflect the mismatch in competence) or go for a characteristic roll instead. Characteristic rolls used versus a skill will necessarily be quite low – x2 or two characteristics added together. Someone trained in a skill should always have the upper hand. See example conflicts below for inspiration.

Example Conflicts

Persuade

Skill: Influence, Commerce, Deceit, Insight

Conflict Pool: CHA

Damage: 1d6

Round length: 1 minute

This is a common situation that can easily be turned into an extended conflict. The one to reach zero first loses the argument. For social conflicts in general, supporting skills can sometimes

be used. These should either relate to the subject being discussed or something like Acting, Culture, Knowledge (Psychology), etcetera. They will add $\frac{1}{5}$ of their value to the main communication skill, but only one at a time.

Sneak

Skill: Stealth vs Perception

Conflict Pool: DEX vs INT

Damage: 1d6

Round length: 1-5 minutes

Sneaking past guards is a favorite theme of many roleplaying games. Turning those situations into extended conflicts can make them even more exciting. If the character reaches zero before the guard, she is detected.

Poker Game

Skill: Gambling

Conflict Pool: (INT+POW)/2

Damage: 1d6, rolled once per round by the winner. All participants but the round winner takes the same amount of damage.

Round length: 15 minutes

A typical conflict only takes 3-4 rounds to resolve - use INT+POW straight for the conflict to last longer.

Note: In a high-level gaming environment, a successful Gambling roll may be needed to be allowed to even participate.

Determine the "gambling stats" of NPCs as follows (if you don't already know them):

Low-level/Casual/Beginner: Gambling 30%, Conflict pool 6.

Mid-level/Regular: Gambling 50%, Conflict pool 11.

High-level/Professional: Gambling 70%, Conflict pool 16.

Everyone place their bets. The GM and players come to an agreement about the size of the bets.

Start playing! Use opposed rolls, with the highest success in Gambling skill winning the round. The winner deals 1d6 damage

Quick Combat

For really quick combat, try these alternate rules.

Skill: Any combat style

Conflict pool: (CON+SIZ)/2

Damage:

1d4 for unarmed combat and impromptu weapons.

1d6 for melee weapons, martial arts and old-style ranged weapons like bows.

1d8 for firearms and energy weapons.

Round length: 5 seconds

Run the combat as any other conflict. Each roll is a combined attack, parry and evade roll. It is recommended to use this type of simplified combat for non-lethal situations mainly. This means a conflict pool of zero only results in unconsciousness - not death. Optionally, every time the pool reaches zero, reduce regular hit points by 1d4.

Cheating in Poker

To be able to cheat, the skill Sleight is required. For every successful Sleight roll, the cheater gets a +10% bonus on her Gambling skill the same round. Failure gives no bonus and the other card players will detect the cheating with a successful Perception roll. For more

Chase (Driving)

Skill: Drive (any vehicle)

Pool: DEX or the average of SPEED & HANDLING (see vehicle rules).

Damage: 1d6

Round length: 10 seconds

The first vehicle to reach a conflict pool of zero has lost. Either the vehicle being followed gets away or the follower has caught up. To force the other vehicle to stop, a Drive roll at Hard is needed. If the roll fails, the vehicles continue side by side, and new tries can be made the following rounds.

Fumble: Both vehicle and passengers takes 1d4 hit point damage (rolled individually), in addition to the reduced pool. For detailed vehicle damage effects, see malfunction rules in Vehicles chapter.

Shooting while driving: All handgun firing between moving vehicles are at a difficulty grade of Formidable. Criticals will hit random passenger.

to every other participant (only roll damage once per round – everyone takes the same amount of damage).

When a PC/NPC is reduced to a conflict pool of zero, she is out of the game.

The last PC/NPC to have a conflict pool left wins the game. Now, either the winner takes it all, or the money is divided according to how many rounds each player won. *Example: Four players bet 100 Cr each; 400 Cr in total. The game lasted four rounds, with player 1 winning three (and winning the entire game) and player 2 winning one round. Player one gets 300 Cr and player 2 100 Cr. Or player 1 wins all 400 Cr.*

Playing an unknown game halves the Gambling skill for the first 3-10 games, depending on the complexity of the game.

Chase (Running)

Skill: Athletics. Complement with Climb & Acrobatics if needed. Additionally, Stealth can be used

Conflict Pool: The average of CON & DEX

Damage: 1d6

Round length: 10 seconds

The person being followed determines the route and if any other skills than Athletics are needed. The follower must make the same skill rolls to keep up.

If the person being followed is down to zero pool points, the follower has caught up. A successful Unarmed roll is needed to actually stop the person. In many cases an Influence, Commerce or Deceit roll at *Hard* will do the trick too.

Fumble: The runner trips, slips or runs into an object, taking 1d4 hit point damage in addition to the regular Pool damage.

Dinner Party

Skills: Any communication skills

Conflict Pool: CHA

Damage: 1d6, rolled once per round. All participants failing their rolls take the same damage.

Round length: 30 minutes

Pick 1-6 NPCs as the main participators. If there are more people attending the dinner, treat them as subordinates to the main NPCs (and ignore them to simplify the setup).

Define the NPCs conflict values as follows (if you don't already have them):

Low-level: Any social skill at 30%, CHA 6

Mid-level: Any social skill at 50%, CHA 11

High-level: Any social skill at 75%, CHA 16

Decide how long the party will last.

Play the dinner! All involved makes a skill roll every half hour the dinner party lasts. Only those failing their rolls takes damage. The person with the highest success rolls the damage (1d6). When the time is up, participants have made it through the banquet according to the points they have left in their pools:

Zero. The character made a lousy impression. She won't be invited again, will have a bad reputation in these circles and won't easily get a job or information from these people. Will be at -10% in communication skills in these circles (*Dislike* on the Social Disposition Table on the next page).

Below half their pool. The outcome is neutral. Nothing special happens. Social disposition +/-0.

More than half the pool left. She made a good impression. She will be invited again and will be favorably met in the future (*Friendly* on the Social Disposition Table).

Social Disposition Table

Social Disposition	Deceit skill modifier	Influence or other skill modifier
Affectionate	-10%	+25%
Friendly	-5%	+15%
Amiable	0	+5%
Indifferent	0	0
Dislike	+10%	-10%
Unfriendly	+20%	-20%
Malicious	+30%	-30%

Use this table to modify social skills when characters interact with NPCs. All social skills but Deceit use the right column; modifiers for Deceit are (mostly) inverted.

For important NPCs, you will probably want to keep notes on how the Social Disposition changes over time. And make sure to update it after each session, to reflect the repercussions of the character's doings.

Social Skills

*Standard: Deceit, Influence, Insight
Professional: Bureaucracy, Commerce, Courtesy, Oratory, Politics, Seduction, Streetwise, Teach*

Supporting skills: Acting, Customs, Gambling, Knowledge (Psychology), Culture

Secrets & Threats

In social conflicts, you may want to add optional bonuses to skill rolls, when the following powerful levers are used.

Threats. Benign threats are commonplace in most social conflicts, but a threat of ample physical violence will make a communication roll Easy; or even Very Easy when used against regular people. The person making the threat must be able to back it up though (at least seemingly), otherwise it can have the reverse effect. Also, for targets with a high Willpower skill or relevant Passion, threats will be less effective: the GM must judge this based on the specific circumstances.

As soon as a threat is included in a conflict, the target's Social Disposition towards the person making the threat is reduced to a minimum for a longer period of time.

Secrets. Threatening to reveal an opponent's well-kept secret will make communication rolls Easy or Very Easy. Everything from tax evasion and romantic lapses, to a literal dead body in a closet can be used. To uncover a secret, the character must have made some research on the opponent beforehand though (or perhaps payed or threatened someone else to tell them about it). As for threats, Social Disposition will plummet as soon as Secrets are brought into a conflict.

In addition, for every successful roll the character makes, there is a chance that something interesting and useful is revealed. It can be related to the scenario or not, and can be secrets overheard, rumors, new business relations presented, love affairs implicitly indicated, etcetera. The GM may want to prepare beforehand what tidbits are revealed and how many successful rolls it takes to get each of them.

Example: Nedra is invited to a fancy dinner held by a criminal network in Glimminge. Earlier that day she had ran into an old enemy, Egil Hermstad. The GM decides that if Nedra makes three successful rolls (out of five), she will overhear a conversation about what her old enemy is up to these days. Nedras' player is lucky with the dice, and makes the three rolls (with an Influence at 60%). This information will eventually lead to a new scenario, with Nedra getting help from a psionic to stop an alien portal from opening.

Boating Through a Storm

Skill: Boating or Seamanship

Conflict Pool: The character can use (DEX+INT) divided by two, vessel SIZE (if the vehicle rules are used) or a combination of both. For the storm, first decide what chance it has to damage a vessel – that is the skill percentage equivalent. Set the pool according to the general rules on opponent rating (see sidebar on page 46).

Damage: 1d6

Round length: 30 minutes

Fumble: Passengers & crew takes 1d4 hit point damage.

Long journey on foot

Skills: Athletics, Endurance, Survival

Conflict Pool: CON

Damage: 1d6

Round length: 24 hours

Decide how many days the journey will last and roll once a day for each character, plus the opposing force. Use the following difficulties:

Light terrain, good conditions*: 30%, pool 6

Mixed terrain & conditions: 50%, pool 11

Difficult terrain, tough conditions**: 75%, pool 16

* = *for example sleeping in a bed at night, plenty of rations, light backpacks, beautiful weather.*

** = *for example too cold or hot, rain or snow, rocky or mountainous, thin or harsh atmosphere, heavy packs, wetlands, gear unsuited for conditions, no time to prepare for the journey.*

Conflict pools are not fully regained until the journey is over.

The journey is over if the characters manage to keep their pools above zero until all the rolls are made. If any character's pool drops to zero, the party will have to rest at least one full day, regaining one fourth of their original pools per day resting. 1d4 hit points are lost every time the CON pool drops to zero.

Optional: Tempo can be allowed to affect pool damage.

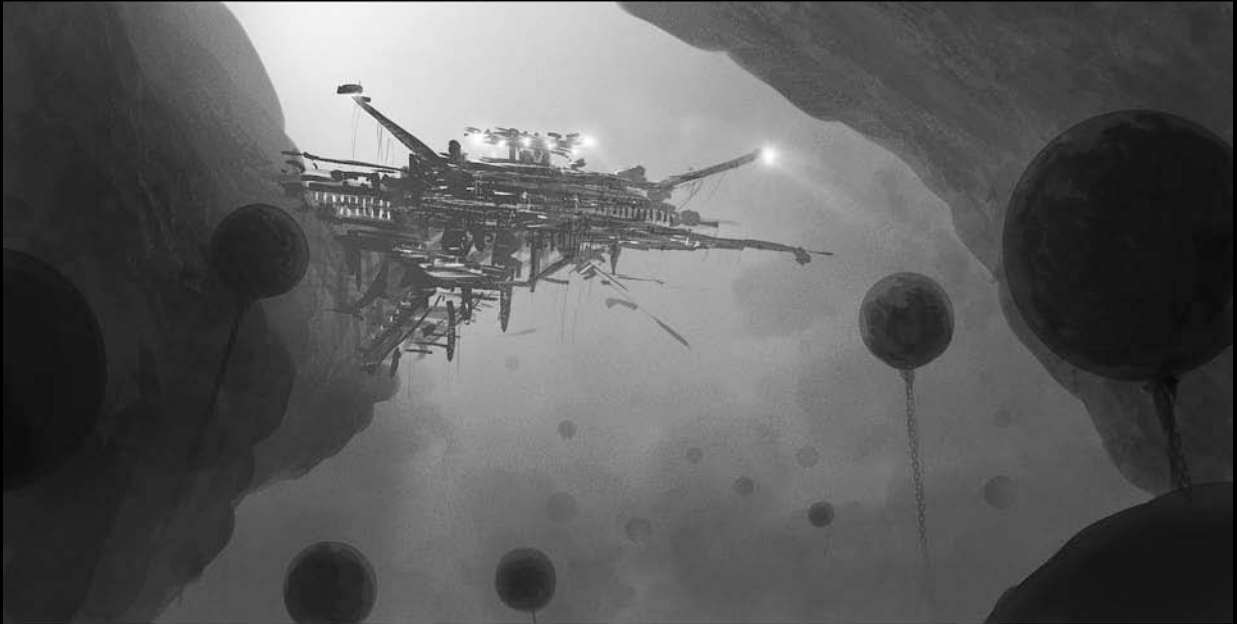
Hard tempo: 1d8, 40 km per day

Normal tempo: 1d6, 20 km per day

Easy tempo: 1d4, 10 km per day







Combat

Combat is an important feature of roleplaying games. Violent confrontation has ever been a way of settling problems, from vengeance driven fights between nemeses, to the clash of armies in times of war. Nevertheless combat need not be a savage battle to the death. Some combat encounters can be swashbuckling duels which end without injury, or perhaps light-hearted bar room brawls.

M-SPACE uses a number of terms to explain the core elements of Combat. These are explained in the following sections, but in overview, these are:

- » **Combat Style:** The skill of wielding a group of weapons learned as part of a culture or profession.
- » **Combat Actions:** Possible acts a character can perform during a round by the expenditure of an Action Point.
- » **Weapon Size:** How difficult it is to parry or block a particular weapon.
- » **Engagement:** When combatants can hit or be hit by a direct opponent, depending on circumstances.
- » **Special Effects:** Combat maneuvers which can be performed if one combatant gains the upper hand.

Combat Styles

Skills covering fighting and combat are called Combat Styles. Each style is a 'package' of multiple weapons, related by culture, career or even schools of combat, which avoids the necessity of learning each individual weapon separately. The most important aspect of Combat Styles is that the character learns how to use each weapon in the style, both singly and in combination so that they might be interchanged as necessary.

Thus a Zamhareer colonist may be expected to know how to use a blaster and a knife; whereas an Imperial High Guard may be trained in blasters, blaster carbines and Unarmed instead. Deciding how many weapons should be included into a single style is ultimately a choice determined by the Games Master and the setting of the game.

Characters who attempt to use a weapon not covered by their style should suffer a skill penalty of one or more difficulty grades.

Combat Style Benefits

Combat styles possess another function beyond simply learning one or several weapon skills. Since each style is taught by a particular culture or career, they are inherently optimized for the environment or military tactics that group normally fights with; for instance an Enyin nomad learns to fight from the saddle, or an infantryman trains to fight in close order formation. Therefore, as an additional bonus, some Combat Styles may be assigned one or more traits which grants it an advantage under certain circumstances. Traits are only intended to be used with the weapons and situations of that particular style. Obviously there are countless traits, many of which are specific to a particular campaign world.

Running Combat

To emphasise its visceral nature, combat is tracked on a blow by blow basis. In order to ease book keeping fights are broken down into Combat Rounds of five seconds each. During this period combatants may make hand-to-hand attacks or defend against them, maneuver into and out of combat, fire or throw a ranged weapon and so on. Combat Rounds use several important terms:

Simplified Combat

As not all scenarios and campaigns involve a lot of fighting, a later chapter is dedicated to simplified combat. Using it can also be a good way to learn the basics of the system. For those instead wanting more details, see the full Mythras rulebook, available from The Design Mechanism.

Example Combat Style Traits

Trait	Description
Blind Fighting	Allows user to ignore any penalties imposed due to poor lighting or temporary blinding
Daredevil	May use the Evade skill to dodge blows in hand to hand combat without ending up prone
Defensive Minded	Increases the Size of your weapon when parrying by one step, provided no offensive action is taken that round
Assassination	Allows the user access to the normally restricted Kill Silently special effect.
Knockout Blow	When attacking with surprise treat any Stun Location as lasting minutes instead of turns
Mounted/Vehicle Combat	Allows character to ignore the skill cap placed upon combat rolls by the Ride skill

- » **Initiative:** The order of when each character or creature may take their Turn during a Combat Round.
- » **Turn:** On their turn, a participant performs a single proactive Combat Action, which comprises of a declaration, any necessary dice rolls (including reactions) to resolve the action.

Initiative

Initiative determines participants' order of actions during the Combat Round. It is rolled at the start of a fight by each combatant rolling 1d10 and adding their Initiative Bonus (page 13).

Whoever gained the highest result acts first, followed by the second highest and so on. When two or more participants tie scores they act concurrently. Unless something occurs to change the situation, the values remain in play until it is forced to be re-rolled.

Characters who wear armor are hindered by its encumbrance. Every type of armor has an associated penalty which is applied to the Initiative of its wearer.

Actions in Combat

Once initiative has been determined, the participants have the potential to perform several Combat Actions during each Combat Round. All characters get 2 Action Points per round, but when they can act is limited to whether the action is proactive or reactive.

Proactive actions can only be attempted on the character's own Turn; that is to say, on his initiative Strike Rank. Proactive actions are those in which the character is the instigator, such as making an attack with a weapon.

Reactive actions are those taken by a character to counter or resist an act made against them. Only one reaction attempt is permitted for each threat, an example would be trying to parry an attack. Unused Action Points do not carry over from one round to the next.

Combat Actions

Combat Actions are those acts which can be performed during battle. Drawing a weapon, casting a spell, or diving clear from an attack are all examples of Combat Actions. Most are concerned with elements of combat itself, but some relate to activities outside the to and fro of spells and weapons.

As previously mentioned, how often a character can act per round is limited by their available Action Points. These are spent over the course of each Combat Round to perform various Combat Actions. Once a combatant's Action Points are expended, they may no longer act for the remainder of that round and must wait until their points reset at the beginning of the next.

Unless otherwise specified any Combat Action (save for 'free' actions) costs one Action Point. Thus combatants need to carefully consider how and when they use their points. They may act as aggressively or defensively as they wish, dynamically reacting to the evolving circumstance of the combat.

Proactive Actions

The following are activities a character can attempt on his Turn by spending an Action Point. Note that some actions such as using a psionic power or reloading may take several turns to complete; each turn costing its own Action Point.

Attack: The character can attempt to strike with a hand-to-hand weapon or use a ranged weapon.

Dither: The default option unless another action is chosen, the character simply wastes his turn doing nothing useful.

Mount: The character can mount or dismount a riding beast or vehicle. Particularly large mounts may require several turns to complete.

Move: Provided he is not engaged with an opponent, the character can move any distance the Games Master deems suitable for the situation.

Example Combat Style Traits (cont.)

Ranged Marksman	When using a ranged weapon, shift a random Hit Location roll to an adjoining body location
Skirmishing	The style permits launching ranged attacks whilst walking or running
Throw Weapons	Any melee weapon in the style can also be thrown at no penalty to skill, but when used in this way a weapon's damage roll is halved
Unarmed Prowess	Permits the user to treat his Unarmed blocks and parries as 'Medium' sized, enabling him to better defend himself from armed opponents

Free Actions

Free actions can be performed at any time during the Combat Round and cost no Action Points to perform.

Drop Weapon: *Dropping a weapon is a Free Action.*

Signal: *If unengaged, gesturing or signalling to one or more participants (as long as they can perceive the sign) is a Free Action.*

Speak: *A character can speak at any time during combat, but what is said should be limited to short phrases which can be uttered in five seconds or less; for example 'Look out behind you!' or 'Damn you to hell!'*

Use Luck Point: *Using a Luck Point – to re-roll a particular result for example – is a Free Action.*

Ward Location: *The character guards a particular Hit Location from being hit by dedicating one of his weapons to passively block the area. Any blow which lands on that location has its damage automatically downgraded as per normal for a parrying weapon of its Size. The cover continues until the dedicated weapon is used to attack or actively parry. Establishing or changing the Hit Location covered must be performed prior to an opponent rolling to attack the character. Due to their design, shields can cover multiple areas. For further explanation see *Passive Blocking*, page 71.*

Outmaneuver: The character can engage multiple opponents in a group opposed roll of Evade skills. Those who fail to beat his roll cannot attack him that Combat Round. See the section on Outmaneuvering on page 71.

Ready Weapon: The character may draw, sheath, withdraw or reload a weapon. Retrieving a nearby dropped weapon requires two turns: one to move and reach down for the weapon and a second to return to a readied stance. Some missile weapons require several turns to reload.

Regain Footing: If unengaged with an opponent, the character can automatically regain his footing from being tripped or knocked down. If engaged, the character must win an opposed test of Brawn or Athletics with the opponent before standing.

Sneak Peek: Assess situation without becoming a target. Perception skill fumble results in opponent getting a pot shot.

Struggle: If the character is the victim of a certain types of attack or Special Effect, he may attempt to extract himself from the situation. For example breaking free from a Grapple or Pin Weapon.

Use Power: The character can attempt to use a psionic power. Complex powers may require several turns in order to complete.

Reactive Actions

This list specifies reactions which can be used at any time during the Combat Round as a response to an imminent threat. As in the previous list, a reaction costs an Action Point to perform.

Evade: The character can use their Evade skill in an attempt to dive clear of threats such as incoming missiles or a charging attack. This leaves the character prone, unless mitigated by some special circumstance. Thus the character's next turn is usually spent taking the Regain Footing action to stand again. See *Evading* on page 69.

Parry: The character can attempt to defend against an incoming

attack using a combination of parrying, leaning, ducking and side-stepping footwork to minimise the blow.

Take Cover: The character gets behind something (not prone). Used as a reactive action here (*ie.* characters can dive for cover after someone shoots at them).

How Combat Works

Fighting in M-SPACE is resolved with each attack or parry representing a single stab, swing, cast or shot of a weapon. Any offensive action is permitted the chance to be resisted by a reaction. Thus even if a character manages to strike an opponent, the foe is permitted its own roll to see if it can parry the blow before it lands. The same philosophy is used whether the attacks are blasters against targets diving for cover, or trying to break free from the iron grasp of a giant alien.

Attacks and Parries

Close combat is handled in the following step by step manner:

1. On his turn the attacker spends an Action Point, rolls against his Combat Style and notes the result.
2. If desired, the defender spends an Action Point, rolls against his Combat Style and notes the result.
3. The success level of the results are compared as per a Differential Roll (page 35).
4. Any difference grants the successful combatant with the superior roll one or more Special Effects.
5. If the attacker achieved a success or critical, he may roll weapon damage and apply their Damage Modifier (if any). If applicable, a Hit Location is determined for the blow.
6. If the defender achieved a success or critical, reduce any damage inflicted according to the comparative sizes of the weapons involved.
7. Reduce any remaining damage by the Armor Points of natural or worn protection.

Special Effects & Damage

Note that any Special Effects generated by the exchange are independent of whether or not damage is inflicted. It is quite possible for a defender to gain the higher success level, yet still suffer injury.

Parrying a Missed Attack

If the attacker misses his initial attack roll, the defender has the option of whether or not to spend an Action Point to parry. Although it may seem disingenuous to parry an attack which will miss anyway, a skilled defender can use this to his advantage to gain one or more Special Effects, potentially weakening or incapacitating a foe and preserving their next turn for some other action.

Unsuccessful Rolls and Fumbles

If both combatants fail their rolls, or the defender decides not to take advantage of a missed attack, then the attack-parry sequence ends and combat continues on to the participant with the next highest Strike Rank.

Weapon Size

Every weapon in M-SPACE possesses a number of different attributes from the damage it deals to how many hands are required to wield it. Size is a combination of a weapon's mass, leverage and stability, and is used to determine the weapon's ability to impose and parry damage.

Size categories are Small, Medium, Large, Huge, and Enormous. The unarmed attacks of creatures are assigned similar categories according to their physical characteristics.

Damage Reduction

If a defender succeeds in parrying, then he can reduce an attacker's damage, if any, according to the comparative Size of the weapons used.

- » Parrying an attack with a weapon or shield of equal or greater Size deflects all damage
- » Parrying with a weapon or shield of one Size less only deflects half damage
- » Parrying with a weapon or shield two or more Sizes less fails to deflect any damage

For example, parrying a Huge axe with a Huge shield would block all damage; parrying it with a sword (Large) would halve the damage, and parrying it with a knife (Small) would stop no damage at all.

Armor

Any damage which penetrates the defender's parry, is further reduced by the Armor Points of any natural protection (such as scales or a shell) or worn armor they possess. If the defender has both, then the two stack together to reduce damage.

Due to its mass and restriction to movement, the highest Armor Point value of armor worn by a character acts as a penalty to their Strike Rank.

Special Effects

Fighting is far more than simply injuring or killing an opponent. Combative arts teach many methods of defeating a foe, perhaps rendering them helpless or forcing them into situations where they must capitulate, without necessarily needing to actually cause them harm. Special Effects represent these techniques and control how they occur in play.

Whenever opponents engage in a Differential Roll of their respective fighting skills, any resulting difference in success levels indicates an opportunity for Special Effects to occur. This reflects one combatant manoeuvring his opponent into a disadvantageous situation which can be exploited using a cunning trick or tactic.

The number of Special Effects received depends on the difference between the levels of success, as illustrated on the Differential Levels of Success table (see page 35).

If any Special Effects are won during an exchange, they must be selected before Damage and Hit Location, if any, are rolled. In cases where the recipient is badly wounded in addition to receiving a Special Effect, Endurance rolls are resolved after the application of the effect.

Special Effects cover a diverse range of situations and techniques. Some are designed specifically for attacks, whilst others are intended for defence and a few are adaptable for either circumstance. Certain Special Effects can also be limited to particular weapon types or specific dice rolls, requiring a Critical or Fumble result on their skill check for instance.

When two or more Special Effects are gained, the combatant may freely mix and match which ones are selected, providing he meets the prerequisite conditions for each one. Some effects can be stacked. For example, an attacker who rolls a critical success and wins two Special Effects could choose Maximise Damage twice rather than choosing two separate offensive maneuvers.

Unable or Unwilling to Parry

In a situation where a defender is unable to parry due to having no Action Points remaining, or, confident in his ability to weather the blow, elects not to parry, he is treated as having automatically rolled a failure. This has the consequence of granting a successful attacker one or more Special Effects.

Special Effect Descriptions

The following Special Effects are a subset of those available in the full Mythras rules:

Accidental Injury. The defender deflects or twists an opponent's attack in such a way that he fumbles, injuring himself. The attacker must roll damage against himself in a random hit location using the weapon used to strike. If unarmed, he tears or breaks something internal, the damage roll ignoring any armor.

Arise. Allows the defender to use a momentary opening to roll back up to their feet.

Bash. The attacker deliberately bashes the opponent off balance. How far the defender totters back or sideward depends on the weapon being used. Shields knock an opponent back one meter per for every two points of damage rolled (prior to any subtractions due to armor, parries, and so forth), whereas bludgeoning weapons knock back one meter per for every three points. Bashing works only on creatures up to twice the attacker's SIZ. If the recipient is forced backwards into an obstacle, then they must make a *Hard* Athletics or Acrobatics skill roll to avoid falling or tripping over.

Bleed. The attacker can attempt to cut open a major blood vessel. If the blow overcomes Armor Points and injures the target, the defender must make an opposed roll of Endurance against the original attack roll. If the

defender fails, then they begin to bleed profusely. At the start of each Combat Round the recipient loses one level of Fatigue, until they collapse and possibly die. Bleeding wounds can be staunched by passing a First Aid skill roll, but the recipient can no longer perform any strenuous or violent action without re-opening the wound. See Blood Loss, page 80.

Blind Opponent. On a critical the defender briefly blinds his opponent by throwing sand, reflecting sunlight, or some other tactic which briefly interferes with the attacker's vision. The attacker must make an opposed roll of his Evade skill (or Weapon style if using a shield) against the defender's original parry roll. If the attacker fails he suffers a situational modifier of *Hard* or *Formidable* for the next 1d3 turns, depending on the method of blinding.

Bypass Armor. On a critical the attacker finds a gap in the defender's natural or worn armor. If the defender is wearing armor above natural protection, then the attacker must decide which of the two is bypassed. This effect can be stacked to bypass both. For the purposes of this effect, physical protection gained from psionics is considered as being worn armor.

Choose Location. When using hand-to-hand melee weapons the attacker may freely select the location where the blow lands, as

long as that location is normally within reach. If using ranged weapons Choose Location is a Critical Success only, unless the target is within close range and is either stationary or unaware of the attacker.

Circumvent Parry. On a critical the attacker may completely bypass an otherwise successful parry.

Damage Weapon. Permits the character to damage his opponent's weapon as part of an attack or parry. The targeted weapon uses its own Armor Points for resisting the damage. If reduced to zero Hit Points the weapon breaks. Ranged weapons require a critical to damage a weapon.

Disarm Opponent. The character knocks, yanks or twists the opponent's weapon out of his hand. The opponent must make an opposed roll of his Combat Style against the character's original roll. If the recipient of the disarm loses, his weapon is flung a distance equal to the roll of the disarmer's Damage Modifier in meters; or, if the character has a free hand, he may seize the weapon from the opponent. If there is no Damage Modifier then the weapon drops at the disarmed person's feet. The comparative size of the weapons affects the roll. Each step that the disarming character's weapon is larger increases the difficulty of the opponent's roll by one grade. Conversely each step the disarming character's weapon is smaller,

makes the difficulty one grade easier. Disarming works only on creatures of up to twice the attacker's STR.

Drop Foe. Assuming the target suffers at least a minor wound from a shot, they are forced to make an Opposed Test of their Endurance against the attacker's hit roll. Failure indicates that the target succumbs to shock and pain, becoming incapacitated and unable to continue fighting. Recovery from incapacitation can be performed with a successful First Aid check or using some form of technological booster. Otherwise the temporary incapacitation lasts for a period equal to one hour divided by the Healing Rate of the target.

Duck back. This ranged special effect allows a shooter to immediately duck back into cover, without needing to wait for their next Turn to use the Take Cover action. The character must be already standing or crouching adjacent to some form of cover to use Duck Back.

Enhance Parry. On a critical the defender manages to deflect the entire force of an attack, no matter the Size of his weapon.

Entangle. Allows a character wielding an entangling weapon, such as a whip or net, to immobilise the location struck. An entangled arm cannot use whatever it is holding; a snared leg prevents the target from moving; whilst an enmeshed head, chest or abdomen makes all skill rolls one grade harder. On

Continued...

Special Effect Descriptions *(continued)*

his following turn the wielder may spend an Action Point to make an automatic Trip Opponent attempt. A victim can attempt to free himself on his turn by either attempting an opposed roll using Brawn to yank free, or win a Special Effect and select Damage Weapon, Disarm Opponent or Slip Free.

Force Failure. Used when an opponent fumbles, the character can combine Force Failure with any other Special Effect which requires an opposed roll to work. Force Failure causes the opponent to fail his resistance roll by default – thereby automatically be disarmed, tripped, etc.

Grip. Provided the opponent is within the attacker's Unarmed Combat reach, he may use an empty hand (or similar limb capable of gripping) to hold onto the opponent, preventing them from being able to disengage from combat. The opponent may attempt to break free on his turn, requiring an opposed roll of either Brawn or Unarmed against whichever of the two skills the gripper prefers.

Impale. Roll weapon damage twice, with the attacker choosing which of the two results to use for the attack. If armor is penetrated and causes a wound, then assuming it is a melee weapon, the attacker has the option of leaving the weapon in the wound, or yanking it free on their next turn. Leaving the weapon in the wound inflicts a difficulty grade on the

victim's future skill attempts. The severity of the penalty depends on the size of both the creature and the weapon impaling it, as listed on the Impale Effects Table on page 66. For simplicity's sake, further impalements with the same sized weapon inflict no additional penalties. To withdraw an impaled weapon during melee requires use of the Ready Weapon combat action. The wielder must pass an unopposed Brawn roll (or win an opposed Brawn roll if the opponent resists). Success pulls the weapon free, causing further injury to the same location equal to half the normal damage roll for that weapon, but without any damage modifier. Failure implies that the weapon remained stuck in the wound with no further effect, although the wielder may try again on their next turn. Specifically barbed weapons (such as harpoons) inflict normal damage. Armor does not reduce withdrawal damage. Whilst it remains impaled, the attacker cannot use his impaling weapon for parrying.

Kill Silently. Restricted to those trained with the Assassination benefit. It allows the attacker to neutralise a victim in complete silence, stabbing, shooting (with silencer) or garrotting them. This prevents the victim from crying out or otherwise raising an alarm. Kill Silently can only be used on a surprised opponent and only on the first attack against them.

Marksman. Permits the shooter to move the

Hit Location struck by his shot by one step, to an immediately adjoining body area. Physiology has an effect on what can be re-targeted and common sense should be applied. Thus using this special effect on a humanoid would permit an attacker who rolled a leg shot, to move it up to the abdomen instead. Conversely shooting a bear-like alien in the chest would permit selection of the forelegs or head.

Maximise Damage. On a critical the character may substitute one of his weapon's damage dice for its full value. For example a blaster which normally does 1d8 damage would instead be treated as an 8, whereas a great club with 2d6 damage would instead inflict 1d6+6 damage. This special effect may be stacked. Although it can also be used for natural weapons, Maximise Damage does not affect the Damage Modifier of the attacker, which must be rolled normally.

Pin Down. This firearm special effect forces the target to make an Opposed Test of their Willpower against the attacker's hit roll. Failure means that the target hunkers down behind whatever cover is available and cannot return fire on their next Turn. Note that Pin Down works even if no actual damage is inflicted on the target (perhaps due to a successful evasion or shots striking their cover instead), as it relies on the intimidation effect of gunfire passing very close by. Although a pinned victim is unable to fire back for the

requisite time, they can perform other actions provided they don't expose themselves to fire in the process, such as crawling away to new cover, communicating with others, reloading a weapon and so on.

Prepare Counter. The defender reads the patterns of his foe and preplans a counter against a specific Special Effect (which should be noted down in secret). If his opponent attempts to inflict the chosen Special Effect upon him during the fight, the defender instantly substitutes the attacker's effect with one of his own, which succeeds automatically.

Rapid Reload. When using a ranged weapon, the attacker reduces the reload time for the next shot by one. This effect can be stacked.

Scar Foe. The combatant inflicts his opponent with a scar that will be the talk of all for the rest of his or her life – such as an almost-severed-throat, or a facial scar.

Select Target. When an attacker fumbles, the defender may maneuver or deflect the blow in such a way that it hits an adjacent bystander instead. This requires that the new target is within reach of the attacker's weapon, or in the case of a ranged attack, is standing along the line of fire. The new victim is taken completely by surprise by the unexpected accident and has no chance to avoid the attack which automatically hits. In compensation however, they suffer no special effect.

Continued...

Special Effect Descriptions *(continued)*

Slip Free. On a critical the defender can automatically escape being Entangled, Grippled, or Pinned.

Stun Location. The attacker can use a bludgeoning weapon to temporarily stun the body part struck. If the blow overcomes Armor Points and injures the target, the defender must make an opposed roll of Endurance vs. the original attack roll. If the defender fails, then the Hit Location is incapacitated for a number of turns equal to the damage inflicted. A blow to the torso causes the defender to stagger winded, only able to defend. A head shot renders the foe briefly insensible.

Sunder. The attacker may use a suitable weapon, such as an axe, to damage the armor or natural protection of an opponent. Any weapon damage, after reductions for parrying or psionics, is applied against the Armor Point value of the protection. Surplus damage in excess of its Armor Points is then used to reduce the AP value of that

armor(ed) location – ripping straps, creasing plates or tearing away the hide, scales or chitin of aliens. If any damage remains after the protection has been reduced to zero AP, it carries over onto the Hit Points of the location struck.

Trip Opponent. The character attempts to overbalance or throw his opponent to the ground. The opponent must make an opposed roll of his Brawn, Evade or Acrobatics against the character's original roll. If the target fails, he falls prone. Quadruped opponents (or creatures with even more legs) may substitute their Athletics skill for Evade and treat the roll as one difficulty grade easier.

Withdraw. The defender may automatically withdraw out of reach, breaking off engagement with that particular opponent.

Weapon Malfunction. When attacker fumbles, this special effect can be used by the target. Attacker's weapon is useless, until time can be spent to clean it. Used for firearms only.

Impale Effects Table

Foe SIZ	Small Weapons	Medium Weapons	Large Weapons	Huge Weapons	Enormous Weapons
1-10	Formidable	Herculean	Hopeless	Hopeless	Hopeless
11-20	Hard	Formidable	Herculean	Hopeless	Hopeless
21-30	No Effect	Hard	Formidable	Herculean	Hopeless
31-40	No Effect	No Effect	Hard	Formidable	Herculean
41-50	No Effect	No Effect	No Effect	Hard	Formidable
Each +10	Follow table progression				

Special Effect	Offensive	Defensive	Specific Weapon Type	Specific Roll	Stackable
Accidental Injury		•		Attacker Fumbles	
Arise		•			
Bash	•		Shields or Bludgeoning		
Bleed	•		Cutting Weapons		
Blind Opponent		•		Defender Criticals	
Bypass Armor	•			Attacker Criticals	•
Choose Location	•			See Description	
Circumvent Parry	•			Attacker Criticals	
Damage Weapon	•	•			
Disarm Opponent	•	•			
Drop Foe	•		Firearms Only		
Duck Back	•		Firearms Only		
Enhance Parry		•		Defender Criticals	
Entangle	•	•	Entangling Weapons		
Force Failure	•	•	Opponent Fumbles		
Grip	•		Unarmed		
Impale	•		Impaling Weapons		
Kill Silently	•		Small Weapons	See description	
Marksman	•		Ranged Weapons Only		
Maximise Damage	•			Attacker Criticals	•
Pin Down	•		Ranged Weapons Only		
Prepare Counter		•			•
Rapid Reload	•	•			•
Scar Foe	•	•	Bladed Weapons Only		
Select Target		•		Attacker Fumbles	
Slip Free		•		Defender Criticals	
Stun Location	•		Bludgeoning Weapons		
Sunder	•		Two Handed Weapons		
Trip Opponent	•	•			
Withdraw		•			
Weapon Malfunction		•	Firearms only	Attacker Fumbles	

Close Combat

Situational Modifiers

Situation	Difficulty Grade
Attacking a helpless target	Automatic
Defending while on lower ground	Hard
Fighting in a confined situation	Hard
Fighting with an unfamiliar weapon	Hard
Fighting when prone	Formidable
Defending against an attack from behind	Formidable
Fighting in pitch darkness or when blinded	Herculean
Firing at prone target	Formidable
If attacker is prone (by force)	Formidable

Close Combat

Close combat is hand to hand fighting in its classic sense, when combatants strike each other with wielded or natural weapons. The following guidelines offer ways to make close combat more interesting and help to further explain some concepts hinted at earlier in this chapter.

Situational Modifiers

Situational modifiers may be applied when fighting in particular conditions, or as the result of a Special Effect. For example fighting in the dark might incur a difficulty grade of *Herculean*. Unless stated otherwise, modifiers are decided by the Games Master. Where two or more situations are pertinent to the character, use the most severe.

Some modifiers are circumstance dependent, but rather than applying a difficulty grade the Combat Style is limited by a relevant skill. For example, fighting from the back of a horse would cap the combatant's Combat Style by their Ride skill, whilst fighting in water might cap it to the value of the character's Swim.

Engagement. A character is considered Engaged if he or she is within melee weapon range of an opponent. This does not necessarily require that both combatants can reach each other; only that one of them can be potentially struck by the other.

Once a character has engaged with an opponent he can no longer freely depart that fight (charging past is a special exception). It requires some form of deliberate act to break contact with the foe, normally performed via a combat action such as Outmaneuver, or use of the Withdraw Special Effect.

Charging. A charge requires a character to spend at least one turn using the Move action prior to the turn in which they attack. Whilst charging, the attack roll suffers a difficulty grade of *Hard*. In return the charge increases the Size of the attacking weapon by one step and a bipedal attacker's Damage Modifier by one step; or two steps if a quadruped (or more legs). Rid-

ing characters may substitute their Damage Modifier for that of their mount instead. The final position of the charging character depends on the result of the exchange and whether the attacker wishes to stop or continue sweeping past, immediately breaking engagement.

Rather than parrying or evading, the recipient of a charge can simultaneously counterattack the charging attacker instead. In this case the wielder of the longer weapon strikes first. If the weapon can be set to receive a charge (such as a spear), the recipient may use the Damage Modifier of the charger instead of his own.

Cover. Cover is used by opponents to obstruct attacks against them, by either physically blocking a blow due to the toughness of the interposing material, or by obscuring where precisely the foe is. The precise value of cover depends on the thickness of its protection and the extent of its coverage.

An attack against a target which lands on an obscured Hit Location will be blocked to the extent of the cover's inherent protection. Cover can be partially negated either by use of the Choose Location special effect to aim at visible parts of the target; or striking through the cover if the weapon is capable of penetrating it.

In situations where cover is total but the attacker believes his attack will penetrate, he may strike blindly at the hidden target. In such cases the attack roll is one grade harder and Choose Location may not be taken if a special effect is won. This assumes the attacker knows fairly accurately the target's position behind the cover.

Evading. Evading in combat is to throw oneself clear of an overwhelming attack. This requires an opposed test of the Evade skill of the defender versus the attacker's pertinent roll. This could be anything from the Drive skill of a ramming battle tank to the usage of a psionic power. If the attacker wins then they



inflict damage as per normal. If the defender wins damage is completely avoided.

If the winner of the opposed roll achieves one or more levels of success over his opponent, they may select suitable Special Effects as per normal combat. Whatever the result, the evasive gambit leaves the defender prone – usually requiring the character to regain his footing on his following turn – unless they can use the Arise special effect or possess a Combat Style trait such as Daredevil.

Knockback. An attack which imparts more damage than the SIZ of the recipient will, by default, result in the character being knocked back. The damage in this circumstance is before any reduction due to parrying or armor. On receiving such a blow, the recipient must pass an *Easy* Acrobatics or standard Athletics roll to avoid falling prone. They are also thrust backwards one meter for each five points of damage (or fraction thereof) in excess of their SIZ.

Leaping Attacks. Leaping attacks can be launched from a variety of situations, most are triggered as part of an ambush or at the conclusion of a charge, but some creatures have the ability to leap atop an opponent without the need for a run-up or superior height.

A leaping attack is resolved with an opposed roll of the leaper's Athletics skill versus the defender's Brawn or Evade skill. Quadruped targets make the attack roll one difficulty grade harder. If the leaper wins then the defender is automatically knocked prone, with the attacker astride them. Failure means the defender has weathered or sidestepped the impact. If the winner of the opposed roll achieves one or more levels of success over his opponent, they may select suitable Special Effects as per normal combat.

No damage is inflicted as part of the leap; however a subsequently prone victim cannot recover his footing until either his

attacker leaves him, or he eventually wins a Special Effect permitting him to Arise.

Outmaneuvering. A character facing multiple opponents can use movement to limit the number which can attack him at any time, constantly shifting position, forcing foes to interfere with one another. Outmaneuvering requires that the character has room to move about and is not pinned in a confining area.

Outmaneuvering requires that the character engages his opponents in a group opposed roll of Evade skills. Every participant, both the maneuvering character and those foes who wish to corner him, must spend an Action Point. Then they each roll once and those who fail to beat the maneuvering character's roll cannot attack him for the remainder of that Combat Round, being blocked by their allies or terrain features.

If the maneuvering character beats all of his opponents he has the choice of safely engaging a single foe for the rest of the round or Withdrawing from the fight completely.

Passive Blocking. Passive Blocking allows a character armed with a weapon to hold it in such a way that it covers a chosen location (or locations when using a shield), but at the cost of being unable to actively parry with it (see Ward Location page 58). Any attack which hits the locations automatically receives the benefit of the weapon or shield, reducing damage as normal. The technique is commonly used when a warrior wishes to guard a weak spot or wounded location. Nothing prevents a two weapons or weapon and shield combatant from using his other weapon to actively parry.

Since passive blocking works in the same way as cover, the Choose Location special effect cannot be used to bypass the block in close combat, though opponents can still use the effect to strike other unblocked areas. Crouching down behind a shield allows a character to double the number of locations covered whilst passive blocking.

Effects of Surprise

- » *The target suffers a -10 penalty to initiative*
- » *Until their Strike Rank arrives they are considered flat footed and cannot defend themselves*
- » *The first attack on the target, if successful, gains a bonus Special Effect*
- » *For the remainder of the round they may not perform any offensive action*

Surprise. Surprise occurs when an unexpected attack is launched against opponents unaware of the attacker's presence or intention. An ambush would be an example of the former, whilst treacherously turning on an unsuspecting ally during amiable conversation illustrates the latter.

The effects of surprise on a target are listed in the sidebar.

Sweep Attacks. Sweep attacks occur at the Games Master's decision, when weapons or creatures of unusual size attack a closely clumped group of opponents – the scything tail of a huge reptile or the unstoppable charge of a giant triceratops for example – striking several foes simultaneously. A sweep attack is made by applying a single attack roll of the weapon or creature to all targets in its path. Each defender must resolve the effects of the attack separately and any special effects imposed on the attacker are treated as having occurred concurrently.

Ranged Combat

Ranged combat incorporates all forms of weaponry which require to be shot, thrown or slung to strike their target. Ranged attacks are resolved in an identical way to close combat. However, ranged weapons can normally only be parried with shields; those without must rely on natural cover or use Evade to dive out of the line of fire. Thus against lightly armored foes, ranged weapons can be formidable deterrents.

Each ranged weapon has a number of specific attributes which determine its effectiveness. The ones which have a key bearing on combat are as follows:

Force

Force is an abstract measure of the penetrative power of a weapon or its ammunition to determine whether the blow overcomes a (shield) parry. Force is not used by energy weapons.

Damage Modifier

This attribute shows whether or not the Damage Modifier of the

attacker can be used to boost the ranged weapon's damage roll. In general only self-drawn bows and thrown weapons allow the user to apply their Damage Modifier.

Range

Three numbers separated by slashes, representing the maximum Close, Effective and Long ranges of the weapon or its ammunition. Close range is the distance over which the Choose Location special effect may be used, provided the target is stationary or unaware of the impending attack. Effective range has no significant modifiers. At long range the weapon can still inflict harm, but the amount of damage is halved and Force is reduced by one step.

Load

The time in turns taken to load or reload a weapon which fires ammunition. A character can reduce the time spent loading or readying by use of the Rapid Reload special effect. Load times for firearms indicates changing the magazine.

Impale Size

The Size of an impaled weapon is different from the Force it strikes with. Ranged impaling weapons have a special column denoting their actual size when considering the hindrances caused by the Impale special effect.

Situational Modifiers

As with close combat, situational modifiers may be applied when using ranged weapons in particular conditions. A character's Combat Style may be capped when using the weapon in difficult circumstances, such as firing a gun whilst driving a motorbike.

Aiming. By spending additional time aiming a ranged weapon, a character can potentially increase his chance to hit. Aiming requires an entire Combat Round steadying the weapon and waiting for the best opportunity to release, for example withholding a blaster shot until a target moves between two obstructions.

Ranged Combat Situational Modifiers

Situation	Difficulty Grade
Light Wind	Hard
Moderate wind	Formidable
Strong Wind	Herculean
Gale, storm or hurricane	Hopeless
Target is running	Hard
Target is jinking	Formidable
Target partially obscured by cover, mist or twilight	Hard
Target mostly obscured by cover, thick smoke or fog	Formidable
Attacker is blind or pitch darkness	Hopeless

Spot rules

Three additional spot rules are used.

From the Hip: Shooting from the hip, without taking aim, is quick but imprecise. Add 10 to Initiative for a character using this. The default difficulty is Hard at close quarters (within 3 meters) and Formidable for longer ranges.

Dual firearms: With dual firearms, two shots at once is possible. They still cost one action point per shot, but both shots are fired in the attacker's first turn. Both shots are at a difficulty grade of Formidable.

Firing From a Moving Vehicle: To fire a handgun from a moving vehicle, the attacker's skill is capped at the pilot's Drive skill.

Humanoid Hit Locations

Hit Location	1d20
Right Leg	01-03
Left Leg	04-06
Abdomen	07-09
Chest	10-12
Right Arm	13-15
Left Arm	16-18
Head	19-20

By aiming, the character may reduce the difficulty of a Range or Situational Modifier by one grade. Additional rounds spent aiming grant no further advantage.

Firing into a Crowd

Firing into the swirling ebb and flow of a melee can be a risky business, thus there is always a risk of accidentally striking someone other than the original target being aimed at.

When firing at a specific target at the edge of a crowd or melee, the attack suffers a difficulty grade of *Hard*. If trying to fire through a group to hit a target in its midst, or on the other side, the penalty should be raised to *Formidable*. Aiming is still permitted to help mitigate the danger.

A marksman who passes his attack roll despite the difficulty penalty has aimed true and will hit his intended target. If however the marksman fails the roll, but would have succeeded if not for the 'firing into a crowd' penalty, then an adjacent victim is struck instead (who is free to Evade or Parry as normal).

If more than one target is in the line of fire, the Games Master should determine the victim randomly. Any special effects won as part of the attack only apply to the original target, not any accidentally struck bystander.

Hit Locations

Most successful attacks land on a specific hit location. This can be determined randomly or in some circumstances be selected by Special Effects such as Choose Location. To randomly calculate which location is been hit, roll 1d20 and compare the number rolled with the relevant humanoid or creature Hit Location table.

Animals and aliens usually have slightly different hit location tables than humanoids to reflect their own unique physiology.

Simplified Combat

Combat is downplayed in some settings and campaigns, and the rules as written may feel too bulky at times. Below is a set of streamlined rules that are designed to make fights quicker and easier.

Combat is also slightly less lethal in this version. One shot will not incapacitate a character quite as often, though special effects like Drop Foe or a lack of armor will still make many gunfights short and dangerous.

As the group starts feeling comfortable with the simplified rules, you may want to switch to the regular ruleset. For even more detail, use the full Mythras rules.

Below is a compact description of the simplified rules; read the regular combat rules first for full comprehension.

Hit points

In simplified combat, general hit points are used, calculated as $(CON+SIZ)/2$. No hit locations are used. When hit points are halved, the character gains a serious wound; see below.

Action points

Characters have 2 action points, just as in the regular rules.

Round length

Round length is the same; 5 seconds.

Initiative

Initiative is determined the same way: Average of DEX and INT, plus 1d10. Rolled at the start of each fight.

Combat Styles

Combat styles are determined by weapon type:

- » Rifle
- » Carbine
- » Handgun

Combat Style Traits (Optional)

Assassination. Allows the user access to the normally restricted Kill Silently special effect.

Blind Fighting. Allows user to ignore any penalties imposed due to poor lighting or temporary blinding.

Mounted/Vehicle Combat. Allows character to ignore the penalties & skill cap placed upon combat rolls by the Ride, Drive or Pilot skills.

Skirmishing. The style permits launching ranged attacks whilst walking or running.

Quickdraw. Trains the character to draw and shoot a holstered weapon in a single, fluid motion, ignoring penalties for From the Hip.

Situational modifiers & Spot Rules

As per the regular combat rules, plus:

- » *Penalty when firing at someone in partial cover: Upper body visible: Hard, Head + Shoulders: Formidable, Leaning out from behind a corner to fire: Formidable.*
- » Fatigue is not used.

For example, use Combat Style (Handgun) when shooting with a blaster, or Combat Style (Rifle) when using a laser rifle.

Having any of the above combat styles and using any of the other types is a *Hard* roll.

- » **Unarmed.** Kick & fist; regular unarmed combat.
- » **Force Sword.**
- » **Melee weapons.**

Melee weapons are also determined by weapon type: Sword, Axe, Knife, Throwing knife, and so on.

Combat style traits are optional (see sidebar on previous page).

Combat Actions

The combat actions listed below are used mainly, though Use power, Struggle, etcetera can be used if applicable.

Attack. Regular attack.

Move. A distance the GM judges as reasonable under the circumstances.

Regain footing. Roll Brawn or Athletics to get up after Trip Opponent for example.

Sneak peek. Assess situation without becoming a target. Perception skill fumble results in opponent getting a pot shot.

Evade. Character ends up prone. Use Regain Footing or Arise to get up.

Parry. Used only with melee weapons. See weapon sizes to determine how much damage that can be absorbed. 1 step smaller stops half the damage, 2 steps smaller doesn't stop any damage.

Take cover. The character gets behind something (not prone). Used as a reactive action here (*ie.* characters can dive for cover after someone shoots at them).

Mook Rules

In many scenarios, less important NPCs – like security guards and troopers – will be encountered by the characters. Most of them will fall under the Mook Rules. These rules state that unimportant, low-level NPCs stop fighting after being hit once. If they can, they flee. Otherwise they fall down, probably unconscious.

Special Effects

A subset of 11 special effects are used in these simplified rules; they are listed in the sidebar. As you get used to them after a couple of fights, the speed of combat will increase. They do add a nice tactical element, so it's well worth the effort to learn them. Cheat sheets for players are recommended!

Wound Levels

As hit locations are not used, wounds work a bit differently – though the same terms are used.

Minor wounds: All damage above half hit points.

Serious wound: When hit points are halved or lower. No attacks possible for 1d3 rounds. All skill checks are at a penalty of *Hard* until the wound is no longer serious.

Major wound: Zero hit points or lower. Character is dead or dying. If the character fails a roll against their Endurance they are killed instantaneously. Otherwise they are incapacitated and require hospitalization before they die of shock or blood loss.

Blown Away: Negative Hit Points equal to Starting Hit Points. Instant death from excessive trauma.

Healing

Minor wounds: Regain hit points equal to a character's Healing rate per day.

Serious wounds: Regain hit points equal to a character's Healing rate per week (until it reaches half the original value – from then on it heals as a minor wound). First aid will restore a number of hit points equal to a character's Healing rate right away.

Major wound: If not dead, First Aid will stabilise a dying character for a number of hours equal to their Healing Rate. Requires hospitalization or Medicine skill to treat.

Special Effects (Simplified)

1. *Arise.* Get up from prone (without losing an action point).
2. *Blind opponent* (Critical only, Opposed). Make an opposed roll: Original roll vs Evade to avoid being blinded for 1d3 rounds.
3. *Disarm* (Critical only, Opposed). Make an opposed roll: Original roll vs Combat Style (new roll) to avoid dropping weapon.
4. *Drop foe* (Opposed, Firearms only). If the target takes at least one point of damage, make an opposed roll: Original attack roll vs Endurance to avoid shock/pain lasting 30 minutes or until First Aid or similar is used. Cannot fight during that time.
5. *Duck back* (Firearms only). Take cover right after attacking (not having to wait for the next action to use Take Cover).
6. *Impale.* Roll damage twice; attacker decides which roll to use.
7. *Maximize damage* (Critical only). One of the damage dice will count as its maximum value.
8. *Pin down* (Opposed, Firearms only). Make an opposed roll: Original attack roll vs Willpower to avoid hunkering down in full cover (no attack possible).
9. *Trip Opponent* (Opposed). Make an opposed roll: Original roll vs Brawn, Evade or Acrobatics to avoid ending up prone.
10. *Weapon Malfunction* (Fumble, Firearms only). When attacker fumbles, this special effect can be used by the target.

Spot Rules

Many different things can occur during a game. Some are resolved through skill use or one of the major game mechanics such as combat; others require their own rules for adjudication. This chapter provides rules and guidance for a variety of different scenarios that Games Masters and players will encounter whilst playing M-SPACE.

Fatigue

Fatigue measures tiredness and its incremental effects. It is used to track many different things from strenuous activity to the debilitating effects of disease.

The primary way of accruing Fatigue is by engaging in some form of physical activity. The more arduous the exercise or work, the more quickly it tires the character. At the Games Master's discretion, characters must make an appropriate skill roll – either Athletics, Brawn or Endurance – to resist gaining a level of Fatigue.

Every failed roll accrues a level of Fatigue. Each level of Fatigue carries penalties for skill use, movement, Strike Rank and Action Points. Asphyxiation, Blood Loss and other setting dependent effects also contribute to Fatigue accrual.

For most characters, activities of any kind become near impossible when the level of Incapacitated is reached. At this stage the character is still conscious but incapable of anything but the most desperate of activities.

Beyond Incapacitated, characters cannot act at all. The Fatigue levels – Semi-Conscious, Comatose and Dead – are generally reserved for measuring the most extreme effects of suffocation, disease, blood loss, starvation, exposure and so forth.

Asphyxiation

Characters can hold their breath for a number of seconds equal to their Endurance skill. However the character must be prepared (filling the lungs with as much air as possible); if not, then the period is halved if the character was in a passive situation, or reduced to one fifth if the character was engaged in strenuous activity.

Once the period of held breath is over, characters must make an Endurance roll every Combat Round; see sidebar for results.

Without aid, death from asphyxiation is usually swift. If the asphyxiation ends before the character dies, they recover Fatigue levels lost.

Asphyxiation Endurance Rolls:

- » *If the roll is a critical success, no further deterioration occurs.*
- » *If the roll is successful, the character accrues an extra level of Fatigue.*
- » *If the roll fails, the character sustains 1d2 extra levels of Fatigue that round.*
- » *If the roll is fumbled, the character sustains 1d3 extra levels of Fatigue that round.*

Fatigue Levels

	Skill Grade	Movement	Strike Rank	Action Points	Recovery Period
Fresh	No Penalties				
Winded	Hard	No Penalty	No Penalty	No Penalty	15 minutes
Tired	Hard	-1 meter	No Penalty	No Penalty	3 hours
Wearied	Formidable	-2 meters	-2	No Penalty	6 hours
Exhausted	Formidable	Halved	-4	-1	12 hours
Debilitated	Herculean	Halved	-6	-2	18 hours
Incapacitated	Herculean	Immobile	-8	-3	24 hours
Semi-Conscious	Hopeless	No Activities Possible	No Activities Possible	No Activities Possible	36 hours
Comatose	No Activities Possible	No Activities Possible	No Activities Possible	No Activities Possible	48 hours
Dead	—				Never

Exposure to vacuum

If suddenly exposed to vacuum, characters first roll 1d4 for decompression damage to the lungs (Chest), then they roll for asphyxiation as normal, plus 1d2 hit point damage per round (random locations).

Blood Loss

Blood loss due to external and internal wounds, usually sustained in combat, can wear a character down very quickly. Its effects are measured by the accumulation of Fatigue levels, in a manner similar to asphyxiation. Unrestrained blood loss typically results in death without some form of medical attention. Unlike asphyxiation, the effects of serious blood loss on Fatigue are enduring. A character recovers Fatigue lost to bleeding at a rate of one level per day, starting the day after his exsanguinations cease.

Falling Distance Table

Distance Fallen	Damage Taken
1m or less	No damage.
2m to 5m	1d6 points of damage to a random location
6m to 10m	2d6 points of damage to two locations
11m to 15m	3d6 points of damage to three locations
16m to 20m	4d6 points of damage to four locations
Each +5m	+1d6 damage

Falling

The amount of damage suffered in a fall depends on the distance of the drop (see sidebar). Armor points do not reduce falling damage, but the Damage Modifier of the falling character or creature applies to damage rolls.

Falling from a Moving Vehicle

Damage sustained from a fall from a moving vehicle, such as a speeder bike, depends on the vehicle's speed and the distance fallen. For Speed values used in the vehicles chapter, this means 1d6 per every point of Speed (if the vehicle is moving at top speed). Otherwise, assume that the speed, in meters per Combat Round, is equal to half the height shown on the Falling Distance table. For instance, a character who fell from a car moving at 20m per Combat Round would suffer 2d6 damage to two random locations.

Fires

Fires are always a source of danger when used as a weapon or rage out of control. The Fire Intensity table below gives five different intensities for heat damage, with some examples. The damage inflicted per round is given in the Damage column. Being relatively small, Intensity 1 and 2 sources apply their damage to a single Hit Location, usually that touching the source. Intensity 3 and 4 sources are larger, applying damage to nearest 1d4+1 Hit Locations, indicating the degree of radiant heat. Intensity 5 sources affect all Hit Locations simultaneously.

Fire has the ability to ignite flammable materials. If not extinguished immediately such materials combust within a number of rounds as indicated by the fire's Intensity. Once ignited, flammable materials burn until physically extinguished. Damage is applied directly to the Hit Points of the material, ignoring Armor Points, and to any flesh beneath. If left uncontrolled it spreads to a number of Hit Locations, per round, equal to its Intensity.

Fire Intensity Table

Intensity	Examples	Time to Ignite	Damage
1	Candle	1d4	1d2
2	Torch	1d3	1d4
3	Campfire	1d2	1d6
4	Conflagration	1d2	2d6
5	Volcanic lava	Instant	3d6

Falling & Acrobatics

Acrobatics can be used to mitigate falling damage – a successful roll allows the character to treat the fall as if it were two meters shorter than it actually is. In addition, as long as the roll is successful and the character does not suffer a Serious or Major wound due to the fall, the character lands relatively safely and is not prone.

Jumping

A successful Athletics roll allows one to jump up to SIZ x20 centimeters horizontally or up to SIZ x10 centimeters vertically (with at least a five meters run-up available).

For every full 20% a character has in Athletics, he can add an extra meter to a horizontal jump.

On a critical success the character adds a further meter to his total distance, and remains upright on landing.

A fumbled roll indicates the character has landed awkwardly. He must immediately make an Endurance roll. If the Endurance roll is a success 1 point of damage is sustained to one leg. If the Endurance test fails, then 1d4 points of damage is inflicted instead.

Keeping Track of Ammunition

The basic idea of M-SPACE is that ammunition is too complicated to keep track of. And blasters in space opera never seem to run out anyway, unless for storytelling reasons.

But an easy way to do it is to have an abstract resource percentage called Ammo that is lowered after every fight. Starting at 100%, it is lowered by x % after a fight (x can be anything from 10 to 50, depending on the setting/campaign).

Roll below Ammo at the end of a fight (after lowering the value first) to have some left. A failed roll means the character is out of ammunition and she must get a new clip before getting into another battle.

The GM can decide how much to raise Ammo depending on how much is found/bought: borrowing from a team member +10% (lowering the team member's Ammo value by -10%) or going back to the starship (raises Ammo to 100%) for example.

Example: At the end of a fight, character A rolls above her Ammo 40% and she's out of ammunition. Her companion B has 80% and rolls a success. Borrowing from B, A now has Ammo 50%, while B's value is lowered to 70%. Both will automatically have enough ammo for the next battle, but lowers them and rolls as normal at the end of it.

Continued...

Inanimate Objects

All inanimate objects possess Armor Points and Hit Points which are used to determine resistance to damage and destruction. Armor Points reduce damage before Hit Points are affected. Once an object's Hit Points have been reduced to zero, it is useless.

Breakage attempts require a character to make a Brawn, Unarmed or Combat Style roll, as appropriate, to inflict damage. A success deals damage to the item.

Weapons vs Inanimate Objects

Using a weapon against an inanimate object with Armor Points equal to or greater than those of the weapon deals damage to both the object and the weapon. For instance, using an axe on an iron door may damage the door, but the axe itself will be destroyed long before the iron door is. The Games Master should exercise discretion on which weapons or tools can affect which objects. A chisel, for example, is explicitly designed to carve wood or stone whilst a sword, although sharp, is not. The chisel would therefore not take damage from something it is attempting to carve whereas a sword most likely would.

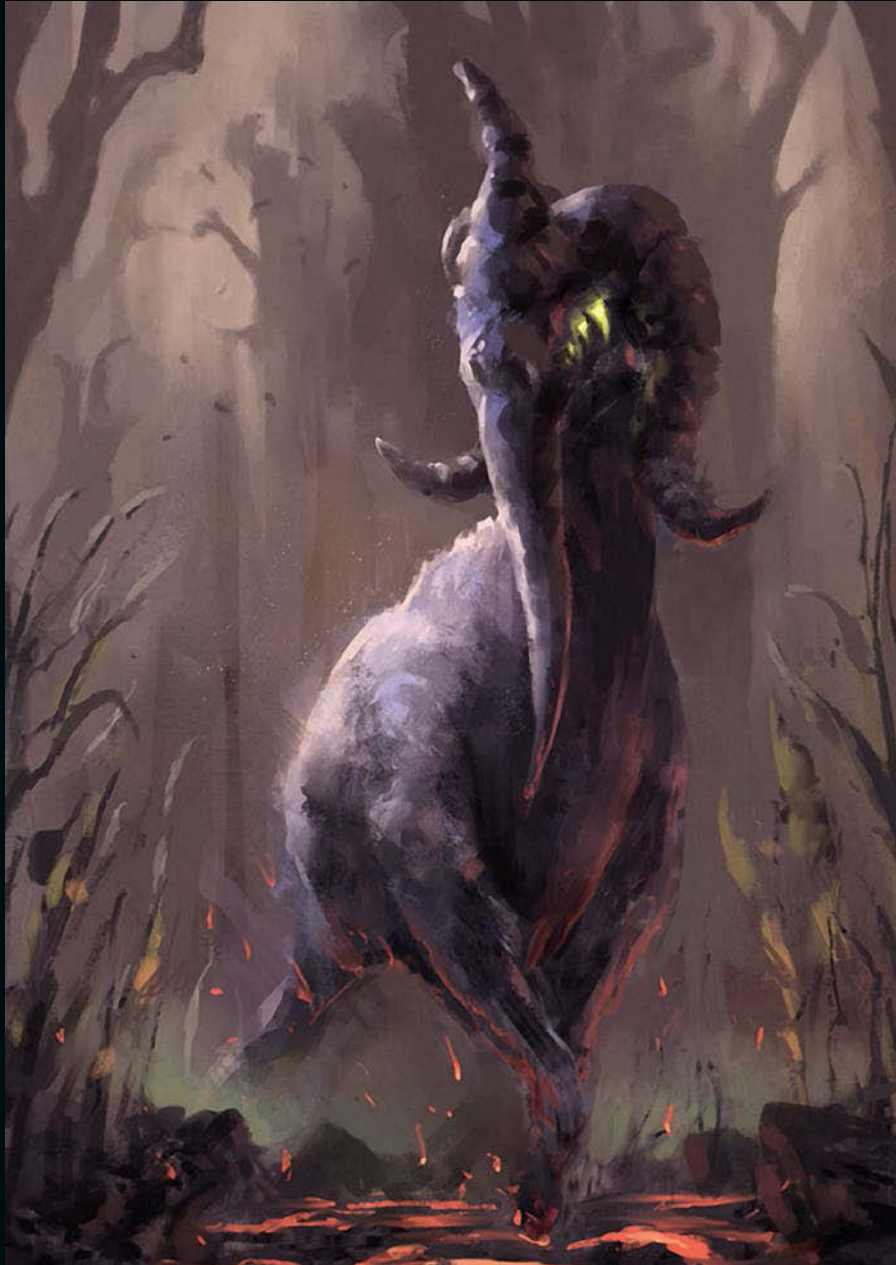


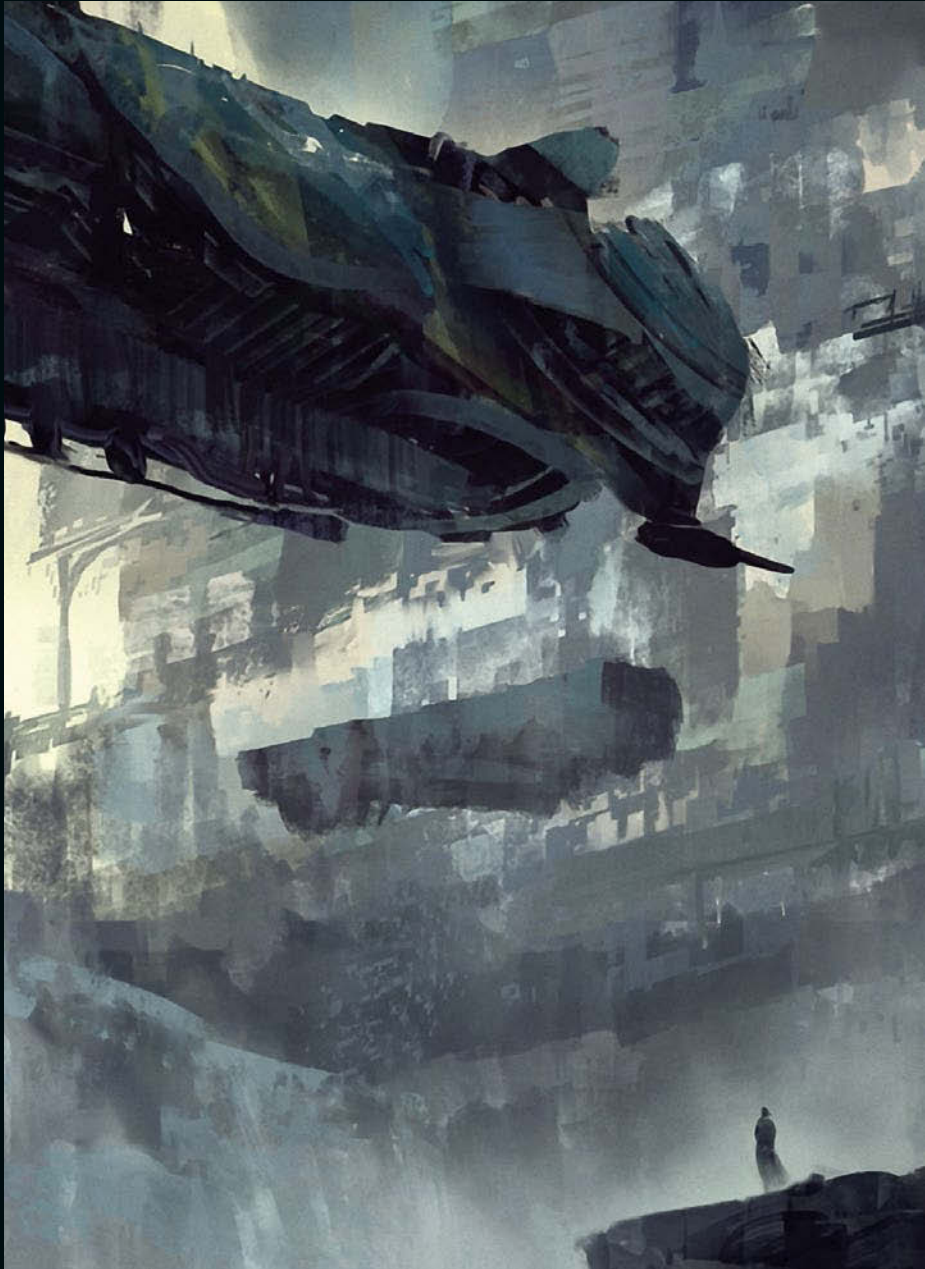
Example Inanimate Objects

Object	Armor Points	Hit Points
Chain/shackle	8	8
Lamp post	8	15
Glass window	1	4
Steel door	12	30
Rope	6	3
Sword	6	10
Wooden chair	2	6
Wooden table	3	10
Wooden door	4	15
Interior wall	3	20
Brick wall	6	30
Concrete wall	8	40
Bulletproof glass window	8	25
Steel beam	12	50
Tree trunk	6	50

Optionally, if a player clearly states that she's trying not to waste "bullets" (and acts like it, with a more tactical or sniping approach), the GM can rule the percentage loss after the fight to be lower than normal.

The good thing about this system, is that it can easily be changed to a more general Energy value. All sorts of equipment can depend on this percentage, not just weapons: powertools, welding equipment, high-energy comms or special sensors.





Starship Design

This chapter covers a simple rules system for starship creation. By combining different types of modules you need, it is very intuitive to design most types of starships, from small fighters up to mega-destroyers. To create a ship, you start with the number of people it's constructed for. For every person, you will need at least one Module, though more are often added as you go. A very simple ship, let's say an automatic rescue pod, can consist of just one Module. The majority of starships will have much more though.

With all persons (crew or passengers) accounted for, you will start to add a cockpit, engines, maneuvering, hyperspace capabilities – and sometimes a galley, sickbay, weapons or a lab. Keep adding Modules to fill the functions you need; without breaking the bank. The number of Modules will eventually make up the SIZ stat of the ship.

Many sci-fi campaigns and scenarios are built on the assumption that the characters have access to a starship. But starships are massive investments and most starting characters don't have that kind of money. There are many ways to solve this dilemma, but one of the easiest is to have a patron lend the characters a ship; perhaps a rusty bucket with loads of personality and many opportunities for upgrades, to be returned at the end of a few scenarios. If they treat it well, the ship may well become a part of a payment later on.

Scale

These rules add the concept of scale to Mythras. Descriptions in many of the other chapters are considered as **Planetside** scale, while starships are in **Starship** scale, being roughly ten times in size, damage, armor and so on.

Overview

The rules go through these steps:

1. Decide upon Ship Type
2. Pick the Modules you need. Determine Size & Size Rating
3. Calculate Speed & Handling. They get more expensive the more Modules you have
4. Add Shields, Armor and Apps (Skill Enhancers)

Starship Type

First decide what type of ship you need. Many adventurers want something in between the examples here, but they can hopefully serve as a starting point.

Example Ship Types: Shuttle, Fighter, Far Trader, Scout, Star Liner, Scientific, Yacht, Gunship, Explorer.

Modules

Pick the Modules you need from the list on the following pages. Write the Modules' names down on the Starship Sheet on page 102, and the number of Modules. When finished, add the number of Modules together and write it down at the bottom of the Module box. This number is the ship's Size stat.

The following things are always included in a starship: Hull, power plant, airlock (not for small ships), vacuum suits for complete crew, computer, life support system, communications system, sensors, repair kit and a gravity generator. There is no need to buy specific Modules for these functions.

On Astrodynamics

To simplify these rules, a catch-all Speed value is used. As a consequence – for those of you concerned with astrodynamics – conservation of momentum in space is mostly ignored.

There are several ready-made ships for inspiration in the Technology chapter (page 188), and also a detailed walkthrough of starship design in Appendix A (page 112).



Cockpit/Bridge

1 Module per person.

Engine

Select a Thrust Rating (TR) for the Modules. Determines the ship's Speed value, see page 94.

Engine Type	TR for Engine	Cost/Engine Module
Cutting Edge	120	10000
Excellent	100	7000
Standard	70	5000
Economy	40	2500

Maneuvering Thruster

Select a Thrust Rating (TR) for the Modules. Use the table above. Determines the ship's Handling value, see page 94.

Sickbay

1 Module for an Autodoc with room for one patient. 4 Modules per patient for a regular sickbay.

Crew

1 Module per crew member. 4 Modules per crew member for a cubicle.

Passengers

1 Module per passenger. 4 Modules per passenger for a cubicle.

Cargo Hold

1 Module per ton cargo. Secret spaces, specific habitats or biomes cost more.

Weapons

1 Module per attack and round. Handled by one person with the combat style Gunnery. One Module can be handled by the pilot. The following weapon Modules are separate turrets. Choose from laser, blaster, ion cannon and missiles.

Lab

1 Module adds +10% in one chosen skill (cannot exceed +30% per skill, though larger specimen can be brought into the lab if more Modules are added for the same skill).

Open Space

8 Modules minimum for canteen, briefing room, theatre, garden, gym etc. Holds one person per Module, but at least 2 Modules per person is preferable.

Hangar Bay

4 Modules for a small All Terrain Vehicle (ATV). 10 Modules for a small fighter or shuttle.

Hyperspace

1-5 Modules resulting in a faster-than-light range from 1-5. Refuelling is needed before a new jump can be made.

Self-Repair

1 Module per self-repair unit. One roll every third combat round. +5% per step.

Escape Pod

1 Module can house one person for a week. No manual steering; docking and landing is automatic.

Example

When putting together a starship, a good way to start is to decide how many people it should be able to carry. We start here with four people: One pilot and three crew members. That's 1 Cockpit Module and as this will be a ship for longer trips, that leaves us with 16 (4x4) Crew Modules.

We will need a cargo space taking up 2 Modules and Hyperspace with a range of 3. Rounding off with 1 Module of extra sensors, we land at 23 Modules.

Not aiming to be particularly fast, we try a Thrust Rating of 100 and 3 Engine Modules. Using the calculation template on page 94, we get a preliminary SPEED of 12 (300/(23+3)).

Using only 2 Modules for HANDLING and a Thrust Rating of 100, we now have 28 Modules in total. HANDLING is 7 (200/28).

With the new total number of modules at 28, we recalculate SPEED to 11 (300/23+3+2).

SIZE is the total number of modules: 28.

Tractor Beam

1 Module per 10% to use as an opposed roll against opponents Pilot skill. Tractor beam percentage value must be greater than the size of the ship being captured. Range 2.

Extra Sensors

1 Module with two additional close range sensor arrays. For example Heat, Life, Specific Mineral, Water, Volcanic Activity. Use with Sensors Skill.

Robot Arm

1 Module for one external robot arm, usually controlled from the bridge. Strength 10 (Starship Scale). Reach: 10 meters. Skill roll not necessary under normal circumstances. For doubled strength and reach, add one Module.

Example Military Ship Sizes

Titan: 1280 (640-1920)

Battleship: 640 (320-960)

Cruiser: 320 (160-480)

Destroyer: 160 (80-240)

Frigate: 80 (40-120)

Corvette: 40 (20-60)

Cutter: 20 (10-30)

Small Craft: 10 [8-15]

Fighter: 5 (3-8)

Example Civilian Ship Sizes

Far Trader: 40 (20-60)

Explorer: 65 (40-120)

Shuttle: 12 (8-15)

Scout: 30 (20-60)

Star Liner: 320 (160-480)

Yacht: 30 (20-60)

○

Add the number of modules together to get ship Size. See the chart on the next page to calculate Size Rating. Use the closest higher number of Modules, and write down the Size Rating next to the Size value.

Streamlined: Write 'Yes' here if the ship is designed for atmospheric flight. Size stat is not altered, but the length and width of the ship will be greater, to make room for wings and a slimmer hull (see page 94). Non-streamlined ships suffer a difficulty grade of *Formidable* to Pilot rolls in atmospheric flight.

Stealth: Gives the opponent -5% per step in Sensors or Perception skill. Max -40%. More advanced stealth technologies may be encountered under rare circumstances.

Capital Ships

For very big ships (somewhere over 250 Modules), using the table for Size Rating makes the design phase a little easier.

Pick Modules as you normally would, but write down both the number of Modules needed and the Size Rating for each function. And instead of keeping track of hundreds (or thousands) of Modules to add together, identify the function with the *highest* Size Rating. Then make an estimate to see if the rest of the Modules moves the ship into the next Size Rating. Round up if necessary.

Example: A Mega Destroyer have a rating of 15 for crew – that’s about 4000 people living on this ship. If it had a rating of 12 in weapons, 3 in labs, 12 in hangar bays, 13 in engines and so on, the whole thing could fit in a Size Rating 16 hull (1 bigger than the Size Rating 15 for the crew, since all the other modules taken together is approximately $2000+4+2000+4100\approx 8000$). So we would know the ship was rated up to 32 768 modules – without having to go into the bother of actually counting them and assigning all of them. Note that it could be 30 000 or 40 000 modules – at this size we really don’t need to know.

It will also be of some help to use the rules for weapon upgrades and the damage ladder on page 116. Using that system will make it easier to convert, for example, 100 Laser Modules into 10 Heavy Lasers.

Size Rating	Number of Modules
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128
9	256
10	512
11	1024
12	2048
13	4096
14	8192
15	16384
16	32768
17	65536
18	131072

Module	Cost per Module	Note
Cockpit/Bridge	5000 Cr	1 Module/person
Engine	2500/5000/7000/10000	Select Thrust Rating (page 88) to determine Speed
Maneuver Thrust	2500/5000/7000/10000	Select Thrust Rating (page 88) to determine Handling
Sickbay	5000 Cr	1 Module/patient for Autodoc. 4 Modules/patient for regular sickbay
Crew	1000 Cr	1 Module/crew member. 4 Modules/crew member for cubicles
Passengers	1000 Cr	1 Module/passenger. 4 Modules/passenger for cubicles
Cargo Hold	1000/5000 Cr	1 Module/ton cargo. The higher cost is for secret holds or habitats/biomes
Weapons	5000-50 000 Cr	1 Module/gunner. For costs, see Weapons
Lab	5000 Cr	1 Module/Skill +5%. Max +30% in any one skill
Open Space	1000 Cr	1 Module/person, though more is to prefer
Hangar Bay	1000 Cr	4 Modules for ATV. 10 Modules for small fighter or shuttle
Hyperspace	5000 Cr	1 Module/jump range. Max 5
Self-Repair	5000 Cr	1 Module/Mechanics +5%

Module (continued)	Cost per Module	Note
Escape Pod	1000 Cr	1 Module. Holds one person for a week
Tractor beam	5000 Cr	1 Module per 10% as an opposed roll against Pilot skill
Extra sensors	5000 Cr	Two sensor types per Module
Robot Arm	5000 Cr	

Attribute	Cost per Module & step	Note
Hit Points	5000 Cr	1 HP/Module is always free
Armor	5000 Cr	Max 10
Shields	1000 Cr	

App	Cost/+5%	Note
Targeting	2000 Cr	Max +20%
Sensors	2000 Cr	Max +20%
Navigation	1000 Cr	Max +20%

Attribute	Cost	Note
Streamlining	100 Cr/Module	
Stealth	5000 Cr/-5% and Module	Max -40%

Stats

$$\text{SPEED} = \frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$$

$$\text{HANDLING} = \frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$$

Speed & Handling Guidelines

To get started, use a Thrust Rating of 100.

1 Speed = 1% of total number of Modules.

Cutting Edge: 1.2 Speed per 1%

Standard: 0.7 Speed per 1%

Economy: 0.4 Speed per 1%

With Engine Modules 10% of the total number of Modules, you get Speed 10.

With Engines 20% of the total number of Modules, you get Speed 20.

SPEED (1-20)

Speed is a combination of acceleration and top speed, and is calculated from the number of Engine Modules and their Thrust Rating (TR). Add all the Engine Modules' TR together. Then divide the combined Thrust Rating value with the ship's total number of Modules to get Speed.

Zero Speed can be used to simulate ship-sized space stations.

HANDLING (1-20)

Handling defines how quick and easy the ship is to steer, and is calculated from the number of Maneuvering Thruster Modules and their Thrust Rating (TR). Add all the Maneuvering Thruster Modules' TR together. Then divide the combined Thrust Rating value with the ship's total number of Modules to get Handling.

SIZE (1-)

Size is the number of ship's Modules. It is divided into the Size Ratings on page 91. Add the ship's Modules together, and see what Size Rating it has, always rounding up.

Size	Approximate Length
1-4	<10 m
5-15	10 m
15-50	20 m
50-100	50 m
100	100 m

For Size over 100, use the Size value as a starting point for the approximate length in meters.

The approximate length is a rough guideline to give a hint at how big a ship is. A spherical ship can be 50% smaller, whereas a streamlined ship can be about 50% longer.

Weapons

Laser

Damage 1d6, Range 20, Cost 5000 Cr.

Blaster

Damage 1d8, Range 20, Cost 10 000 Cr.

Ion Cannon

Damage 2d6+1, Range 10, Cost 15 000 Cr.

Missile

Damage 3d6, Range 40, Cost 20 000 Cr.

High-Energy Blaster

Damage 3d6, Range 30, Cost 50 000 Cr. Size: 3 Modules.

Note that all damage is in Starship scale. For Planetside objects, like vehicles and built structures, multiply damage by ten.

Protection & Recovery

Shields

Shields are energy fields protecting the ship. Damage is subtracted from Shields first, until it reaches zero. If Recovery is used, Shields gain an amount equal to Recovery at the end of every combat round. Otherwise Shields are fully restored in 6 hours. Cost/Module and step (+1): 1000 Cr.

Calculating Speed & Handling:

A Simpler Approach

Here is an alternative approach to Engine and Maneuvering Thruster Modules, making it slightly easier to determine a ship's Speed and Handling.

To mimic the idea that the engines are an integral part of the hull, always taking up approximately the same percentage of the ship, calculate the total number of Modules without Engine and Maneuvering Thruster Modules. Determine the number of Engine and Maneuvering Thruster Modules you need to get your desired Speed and Handling, but do not recalculate the total number of Modules with the new Modules.

Missiles

Missiles hit the round after they were launched, and again two rounds later if they miss the first time. Evading missiles: Regular Evasion maneuver. Shooting it down: Roll Sensors first and then Gunnery. Or just Gunnery at -20% (if Sensors roll fail or Sensors are off-line). In any of the four rounds.

Round 1: Launch. 2: First attack. 3: If first attack is a miss, finding a new trajectory. 4: Second attack.

Armor in Space Opera

Many space opera settings seem to construct ships without armor, perhaps as a tribute to the aeroplanes of the past that were optimized for low weight.

Optional Rule: Armor as Modules

In most cases armor does not count as Modules. But sometimes it is more logical to add parts of the armor as Modules. The most obvious situation is a ship with completely separate, suspended armor, often protecting only from a couple of directions. To calculate the size of the suspended parts, use $\frac{1}{6}$ th of the total number of Modules for every side of the ship that are to be covered.

Example: A 12 Module ship will have thin plates of armor suspended along both sides as its only protection. $\frac{2}{6}$ ths of 12 is 4 – adding 4 Modules of armor will cover the sides, resulting in 16 total Modules (12 + 4).

Armor

A high tech composite material covers the hull, giving more protection. When Shields reach zero, deduct Armor from the damage roll before reducing Hit Points. $\frac{2}{3}$ of the Modules need to be armored; the remaining third are considered internal.

Cost/Module and step (+1): 5000 Cr. Max 10

Hit Points

A ship's general Hit Points are the same as Size. To simulate that a ship can be built with a sturdier construction than normal for its size, Hit Points can be bought separately. After the shields reach zero and armor is deduced from the damage, it reduces Hit Points. Note that hit points are reduced only per section, as hit locations are used. General hit points are only used in the simplified starship combat rules.

Cost/Module and step (+1): 5000 Cr.

Recovery

Recovery is an optional rule, to regenerate Shields at the end of every Combat Round. One point is recovered at the end of a round for every step bought. Otherwise Shields are fully restored after 6 hours without combat.

Cost/Module (+1): 2000 Cr.

Apps

Apps are programs that can be installed in a starship to aid its crew. The most common apps are Targeting, Sensors and Astro-gation. Each of them are targeted at a specific skill, and will give the user a bonus in certain situations.

Targeting App

Skill affected: Gunnery. Up to +20% in Gunnery combat style.

Cost/+5%: 2000 Cr.

Sensors App

Skill affected: Sensors. Intelligent algorithms aid users of sensor systems to detect ships, get info on star systems, planets or anomalies. Adds up to +20% in Sensors.

Cost/+5%: 2000 Cr.

Astrogation App

Skill affected: Astrogation. Add up to +20% in Astrogation, when rolling for Hyperspace jumps. Cost/+5%: 2000 Cr

Rebuilding & Expanding

At standard starports or better, and all ship yards, a ship can be rebuilt and expanded (and repaired of course).

A ship can only add 20% new Modules when expanding. Modules can be changed quite freely to new ones (labs to cargo hold, cargo hold to weapons for example), but use common sense.

Most of the other stats can be bought up, but not more than 20% (maybe with an occasional exception for storytelling reasons). This can, among other uses, simulate the acquisition of gear from a world with an unusually high Tech Level.

Upgrading Engines

The primary upgrade of Engine & Maneuvering Thrust Modules is to increase Thrust Rating. Re-calculate Speed and Handling, and pay the difference between the two ratings. If more Engine Modules are to be added, they can only be expanded by 20%.

These upgrades can be done in a standard starport or better.

NPC Starship Sheet

On page 103 is a simplified Starship Sheet to use with less prominent vessels. Additionally, Attitude and Faction can be written down.

Attitude might be described as aggressive, stalking, hit & fade, fights to the last man and so on.

Faction is the side the ship belongs to.

Hit Locations

For more realistic battles, but also deadlier and more unpredictable, a system for hit locations is used. As soon as a ship is damaged, for example in combat, 1d100 is rolled and a ship-specific chart is consulted.

Preparing a Hit Location Chart

As layouts for starships can vary quite a lot, every ship has its own hit location chart prepared at the design stage. First, look up the ship's total number of Modules. Then go through each ship section (Engines, Cargo Hold, Cubicles, etcetera) and use the formula to the left (rounded up). The number you get is the chance that this section is hit, depending on how many Modules each section has.

Go through all sections and add them to the hit location chart until you have filled the chart up to 100. See example in the sidebar on the next page.

If you want to, you can specify Shields and Armor for specific sections at the normal cost per Module. Write the new Shield and Armor value in the chart next to the percentage to hit. In this case the standard armor value is not used.

Hit Locations in Combat

When an attack is successful roll 1d100 to determine which section is hit. Subtract Shields and Armor as normal (per location if you have assigned it).

The default system for hit location damage works like this: a section has hit points equal to its number of Modules, and damage is subtracted per section. When hit points reach *zero* or below for a section, there is a complication . If section hit points

Section Modules

Total Modules

then multiply answer with 100

are reduced to its full negative value, the section is unusable until landing and repairs are made (see more on page 109).

Dynamic Shields

While requiring more book keeping, some players want to be able to re-allocate shields per round. In that case, add together all Shield values and make sure that all Shield points are distributed at the start of each round. Make sure you keep track of lost Shield points.

A new, free Combat Action called **Re-allocate Shields** can be used at the start of each round.

Hit Locations for NPC Ships

Not all NPC ships the characters meet will have hit locations prepared (unless you are an exceptionally well-prepared GM). In those cases, use hit locations for a similar ship; several different types can be found in the Technology chapter at the end of the book. While they will not be exactly right, they will often be close enough.

For small enemy fighters, around Size 10, it is often enough to decide how many hits they can take (1 or 2 hits is quite normal) before they explode. Hit locations will not be necessary in those cases.



Example: A ship consisting of 80 Modules in total has 2 Modules for the cockpit. $2/80=0.03$. Multiply that with 100 and you get 3%.

Now you can put those 3% on top of the hit location chart for the ship:

01-03 Cockpit

Next, 16 Modules are used for cubicles. $16/80=0.2$. Multiplied with 100 this is 20%. Add it to the hit location chart:

01-03 Cockpit

04-23 Cubicles

Adding Shields, Armor & Hit Points can look like this:

01-03 Cockpit. Sh 7, Ar 4, HP 2

04-23 Cubicles. Sh 4, Ar 1, HP 16

Continue adding sections till you reach 100. (If you get to 98 or 102 it's often because of small rounding errors made on the way. Don't worry. Just try to reshuffle the percentages, so that those last points end up in a less important section, like the cargo bay).

Crew & Passengers

Luxury Accommodations: 16 modules per person (five star, first class accommodations on a passenger liner)

1st class civilian: 8 modules per person

2nd class civilian: 4 modules per person (standard)

3rd class civilian (coach/steerage): 2 modules per person

Military, Officer's Quarters:

4 modules per person (a bunk, desk and some storage space)

Military: 1 person per module (a pair of bunk beds). Hot bunking can reduce the crew requirements up to half again.

Minimum requirements to run a ship: *10% of the crew is needed to run a ship (only 10% of the Weapon Modules are active) for a short period of time. For ships below 150 Modules, one person can pilot the ship and utilize one Weapon Module.*

With automation, crew requirements can be lowered considerably.

Additional Rules

Autodoc

An Autodoc has First Aid skill at 80% (treatment takes 10 minutes) and life sustaining treatment in severe cases (major wound, poison, contamination) for three days.

Sensors

With a successful roll you can get the following information:

Long range: Detect a starship, its speed and direction, and sometimes an official record with name, home port, destination, mission type & captain. Communications possible.

You can also get a good reading on uncharted planets and moons (atmosphere, rough map, standard temperature range, electronic signals, broadcasts). For higher tech solar systems, you get most info from the star charts and comm droids: space stations, starports, tech level, law & security, customs.

Short range: Starship type, speed & direction, approximate weaponry and armor. For planets and moons you get a detailed map, temperature variations, rough idea of biomes, general weather data, probably the location of a few settlements.

Hyperspace

A hyperspace engine is a storytelling device needed to travel the huge distances between the stars. For a regular jump, no skill roll is necessary. The length of a jump is between 1 and 5 (with secret high tech gear and unknown civilizations probably having access to more). A jump of 1 gives access to only a few close-by star systems, while 5 will make it possible to cross large areas of empty space to hard to reach systems, and short cuts across voids. To really make sense of this value, you need to draw a star chart – see page 150.

Ship Condition

Ship condition is an abstract way to deal with ship damage. It is an optional rule to simulate ships that are a bit rusty or ships with a bit of “personality”. Ship Condition ranges from 0 to -100. All new ships start with zero.

The ship condition value first and foremost works as a penalty to all Pilot rolls. Under normal circumstances, routine maneuvers does not require skill checks. But as ship condition drops below -20, take off, landing and entering hyperspace will often need a Pilot skill roll. Any time a roll is failed, the GM may call for a roll on the malfunction table. At -20 these rolls should occur once every second gaming session, at -40 once every gaming session. At -60 to -100; roll freely!

Ship Condition is reduced as follows: -10 each time maintenance is not paid for (maintenance costs 1% of ship cost every month or every fourth adventure) and -10 every time the ship is not repaired properly after combat.

Also use Ship Condition as a negative Mechanics skill modifier. To increase Condition, one Mechanics roll is required per +10, plus the expenses in Credits.

Buying and selling used ships

The Ship Condition modifier can also be used when buying and selling used starships. For example, a ship with condition -40 will have it's price reduced by 40%.

High- & Low-Tech Ships

Here are some guidelines for creating starships from lower technology levels (TL 10-12):

They will have low Speed and Handling (1-10), to simulate weaker engines and poor maneuvering controls. Use a Thrust Rating between 10-30. To make them less capable in combat, use Apps to give skill penalties (-20%-50%) to both Pilot and Gunnery rolls. They will have reduced damage with all weapons. Low (1-5) or no Shields. Armor 1. Hyperspace 1, if any.

For every Tech Level lower, the number of Modules needed for a function is increased by 50%. Weapons can either increase in size or reduce damage one step on the Damage Ladder (see page 116).

Higher Tech Levels (14-15, or more if needed), will have engines with higher Thrust Rating (140-200) and Weapon Modules will either take 50% less space or move up one step on the Damage Ladder. Other types of Modules can also be more space efficient, but use common sense.

M - SPACE

NPC SHIP

attitude

type

faction

speed
handling
size

shields
armor
hyperspace

recovery
hit points

pilot
gunnery.....
pilot hit points.....
.....
.....
.....

weapons
.....
.....
.....
.....
.....

attitude

type

faction

speed
handling
size

shields
armor
hyperspace

recovery
hit points

pilot
gunnery.....
pilot hit points.....
.....
.....
.....

weapons
.....
.....
.....
.....
.....

M - SPACE

STARSHIP

name *nighthawk*

type *trader*

player

speed 10
handling 10
size 89

shields 7
armor 1
hyperspace 3

recovery —
hit points 89

modules

<i>cockpit</i>	<i>2</i>
<i>open space</i>	<i>12</i>
<i>crew (4)</i>	<i>16</i>
<i>cargo</i>	<i>38</i>
<i>hyperspace</i>	<i>3</i>
<i>engine (tr100)</i>	<i>9</i>
<i>maneuver (tr100)</i>	<i>9</i>
	<i>= 89</i>

streamlining *yes*
stealth *—*

weapons

—

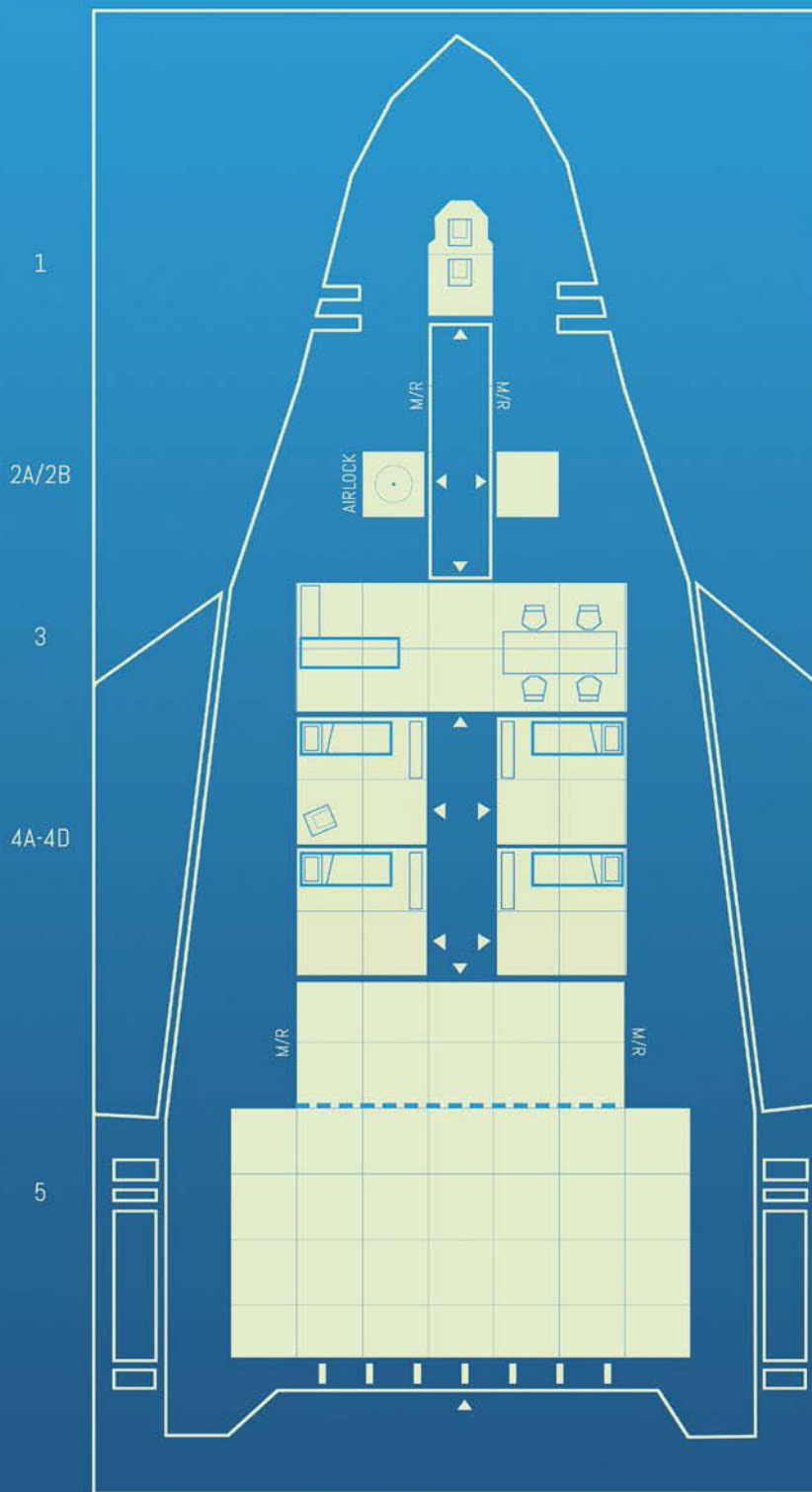
apps

astrogation +10%

other

*hit locations: 01-02 cockpit,
03-15 open space, 16-33 cubicles,
34-76 cargo, 77-86 engines,
87-96 maneuvering, 97-00 hyperdrive*

nighthawk



M/R = ACCESS POINTS FOR MAINTENANCE AND REPAIR

1. COCKPIT
- 2A. UPPER AIRLOCK
- 2B. FRESHER
3. COMMON SPACE/GALLEY
- 4A-4D. CUBICLES
5. CARGO HOLD

Starship Combat

This is a starship combat system that is somewhere between abstract and detailed; abstract enough to be quick and fun to play, but with enough details for players to make interesting choices. For more detailed rules, add some or all of the ingredients from the chapter Advanced Starship Combat.

Two examples of starship combat are included in the book: the first starts at page 110, the second at page 216.

Getting All Players Involved

For every additional crew member that is active on a ship, one Action Point is added. Their actions are played out at the same time as Gunnery. It can be used for Gunnery, Mechanics, First Aid, Medicine, Sensors, Comms or Computers.

Mechanics. A skilled starship mechanic is essential in combat, doing quick-fix repairs in mid-combat.

First Aid & Medicine. The crew will need to be kept in shape during combat.

Sensors & Computers. Not all ships are easy to locate, and a skilled technician can be the key to getting a good shot.

Comms. Social skills, negotiations and deceptions can be very useful even in the hard vacuum of outer space.

Combat Round

The combat round works very similar to the round in regular combat. Combat Actions, Differential rolls and Special Effects are used in the same way. Round length is multiplied by 10 though: 50 seconds. A pilot has two Action Points to spend every combat round: one for the Pilot skill, and one for Gunnery (or, more seldom, Comms, Sensors or Computers).

The Combat Round works like this:

The ship with the highest Handling plus 1d10 goes first (or pilot DEX if there's a draw).

1. Players choose Combat Actions and roll Pilot skill
2. Compare Success Levels (page 35) and pick piloting Special Effects, if any
3. Gunnery Initiative goes to the ship with the highest success level in piloting (or left unchanged if there's a draw)
4. Roll Gunnery. Include any modifiers from Pilot Combat Actions or Special Effects. Roll for other skills
5. Compare success levels and pick any Gunnery Special Effects. Roll for damage & hit location
6. Initiative for the next Pilot roll (next round) goes to the ship with the highest Success Level in Gunnery (or left unchanged if there's a draw). Keep track of any modifiers carrying over to the next round

Rinse and repeat for next player. When all ships have acted, the next Combat Round begins.

Both the choice of Combat Actions and any Special Effects can affect the following rolls with skill modifiers. Especially Pilot rolls will make or break the gunner's opportunities for a good shot. Also note that Initiative shifts continuously, often creating streaks of dominance – only to be lost by a single roll or two.

Combat Actions

These are the Pilot Combat Actions to choose from:

Offensive Positioning

This is the default attack roll. The pilot does her best to position the ship favorably for using its weapons; without becoming an easy target. No modifier to the following (Gunnery) roll.

Defensive Positioning

With this positioning, the pilot optimizes the flight pattern to evade incoming fire. This leaves the gunners (or the pilot herself when firing) in a much more difficult situation. If the Pilot roll is a success, Gunnery is at *Hard* for both the opponents and the ship using Defensive Positioning. If failed, Gunnery is at *Hard* for defender only. Penalties from any Special Effects are not added to this; use only the largest one.

Move

The ship moves a distance determined by the player, with the ship's Speed value as maximum. In complex environments, with obstacles or other moving ships, the GM may reduce top speed to half (or impose a Pilot skill penalty at *Hard* to *Formidable*).

Hold Steady

The pilot holds the ship reasonably steady one entire round, to allow for the gunner to use Aim; see below. The ship holding steady is *Easy* to hit. If the Pilot roll is failed, the gunner receives no bonus, but the ship holding steady is still *Easy* to hit.

Keeping track of distance

Sometimes you may want to keep close track of distances between starships in combat. The easiest way to do this, is to use the slowest ship as a point of reference. Then add the difference in Speed at the end of every round, for each of the faster ships and write this number down. When this number exceeds the Range value of a weapon, additional attacks will be automatic misses.

Additional Combat Actions

Some additional Combat Actions that may be of use:

Speak. *Free action. The crew members can communicate quite freely through the internal comms system, coordinating their efforts, report casualties, damages, and so on.*

Use Power. *For psionic pilots and gunners, using a power related to the current skill takes one Action Point. Thus, a gunner will have to wait one round for the power to take effect; a pilot must spend the second Action Point on Use Power, and the effect comes in the the next round at the power user's first action..*

Aim vs Defensive Positioning

If one part uses Aim and the opponent Defensive, the modifiers cancel out if both parts are successful or fail.

Additional Special Effects

The following Special Effects will come into use more rarely:

Bash. *(Pilot) Not as desperate as ramming, this Special Effect is a more "gentle" bump into the other ship. Any damage rolled will force the ship into an alternate path; recipient's next Pilot roll is Hard. Bashing works only after at least one Change Range, and on ships up to twice the attacker's SIZ. If the recipient is forced into an obstacle, then they must make a Hard Pilot skill roll to avoid bruising the ship (1d6 damage in random location).*

Change Range. *(Pilot) With a clever flight path, this increases or decreases the distance between ships by half the ship's Speed, no matter the speed of the other ship. Can be used to get out of firing range, move into cover, etcetera.*

Select Target. *(Gunnery) When an attacker fumbles, the defender may maneuver in such a way that the shot hits an adjacent ship instead. This requires that the new target is along the line of fire. The new victim is taken completely by surprise by the unexpected accident and has no chance to avoid the attack which automatically hits. In compensation however, they suffer no special effect.*

The following Gunnery Combat Actions are used:

Fire

This is the default attack. Damage is rolled after any Special Effects are picked.

Aim

The Gunner spends an entire round aiming, making the Gunnery roll *Easy*; but the aiming ship is also *Easy* to hit for opponents. Must be used in tandem with Hold Steady by the pilot (see above). An aiming gunner's action is moved last in the round; if several gunners choose Aim, use Initiative to determine order.

Special Effects

Just as in regular combat, Special Effects are used to get a tactical advantage. Pilot and Gunnery rolls have separate sets of Special Effects, and several of them affect the following rolls – either improving your own chances or decreasing the opponent's.

These are the Pilot Special Effects to choose from:

Dominate. The pilot gains the upper hand, finding a supreme position to fire from. The ship's Gunnery rolls are *Easy* the current round.

Evasive Flow. The pilot finds a flight path that the opponent has difficulties firing at. Opponent's Gunnery rolls are *Formidable* the current round.

Withdraw. With this Special Effect, the ship can withdraw from combat.

Use the following Gunnery Special Effects:

Choose Location. Critical only. The Gunner can pick any hit location to strike.

Find Weakness. The gunner strikes a weak point in the shields or hull; roll damage twice and pick the best roll.

Limit Flight Path. By planning the firing pattern, the opposing ship will have a limited choice of flight paths. Opponent's next Pilot roll is *Hard*.

Marksman. The gunner rolls hit location as normal, but can move the hit to an adjoining location on the list.

Maximize Damage. Critical only. The gunner strikes a perfect hit. One damage dice yields maximum damage.

Weapon Malfunction. When an attacker fumbles, the opponent can choose this effect to render the weapon unusable for 1d3 rounds.

Damage

Damage is first subtracted from Shields. When Shields reach zero, subtract Armor and then the remaining amount goes straight to Hit Points. Roll 1d100 to determine hit location.

For technical sections, like engines or weapons, hits disable the specific function at zero or lower hit points. Quick-fix repairs are needed to get them online again: Three successful Mechanics skill rolls raise hit points to 1 (and the function is temporarily restored). If section hit points reach the negative equal to the full hit points, the section is so badly damaged the ship must land or dock at a port to be repaired.

For crew or passenger areas, hits add complications in a specific section; roll on the table in the sidebar.

When any section reaches zero or lower hit points, all onboard the ship must also roll 1d4-1 personal damage.

Recovery & Repairs

Lost starship hit points are recovered in the following way:

Hit points above zero: Only light repairs. The ship is back to normal hit points after six hours, as long as the crew spends that time repairing it. No skill rolls necessary, but at least one crew member must have the Mechanics skill. If only three hours are

Technical Sections: Engines, Maneuvering Thrusters, Weapons, Extra sensors, Tractor beams, Robot arms and Self-Repair.

Crew & Passenger Areas: Cubicles, Open space, Cockpit, Cargo, Sickbay, Lab.

Crew & Passenger Area Damage (1d6)

1-2 Power out. No power to controls. Controls for thrusters, engines, sensors, computers, etcetera are unresponsive. Only life support, comms and emergency lights are functional. Doors must be opened manually; requires 1 round.

3-4 Air Leak. The hull has been breached and air is leaving the section. If left without repairs, vacuum ensues in 10 rounds. If section hit points are reduced to their full negative value, decompression is instantaneous; see rules for exposure to vacuum.

5-6 Gravity damaged. Everyone and everything not fastened floats into the air. Athletics or Acrobatics rolls may be necessary to get back to a specific point. Other effects, like floating objects, are determined by the GM. Also keep in mind what will happen when gravity returns.

Starship Combat Example

These are the two ships involved (full stats on page 104 and 114):

Kierkegaard

Speed 15, Handling 12, Size 101

Pilot 70%

Gunnery 70% (Blaster, 1d8 Damage)

Shields 10, Armor 2

Nighthawk

Speed 10, Handling 10, Size 89

Pilot 70%

Gunnery 70% (Blaster, 1d8 Damage)

Shields 7, Armor 1

Roll for Initiative. Kierkegaard wins with 16 versus Nighthawk's 12.

Round one. Kierkegaard makes an Offensive Pilot roll: She rolls 70, a success.

Nighthawk takes the safe route and rolls a Defensive Pilot roll: 10, also a success. Both ships will be at a difficulty grade of Hard for their next Gunnery rolls. As Success Levels are the same, no Special Effects can be used and Initiative remains with Kierkegaard for Gunnery rolls.

Kierkegaard's Gunnery is 70%-20%=50%. She rolls 47 for Gunnery; a success.

Nighthawk's Gunnery is also at 50%; 49, a success.

Both roll for damage, 1d8 each. Kierkegaard rolls 7 and blasts away Nighthawk's shields. Nighthawk rolls 2 and reduces Kierkegaard's shields to 8. As Success Levels are the same, no Special Effects can be used and Initiative remains the same.

Continued...

spent repairing the ship, hit points will only be raised by half the amount.

Hit points at zero or below: Repair time is 1 day per damaged section if Mechanics rolls are successful; double the time otherwise (or restore only half the hit points, if doubling the time is not possible). When repairs are finished, hit points will be back to normal.

Hit points at full negative value: The ship must land to make repairs and new parts must be obtained. Repair time is 1 week per section; double if Mechanics roll fails (or restore half the hit points only, if doubling the time is not possible).

Spot Rules

Partial Cover

Moving the ship through an area with large obstacles makes it harder to hit – but it's also harder for your own gunner to get a clean shot. Both sides at a difficulty grade of *Hard* in Gunnery. Also see Obstacles below.



Boarding

To board a ship, it's most common to render the target ship incapable of defending itself or escaping (though this may vary from setting to setting). If you are not using hit locations – to take out engines and weapons – this is simulated by reducing a ship's hit points to 1, and the gunner declaring she's disabling the ship (with the GM adjusting damage to save one hit point). Manipulating the airlocks to get inside is often quite simple. No skill roll is needed in most situations, or use Demolitions, Mechanics, Electronics or Computers at *Easy*.

Ramming

For desperate players ramming is sometimes a viable option, either to strike an opponent or to get out of enclosed spaces. Both ships (or ship plus construction) take an equal amount of damage. Size and speed are the determining factors for damage. 1d6 damage per 5 Size, and add 1d6 per 5 Speed.

Obstacles

Use a difficulty grade of *Hard* or *Formidable* in Pilot skill if there are many obstacles, like space junk, debris from exploding ships, and so on. A failed roll will damage the ship lightly: 1d6 hit points. Fumbles will also require a roll for personal damage to everyone onboard: 1d4-1. Roll Athletics or Acrobatics to avoid damage. Also see Partial Cover above.

Small Ship Advantage

When the difference in Size Rating is 4 or 5, the larger attacker's Gunnery is at *Hard*. For the smaller attacker, Gunnery is *Easy*. With a Size Rating difference at 6 and upwards, Gunnery will be *Formidable* (larger ship) and *Very Easy* (smaller ship).

Fast Ship Advantage

When the difference in Speed is 5 or higher, the faster ship's Pilot rolls are *Easy*. This modifier evens out the odds for small and fast ships, especially against heavily armed opponents.

Surprise

Attacker gets one free Combat Action at *Easy* before the oppo-

Round two. Kierkegaard rolls 18 in an *Offensive Pilot* roll, a success.

Nighthawk rolls 81 in a *Defensive Pilot* roll, a failure. He will be at a difficulty grade of *Hard* for Gunnery, unless Kierkegaard picks a *Special Effect* to change it.

Kierkegaard chooses between *Dominant* and *Evasive Flow*: either boosting her own Gunnery by +20% or penalize *Nighthawk's* with -40%. As *Nighthawk's* is already at *Hard* due to his defensive positioning, Kierkegaard decides to boost her own Gunnery to 90%. She rolls 20, a confident success.

Nighthawk's Gunnery is at *Hard*: He rolls 95, a grand failure. Kierkegaard gains a Gunnery *Special Effect*. She picks *Find Weakness* and rolls damage twice, picking the best roll: 5. Rolling 67 for location, she reduces the cargo bay from 38 to 34, after reducing damage by 1 for armor. No worries.

Round three. Initiative remains with Kierkegaard.

Kierkegaard rolls *Offensive Pilot*: 87, a failure. This opens for *Nighthawk* to be a bit more aggressive: he rolls 35 for *Offensive Pilot*, a success. He also gains one *Pilot Special Effect*, and decides to lower Kierkegaard's Gunnery to *Formidable* with *Evasive Flow*.

Nighthawk wins the Gunnery Initiative thanks to his successful piloting roll. He rolls 33, a success.

Kierkegaard's Gunnery is at 70%-40%=30%. She rolls 54, a failure.

Continued...

Nighthawk gains one Gunnery Special Effect. He picks Limit Flight Path; Kierkegaard's next Pilot roll is at Hard.

Nighthawk rolls damage: Kierkegaard's shields are reduced by 3 to 5.

Round four. Nighthawk's got the Initiative.

He rolls for Offensive Pilot: 97, a failure.

Kierkegaard also goes for Offensive Pilot: 73, also a failure. Initiative remains with Nighthawk. Both fire at normal values.

Nighthawk rolls 35, a success. Kierkegaard 81, a failure.

Nighthawk is rewarded with a Special Effect: Find Weakness.

He rolls damage twice and picks the best: 7. Kierkegaard's remaining shields are blasted away, and 2 points of damage are soaked up by the armored hull.

Round four. Initiative remains with Nighthawk.

Nighthawk rolls for Offensive Pilot: 83, a failure. Kierkegaard goes for Offensive Pilot, in the hope of turning the combat around: 57, a success.

Kierkegaard gains one Special Effect: She picks Evasive Flow. Nighthawk's Gunnery is at Formidable. She also wins the Initiative.

Kierkegaard rolls 06, a critical! Nighthawk rolls 41, a failure.

Kierkegaard gains two Special Effects. She picks Find Weakness and Marksman.

Continued...

ment can react; also the surprised part's non-reaction is considered a failed roll (giving the attacker one Special Effect if the roll is successful). The target's second Action Point can be spent either on Gunnery, as usual, or on Pilot – both are at *Hard*.

Simplified Starship Combat

Below is a simplified system for starship combat, for settings or scenarios where combat is less important. The main points are: no hit locations, Pilot rolls are simplified and damage is handled in an abstract way.

This system is less deadly than the regular rules. If fights are too drawn out, upgrade weapons to double damage.

Pilot Rolls

Instead of choosing between different Combat Actions, the Pilot rolls are generic. Both Pilots make differential rolls and pick Special Effects (if any) as usual.

These two Gunnery Special Effects will be redundant: Choose Location and Marksman. Pilot Special Effects are kept as is.

Damage & Malfunctions

Without hit locations, all damage is withdrawn from general hit points. When hit points are halved, the ship starts to be badly injured; roll on the Malfunction Table below. For every subsequent hit, malfunctions lasts a little longer; one step up on the Duration Table.

Malfunction Table (1d6):

1. Power out, no sensors or weapons
2. Leakage (air/water/fuel)
3. Maneuvering damaged, Pilot skill halved
4. Speed halved, Pilot skill halved
5. Uncontrolled spin, stabilization damaged.
Pilot skill at 0 %
6. Re-roll on this table. +1 on duration table

Personal damage: Everyone on board the ship must also make an Athletics or Acrobatics roll to avoid 1d4-1 damage.

Duration Table:

1. One round
2. 1d6 rounds
3. Until repaired
4. Until repaired, Mechanics at *Hard*
5. Until next landing and repair
6. Until next landing and buying new parts.

Repairs & Ship Condition

Lost starship hit points are recovered in the following way:

Hit points above half: Only light repairs. The ship is back to normal hit points after six hours, as long as the crew spends that time repairing it. No skill rolls necessary, but at least one crew member must have the Mechanics skill. If only three hours are spent repairing the ship, hit points will only be raised by half the amount.

Hit points below half: Repair time is 1 day for every hit that ended up on 3-6 on the Duration Table; if Mechanics rolls are successful. Double the time otherwise (or restore only half the hit points, if doubling the time is not possible). When repairs are finished, both hit points and ship condition will be back to normal.

Hit points at negative value: The ship stops functioning, except emergency systems (life support, docking, emergency light, autodoc, air locks). Less important NPC ships probably explode at zero Hit Points. Repair time is 1 week for every hit that ended up on 6 on the Duration Table; double if Mechanics roll fails (or restore half the hit points only, if doubling the time is not possible).

Ship Condition is lowered by -10 for every hit below half hit points. To restore them, use the regular rules.

Kierkegaard rolls 7 for damage and 73 for hit location. That's the cargo bay again, but Marksman allows her to pick any of the two adjoining locations. She picks Engine. 6 points of damage reduces Engines to 3 hit points. One more hit like that and Nighthawk is a sitting duck.

Round five. Initiative remains with Kierkegaard.

Kierkegaard rolls for Offensive Pilot: 41, a success. Nighthawk rolls for Defensive Pilot: 73, a failure. He will have Gunnery at Hard.

But Kierkegaard gained one Pilot Special Effect, and picks Evasive Flow: Nighthawk's Gunnery will be at Formidable instead.

Initiative remains with Kierkegaard. Kierkegaard rolls 10 for Gunnery, a success. Nighthawk rolls 31, a failure.

Kierkegaard gains one Special Effect: Marksman, hoping to take out the engines.

Kierkegaard rolls an 8 for damage! Hit location is 90 (Maneuvering Thrusters), but she moves the hit to Engines thanks to Marksman. 7 points pass through the hull, and reduces Engines to -3. They are offline! Nighthawk cannot make any Pilot rolls. At least not until the engines are repaired; three successful Mechanics rolls are needed for that. It will be at least three rounds when he can only use Gunnery, and Kierkegaard's attacks will automatically be Easy. Nighthawk reaches f

M-SPACE

STARSHIP

name *Kierkegaard*

type *explorer*

player

speed 15
handling 12
size 101

shields 10
armor 2
hyperspace 3

recovery —
hit points 101

modules

<i>cockpit</i>	<i>3</i>
<i>crew (4)</i>	<i>16</i>
<i>open space</i>	<i>8</i>
<i>open space (workshop)</i>	<i>16</i>
<i>sickbay</i>	<i>4</i>
<i>weapons</i>	<i>2</i>
<i>cargo</i>	<i>18</i>
<i>hyperspace</i>	<i>3</i>
<i>engine (tr100)</i>	<i>15</i>
<i>maneuver (tr100)</i>	<i>12</i>
<i>extra sensors</i>	<i>1</i>
<i>aerial dropship (external)</i>	<i>3</i>
	<i>= 101</i>

streamlining *yes*

stealth *—*

weapons

blaster (turret)

apps

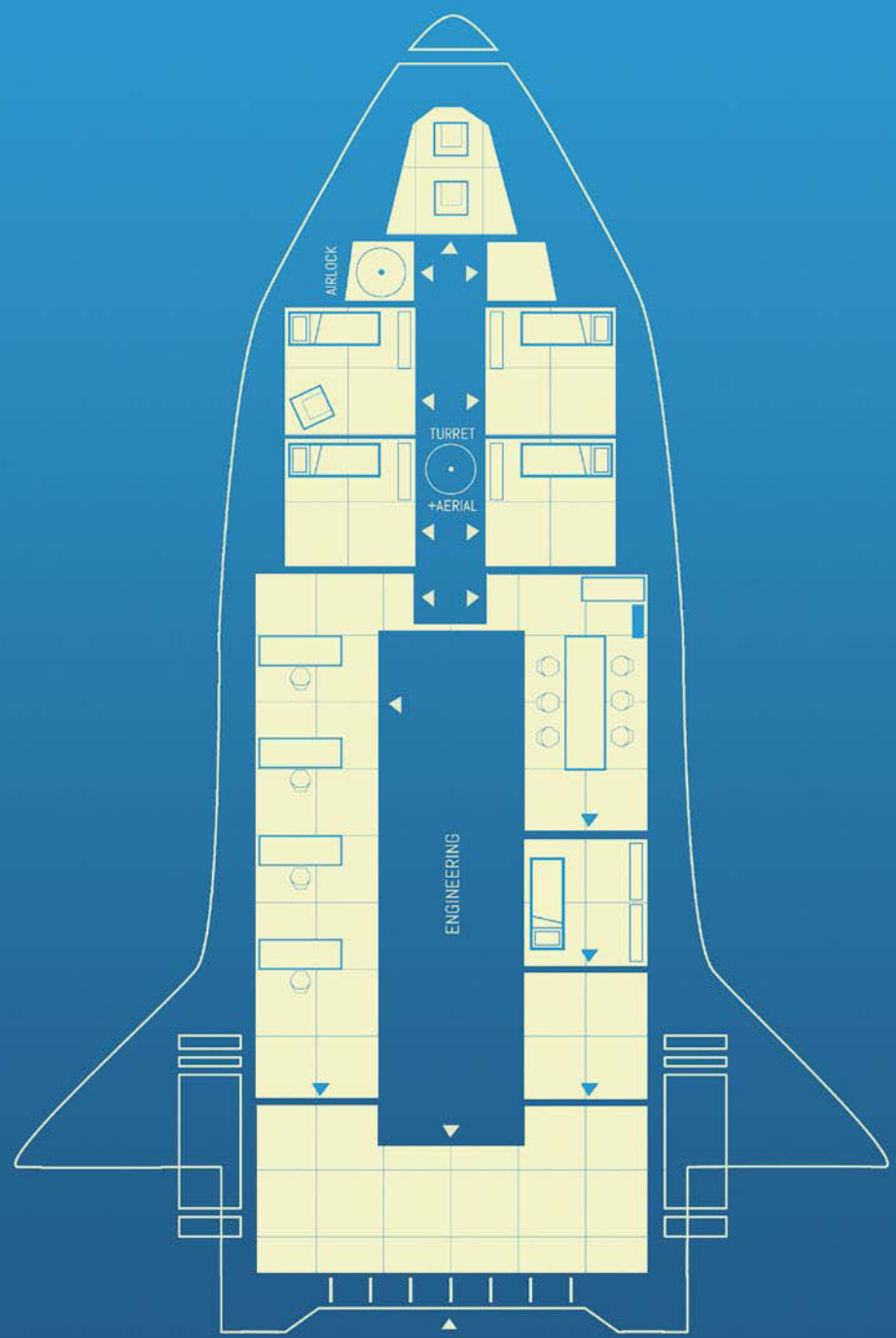
sensors +15%

astrogation +10%

other

*hit locations: 01-03 cockpit, 04-19 cu-
bicles, 20-43 open space, 44-47 sickbay,
48-49 weapons, 50-67 cargo, 68-70 hy-
perdrive, 71-85 engine, 86-96 maneuver,
97-99 dropship, 00 sensors*

1
2
3A/3B
4A-4D
5, 6
7
8
9



kierkegaard

- 1. SENSORS
- 2. COCKPIT
- 3A. UPPER AIRLOCK
- 3B. FRESHER
- 4A-4D. CUBICLES
- 5. LAB/WORKSHOP
- 6. COMMON SPACE/GALLEY
- 7. SICKBAY
- 8. EQUIPMENT STORAGE
- 9. CARGO HOLD

Advanced Starship Combat

Weapon	Damage	Type	Range	Ammo	Cost
Laser	1d6	Laser	20	No	5000
Blaster	1d8	Particle Beam	20	No	10000
Ion Gun	2d6+1	Electric	10	No	15000
Missile	3d6	Explosive	40	10	20000
Kinetic Cannon	1d8	Kinetic	10	10	1000

Weapon Options

The following options allow the weapons above to be customized and expanded. A GM can use all, some or none of the following.

Options and Cost: All the options presented below increase the cost of the weapon. This increased cost can be paid for in Credits or by increasing the number of modules allocated to the weapon (mounting a bigger weapon). Instead of 20 normal blasters, you can have 4 (each taking up 5 Modules) with a bunch of upgrades.

Damage	Cost
+1 step	x2
+2 steps	x4
+3 steps	x8
+4 steps	x16

Increased Damage: This upgrade increases the weapon's damage by one step on the Damage Ladder (see sidebar). This doubles the cost each time it is done. If desired, instead of increasing the damage dice, a flat +1 add to damage can be taken. A weapon cannot have more adds than half its maximum damage roll.

Increased Range: This upgrade increases the weapon's range.

Range	Cost
+25%	x1.5
+50%	x2
+75%	x3
+100%	x4

Fire Arcs	Cost
2 arcs	x2
3 arcs	x3
4 arcs	x4

Fire Arc: This upgrade allows a weapon to attack targets in multiple fire arcs. See more on page 119.

Autofire: This upgrade allows a weapon to fire multiple shots in one attack, allowing it to get more than one hit on a successful attack.

Burst	Cost	Attack Bonus
Short Burst (1d3)	x2	+10%
Medium Burst (1d6)	x4	+20%
Long Burst (1d10)	x6	+30%

Note: In some cases, such as point defense, a rapid firing weapon's benefit is in putting more shots on target in order to increase the chance of getting one hit, rather than trying to get multiple hits. The GM can allow someone to give up the extra hits from a burst in order to receive the bonus to attack.

Point Defense: This upgrade allows a weapon to intercept incoming missiles before they hit, possibly destroying them. A weapon with this upgrade can make an attack against the missile, right before it hits (just like a parry). If the missile is destroyed, then the ship takes no damage. Most missiles are unarmored and only have 1 hit point. A weapon that is used for point defense cannot be used to attack on the same round. Cost x2.

Damage
Ladder

1d4
1d6
1d8
1d10
2d6
2d8
3d6
2d10
3d8
4d6
3d10
5d6
4d8
4d10
5d8
5d10

Armored: The weapon has its own armor. This has the same cost as armoring a ship, and is based on the number of modules the weapon takes up. The upgrade is usually used to either give a weapon more armor than the ship is in, or to make missiles somewhat resistant to point defense weapons.

Increased Ammunition: This upgrade increases the amount of ammunition available for a weapon.

Shots = Ammunition Modules/Weapon Modules x 100

Spinal Weapon Mount: This upgrade allows the weapon to tap directly into the ship's engines. The ship is pretty much built around the weapon. This allows for a very powerful weapon, but one with some serious limitations.

A Spinal Weapon:

- » takes 1 round to charge up per module it takes up.
- » gets one or more free upgrades based on the total number of engine modules
- » uses up all the ship's engine power when fired, dropping the ship's Speed to 0 in turn after it is fired.
- » a spinal weapon mount double the weapon's cost. (x2).

Damage

See Damage Ladder on page 117.

Armor

Armor is split into five categories: Primed for laser, particle beams, electric, explosive and kinetic. Standard armor in the Starship Combat chapter, is Multi-Primed and protects equally well against all attacks. In advanced combat, armor can protect

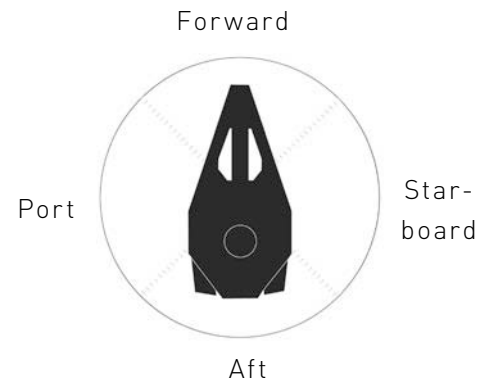
Engine Modules	Free Upgrades
1	1
2-3	2
4-7	3
8-15	4
16-31	5
32-63	6
64-127	7
128-255	8
x2	+1

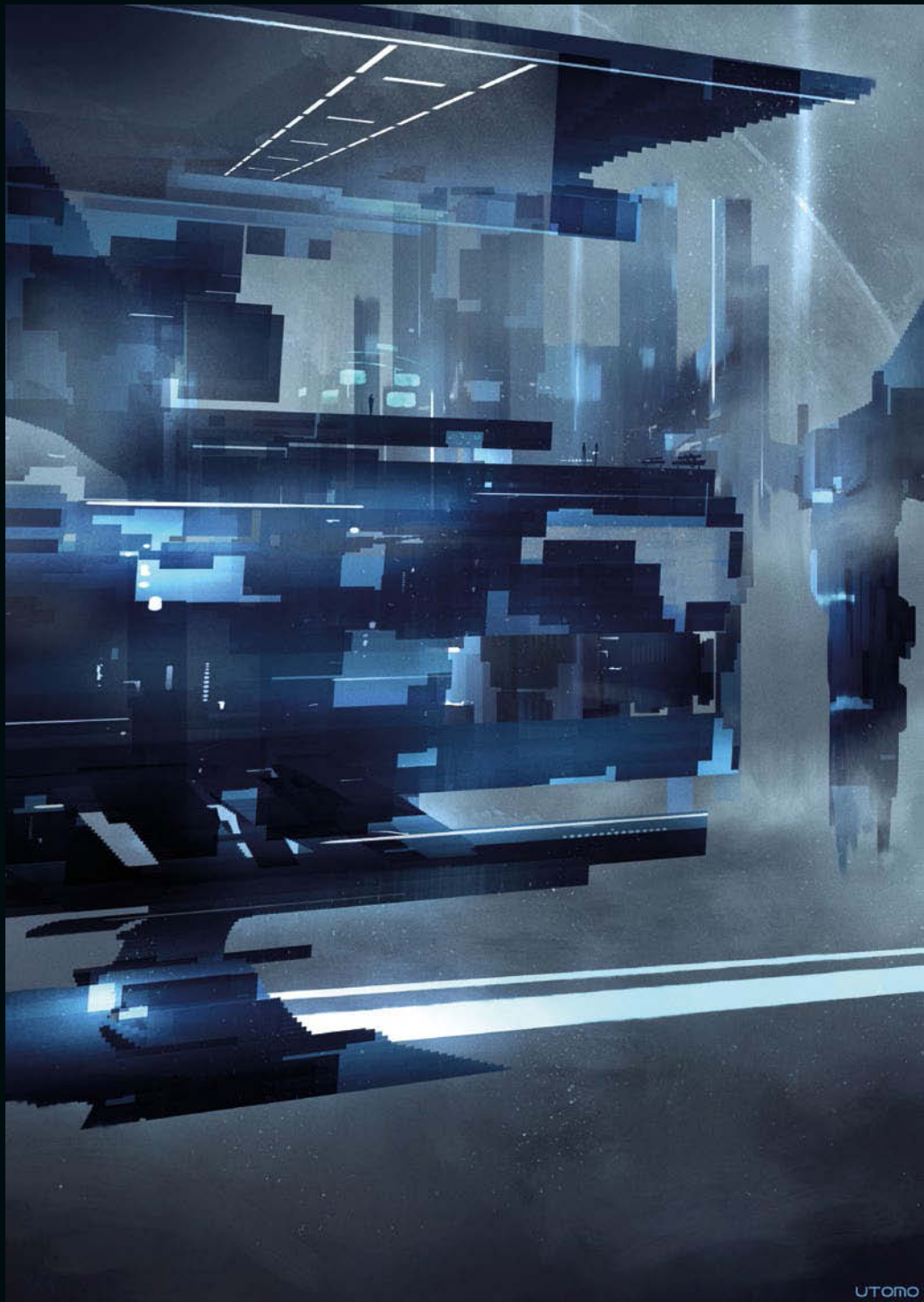
at half value against some types of attack. For instance, Single-Primed Kinetic armor protects at full value against kinetic attacks, but only protects at half value against all other weapons types. Armor can be Single-Primed, Duo-Primed, Triple-Primed, Quad-Primed or Multi-Primed. The table on page 116 lists what type of damage different weapons do.

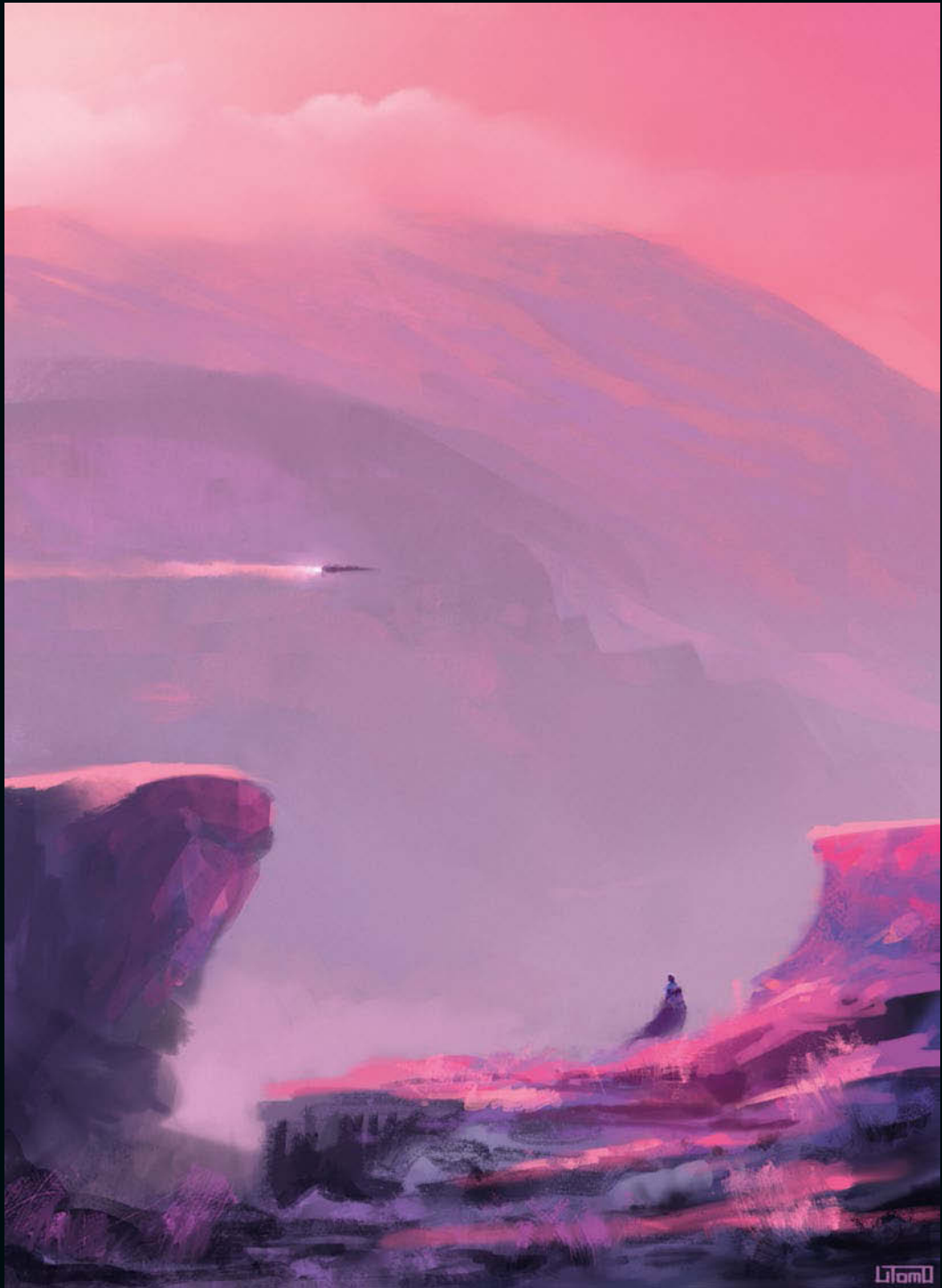
Armor that is weak against a certain type of attack cost a little less. For every damage type removed, cost will be lowered by 10%.

Fire Arcs

Fire Arcs represents the idea that mounted weapons can only fire in certain angles. There are four arcs: Forward, Aft, Port and Starboard. When using the advanced combat rules, weapons fire in one of the arcs unless they are upgraded. Use with miniatures for best result.





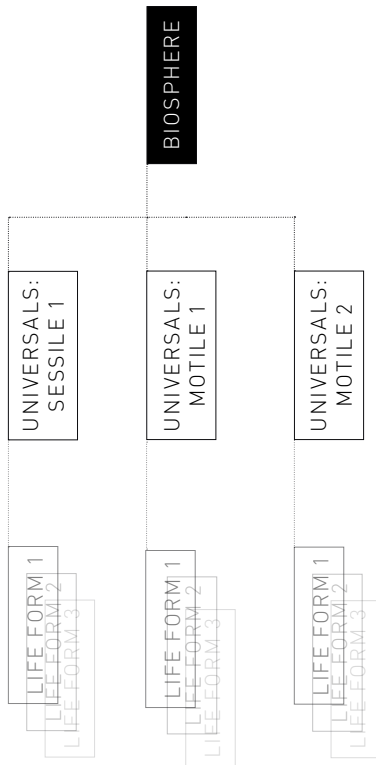


Alien Creation

Creating believable aliens can be hard. We do, after all, have very little experience of extra-terrestrial life. The images and stories spread by popular culture are not always the best source of inspiration, as those beings were created to fit a manuscript, not an alien world.

The following rules will help with the creation of aliens, making it both easier and more fun. It's not a replacement for creativity, but rather a tool to spark it.

The rules are divided into two steps. First, the universal blueprints of all living beings on a planet are defined, and next separate alien species are developed from those universals.



Universal Life form Parameters

i.

Strangeness: 1-100, where 1 represents *Earth-like*, 50 *Alien* and 100 *Really strange*. The Strangeness parameter adds a good over-all picture when interpreting the dice rolls in the creation process. A low Strangeness value will indicate small variations on concepts well-known on Earth (physiology, behaviour, culture). A high value means you should interpret many of the results as differing wildly from what's common here.

ii.

Define a few basics about the biosphere.

Biosphere: Write down 1-3 main parameters about the biosphere, either from a world already created, or make some up.

A biosphere can be described as hot, cold, garden world, aqueous, desert, high radiation, sulphur rich, thin atmosphere, low gravity and so on. Use the rules for world building for more details.

Biodiversity: Define how rich life is on the planet. Default is 1 sessile (plant) group, 2 motile (animal) groups. High biodiversity: +1 sessile, +1d4 motile. Low: 1 sessile, 1 motile.

iii.

Body Plans: These work as generic blueprints for all beings on a planet, with separate body plans for the different motiles and sessiles. Number the motile and sessile groups, and roll for each body plan group to get the five values below (Size, Frame, Symmetry, Limbs, Segmentation):

Size:

1d100	01-15	16-30	31-50	51-60	61-70	71-75	76-80	81-85	86-90	91-95	96-97	98-00
Size	Sub 1	2d4 (5)	2d6+6 (13) Human	2d6+14 (21)	2d6+22 (29)	2d6+30 (37)	2d6+38 (45)	2d6+44 (53) Elephant	2d6+52 (59)	2d6+60 (67)	2d6+68 (75)	>2d6+74 (>81)

Frame:

01-33 Endoskeleton, 34-66 Exoskeleton, 67-00 No frame

Symmetry:

01-25 Bilateral, 26-50 Asymmetrical, 51-75 Radial Symmetry, 76-00 Spherical Symmetry

Limbs:

1d100	0-10	11-30	31-50	51-80	81-90	91-00
Limbs	0	2	3	4	5-8	1d100

Segmentation:

Many beings divide their body into parts, either the whole body, limbs or specific organs. Roll 1d4 for the number of segments. Segmented parts can be body, limbs and/or organs.

Strangeness can also be used as a negative modifier for all communication skills. Use the modifier whenever communication skills are used with humans or other aliens (for both sides). It can also be used as a negative modifier on First Aid and Medicine rolls, when using alien technology etcetera.

***Bilateral:** Body can be split in two similar parts. **Radial:** Body is roughly circular, with similar parts repeated radially. **Spherical:** Roughly spherical in form, with parts repeated all over the surface.*

***Sex:** If needed you can also decide the number of sexes: 2d3-1. One or two sexes are common on Earth, but several more are probable to occur in other places.*

Insects are the typical segmented earth life form.

Starting With a Weakness

An alternate method for alien creation is to start with a disadvantage, and then try to figure out how a species could survive through evolution despite the weakness.

How, for example, can very slow beings avoid being eaten by predators? Do they taste awful, are they poisonous or perhaps covered with spikes?

Especially for intelligent life forms this can be a good practice. Their intelligence have probably been instrumental in their survival, but some additional advantages will probably be needed to fully explain it.

This method will force you to walk in the alien's shoes, so to speak, through its evolutionary stages. Missing hearing, what alternate ways to protect yourself would you need? And what would you eat if you cannot hear your prey?

Keep asking yourself these kind of questions and it's likely you will find yourself with a well-rounded alien species that's not just cannon fodder for characters.

iv.

Universals: Roll or pick 1d3 traits from the list of advantages on the next spread that apply to all beings in a body plan group.

Dealing with contradictory rolls: If a random method is used to create alien life forms, sooner or later contradictory results will occur from the different tables. There are several ways to deal with this. The most simple solution is to re-roll, but sometimes it's good to give the contradiction some thought. Can it be used as a creative springboard, to venture into solutions not tried before? Can the two results make a working combination by just fudging them slightly? If time allows, try these pathways, and possibly you will be rewarded with some highly original material.

Life forms

With universals defined, the individual alien species is to be detailed. It is recommended to create a handful of beings, filling different roles in the ecosystem. Start with a few in the primary motile group, like a handful of mammals on Earth, then proceed to create the others as needed (*ie.* plants and a radically different secondary motile).

Decide which body plan group the being belongs to. One of the motile groups is probably most commonly encountered by characters, with the other motile being a more rare sighting.

Classification and Habitat: Define the role it plays in the ecosystem (forest trapper for example).

1d100	Classification	Type
01-25	Producer	Plant
26-50	Herbivore	Grazer, Filter feeder
51-75	Omnivore	Gatherer, Scrounger
76-00	Carnivore	Ambusher, Chaser, Pouncer, Raider, Stalker, Trapper

Filter feeders eat small objects (animals, seeds, etcetera) suspended in the atmosphere (or in liquid).

1d100	Habitat
01-07	Pool/Lake/Sea
08-14	Stream/River
15-22	Shore/Reeds
23-29	Plain/Meadow
30-36	Tundra/Steppe
37-43	Semi-open/ Savannah
44-50	Bush land

1d100	Habitat (cont.)
51-57	Forest/Tree
58-64	Underground/Cave
65-72	Desert/Dunes/ Arid
73-79	Wetland
80-86	Ice/Snow/Glacier
87-93	Mountain
94-00	Rocky

Roll multiple times for interesting combinations.

Climate: Many life forms can adapt to different climates and will appear with only slight alterations in coloration or other details important to survival. But sometimes you may want to design a creature for a specific environment. Use the list below as a reference:

01-25 Arctic
 26-50 Temperate
 51-75 Subtropical
 76-00 Tropical

As you can see not all habitats and climates match up; make sure you find a combination that doesn't contradict natural sciences but still fulfills your needs.

Size Modifier: +/-1d3 (or more) on the Size table on page 81. This will create a large variety in size within a body plan group, similar to what we have on Earth among mammals for example. Feel free to deviate from this if you want a more evenly sized group.

Advantages: These are the specifics that have kept the being alive through the ages, and have helped it to carve a niche in the ecosystem. Pick or roll 1d3 times on the table on the next page and try to find interesting combinations.

Art as an Advantage?

The Swedish biologist Svante Pääbo has presented the idea that the biggest difference between modern humans and Neanderthals is that they had no drive to express their experiences to others (and not that their intelligence was lower, as we traditionally have believed).

Right from the start, modern humans seem to have utilized flutes, images and probably storytelling, eventually leading to what we today call the arts.

Could this be the advantage that gave modern humans the edge in the long run?

1d100	Advantage	Description
01-06	Perception	Choose 1d3 senses that are heightened
06-12	Fast	DEX above 20 and/or Movement Rate >10. Fast life forms add +1d6 to both; Lightning +2d6
13-18	Flight	Gas bag, wings, glide, etcetera
19-24	Camouflage, Hide or Stealth	By appearance and/or as a skill (75% and higher)
25-30	Climb	Natural ability (like sticky feet or hooks) or as a skill (75% or higher)
31-36	Second habitat	Moves equally well in, for example, liquid and on land (or in gas)
37-42	Second atmosphere	Breathes both gas and liquid
43-48	Regeneration	Heals at a quicker pace (Healing above 5), can heal more severe wounds or regrow entire body parts
49-54	Fine Manipulation	Fingers, toes, lips, ears, tails, tentacles. 75% or more in two DEX-based skills. May be a tool user
55-60	Sharp	Thorns, teeth, claws, beak, horns, ridges
61-66	Armor	Exoskeleton, bony plates, hard scales, coarse skin
67-72	Poison	Poison for protection or hunting
73-78	Builder	Building complex nests, for protection and/or to alter the ecosystem to suit them better
79-84	Communication	Can be <i>Simple</i> (as for animals), <i>Complex</i> (as apes, whales, dolphins or bees) or <i>Language</i>
85-88	Psionics or Psionic Immunity	Powers of the mind; see the chapter on psionics
89-94	Extra Sense	1d3 extra senses. Heat, bacteria, movement, electricity, magnetism (compass), specific chemicals
95-00	Intelligence or High Intelligence	Intelligence: INT 7-15 High Intelligence: INT 16 or more

1d100	Disadvantage	Description
01-04	Immobile	Cannot move. DEX 0. Suitable for producers/plants
05-12	Fragile	Low hit points (-1d6 to -2d6), no armor. Reduce CON; see next page
13-20	Slow	DEX lower than 5, Movement below 2
21-28	Rare or Vulnerable habitat	Hard to find fully functional ecosystem. Behavior 60 or above
29-36	Hunted	Intensely targeted by a carnivore. Behavior 31-70
37-44	Disease-ridden	Reduce CON. See next page
45-52	Affected by pollution	Changes in the environment affect the beings negatively. Reduce CON; see next page
53-60	Eggs/Cubs	For K-strategists, this is a danger-filled period
61-68	Internal Conflicts	Fighting about food, rank, territory, leadership, etcetera. Behavior at 70 or more
69-76	Hierarchy/Obedient	Individuals are not able to make their own decisions
77-84	Missing one or more of the senses	Remove 1d3 senses
85-92	Hibernation	Spends considerable time in deep sleep or coma, reducing body functions to a minimum
93-00	Food/energy scarcity	Must fight for food. Reduce CON by -20%. Behavior at 70+

Empathy

Somewhere between a behavior, advantage and disadvantage, empathy is placed. Use this trait wisely, to form the basis of a society or to expose individual beings to difficult decisions.

Aliens completely without empathy will rarely form societies. A "small" kind of empathy encompasses the closest beings. A "medium" kind, have empathy extend to a complete herd, village or group. A "large" kind of empathy extends to almost all living beings.

As with humans, empathy varies between individuals, and can be shaped by philosophical or religious ideas present in a society.

Life Span

In general, life span is related to size. Small creatures live short lives, large creatures long. But a closer look reveals many deviations from this rule. To simplify the rules here, SIZ 1 aliens live around a year or shorter. From SIZ 2 and above, apply a life span freely (even immortality is physically attainable, as proven by some jellyfish on Earth). The more effective advantages, the longer the life span, while difficult disadvantages may shorten the life span by 50%. Closely related species can have wildly different life span

Placement of Sense Organs

The logic behind the placement of the sense organs is that they appear front most in the direction of movement. Either the current direction or what used to be the main direction of movement in an earlier development stage. They are also placed close to the brain.

Behavior & Fear

Fear is a strong driving force for behavior. A species under constant pressure will very likely have a behavior in the upper half of the Behavior range. Species that have had peace for a long time will on the contrary tend to the lower half. With different parts of a species shaped by different backgrounds their behavior will probably vary quite a bit too.

The range of communication can have interesting effects on life form behavior. Try picturing the distance needed to warn others in their natural ecosystem, and this will be the maximum range of communications. The normal communication range will be much shorter, perhaps as low as 10% of the maximum range.

Disadvantages: This describes some of the problems the beings are struggling with, or what makes it more vulnerable. Roll or pick 1d3 Disadvantages above, and try to find interesting combinations.

Behavior: 01-10 In Harmony, 11-20 Curious, 21-30 Patient, 31-40 Watchful, 41-50 Suspicious, 51-60 Hiding, 61-70 Afraid, 71-80 Easily Angered, 81-90 Aggressive, 91-00 Detached.

Social: 01-20 Single, 21-40 Pair, 41-60 Small Group, 61-80 Herd (from small to swarm), 81-00 Special (Parasite, Symbiotic).

Also decide if the beings are K-strategists or R-strategists (producing only a few off-spring and caring for them, or producing many and not caring for them).

Communication:

1d100	Comm.	Description
01-04	Psionic	Sending and receiving thoughts
05-20	Scent	Spreading scents with various organs
21-36	Sight	Light, color, signs, infrared, ultraviolet
37-52	Tactile	Touch, tapping, stomping
53-68	Sound	Clicks, stomps, scratches, mouth-sounds, low/high frequency, generate sounds with other body parts
69-84	Chemical	Similar to scent, though other "sensors" are used
85-00	Electricity	Electronic impulses or fields are used for communication

Several communication forms can be combined, but pick one to be the primary.

Natural weapons: Many beings will be able to defend themselves, though not all life forms will, and not against an unusual threat (like humans for example). If they do, pick a natural weapon in the sidebar and use the following base chances.

Primary weapon: Low-powered aliens has a base chance of 20%+DEX. Medium-powered 40%+DEX and High-powered 60%+DEX. Carnivores get at least +10%.

Secondary/Third weapon: 20-40%.

Skills: To round off the alien, add a few dominant skills you find appropriate: Animals 0-3 skills, Intelligence 1-5 skills, High Intelligence 3-10 skills.

Calculating Characteristics

STR: Two thirds of SIZ +/-1d6. If fragile, one third of SIZ +/-1d6. For every 2 INT above 5, STR is often lowered by 1.

CON: Two thirds of SIZ +/-1d6. If disadvantage Fragile/Polluted/Disease-ridden, one third of SIZ +/-1d6.

SIZ: See earlier.

DEX: Immobile 0, Slow 1-5, Fast 20+. For every 5 SIZ above 20, Dexterity is lowered by 1.

INT: Animal 3-7, Intelligence 8-15, High Intelligence 16+, Mindless feeder/producer 0-2.

POW: Animals often have POW 10 or lower, Psionics 16+, Mindless feeder/producers will often have zero POW.

CHA: Above 3d6 striking, awe-inspiring, beautiful. Below 3d6 ugly. CHA is always at -10 at first contact.

Movement: Normal 5-8, Slow below 5, Fast above 12. For every 5 SIZ above 30, Movement is lowered by 1. Two movement values are used if the being can move in two different atmospheres (air and water for example).

1d100	Natural Weapon	Base Damage (+/- Dmg Mod)
01-10	Bite	1d6
11-20	Claw	1d6
21-30	Punch/kick	1d3
31-40	Grapple	1d3
41-50	Crush	1d3
51-60	Throw	1d3
61-70	Horn	1d3
71-80	Sting	1d3
81-90	Electricity	From surprised to 2d6
91-00	Poison	From light rash to 3d6

Quick Monsters

Sometimes you need to roll up an uncanny adversary quickly:

Decide upon SIZ & power level (high, mid or low). Choose between carnivore and omnivore.

Roll two Advantages (previous page) and three times on Appearance table (next page).

Add one or two natural weapons, at 60% (+15% if high-powered, -15% if low-powered).

Hit points: $\frac{2}{3}$ of SIZ.

DEX 10 (+5 if high-powered, -5 if low-powered).

1d100	Descriptive	1d100	Posture	1d100	Surface
01-05	Massive	01-20	Upright	01-14	Fur: Short or long
06-10	Slender	21-40	Horizontal	15-28	Skin: Smooth or coarse (AP 1-2)
11-15	Pear-shaped	41-60	Diagonal	29-40	Scales (AP 1-5)
16-20	Long	61-80	Bent	41-52	Chitinous (AP 1-3)
21-25	Flat	81-00	Crooked	53-64	Transparent/ Semi-transparent
26-30	Bent			65-76	Patched
31-35	Split			77-88	Feathers
36-40	Bulbous			89-00	Ornamented/Colorful
41-45	Hammer-shaped				
46-50	Boxy				
51-55	Ridged				
56-60	Crystalline				
61-65	Slithering				
66-70	Fat				
71-75	Wedge-shaped				
76-80	Spindle				
81-85	Retractable				
86-90	Hollow				
91-00	Bony/Angular				

Appearance (Optional)

Hopefully the above process has given enough insights to make it possible to conjure up an image of the alien being. If further input is needed, roll or pick on the tables above.

Start with descriptive terms for the whole being, and if needed, continue detailing specific body parts or even sense organs. Go through Posture and Surface in the same way. Keep the overall picture of the being (from the earlier results) in mind all the time, to find interesting combinations.

High- & Low-Powered Aliens

Here are a few examples of how to make an alien species higher or lower powered.

Low-Powered: Small size, fragile, slow, weak, no natural weapons and/or no armor.

High-Powered: Big, strong, fast, lethal natural weapons, intelligence, high intelligence, armored, coordinated (often as a small group, but possible for pairs or herds too), tech level matching the character's or higher and/or psionic.

Tech Levels & INT

Intelligence 4-6: Can be an animal or have a primitive culture (Tech Level 0-1). Will not advance beyond TL 2, unless uplifted by another species.

Intelligence, 7-15: Will eventually reach the stars in FTL ships. Depending on how long time they have spent evolving, everything between 0 and 10 on the Tech Level table is possible.

High intelligence, 16+: 50% chance that Tech Level surpasses character's Tech Level by 1d3. More primitive cultures exist too, though evolution to higher Tech Levels may be faster, if they don't blow themselves up in the process; not uncommon with the Aggressive and Easily Angered behaviors.



Clothing

Clothing will probably be worn by some alien species. Here is a list of descriptive words to make imagining them a bit easier. Roll or pick 1d3 times.

01-10	Loose
11-20	Functional
21-30	Strict
31-40	Patched
41-50	Coarse
51-60	Tight
61-70	Plain
71-80	Colorful
81-90	Smooth
91-00	Elaborate

Roll another 1d100 to find out how large percentage of the body that is covered.

Cultures

For human worlds, you can use the culture creation rules without designing a species first.

Developing a culture will by necessity start and end with the peculiarities of the alien and its world. Hopefully you have formed a vague image of the species' life as you worked through its physical properties. This step is meant to turn that vagueness a bit more specific.

Tech Level

Technology Levels measure the scientific capacity of a world and the complexity and effectiveness of a piece of equipment. Use the Tech Level Table on page 135 and roll 3d6-3. This will be the general Tech Level of the world. Keep in mind that there will probably be cases where there are different Tech Levels on a world.

1d20	Technology Areas
1	Agriculture
2	Astronomy
3	Machinery
4	Biology
5	Chemistry
6	Communication
7	Construction
8	Computers
9	Economics

1d20	Technology Areas
10	Energy
11	Manufacturing
12	Materials
13	Medicine
14	Physics
15	Sensors or Optics
16	Transportation
17	Weapons
18-20	Unusual Technology*

** Examples include time travel, shape-changing, immortality, psionics, biotech, advanced robotics or technology connected with species-specific senses.*

Alternate Technology Paths

Some worlds may not have followed the same path of technological progress as human civilization. Roll below to find out how technology have developed differently.

Alternate Technological Path, 1d6:

1-2	No deviation from the standard Tech Level
3	-1 Tech Level in one area
4	+1 Tech Level in one area
5-6	+1 step in one area, -1 in another and roll once more

Roll on the table on the previous page to determine what areas of technology have developed differently.

Law Level

To determine the Law Level, roll 1d10-1. The table on the next page lists examples of illegal objects and some regulations.

Cultural Details

To develop an alien culture start by considering the ten questions on page 136. Pick a few attributes that you consider to be the most important for the species. Give each a value between 75% and 90%, with 90% representing the attribute having the biggest importance for society. Add a couple of more attributes and assign them the value of 30%, meaning they are less important factors.

If some of the attributes are not in your curated list (or has a value of zero) it means that they are still likely to exist within the culture, but is not given much attention. Now, take a look at all the values and consider if they give a good picture of the species. If not, rearrange the values until you are happy with them.

With a well-developed alien culture it should be possible to assign a few good Passions to alien individuals. Use the same rules as for humans but assume that at least one Passion will be common to all of the same species, while the rest will be individual.

Continued on page 136...

Law Level Table

1d10-1	Weapons	Information	Travellers
0	No restrictions	—	—
1	Poison gas, explosives, undetectable weapons	—	Visitors must contact planetary authorities by radio, landing is permitted anywhere
2	Portable energy weapons (except ship-mounted weapons)	—	Visitors must report passenger manifest, landing is permitted anywhere
3	Heavy weapons	—	Landing only at starport or other authorised sites
4	Light assault weapons and submachine guns	—	Landing only at starport
5	Personal concealable weapons	—	Citizens must register off-world travel, visitors must register all business
6	All firearms except shotguns and stunners; carrying weapons discouraged	—	Visits discouraged; excessive contact with citizens forbidden
7	Shotguns	Free speech curtailed.	Citizens may not leave planet; visitors may not leave starport
8	All bladed weapons, stunners	Information technology, any non-critical data from offworld, personal media	Landing permitted only to military personnel
9	Any weapons	Any data from offworld. No free press	No offworlders permitted

Tech Level Table

TL 0: *(Primitive)* No technology.

TL 1: *(Primitive)* Roughly on a par with Bronze or Iron Age technology.

TL 2: *(Primitive)* Renaissance technology.

TL 3: *(Primitive)* The advances of TL 2 are now applied, bringing the germ of industrial revolution and steam power.

TL 4: *(Industrial)* The transition to industrial revolution is complete, bringing plastics, radio and other such inventions.

TL 5: *(Industrial)* TL 5 brings widespread electrification, telecommunications and internal combustion.

TL 6: *(Industrial)* TL 6 brings the development of fission power and more advanced computing.

TL 7: *(Pre-Stellar)* A pre-stellar society can reach orbit reliably and has telecommunications satellites.

TL 8: *(Pre-Stellar)* At TL 8, it is possible to reach other worlds in the same system, although terraforming or full colonization are not within the culture's capacity.

TL 9: *(Pre-Stellar)* The defining element of TL 9 is the development of gravity manipulation, which makes space travel vastly safer and faster.

TL 10: *(Early Stellar)* With the advent of Hyperspace, nearby systems are opened up.

TL 11: *(Early Stellar)* The first true artificial intelligences become possible, as computers are able to model synaptic networks.

TL 12: *(Average Stellar)* Weather control revolutionizes terraforming and agriculture.

TL 13: *(Average Stellar)* Battle dress appears on the battlefield.

TL 14: *(Average Stellar)* Fusion weapons become man-portable.

TL 15: *(High Stellar)* Black globe generators suggest a new direction for defensive technologies, while the development of synthetic anagathics means that the human lifespan is now vastly increased.

Higher Technology Levels exist and may be discovered by pioneering scientists.

Present time on Earth is TL7-8 and suggested tech level for these rules is around TL13.

These tables are taken from the original 1977 Traveller RPG by Marc Miller (now under a Creative Commons license). This is as close to canon as you can come. For me, sticking with it is a small homage to one of the first sci-fi RPGs ever.

Go over the attributes again and add a short description, either using the words suggested below, or something completely different. See if some interesting links appear and mark these connections in some way for later development.

This will probably be enough to start with. If you want to detail the culture more, now or later, develop each description into a couple of sentences, starting with the attribute with the highest value. Deepen the connections if possible. When you have gone through the list doing this, expand each sentence into one paragraph.

Cultural Attributes

These ten attributes can be linked to the Strangeness value. For a Strangeness of 10 only one answer will differ much from the way we humans do things. For a Strangeness of 100, all ten will be highly different.

Cultures & Circles

You may notice the similarities between the rules for Cultures and Circles, and they are indeed very closely related. This means attributes can be easily transferred between them if you like.

And if you want to have cultures clash on a grander scale it may be a good idea to use the Circle rules to give them stats and more fixed attributes, using the Cultural Attributes as a starting point.

Value. What do they value? If needed, check the Idea Table on page 166 for some suggestions.

Belief. What do they believe in? Examples: Pantheon, animism, god-like leaders or aliens, nothing (atheism), ancient forefathers.

War. How do they wage war? Examples: Non-violent, ritualistic, symbolic, psionic, large-scale, small-scale, brutal.

Weakness. What is their main weakness and how do they compensate for it culturally? See species description.

Attachments. What forms of attachments are there? Examples: Romantic, life-long, familial, platonic, parasitic, none.

Dwellings. What kind of dwellings do they create? Examples: Labyrinthine, technical, elaborate, temporary, haphazard.

Forbidden. What is forbidden and why? Examples: Science, books, interaction with aliens, androids, religion, speech.

Art. What is their art like? Pick one sense or sense group as primary for the art form and give it a descriptive word. Examples: Elaborate, crude, existential, serene, beautiful, functional, complex, provocative, repulsive, completely unintelligible.

Economy. What is their economy like? Examples: Barter, cooperative, egoistical, secret, money-based, abstract.

Food. How do they eat and how is it grown/hunted? Food can be elaborate, simple, disgusting, tasty, bland, literally inedible. With the species' food preferences in mind, how is food production rationalized?

And finally give some thought to:

What is the biggest crime one can commit?

What is the greatest act one can commit?

Dwellings: Population & Settlements

Roll two times on the table below to find out the population density and settlement structure. Start by rolling the middle columns, Population Density. For results Very Low to Medium, roll a second time on the columns to the right. If the results, on the other hand, are from High to Super-Dense, roll on the columns to the left. The first roll is at -40 if Tech Level is 4 or lower.

1d100	Settlement Structure	1d100	Population Density	Settlement Structure	1d100
01-17		01-17	Very Low	Nomadic	01-19
18-35		18-35	Low	Temporary Clusters	20-39
36-53		36-53	Medium	Dispersed	40-59
54-70	Towns & Cities	54-70	High	Villages	60-79
71-87	Low Density Sprawl	71-87	Very High	Towns & Cities	80-00
88-00	High Density Mega City	88-00	Super-Dense		

For Tech Levels 8 and up, add 1d3 space stations and 1d3 in-system colonies for every additional level.

Description of population densities:

- » **Very Low.** People are few and far apart.
- » **Low.** Mostly unpopulated, with small clusters at large intervals.
- » **Medium.** Large areas are populated, but there are also wide stretches of unpopulated wilderness.
- » **High.** Densely populated areas are huge, and true wilderness is gone.
- » **Very High.** Very large areas of high density. Open space is a scarcity.
- » **Super-Dense.** Most of the surface is covered with multi-story buildings.

1d100	Rulers
01-24	Anarchy
25-49	Dictatorship
50-74	Democracy
75-00	Council/ Semi-Democratic

Combine the above types of ruling with the concepts in the Idea Table, to get more specific types (religious dictator, council based on wealth, democracy promoting pleasure, and so on). Make sure it matches the overall ideas of society.

Rulers

How a species or world is ruled can be a quite complex issue, and many worlds will surely have different power structures in different parts. Roll on the table in the sidebar to get an indication on official ruling (and roll multiple times if there are several nations, for instance). To make it more complex, roll once more for the actual, but informal power structure, and write down in parentheses.

Foreign Policy

Foreign policy describes a general attitude towards the rest of the galaxy, both close neighbors and distant empires. It consists of Attitude, Allies, Enemies and Part of.

Foreign Policy: Roll on the table on the next page 1-3 times to craft an interesting relationship to the surroundings. Re-roll obvious contradictions.

Allies: Write down what allies and friends the species has. Consider how strong the ties are and how stable they are.

Enemies: Find some enemies, old or new. Add details later about how and why.

Part of: Is the species part of some larger political structure? This may be empires, kingdoms, unions, federations and so on. Is it participating out of free will, or is there some pressure or necessity involved (internal or external)?

With only a handful of species and worlds, relationships can quickly become interesting, making it much more difficult for the players to move around, and adventure hooks to spawn effortlessly.

Species Conflicts

Roll 1d100 1-3 times on the Idea Table on page 166 to find the conflicts that dominate a species or world.

Rolling on the Idea Table will give you the ingredients of a world's conflicts. For example, Tradition versus Equality is quite easy to start imagining what it could look like (according to tradition one species is a servant to another, but now the servants wants equality), but Peace versus Wealth can raise some interesting questions about a society (wealthy families run mafia-like city states and are being opposed by a new generation of peace-seeking youths, leading ascetic lives to avoid the old blood-stained money).

Use the full Circle rules if you want to, with stats, attributes, sub-circles and so on, or stick with this chapter for now and add details later if you need them. Just keep in mind that mono-cultural planets are quite unlikely to exist – most worlds will host several cultures.

With the basic conflicts defined, mark them with an arrow to specify if they are intensifying or not. This will tell you something about what can happen if the characters start fooling around on

1d100	Foreign Policy
01-04	Aggressive
05-08	Intriguing
09-12	Peaceful
13-16	Secretive
17-20	Negotiating
21-24	Provocative
25-28	Opportunistic
29-32	Union-Building
33-36	Neutral
37-40	Colonial
41-44	Trading
45-48	Closed
49-52	Passive
53-56	Exploring
57-60	Unpredictable
61-64	Low-key
65-68	A Cultural Giant
69-72	Destabilizer
73-76	Fatherly
77-80	Sensible
81-84	Easily provoked
85-88	Nostalgic
89-92	Empire builder
93-96	Dependent
97-00	Introvert

a world. Will carelessness start a war? Is diplomacy needed? Can some strategic support ignite a revolution?

Change over time:

- ↑ Conflict is intensifying
- No change over time, given the circumstances
- ↓ Conflict is cooling down

Conflict Intensity

Conflict Intensity determines how hot a conflict is. Roll once for every conflict and indicate with a small arrow on the World Sheet how it will develop over time.

1d100	Conflict Intensity	Description
01-13	Large scale war	All-out conflict. Every aspect of society dominated by the war
14-27	Small scale war	Smaller areas and groups involved in wartime activity, only certain parts of society affected
28-41	Skirmishes	Isolated acts of violence & black ops, with bursts of retaliation
42-56	Hatred & severe discrimination	Society as a whole is aware of the conflict, acting deliberately and self-consciously. A majority, referring to tradition, upholds the blatant discrimination
57-71	Ignorant	A large part of society doesn't care about the conflict, fueling it with their ignorance
72-86	Debate & mild discrimination	Society as a whole is aware of the conflict, debating it, and trying to avoid acting on it. Tradition and small groups keep discrimination alive
87-00	Harmony & respect	The "conflict" is viewed as curious differences between individuals/groups, enriching society

Wild Card

Wild Cards is an optional rule to make conflicts less binary. It is used to identify some people standing beside the main conflict of a world, offering an alternative way for the players to get involved.

To determine a Wild Card, roll again on the Idea Table. Use this result as a starting point for an individual or group that acts independently of the planetary conflicts.

Then roll on the Circle Influence Table on page 158 to determine the influence they have on society. Results above 14 will be rare.



M - SPACE

ALIEN
UNIVERSALS

biodiversity

biosphere

world

sessile no.

motile no.

frame.....

symmetry.....

.....

limbs.....

segmentation.....

.....

universals

strangeness

size

sessile no.

motile no.

frame.....

symmetry.....

.....

limbs.....

segmentation.....

.....

universals

strangeness

size

sessile no.

motile no.

frame.....

symmetry.....

.....

limbs.....

segmentation.....

.....

universals

strangeness

size

M - SPACE

LIFEFORM

world

strangeness

species

classification

ecosystem

body plan

communication

behavior

social

str	.....	.....
con	.....	.....
siz	.....	.....
dex	.....	.....
int	.....	.....
pow	.....	.....
cha	.....	.....

hit points

power points

natural weapons

skills & powers

advantages & disadvantages

description/culture
.....
.....
.....
.....
.....

tech level

law level



Litani



World Building

Unknown worlds are a staple of science fiction, and the following rules are meant to help create them. You can either start with a world and create an alien race that inhabits it, or start with an alien and make up a world that matches. The method proposed is semi-random: roll dice for some initial results, let your creative side start combining them into something interesting, and then add additional details to make the image more complete.

See page 152 for a blank World Sheet.

Barren Systems

Barren systems or worlds might seem uninteresting, but could be used in many ways. They can be sources for rare minerals, drawing both corporations and individuals. Dissidents, refugees or groups seeking solitude can colonize planets, moons or asteroids. Scientific outposts may be located on barren systems for many reasons. Once a camp is set up, they tend to remain, if they are reasonably functional.



Star System & Planet Specs

To create a planetary system and some physical details about planets, roll up the values you need below. Or leave all blank, and only roll them when the players actually need them. Note that you may already have determined some details if you have created an alien species first.

Star Type: Roll 1d3, three times.

- » **Light Color:** Blue, Yellow, Red
- » **Star Size:** Dwarf, Normal, Giant
- » **Number of Stars:** Single, Binary, Trinary

Number of planets: 3d6-2, of which 20-50% will be gas giants. Remove one planet if you need an asteroid belt.

Planets in the habitable zone: 1d3 (+ 1d3 moons each)

Roll on the tables below for each planet in the habitable zone:

Planet Size

Planet size is probably most important as a “psychological hook” for the players. Resources and areas to explore will be sufficient on even the smallest planets, though it gives some guidance to population size.

1d100	Planet Size	Gravity
01-20	Extra Small	0.7 G
21-40	Small	0.85 G
41-60	Medium	1 G
61-80	Large	1.15 G
81-00	Extra Large	1.3 G

Multiple Stars

Star systems with two (binary) or three stars (trinary) seem to be quite common. Often one of the stars have planets (if there are any), with the other star(s) orbiting at a distance. If the stars are too close, planets are more unlikely and one of the stars starts cannibalizing on the other.

Clusters of stars also seem to have planets, contrary to what was believed earlier. Planets with perpetual daylight and half a dozen sunsets a day might be possible after all...

Starport Type (Optional)

1d100	Type	Description
01-20	Full	Build and repair all types of ships
21-49	Standard	Repair and larger up-grades for common ship types
50-79	Local	Simple repairs & maintenance
80-00	Emergency	Landing area & emergency gear

Life (if not already defined)

1d100	Life
01-19	Lifeless
20-39	Single-cell life
40-59	Plant life
60-79	Animal life
80-00	Intelligent life (Tech Level)

Planets with just one climate or bi-ome (ice planets or desert planets) are quite common in sci-fi. In reality scientists believe this to be very rare, or even non-existent: Even very cold or hot worlds are bound to have some climate variation.

Overall climate

1d100	Overall climate
01-11	Very hot
12-24	Tropical
25-37	Warm
38-50	Earth like
51-63	Cool
64-76	Chilly
77-89	Very cold
90-00	Frozen

Percentage of planet surface covered by water: 1d100. On a Very Cold or Frozen planet, a large percentage will be ice or snow.

Atmospheric Pressure

1d100	Atmospheric Pressure
01-19	Too thin (vacuum suit)
20-39	Thin (breathing mask)
40-59	Earth like
60-79	Dense (unpleasant)
80-00	Too dense (breathing mask)

Atmospheric Breathability

1d100	Breathability
01-24	Vacuum suit
25-49	Breathing mask
50-74	Unpleasant
75-00	Earth like

Unbreathable atmospheres can for example have too high levels of methane, CO₂, hydrogen, nitrogen, ammonia, be corrosive, and/or contain pollutants (ashes, pollen, sulfur).

Special World Features

Here is a list of unique features that will occur sometimes, with varying frequency.

01-07 Double Planet. *Probably a special case of a very large moon, two small planets orbit each other.*

08-14 Ringed. *Rocks and blocks of ice form a disc around the planet. Beautiful to see from space, spectacular from the planet's surface.*

15-21 Habitable Moon. *A satellite with either an atmosphere or oceans. Not uncommon around gas giants, though temperatures tend to be a bit low if they are too far out in a system.*

22-28 Tide-Locked. *The planet is turning the same side to the sun all the time. The night-side is freezing cold and the day-side is extremely hot. The small areas of twilight are best suited for humans.*

29-35 Canyon. *A planet with a thin atmosphere can sometimes have pockets of breathable air in recesses like canyons and valleys.*

36-42 Gaia. *All living beings have formed a joint consciousness, sometimes taking on an individual will of its own to develop and protect the planet. Psionic powers of some kind are probably involved in this.*

43-49 Heavy Bombardment. *With a lot of material left unused when a planetary system was formed, planets will have many more meteorite strikes than normal. This is a natural stage for young systems, decaying over time. Interesting compounds and organic molecules can be brought to a planet this way.*

50-56 Rogue World. *The mighty forces involved when star systems are formed will sometimes*

plunge a planet away into deep space on its own. Hard to detect and almost certainly lifeless.

57-63 Seismologically over-active. *Either by internal powers or because of gravitational forces, some planets have large numbers of active volcanoes and tectonic plates grating at each other to produce violent recurring earthquakes.*

64-70 Artificial. *For very high tech societies, creating a planet from the resources found in a star system is feasible. It's a possibility to shape the perfect world for their species.*

71-77 Unique resource. *The planet houses a unique compound, plant or animal, highly sought after (or perhaps not even discovered before). Can be devastating, enriching or grant the discoverers/inhabitants great power, depending on how it is handled.*

78-84 High radiation. *From the planet itself, from the star or from a near-by gas giant.*

85-91 Tidal Effects. *Tidal effects from a moon or an accompanying planet not only affects water but also land masses, heating the planet from inside and creating seismological activity.*

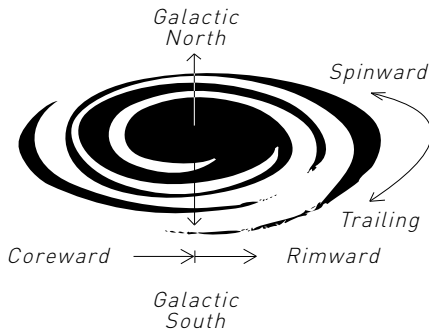
92-98 Flare Star. *Relatively small stars can have recurring huge solar bursts, making them double in size. For planets in close orbit this results in both a heat wave and higher levels of radiation, sometimes even in deadly doses. An atmosphere will reduce the effects. Life will be problematic and indigenous species are likely to have a high degree of mutations.*

99-00 Rosette Configuration. *An artificial construction where two objects are placed opposite to each other in orbit.*

Star Mapping

To make a star map for a small part of a fictional galaxy, the classic route is to create a hex map. They might look a bit unimaginative, but are quite practical. There is a blank hex map on the next page to fill out.

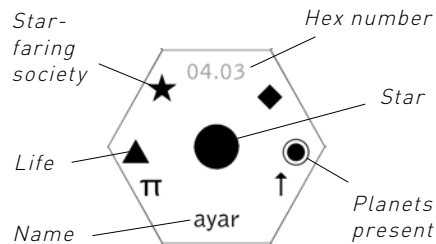
You can also use the free version of the program *Hexographer* to make star maps. Here you can add the name of the star in the hex, and small symbols around the star to indicate some important facts. The symbols are tied to Classic Traveller, but it's easy to change their meaning, as I have done in the sidebar.



Different Densities

For really dense parts of a galaxy (close to the core or in a star cluster) 80-90% of the hexes will have a star. For more sparse parts 10-20% will have stars. Placing stars just out of reach of regular hyperspace jumps can make them a bit mysterious.

One hex represents 1 parsec, equalling 3.26 light years, (the Milky Way is approximately 30,000 parsecs across) and also the distance travelled with Hyperspace 1. For every hex in normal space there is a 50% chance that a star is present, and 8 stars in 10 have a planetary system. For storytelling reasons, a large amount of these systems will have some kind of habitable planet. Political units can also be marked, with lines or colors, and other features of space that affects travelling (rifts of empty space, slow-FTL zones, debris-rich or pirate infested areas for example).



A map with 8x10 hexes is called a subsector. 16 subsectors (4x4) make up a sector. You keep track of subsector placement by noting the names of the adjacent subsectors.

For a planet you want to detail, always write down the name of the subsector and the number of the hex it occupies, to make it easy to locate.

M - SPACE

WORLDS

subsector

solar system

hex

species

main worlds

star type

planets
habitable

starports
asteroid belt

world #1

world #2

world #3

notes

M - SPACE

WORLDS

subsector *dendrite*

star system *iimbeni*

[07, 04]

hex

species

ayari

main worlds

ayar (innermost), goltor (2nd), varl (3rd)

star type

yellow, normal, single

planets *3*

habitable *2*

starports *—*

asteroid belt *—*

world #1

*ayar: small planet, cool climate, 87% water, dense/earth like atmosphere, no moons.
inhabited by ayari species.*

world #2

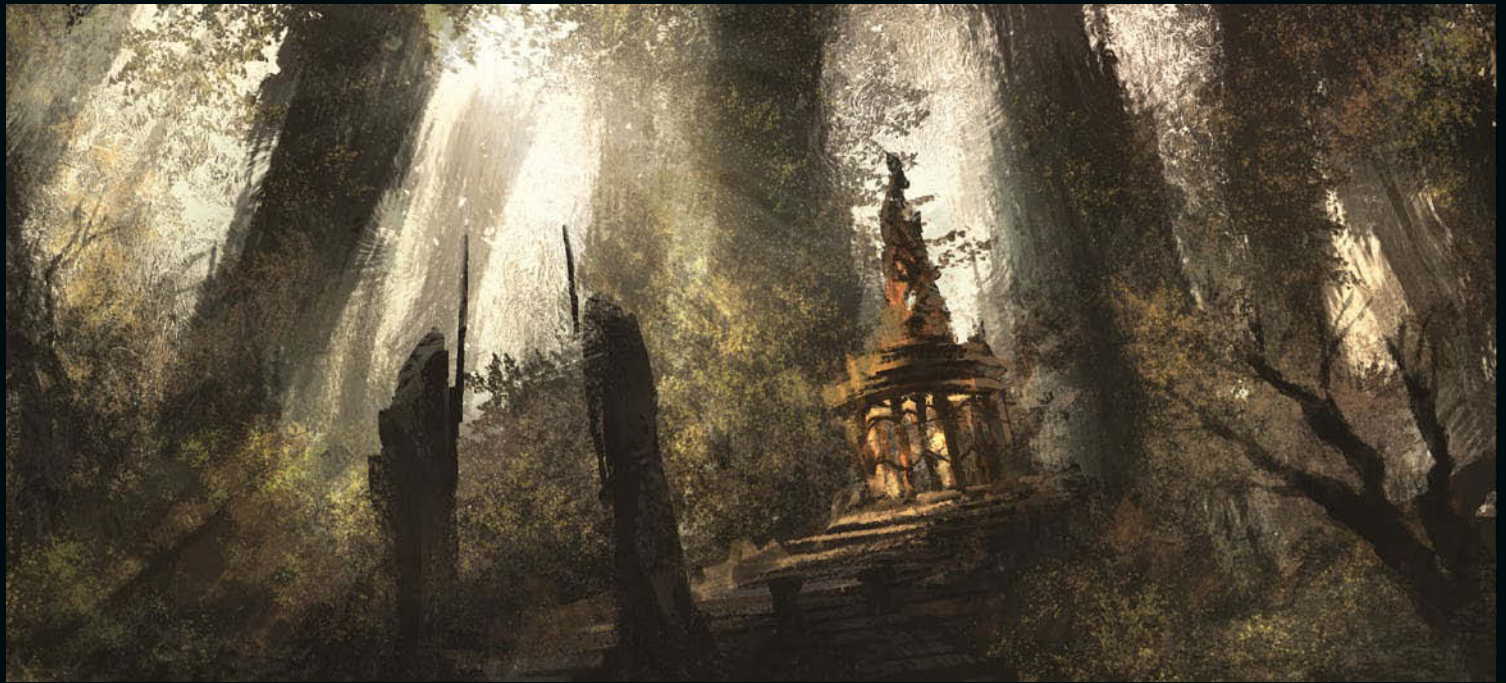
goltor: medium size, cool climate, 73% water, thin/earth like atmosphere, no moons. animal life only.

world #3

varl: gas giant, 22 moons.

notes

ayari: tech level 3, law level 5.





Circles

With more than five people doing things together, work tends to be organized in one way or another. And with more than twelve people brought together, ideological groupings will often start to appear. Using organizations and ideologies in play can be a very effective way to make worlds and NPCs come alive, giving them clearly defined goals that the characters can either be a part of, or try to thwart.

Here, organizations and ideologies are called Circles. A Circle can be any collection of people sharing an ideology or goal, from alien communities and world-spanning religions to secret illuminatis and local anti-environmentalists.

By assigning stats, attributes and traits to Circles, their relative strengths and weaknesses can be compared. If characters join a Circle, they can call for benefits and fight for its cause. This way you can make Circles an integral part of the game, from the personal level of the characters up to a galactic scale where ideologies compete for dominance.

Below you will find a way to describe Circles in more detail.

Ideas

Ideas are what make Circles tick, the very reason for their existence. It can be the love of a god, technological advancement, the superiority of a specific group of life forms - or a combination of several ideas. Many Circles have one idea at the center of its "faith", with other ideas being added as the ideology evolves.

On page 166 is a list of ideas that have passionately engaged

many humans throughout the ages. Use them if you need some support for your creativity.

For some Circles there will be several layers of ideas: some official and some unofficial. The unofficial side can for example be a handful of core values that are kept secret from everyone but a select few, or a violent tradition called upon when needed.

This can also be modelled with Sub-Circles. Sub-Circles share most ideas, traits and attributes with the parent Circle, but have a few that sets them apart. They can either be an integral part of the parent Circle or stand a bit on the side, handling its own business.

Types

There are four types of Circles: **Organization, Ideology, Corporation, Location.**

Add a descriptive word after the type, for example *Organization (Religious), Ideology (Political), Ideology (Alien), Location (City of Graath).*

Stats

Three stats define the basic concepts of a Circle: **Influence, Size, Resources.**

Influence (INF, 1-20)

Influence measures the impact a Circle has on the society it belongs to. Not only the direct influence, but also on general policies, laws and ethics of a society.

Resources and Tech Level

To compare the resources of Circles from different Tech Levels, use the highest TL as reference. For every TL step lower, reduce Resources by 2 for the lower-tech Circle down to a minimum of 2. Use with caution though, as low-tech societies may have access to rare raw materials for example, that are in high demand elsewhere, giving them an u

Nations, Worlds & Corporations

Nations or entire worlds can be played as Circles if you want an abstract way to model their conflicts.

Size will be tied to population size and Resources will broadly reflect the wealth of the world or country. Influence will in this case mean world or subsector influence – how much the nation can affect international (or interstellar) decisions and policies.

Attributes and Ideas will vary as for other Circles, but Group (Nation) or Group (Species) will be common ideas. Troops and Politics will be common attributes.

Large corporations can in some settings also act as powerful Circles, with their own agenda and political goals. They can be modelled as other Circles with the exception that Wealth will always be one of their ideas.

INF	Description
1-4	None. Circle's ideas are unknown to most people or viewed as uninteresting, extreme or just strange.
5-9	Very little influence. Concepts never reach the corridors of power.
10-14	Some contacts and influence in the corridors of power. Under favorable conditions the Circle's concepts can be turned to society-wide policies.
15-18	The Circle is a major player in the corridors of power. Has a big impact not only on what decisions are made but also upon the very agenda.
19-20	The corridors of power are completely in the hands of the Circle. Society is fully immersed in ideas from the Circle and new concepts are easily implemented by its leaders.

Resource Levels

1-4 *Destitute*

5-9 *Poor*

10-14 *Average*

15-18 *Affluent*

19-20 *Wealthy*

Size (SIZ, 1-20)

Size defines the number of followers and is a rough estimate on the number of life forms that can be considered part of a Circle. They are not necessarily active, but define themselves as belonging to that sphere of ideas. See next page for some example sizes.

Resources (RES, 1-20)

The resources of a Circle can take many forms, though money and property are perhaps the most common. For more primitive societies, wealth will be measured in food, valuable objects and animals. Somewhere around TL4-5 abstract resources will make an entrance.

Organic Stat Growth

To give a quick indication of how a Circle develops, you can mark potential stat growth with a small arrow pointing up, down or horizontal next to the stat value.

Character Actions Raising Stats

If the characters decide to openly support a Circle, their actions can increase or decrease stats. A heroic deed showcasing the ideals of the Circle are very likely to attract new followers, new money and possibly contacts with important decision-makers and spin doctors. A Circle can gain 1 point in any of the stats for a heroic deed by a character. Bad publicity will reduce any stat by 1.

Area of Influence

Size and Resources are in absolute numbers. Influence, on the other hand, is in reference to the society it belongs to. A band of mercenaries can have a huge impact on a small colony world but go unnoticed in an entire subsector. To handle this, always write down the area of influence after INF. If you are moving it out of that area or scale, Influence is very likely to change.

SIZ	Examples
1	<50. Mercenary group
2	200. Small colony
3	800
4	2.5k. Flat Earth Society
5	10k. Town
6	50k
7	200k. Small city
8	800k
9	2.5M. Greenpeace
10	10M. Small nation
11	50M
12	200M. Large nation
13	800M
14	2.5Bn. Christianity
15	10Bn. Humanity
16	50Bn
17	200Bn. Interstellar Empire
18	800Bn
19	2 500Bn
20	>5000Bn

Attributes

Attributes describe how the ideas of a Circle are implemented and how the goals are to be reached. They are used just as skills for characters, with a d100 to be rolled below the value to use it successfully.

Choosing Attributes

Attributes are picked to reflect the ideas and methods of a Circle. For violent freedom fighters, Mob or Troops will probably be appropriate, while Ahimsa and Politics will better reflect a serene religion.

Node Based Circles

A convenient way to work with Circles is to create them as interlocking nodes. That way you can start with a small local Circle, and work your way up to bigger and more powerful Circles in several steps.

This is an easy way to structure a longer campaign or a string of scenarios: the players start investigations relating to a small Circle. At the end of the scenario they find clues leading to a slightly more powerful group acting behind the small one, and at the end of the second scenario the clues point to yet another Circle and so on.

The Circle nodes can be created top-down or bottom-up, but starting out small (bottom-up) is a good way to keep both feet on the ground during the creative process.

Using Attributes

Attributes can be used in scenarios to indicate how a Circle reacts to changes. Will they call in their lawyers or send an assassin when the characters start poking around? The Attributes can be used both to indicate what reactions are likely to be (highest Attribute is likely to be used first, if the situation is appropriate for it) but also how efficient that reaction will be (a Circle with Troops 10% will perhaps only have a few sloppy guards, while Troops 85% will represent a well-trained elite group with top of the line gear).

Attribute Descriptions

Ahimsa. Ahimsa is a collective term for all types of non-violent actions. Protest marches, sit-ins, mass non-cooperation, civil disobedience, blockades & strikes. Requires *Dedicated followers* or *Strong Leader*.

Black Ops. Secret missions used for sabotage, assassinations, terrorism & kidnapping.

Cellular. The Circle is divided into self-sufficient cells with as little contact as possible with each other.

Connected. The Circle is well-connected, perhaps through old acquaintances, relatives or extensive bribes.

Cultural Heritage. The Circle is an integral part of the society it belongs to. INF cannot be fully reduced.

Dedicated Followers. There is a spirit of dedication within the Circle. It can be due to natural causes like good leadership or forced upon the members with shame, surveillance & brain washing.

Fear. The Circle has a fearsome reputation.

Functional Stupidity. Members have a certain way of always sub-optimizing their actions to suit the Circle's limited goals rather than anyone else's (or society as a whole).

Info Retrieval. Through espionage, infiltration and bribery the Circle gains useful knowledge about its opponents.

Legal. The Circle has got a well-trained staff of lawyers always ready to target opponents with lawsuits and threats.

Media. The Circle is very skilled at PR and has good relations with the media in general.

Memes. The Circle has a knack for spreading its world views through word of mouth.

Mob. With a large enough mob even trained troops will back off. Use *Thugs* for small scale trouble-making.

Politics. With members at home in the corridors of power, the Circle can influence political decisions.

Sanctions. The Circle is using its powers to block an opponent economically.

Secrecy. The Circle's members and operations, and even its existence, are kept secret. Use this as a negative modifier for characters researching the Circle.

Security. Always wary of attacks, the Circle's security is tight. Passwords, id checks and clearance levels are common.

Spread. Different parts of the Circle reside in various locations. The Circle cannot be reduced below a certain SIZ, unless attacked globally.

Strong Leader. A charismatic leader is a strong focus point for the Circle.

Territory. The Circle has some territory of its own. Higher value indicates either larger areas and/or higher quality.

Troops. Well-trained military personnel is kept by the Circle.

Welfare. The Circle supports society by offering education, charity, health care and so on. Not always for altruistic purposes, but also to gain a strong local support.

Traits

Traits are defining important aspects of a Circle that are not easily covered by Attributes. This can be significant details like a dress code, typical behavior, diet restrictions and so on. This is a chance to add some color to the Circle, making it stand out in the player's memories.

Stat & Attribute Levels

Below are some suggested power levels for Circles, and what values to assign to them.

Low Level: Use 10 stat points to spend freely on stats. Distribute 150 attribute points or 70 points to one attribute and 40 to two. Random method: Roll INF, SIZ and RES on 1d6. Roll 1d100 twice on the Idea Table. Finally pick 3 Attributes resonating with the ideas (using the same Attribute values as suggested above).

Medium Level: 25 stat points. 250-320 attribute points or 90 points to one attribute, 70 to two and 40 to one. Random method: Roll INF, SIZ and RES on 2d6. Roll 1d100 twice on the Idea Table. Finally pick 4 Attributes resonating with the ideas (using the same Attribute values as suggested above).

High Level: 40 stat points. 450-550 attribute points or 90 points to two attribute, 70 to three and 40 to two. Random method: Roll INF, SIZ and RES on 2d6+6. Roll 1d100 twice on the Idea Table. Finally pick 7 Attributes resonating with the ideas (using the same Attribute values as suggested above).

Player-Controlled: For Circles created by the players, spend 2-4 stat points per player and a total of 150 attribute points equally divided among the players.

Some additional ways to gain or lose rank:

Large donation: +3

Successful public appearance: +1 to +3

Negative publicity or public blunder: -1 to -3

Illegal actions: +1 to -10

Challenging the leaders: +5 to -5

High CHA: +1

Character Rank

For most Circles Rank will be an important concept. Rank is measured from 1 to 100+:

01-74	Factotum
75-99	Initiate
100+	Fugleman

For characters joining a Circle starting Rank will be 20.

Rank is raised when a character (or NPC) does something good for the Circle, in the name of it or put the spotlight on it. In general, if the character has been acting like a good role-model for the Circle in a scenario she will gain 1-3 in Rank.

Benefits

All Circles can offer benefits to its members. What kind of benefits will vary. Some will be highly specialized and closely tied to the ideas of the Circle and some will be more generic, like money or information. A psionic institute might be able to boost a character's POW for a while or provide training. Classified equipment or augmentations can be made accessible through a black ops Circle, and unheard-of science from a group of shy aliens.

The easiest way to call for a benefit is to roll below RES x5 or an appropriate Attribute. But it can also be played as a one-sided social conflict, with the characters using their communication skills to win a bargain. Beforehand, the GM should decide upon a minimum benefit to grant the characters (*ie.* what they need to finish the scenario), adding a larger benefit the more successful they are in the bargain. See the chapter on extended conflicts for more details.

Below are some typical benefits, shared by most Circles:

Influence: Contacts, allies, information

Resources: Money, equipment, transport, troops, mob

Roll below the appropriate Circle stat x5 or Attribute to call for a benefit. Apply the following difficulties:

- » **Small/Common benefit:** +/-0. Examples: Small loan, common equipment, contact with journalist letting characters get access to newspaper archive.
- » **Medium benefit:** *Hard*. Examples: Contact with low-level security officer tweaking a few rules, medium loan, special equipment.
- » **Large/Rare benefit:** *Formidable*. Examples: Contact with police/lawyer giving access to archives or confidential information, large loan, rare or expensive equipment.
- » **Spectacular/Ridiculous benefit:** *Herculean*. Anything you can think of.
- » **Character Rank:** Factotum -20%, Initiate +/-0%, Fugleman +20%.

Many Benefits will be ready within 24 hours, but as much as a week will sometimes be necessary. In most cases the flow of a scenario will be the determining factor, either to speed the characters up a bit or to withhold a benefit to increase tension.

Benefits are often to be returned by doing some duty for the Circle or, in the case of resources, with money. A duty is probably most natural to turn into a new scenario.

Additional Benefit Modifiers:

- » Character CHA >16: +10%
- » Character will not tell what the benefit will be used for: -20%
- » Character has not been entirely truthful regarding benefits in the past: -20%
- » Illegal activity/equipment: -40%. +/-0 for criminal organizations
- » Will aid the Circle in a very positive way: +20 to +40%
- » Any one of the following skills divided by 5: Influence, Deceit, Commerce, Acting, Seduction, Bureaucracy, Knowledge (Psycho-logy), Courtesy, Oratory, Politics, Teach, Customs or Culture

Church of Reason

Ideology (Religion)

Ideas: Knowledge, Peace

INF 11 (Erdini Sector)

SIZ 9

RES 15

Attributes: Ahimsa 65%, Dedicated Followers 75%, Media 40%, Political 40%.

Traits: Dress code (Yellow robes), Research, Academic Outlook.

Description: Religion celebrating knowledge as the highest level of existence. Strong advocates for peace, learning and research. Can appear a bit cold in manners.

Android Liberation Network

Organization (Secret)

Ideas: Equality, Freedom

INF 4 (Erdini Sector)

SIZ 2

RES 12

Attributes: Cellular 95%, Info Retrieval 75%, Memes 40%, Secrecy 100%, Spread 75%.

Traits: Only androids are allowed to join the network.

Description: Network of androids and robots secretly promoting the rights and freedoms of the entire android community.

Circle Details

Here are some optional details that can be used if a Circle needs to be fleshed out a bit more.

Income

Income specifies how the resources are collected. Common sources are donations, wealth, crime, business, collecting taxes and state subsidies.

Age

The number of years the Circle has existed. Large ideologies and organizations are likely to have existed for at least 10 years.

Enter & Exit

Some Circles are more difficult than others to enter. Sometimes very specific requisites are asked for (wealth, species, recommendation and so on). Write requisites down and a more general difficulty level of becoming a member (from easy to difficult).

Likewise, getting out may be as easy as saying so, or it may result in a lifelong death sentence. Rate from easy to impossible.

Restrictions

Some Circles regulate not only what members should do, but also what they ought not to do. Restrictions are often the opposite to the ideas & attributes, plus some ad hoc restrictions concerning everyday tasks (including food, clothes, behavior, language, reproduction, pleasures and so on). Some of them can be related to traditional wisdom (for survival or since long derived best practices), some are tools for control and power, and some again are just plain incomprehensible, at least to outsiders.

Structure

About the structure of Circles an entire book could be written. For most gaming needs these four categories will probably suffice though:

- » **Top-Down.** (*Rational, Traditional or Charismatic*). A strongly hierarchical structure with everyone well aware of who is making decisions for who. *Rational* is where leaders are chosen for their actual skills. *Traditional* represents leaders that, for example, inherit their status. *Charismatic* is for highly verbal and passionate leaders, with exceptional talents for engaging followers (also see attribute Strong Leader).
- » **Flat.** Members are equal and decisions are collective. Decision-making can be slow due to internal discussions and conflicts. Can also generate very dedicated followers.
- » **Net.** (*Open, Closed, Virtual or Cell*). A very flexible structure with individuals acting mostly on their own. *Open* has the net in constant change, including and excluding people as they are needed. *Closed* is a fixed group of people with trust as a major component in their work. *Virtual* is a net that only exists through indirect communication through technology or psionics. *Cell* is a small, tight group that has as little as possible to do with other parts of the organization, often for security reasons (also see attributes Cellular and Spread).
- » **None.** No structure at all or a structure in constant change. Hard to steer and often has difficulties reaching a consensus, but also notoriously hard to destroy.



Idea Table

1d100	Idea	Description
01-06	Egoism	The self comes first and as few limitations as possible should be set upon it.
07-12	Peace	War and violence destroy everything of value. Peace must be upheld.
13-18	God(s)	One or several spiritual beings make their will apparent to followers.
19-24	Anarchy	Freedom from hierarchy and outer restrictions.
25-30	Equality	Equality can be between sexes, species, races, different parts of society and so on.
31-36	Independence	The will to not be governed by an exterior force.
37-42	Group	A specific group of life forms are at the center of the Circle. The group can be a nation, species, clan, work group, terrorist cell etcetera.
43-48	Power	Gaining more power is a goal in itself.
49-54	Wealth	Increasing wealth is a goal in itself.
55-60	Environment	Protecting some or all aspects of the environment.
61-66	Chaos	Not content with just anarchy, society should be actively exposed to chaos.
67-72	Pleasure	Pleasure and well-being are goals in themselves.
73-78	Tradition	The drive to keep doing things the same way as they have always been done.
79-84	Enlightenment	Continuous strife to get better.
85-90	Newness	Discovering new worlds, technologies, designs, philosophies is the solution to all problems.
91-95	Pro (anything)	There is always something to support...
96-00	Against (anything)	...or protest against. Make your voice heard!

M - SPACE

CIRCLE

leader

name

influence

size

resources

attributes

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ideas

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traits

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benefits

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notes

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Psionics

Psionics are the powers of the mind, reaching out to change the world without the body as an intermediate. POW is the basic characteristic defining if a mind is tuned to work with these forces.

Psionic powers are divided into three spheres: *Sense*, *Mind* and *Matter*. They describe, respectively, how well a psionic is tuned to the forces flowing through the universe, her ability to affect other people's minds and finally her ability to affect objects in the material world.

When using a power, the player decides what she wants to achieve and calculates the Power point cost. Roll 1d100 under the power's skill value. If successful, reduce Power points by the calculated value, otherwise subtract 1.

Powers

Base range: 20 meters. Double Power Point cost to double range in most cases.

Base Power point cost: 1-10

Default time: 1 Action Point

Skill value is per power, increased as normal skills. Optionally, increase value +5% temporally per extra Power point spent.

Starting values: Three powers at POW x2 + add any skill points.

All powers are treated as separate skills and increase individually as regular skills. Depending on the style of the setting the availability of powers may differ. Either all powers are allowed for everyone to learn, or the psionic can be confined to one



sphere only. Or the different *Arcs* (see below) may have specific requirements that must be fulfilled. Such requirements can for example be a POW value and a skill value (see sidebar). With less restrictions, the more powerful the characters will be.

Power points are restored by sleeping one night.

In extreme situations a character can make an extra effort, pushing his/her capacity beyond what is normally possible. In these cases Hit points can be spent as Power points.

Finding New Powers

Spend a month in training with a teacher or in isolated meditation to awake a new power. Roll under POW x4 (training) or POW x2 (isolated meditation) to succeed. The new power starts at POW x2.

Increasing POW

POW has a chance of being increased when a character have won a resisted or opposed roll against a more powerful opponent. Put a check mark next to POW, and at the end of the adventure roll 1d100 below $(25-POW) \times 5$, with a minimum of a 5% chance of raising POW. If successful POW will increase by 1 point.

Sense

First Arc:

Avoid Harm. Utilizing small fluctuations in the continuum to soak up damage, the psionic can trade 1 power point for 1 point of damage when hit. Cannot be used on anyone else.

Intuition. The psionic is perfectly in tune with the forces surrounding her, acting as a gentle guiding hand. Adds +1% to any skill per 1 power point.

Power Arc Requirements

First Arc: POW 16

Second Arc: POW 18, one power at 90%, lowest power at 60%

Third Arc: POW 20, three powers at 90%, lowest power at 60%

Optional Rule: Stacking Powers

In some situations a psionic may want to combine two powers to achieve the impossible. To do this, the GM must first accept the power combination. Then both powers are rolled at Hard (with Power points spent as usual). If in the middle of combat, preparation time is 1 round, in which the psionic can do nothing else. The consequence is that both powers are activated at the same time and can be u

Psionic Aliens

The basic concepts for psionics work the same way for alien life forms. All species are supposedly tapping into the same continuum of life-forces that permeates the universe, and have learned to manipulate it.

But the powers are likely to manifest themselves in different ways due to the variation in the mental internal wiring.

As a general guideline, human-like aliens (Strangeness 1-40) can use the rules as is. Powers can have different names, be ordered slightly different to reflect the specific needs of the species and a couple of new powers are likely to exist.

There is also the possibility of single-powered aliens, with one or two powers closely linked to the evolutionary survival of the life form. These often have close ties to the way they get food, protect themselves or fight opponents. The rules here can be used as inspiration but it is quite likely the powers are unique. Otherwise low-powered life forms (even plants) can be a real challenge for the characters if psionics are used this way.

For even stranger aliens (Strangeness 50-70) it is possibly best to write down a new psionic power

Continued...

Meditation. Moving into a perfect meditative state, the psionic can restore $\frac{1}{4}$ of her full Power points in one hour. Meditation must be undisturbed and works only once a day. No power point cost.

Second Arc:

Battle Meditation If a calm moment presents itself during combat, the psionic can choose to quickly enter a deep state of inner focus and clarity, giving her an extra bonus on the first combat action following it. Minimum time 2 rounds. First action is *Easy*. Cost: 3 power points.

Psychometry. Sense the history of an object or place, who's been using it, when and for what. The outcome can vary greatly in detail depending on the local flow of the continuum. Cost: 3 power points to sense a few days back in time, thereafter 5 points/month.

Detect. Detects a psionic nearby or the traces it has left. Mask Mind can be used for psionic stealth. Cost: 2 power points.

Third Arc:

Farsight. This power can give the psionic vague impressions of events far away in time and/or place, not always showing actual outcomes, but also possible scenarios. Cost: 10 power points.

Mind

First Arc:

Friendship. Befriend any intelligent life form (2 power points per step up on the *Social Disposition* table, if used). Duration: 2 minutes. Cost: 2 power points.

Mental Defense. Protection of a 5 m² area, including everyone inside it, against all psionic attacks. If attacked, use opposed rolls (Power vs Power). Cost: 2 power points for every 5 m².

Empathy. The general feelings and attitudes of a being can be sensed. Cost: 2 power points. Re-new for 1 Power point to capture changes in attitude, for example during an ongoing conversation (must be within a few minutes of the first roll).

Scream. A mind-numbing, silent psionic scream, like mental static. No one within range can act for the duration of the scream plus 2 rounds. Targets must succeed with a *Hard* Willpower roll to perform one simple action. Cost: 3 power points.

Second Arc:

Read Mind. Surface thoughts can be clearly read by the psionic for 5 power points. For deeper probing, spend 10 power points and at least one minute. To block deep thoughts from being read, use opposed roll versus Willpower or Mental Defense.

Affect Mind. Target follows one suggestion of the caster without hesitation in small matters. Cost: 5 power points.

Mask Mind. Hides the psionic signature from other psionics, making her difficult to detect. Make an opposed roll if another psionic is using Detect. 1 power point per minute.

Speed Mind. A burst of mind activity allowing fast comprehension, reading or complex interconnections. Knowledge or research rolls are Easy as default, but can also be used for more specific resolutions under stress. Cost: 5 power points.

Amnesia. The psionic can make the target forget one minor event that happened recently. Cost: 4 power points. To erase more significant and emotional events, cost is doubled and an opposed roll (Willpower vs Amnesia) is needed.

Third Arc:

Control Mind. The ability to control the actions of one intelligent life form. This is a resisted roll with the opponent's Willpower. Duration: One action or approximately one minute. Cost: 10 power points.

structure. Starting with a few central powers is often good, and then keep adding abilities in relation to these. Use the life form's biome and evolutionary challenges as a starting point.

Last but not least, the really bizarre life forms (Strangeness 80+). Here, anything goes. If their physical forms are hard to grasp by humans, their minds are likely to be even more incomprehensible. (Though not always – body and mind need not to be linked this way and shapeless blobs with human-like minds can be fun for a changel). Only your imagination sets the limits here.

Psionic Success Levels

Fumble: Ability fails and the full power point cost is lost.

Failure: Ability fails. Power point cost: 1

Success: Ability succeeds. Full power point cost.

Critical: Ability succeeds plus any of the following effects: Power point cost 1, triple range, triple duration, information gained exceed all expectations or POW (or power point) value temporally doubled.

Thrown Object Damage

Default damage by objects hurled is 1d6 for every SIZ 10. Use the list below as a reference for object size and damage.

Some examples:

Full suitcase	1d3
Small robot	1d6
Human	1d6
Robot	1d8
Motorcycle	2d6
Speeder Bike	3d6
Land Speeder	5d6
Truck	7d6
Star Fighter	9d6

Fear. Target must make a *Hard* Willpower roll or flee in terror. If the roll is made, the life form is incapable of anything but the simplest action for as long as the power is upheld. A psionic can raise Mental Defense in an opposed roll. Cost: 10 power points per round.

Telepathy. Allows the psionic to send a simple message of any one type (sound, image, feeling, etcetera) to another being. Cost: 10 power points. Add 5 points for each added type.

Matter

First Arc:

Healing. Healing can be used in two ways. Either the target restores 1 hit point per power point spent, or physical healing is doubled at a cost of 2 Power points per day.

Find. Locate any object known to the caster, just as if a compass was pointing at it. Cost: 2 power points.

Move Object. Use the mind to move any object. Base cost is 3 power points for up to human-sized objects, then 1 more point per similar weight added. Base cost is 5 power points instead to hurl an object. See sidebar for damage examples.

Illusion. Life-like human-sized illusion working on all senses. To keep an illusion animated the psionic must focus on keeping the power up and can do nothing else. Cost: 2 power points per round.

Second Arc:

Push. Spend 2 power points to violently push back 1 human-sized object. Target suffers knockback 5 meters, is prone next round and takes 1d4-1 damage. Drops weapon if a Combat Style roll is failed. Use Evade or Acrobatics to dodge, or an opposed Push roll.

Leap. Jump up to 10 meters horizontally or vertically. Can also be used to break a fall. Cost: 4 power points. For every additional 4 Power points, add 1 meter.

Reflexes. Lightning fast reflexes enabling the psionic to parry blaster shots, dodge bullets and get double Action Points in a combat round (for simplicity, treat it as two actions per action point). Cost: 5 power points per round.

Stun. A more targeted version of the Scream power affecting only selected opponents. Cost: 2 power points per person and round.

Martial Flow. In combat, after the dice has been rolled, the psionic can spend power points to nudge a roll into a better success: Fumble to failure, failure to success or success to critical. Cost: 1 power point per 1% subtracted or added to a roll.

Third Arc:

Agility. Exceptional body control. For every 5 power points spent add 10% to Athletics, Acrobatics or Unarmed in the current round. Can be used to push a skill over 100% to minimize the risk of failure or to counter negative modifiers when performing difficult tasks.

Haste. A burst of high-speed movement at Movement Rate 30, lasting 1 round. Cost: 10 power points.

Life Giver. Restore hit points to 1 for any dead life form. The cause of death must be from unnatural causes. Use the power within two minutes from the deadly blow. Can only be used on bodies that are reasonably intact. Cost: 12 power points.

Forgotten Powers

Destruction (Mind Rapture, Ego Attack, Pain)

Tech (Animate, Redirect Power, Power Blast)

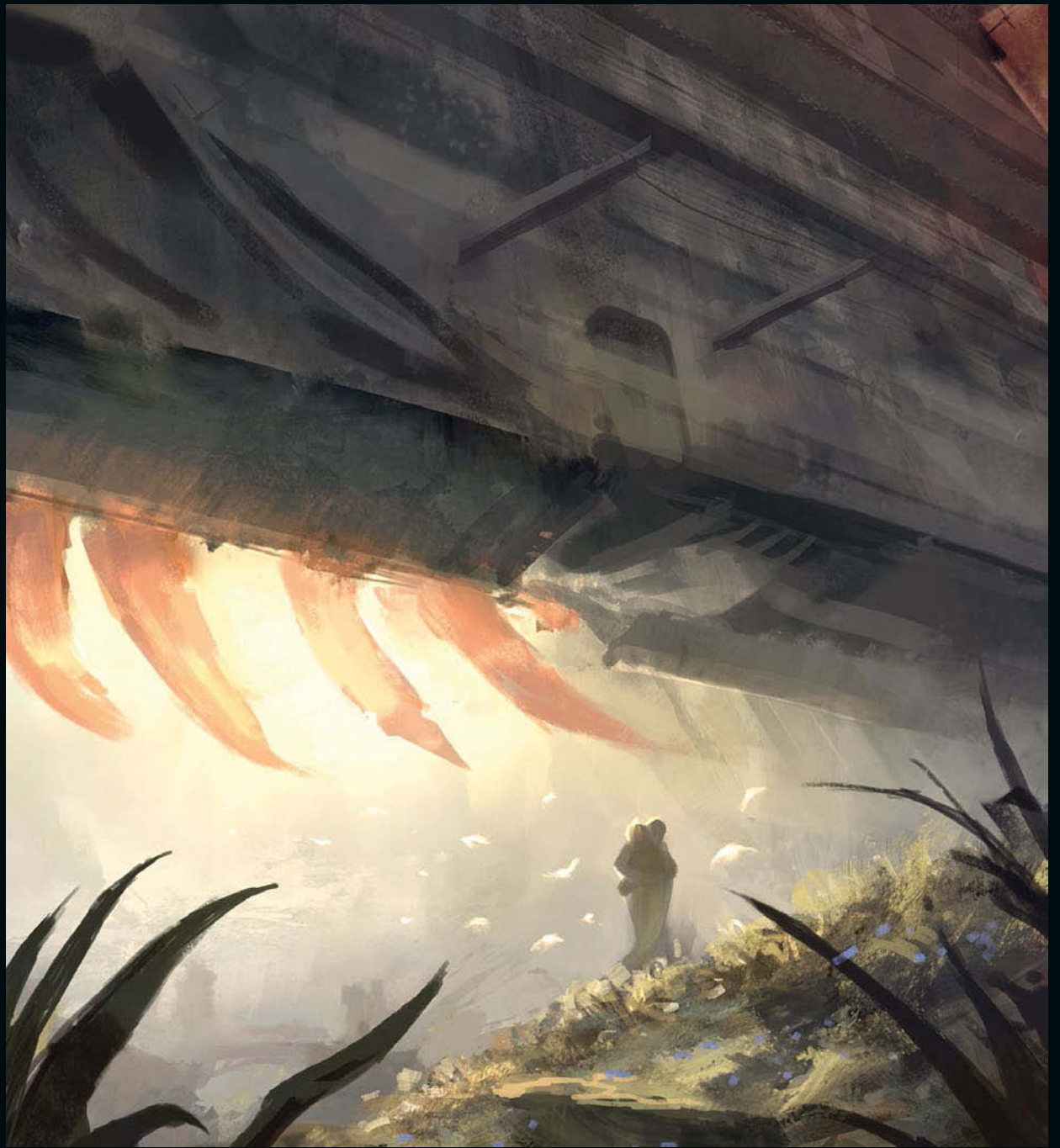
Weaving (Teleportation)

Crafts (Forge POW Capsule, Psionic Shield)

Nature/Arcane (Beast Language, True Path)







Vehicle Design

To survey vast areas or to venture into dangerous environments, the characters will sometimes need specialized vehicles tailored for the situation. These rules provide a framework for that design work, from small single-person flyers up to large mobile headquarters.

Vehicles use the same modular approach as starships, with the biggest difference being in scale. The scale of the modules (and the finished vehicle) is in Planetside Scale, *ie.* one tenth the size of starships. The default Module size is defined as: 1 Module is big enough for 1 person. Just as for starships, but here with a very bare-bones functionality compared to space faring vessels: Planetside vehicles don't have to withstand cosmic radiation, keep air pressure up or micro-particles out. This also means they require much less space, building materials, structural support, electronics and so on.

Vehicle design follows these steps:

- 1. Decide upon a vehicle type.**
- 2. Pick a Movement Class.**
- 3. Determine what Modules you need. Calculate Speed & Handling.**
- 4. Multiply Modules according to Movement Class and get vehicle Size.**
- 5. Add apps & pick armor.**

Vehicle Type

Start by defining what type of vehicle is needed. Examples include: All-terrain vehicle (ATV), fly cycle, car, transportation quad copter, speeder bike, land speeder, armored walker, helicopter etcetera.

Movement Class

Movement class represents the medium the vehicle moves in or on. It can be on or through the ground, in the air, and in or on liquid. This choice will affect the total number of Modules and sometimes Speed & Handling.

Ground:

- » Regular. Add 1 Module/10 Modules (minimum 1)
- » Terrain. Add 2 modules/10 modules (minimum 2)
- » Walker. Modules x2
- » Burrower. Modules x3 (Speed & Handling at -90%)

Liquid:

- » Surface, Motor. Modules x2
- » Surface, Sail. Modules x2 + sails
- » Sub. Modules x3

Note that Speed & Handling are at -50% for all vehicles moving in or on the surface of liquids.

Flight:

- » Wings. Modules x3
- » Anti-grav. Add 1 module/10 modules (minimum 1)
- » Rotor blades. Modules x2
- » Hover craft. Modules x2
- » Gas bag. 10 modules (1 ton) need 1000 modules of default lifting gas.

An Open System

To make it possible to create all kinds of vehicles, from vespas to fighter jets, these rules are kept as flexible as possible. This means there are very few restrictions and the rules can produce fantastic or, depending on how you look at it, ridiculous results. (Vespas going at Mach 2 for example)

To keep vehicles in the spirit of the setting, the GM should always supervise the design and compare the results with the real world or his campaign ideas.

Vehicle Combat

For vehicle combat, use the rules for starship combat.

Module Partialals

For small vehicles it often makes sense to work with half or quarter Modules for some functions, especially engines and maneuvering.

Stunts

To add even more fantastic technology, bordering on magic, use the guidelines below for Stunts.

Psionics. *The vehicle has a psychic artificial mind with powers equal to a starting psionic character, either to use by itself or as supporting powers for the character.*

Luck Points. *For vehicles that seem to make the impossible happen at just the right moment, make 1-3 Luck points available to the characters using it.*

Lighting Fast. *Calculate Speed & Handling stat as usual, but there is also a boost function pushing the vehicle into the 16-22 range of the stats for a short period of time.*

Shape Change. *From vehicles that can be unfolded, to vehicles with different states or modes, for example automatically changing into a submarine when hitting water.*

Tiny. *Technology miniaturization taken so far that almost anything can fit into a personal-sized vehicle.*

Vehicle Modules

Pick the Modules needed for the vehicle. Most Modules are the same as for starships: Cockpit, Cargo, Passengers and so on. Below is a list of all Modules for vehicles.

Basic assumptions:

- » 1 module/person
- » 1 module/100 kg cargo
- » 10 Hit Points/module
- » Weight: 1 Module = 100 kg
(10 modules = 1 ton)

Module Descriptions

Cockpit. 1 module per person. 1000 Cr.

Engine. Select a Thrust Rating (TR) for the Modules. Determines the vehicle's Speed value, see page 182.

Engine Type	TR for Engine	Cost/Engine Module
Cutting Edge	120	2000
Excellent	100	1500
Standard	70	1000
Economy	40	500
Simple	20	250

Maneuvering. Select a Thrust Rating (TR) for the Modules. Use the table above. Determines the vehicle's Handling value, see page 182.

Sickbay. 2 modules for an Autodoc with room for one patient. 4 modules per patient for an ambulating sickbay. 1000 Cr.

Crew. 1 module per crew member. Bunk requires 2 modules/person. 4 modules per crew member for cubicles. 500 Cr.

Passengers. 1 module per seated passenger. Bunk requires 2 modules/person. 4 modules per passenger for cubicles. 500 Cr.

Cargo Hold. 1 module per 100 kg cargo. Secret compartments, specific habitats or biomes cost more. 500 Cr. 1000 Cr for special demands.

Weapons. 1 module per attack and round. Handled by one person with Gunnery skill. One module can be handled by the pilot, the following weapon modules are separate turrets. Choose from laser, blaster, ion cannon, missiles. For costs, see weapon table.

Lab. 1 module +10% in one chosen skill (cannot exceed +30% per skill, though larger specimen can be brought into the lab if more modules are added for the same skill). 1000 Cr.

Open Space. 8 modules minimum for canteen, briefing room, gym etc. Holds at most one person per Module, very tightly packed. 500 Cr.

Vehicle Bay. Garage or hangar for a small vehicle. Takes twice as many modules as the vehicle carried. 500 Cr.

Self-Repair. 1 module per self-repair unit. One roll every third combat round. +5% in Mechanics per step. 1000 Cr.

Rescue Utilities. 1 module/1 person. 10 Parachutes or Life-Vests fits into 1 Module. 500 Cr.

Sensors. Sensors are not automatically included for vehicles. 1 Module includes a close range sensor detecting radiation, atmosphere, heat (IR), life, specific minerals and water. Use with Sensors skill. 1000 Cr.

Speed	km/h
1	10
2	20
3	30
4	40
5	50
6	60
7	80
8	100
9	130
10	160
11	200
12	250
13	300
14	400
15	500
16	600
17	800
18	1000
19	1250
20	1500
21	2000
22	3000

Vehicle Stealth

While often not as advanced as the stealth found in starships, it is crucial for vehicles in many settings. Common technology is masking of radar, heat, sound and emissions, High tech visual masking is also an option.

Use the same rules as for starships: Stealth gives the opponent -5% per step in Sensors or Spot skill. Max -30%.

Cost: 500 Cr per -5% and Module.

Robot Arm. 1 Module for one external robot arm, controlled from the bridge. Strength 40. Reach: 2 meters. For doubled strength and reach, double the number of Modules. 1000 Cr.

Airlock. 2 modules for one person. Not automatically included in the "hull" as for starships. 500 Cr.

Storage. *Air:* 1 module holds compressed air (and a recycler) for 1 person to last 12 hours. *Smoke:* 1 module holds 2 charges of smoke, capable of generating a 100 m² smoke screen. Vehicle concealed within 2-4 rounds. 500 Cr.

Environment. Sealed hull. Multiply total cost with 2. Required for subs & high altitude flight. 1000 Cr.

Vehicle Stats

Vehicles, like starships, are defined by three stats: Speed, Handling and Size.

$$\text{SPEED} = \frac{\text{Total Thrust Rating}}{\text{Number of Vehicle Modules}}$$

$$\text{HANDLING} = \frac{\text{Total Thrust Rating}}{\text{Number of Vehicle Modules}}$$

SPEED (1-20)

Calculate Speed by multiplying the total Thrust Rating of the Engine Modules with the number of Modules. (Total Engine TR/number of Modules).

HANDLING (1-20)

Calculate Handling by multiplying the total Thrust Rating of the Maneuver Modules with the number of Modules. (Total Maneuver TR/number of Modules).

SIZE (1-)

Vehicle Size is calculated by taking the number of Modules, then multiply or add, the modifier associated with the Movement class. Then multiply that number with 10. For short: (Number of Modules) x (Movement class modifier) x10.

Weapons

Choose weapons from the table below. All weapons require a gunner with the Gunnery combat style.

Weapon	Damage	Range	Modules	Cost
Heavy Laser Rifle	2d10+4	150 m	1	1000 Cr
Heavy Blaster Rifle	3d10+2	100 m	1	2000 Cr
Blaster Cannon	4d10+4	1000 m	2	3000 Cr
Rail Gun	6d8+6	10 000 m	2	4000 Cr
Laser Cannon	4d8+4	600 m	2	3000 Cr
Ion Cannon	3d10+4*	70 m	2	2000 Cr
Missile	8d6+8	1200 m	2	5000 Cr
Stun Cannon	4d6	40 m	2	1000 Cr

* Only versus tech.

Damage & Malfunction

Damage works as for simplified starship combat (without hit locations). When hit points are halved, roll on the Malfunction table:

Malfunction Table (1d6):

1. Power out, no sensors or weapons
2. Minor leak in one module (air/water/fuel)
3. No Maneuvering, Pilot or Drive skill halved
4. Speed halved
5. Uncontrolled spin. Pilot or Drive skill at 0 %
6. Re-roll on this table. +1 on duration table

Optional: Calculating Weight

Multiply Weight with $1+(AP/10)$

Examples:

AP 5 = Module weight x1.5

AP 10 = Module weight x2.0

AP 21 = Module weight x3.1

Special cases:

Low-weight: Weight/2, cost x10

Ultra-light: Weight/10, cost x10

Supra-light: Weight/100, cost x100

Heavy-weight: Weight x4, cost x4

Vehicle Condition

Vehicle condition is measured from 0 down to -100. Use the rules for starship condition regarding skill modifiers, maintenance, repairs and the cost of used vehicles.

Armor Examples

Use the list below as a reference for armor. Most common is steel armor, but various high-tech composites appear at TechLevel 12. If two AP values are shown, the second value represents the protection for passengers.

Speeder Bike, AP 10/0

Car, AP 10/2

Land Speeder, AP 10/0

Armored Car, AP 16/5

ATV, AP 18

Tank, AP 24

Hover Craft, AP 10

Helicopter, AP 4/2

Fighter Jet, AP 6/5

Duration Table:

1. One round
2. 1d6 rounds
3. Until repaired
4. Until repaired, Mechanics at -20%
5. Until next stop and repaired
6. Until next stop and buying new parts.

Personal damage: Everyone on board the vehicle must also make an Athletics or Acrobatics roll to avoid 1d4-1 damage.

Armor & Hit Points

Shields are not very common for vehicles in most settings, often because they are too bulky and energy demanding. If needed, use the rules for starship shields. Cost/Module and step (+1): 500 Cr.

For armor, only $\frac{2}{3}$ of the Modules need to be covered – the remaining Modules are considered internal, with no need for protection. Cost/Module and step (+1): 100 Cr.

Hit points can be bought up (for vehicles with better structural integrity) or down (for fragile constructions and thin, shell-like vehicles). +/- 500 Cr for each HP up or down. Can never raise Hit points more than 30% above the starting value.

Apps

Apps function the same way as for starships, giving up to +30% to the skill used. The apps available for vehicles are Navigation, Sensors and Targeting. See page 96 in the Starship Design chapter for more details.





Researching New Gear

Goal: Combining functions in new ways, inventing new functions or modifying existing functions.

Requisites: Sufficient materials, a lab/workshop and relevant skills (one character must have the Engineering skill; Mechanics, Electronics & Computers can be used as assisting skills).

The success or failure of construction skill rolls, affect later operation skill rolls.

Default base penalty for operation of home made gear: -20% (see Permanent Objects on how to reduce the penalty).

One-shot objects:

These are improvised objects that are developed to solve a specific challenge in a scenario. First the GM must decide if the required materials are available (or can be cobbled together from scrap or other nearby objects). Optionally one Luck Point can be spent by players to gain access to a reasonable amount of materials.

For every function the finished object will consist of, it will take one person 1 day to put it together (or 1 hour in truly heroic settings). For every additional person involved with relevant skills (up to 4 people), reduce time by 25%.

Continued...

Technology

Technology is one of the pillars of science fiction. This chapter contains lists of equipment and weapons for the characters, sample vehicles, rules for constructing and modifying gear, and some guidelines for interstellar trade.

Lab Research

Finding clues by scientific research is quite common in science fiction. With a Lab Module in their starship or vehicle, characters even get a chance to uncover clues in the field.

First, decide what skill or skills the Lab will be built for. A character using the lab must have the same skill, and gets a skill bonus between 5-30%, with each 5% step costing 5000 Credits. A single Module can give max +10%, so to get full bonus, three Modules are needed.

Conducting research: The GM decides what basic clue should always be uncovered – the bit of information needed to move the story forward. Determine a time frame (5 days for example) and the number of rolls needed (one per day perhaps). For each successive roll, add a piece of information that gives the players an advantage when later solving the larger problem in the story (perhaps a shortcut, a way to avoid violence, revealing sensitive local customs and beliefs or avoiding a trap). All dice should be rolled by the GM.

Trade & Cargo

Here are some pointers on interstellar trade, for characters that wants to make good use of their cargo holds.

Cargo available: In major starports there will always be cargo. For smaller ports, there is a 20-50% chance, depending on population size and tech level.

Tons available: Roll 2d6 for the number of tons available on a regular planet. Lower to 1d6 for sparsely populated worlds, and raise to 3d6 or more for densely populated or high-producing worlds.

Destination: Choosing the destination is an important part of the job. Use the Commerce skill to determine a good match, adding $\frac{1}{5}$ of Culture for any of the regions involved. Missing this roll results in a *Hard* penalty on both buy and sell rolls (see below).

Buying & selling: Use Commerce first when buying, and again when selling. Consult the table below to see how large the profit will be.

Buy skill roll is a:	Modifier when selling	Sell skill roll is a:	Profit, % of buy value
Success	Easy	Success	+50%
Fail	Hard	Fail	-20%
Success	Easy	Fail	0%
Fail	Hard	Success	+10%

Common goods are agricultural products, industrial technology, luxury goods (fine beverages, rare minerals, antiques, exclusive textiles, works of art, etcetera), consumer electronics and so on. Calculate with a cost per ton starting at 150 Cr for staple goods, 3000 Cr in the mid range, while luxury items will go much higher.

Roll the relevant construction skill once a day. For every failed roll, later operation skill rolls will be at -10% (in addition to the default -20%).

In operation: Skill roll once every minute (or somewhere between 1-10 minutes, depending on the time scale of the situation) the object is in use. For every failed roll, object functionality will be halved. The exact effect is for the GM to decide; it can be range, damage dealt, efficiency, etcetera. Criticals, on the other hand, will extend operation time or efficiency.

Permanent objects:

Same as above, but for every additional week spent refining the construction, design and operation (with a successful construction skill roll) add +5% to the operation skill roll. When the total penalty reaches zero, the object can be used as normal gear, without extra skill rolls or penalties.

Costs will be roughly the same as if a reasonably similar object were bought on a nearby world.

Personal Equipment

Below is a list of weapons, armor and personal equipment typical for heroic sci-fi settings. All values in Planetside scale.

1. Can be set to stun. Roll damage as normal, but damage is done to the Conflict Pool (CON+SIZ) divided by two; see the chapter on extended conflicts. When the Conflict Pool reaches zero, the character falls unconscious and takes 1d4 hit point damage (in random location).
2. Renders droids and electronics inoperable for 1d3 x10 minutes.

Ranged Weapons	Damage	Range	Firing Rate	Load	Cost
Blaster	1d8 ¹	10/30/120	1	3	400 Cr
Blaster Carbine	2d6 ¹	15/50/220	1	3	700 Cr
Blaster Rifle	2d6 ¹	30/100/300	1	3	1000 Cr
Heavy Blaster	1d10 ¹	7/25/50	1	3	500 Cr
Light Blaster	1d6 ¹	30	1		300 Cr
Mini Blaster	1d6 ¹	7/25/50	1	3	250 Cr
Ionization Rifle	1d10 vs tech ²	5/10/20	1	3	600 Cr
Force Sword	2d8	Reach: L	1	-	-
Particle Grenade	3d8	Thrown	1	-	800 Cr
Thermal Detonator	5d10	Thrown	1	-	1000 Cr.

Contemporary guns and other ranged weapons are covered in the freestanding version of *Mythras Imperative* and in *RQ Firearms*. Both are free downloads from *The Design Mechanism*.

Melee Weapons	Damage	Size	AP/HP	Note	Cost
Axe	1d6+1	M	4/8	Can sunder armor	50 Cr
Club	1d6	M	4/4		-
Dagger	1d4+1	S	6/8	Can be thrown	25 Cr
Force Sword	2d8	L	6/8		-
Unarmed	1d3	S	-	Unarmed human	-

Type	AP	Skill Modifiers	Hit Locations	Cost
Blast Helmet	4	-5% Perception Skills	Head	250 Cr.
Blast Vest	4	-5% to Physical Skills	Chest/Abdom.	300 Cr/part
Blast Shield	6		<i>(Shield Skill)</i>	300 Cr.
Light BioMesh	4		Any	150 Cr/part
BioMesh	6		Any	300 Cr/part
Light Body Armor	10	-10% to Physical Skills*	Any	400 Cr/part
Military Body Armor	12	-25% to Physical Skills*	Any	800 Cr/part

** Lower if not a full suit. -5% for one or two pieces (for example both arms or chest/abdomen).*

Equipment

Datalink – For transmitting high-bandwidth data across computer-systems. 100 Cr.

Comlink – A basic communicator: can easily be keyed together in pairs or groups, also vary from commercial models to high-end military issue. Either hand-held, wrist-mounted, or headset. 50-200 Cr.

Droid Caller – Small device capable of summoning any droid with a restraining bolt, or alerting any nearby service droid. 100 Cr.

Droid Controller – A more complex version of a droid caller, similar to a keypad link. 150 Cr.

Keypad Link – A small hand-held computer slaved to another computer or vehicle system, used for remote access and control. 200 Cr.

Datapad – Either specialized or general-use portable computer, usually equipped with some sensors and a datalink. 250 Cr.

Memory Cell – A data storage medium, commonly used. 10 Cr.

Strangeness & Technology

Characters tend to find alien technology that is hard to understand. It can be labeled in an unknown language, be fitted with controls made for a completely different set of limbs and manipulators, and so on. Usage of strange technology may require a skill roll (Mechanics, Electronics, Sensors, Computers, Pilot, Drive and so on).

To reflect the alien nature of an object, use the Strangeness value associated with the alien originally constructing the object. Assign the Strangeness value to the object, and use it as a negative modifier whenever the characters try to use it. Skill points relating to the alien species in Culture, Language, Knowledge or Astrobiology will counteract a negative modifier.

Holographic Display Projector – Read-only projector for holographic imaging or data, sometimes called a holoprojector. 100 Cr.

MemCube – Data storage medium, encrypted and self-destructing. 50 Cr.

Code Reader – Data reader for code cylinders, will scramble cylinder if not keyed properly. 100 Cr.

Sensor Jammer – Anti-sensor equipment. Often illegal. 250 Cr.

Communications Jammer – Self explanatory, often illegal. Range: 200 meters. 200 Cr.

Security Field Jammer – Anti-security countermeasure device, aiding intrusion into secure areas. Highly illegal and controlled. 350 Cr.

Damper Shield Generator – Device capable of dampening all electronic transmissions in an area. Range: 50 meters. 200 Cr.

Macrobinoculars – Self explanatory, also similar to Electrobinoculars. 100 Cr.

Tracer Beacon – Tracing units capable of relaying coordinates planet-wide or across star systems. Usually keyed into ship sensors or a computer with extended sensor capabilities. 250 Cr.

Sensor Pack – A backpack-sized sensor array, capable of long-range detection and two-way planetary-wide relay. 400 Cr.

Multiscanner: Specialized handheld scanner

to detect radiation, energy, minerals, chemical compounds and life forms. Range: Up to 500 meters. Skill: Sensors. 400 Cr.

Probe: A self-sustaining sensor array in a small anti-grav probe built to work both in vacuum and different atmospheres. Detects radiation, energy, minerals, chemical compounds and life forms. Will last up to a month. Scanner range: 1 km. Flight range under atmospheric conditions: 500 km. Flight range in space: Within a star system. Skill: Sensors. 10 000 Cr.

Light-intensifier Goggles: Intensifies available light. Penalties for darkness halved. 200 Cr.

Infrared Goggles: Allows vision in total darkness. 200 Cr.

Cable Dispenser and Hook – Device with liquid cable reservoir or filament cable, possible spike launcher, and attachable grappling hooks. Can also be combined into a rocket cable launcher, mounted onto a blaster frame, gauntlet, or bracer. Range: 20 meters. 100 Cr.

Lock Picking Set: A small electronic kit for picking all sorts of locks, both mechanical and advanced electronic locks. 400 Cr.

Laser Torch: Small close-focus hand laser for cutting and welding. Will cut through regular doors and bulkheads but not armored ships. Can be used as a weapon (damage 1d6,

range 1 meter). 100 Cr.

Food Capsules – Could also contain concentrated liquids or drugs. 10 Cr/10 meals.

Nose Filter: Filtering out unwanted contaminants when breathing. 100 Cr.

Oxygen Reprocessor – Also comes in general or specialized varieties. Can also be combined with an oxygen supply. 400 Cr.

Aquabreather – For underwater environments. 300 Cr.

Exposure Suit – Protective outfit, comes in general or specialized varieties. 500 Cr.

High Grav Suit – Support outfit, with auto-musculature support enhancements. 800 Cr.

VaccBelt – Belt with built-in air-bag resembling a transparent balloon, automatically inflated when there is a steep pressure change. Works for 10 minutes. 2000 Cr.

Life Support Suit – Can survive light vacuum for short periods, some include food, fluid, and waste systems. Monitors and regulates life signs on chest or wrist panel. 1000 Cr.

Space Suit – Comes in three basic varieties: Emergency (short-term survival in hard vacuum), Utility (basic, with maneuvering jets and high radiation shielding), and Military-Grade (long-term hard vacuum survivability, self-sealing, high rad shields, jets, full food, fluid, and waste systems). 2000-10 000 Cr.

Cocoon – Very light and portable all-weather

cocoon holding one person. 500 Cr.

Portable Emergency Shelters – Come in a variety of sizes and configurations, from basic to deluxe, general to specific environment. 300-2000 Cr.

Medpak – A medical kit with either specialized or general application use. Makes First Aid an *Easy* skill roll. 75 Cr.

Power Cells – Useful for most powered equipment, weapons, etc. Wide range of sizes and energy output features. 50 Cr.

Fusion Generator – One of a variety of light-to-heavy portable generators. 300-1500 Cr.

Fusion Tools – Could be a general kit, or specialized for specific types of work such as android repair, starship mechanics, or computer systems. 100 Cr.

Anti-grav Platform: Human-sized platform used for lighter transport duties. Can carry up to 200 kg. 400 Cr.

Jet Pack: Two small thrusters worn as a backpack. Move 6. Skill: Drive (Jet Pack). Range 2 km. 2000 Cr.

Hover Board: Small disc-shaped anti-grav platform for personal transportation. Skill: Drive (Hover Board). Move: 14 (lower in close quarters and combat). Range 2 km. 2000 Cr.

Vehicles

The following vehicles are some of the more common types used in sci-fi works.

Speeder Bike

Fast and lightly armored hover bike. Cost: 10 000 Cr.

SPEED	15	Hit Points	40
HANDLING	18	Weight	0.8 ton
SIZE	30	Dimensions	L: 4 m W: 1 m

Weapons Heavy Blaster Rifle, 3d6
Armor AP 5/-
Cargo 50 kg

Land Speeder, Standard

Four-person standard model hover car. Cost: 5000 Cr.

SPEED	12	Hit Points	60
HANDLING	8	Weight	1.2 ton
SIZE	50	Dimensions	L: 5 m W: 2 m

Weapons None
Armor AP 10/-
Cargo 100 kg

Land Speeder, Fast

Two-person fast hover car. Cost: 10 000 Cr.

SPEED	15	Hit Points	50
HANDLING	14	Weight	1 ton
SIZE	40	Dimensions	L: 3 m W: 2 m

Weapons None
Armor AP 8/-
Cargo 50 kg



All Terrain Vehicle (ATV), Small

Four-person light terrain vehicle. Cost: 50 000 Cr.

SPEED	10
HANDLING	8
SIZE	70

Hit Points 70
Weight 2 ton
Dimensions L: 6 m W: 2 m

Weapons None
Armor AP 12/2
Cargo 400 kg

All Terrain Vehicle (ATV), Medium

Six-person armored terrain vehicle with roof-mounted heavy blaster.

Large cargo area for expedition gear. Cost: 100 000 Cr.

SPEED	8
HANDLING	6
SIZE	100

Hit Points 100
Weight 4.5 ton
Dimensions L: 10 m W: 2 m

Weapons Heavy Blaster Rifle, 4d8+4
Armor AP 16
Cargo 600 kg

Quad, Small

Two-person highly maneuverable personal flyer. Cost: 10 000 Cr.

SPEED	13
HANDLING	17
SIZE	30

Hit Points 30
Weight 0.5 ton
Dimensions L: 3 m W: 3 m

Weapons None
Armor None
Cargo 50 kg

Information Access Levels

In campaigns with extensive networks and powerful computers, information is likely to be easily accessible.

Level A: Information accessible to all citizens. No skill roll required. Historic data is often accessible at this level but time-consuming to sift through, either due to legacy systems (isolated and with arcane input/output methods) or because they exist only in print or handwritten form. Skills: Computers, Research, Bureaucracy.

Level B: Data considered as "owned" by someone who invested money to collect, organize and interpret it. Not classified. Examples: Complete technical drawings of building complexes, detailed descriptions of technical systems, research data. Skills: Bureaucracy, Computers, Research.

Level C: Classified & encrypted data. Examples: Economic transactions, medical data, descriptions of security systems, military research, descriptions of high-risk complexes. Skill: Computers at Hard or Formidable.

Level D: Highly classified information. Kept in an isolated network without access from external sources, or data might only exist in physical form (in print, embedded in objects or in a life form), well-guarded and/or hidden.

For information in alien systems, use Strangeness as a negative modifier.

Starships

This is a small collection of starship stats to use in scenarios and campaigns, either for characters or NPCs. All ship modules have been listed to make it easy to tweak the values to your own taste, or to use them as reference when designing your own ships.

Starfighter: Allround

A fast fighter with considerable firepower.

SPEED	19
HANDLING	17
SIZE	8

Hit Points	8
Shields	10
Armor	2
Weapons	Laser x2 (2d6) Missiles (3d6)
Apps	Targeting +15%
Hit Locations	Cockpit 01-13 Crew 14-25 Weapons 26-51 Engine 52-77 Maneuver 78-00

Cockpit	1
Crew	1 (Mech Droid)
Weapons	2 (Laser, damage upgrade to 2d6 each)
Engine	2 (Thrust Rating 80)
Maneuver	2 (Thrust Rating 70)
Cargo	None (only personal/survival gear)
Hyperspace	1 (tiny - no module added to SIZ)
Shields	10
Armor	2
Apps	Targeting +15%

Starfighter: Fast & Fragile

Mass produced favourite, well known (and feared) for its speed and maneuverability.

Cockpit	1
Weapons	3 (Laser x2, 2d6 each, Missiles)
Engine	1 (Thrust Rating 115)
Maneuver	1 (Thrust Rating 110)
Cargo	None (only personal/survival gear)
Hyperspace	-
Shields	-
Armor	-
Apps	-

SPEED	20
HANDLING	18
SIZE	6

Hit Points	6
Shields	-
Armor	-
Weapons	Laser x2 (2d6) Missiles (3d6)
Apps	-
Hit Locations	Cockpit 01-20 Weapons 21-60 Engine 61-80 Maneuver 81-00

Starfighter: Slow & Sturdy

A ship from a previous generation, but still in use for its heavy armament and sturdy build.

Cockpit	2 (pilot + gunner)
Crew	1 (Mech Droid)
Weapons	5 (Laser x2, Ion, Missiles x2)
Engine	3 (Thrust Rating 70)
Maneuver	3 (Thrust Rating 50)
Cargo	None (only personal/survival gear)
Hyperspace	1 (tiny - no module added to SIZ)
Shields	10
Armor	3
Apps	Targeting +10%
Extra HP	2

SPEED	15
HANDLING	11
SIZE	14

Hit Points	16
Shields	10
Armor	3
Weapons	Laser x2 (1d6) Ion Cannon (2d6+1) Missiles x2 (3d6)
Apps	Targeting +10%
Hit Locations	Cockpit 01-13 Crew 14-20 Weapons 21-56 Engine 57-77 Maneuver 78-00

SPEED	10
HANDLING	8
SIZE	79

Hit Points	79
Shields	10
Armor	4
Weapons	Laser x2 (2d6) Machine gun (-)
Apps	-
Hit Locations	Cockpit 01-03 Open space 04-23 Weapons 24-28 Engine 29-38 Maneuver 39-46 Cargo 47-00

Free Trader

Versatile light freighter still in use by shady characters despite its age. Very easy to repurpose for all sorts of missions.

Cockpit	2
Passengers (8)	8
Open Space	8
Weapons	4 (2 laser turrets, damage upgrade to 2d6 each, Machine gun)
Engine	8 (Thrust Rating 100)
Maneuver	6 (Thrust Rating 100)
Cargo	40 (40 tonnes). 4 hidden (<i>Formidable</i> to find)
Hyperspace	3 (tiny - no modules added)
Shields	10
Armor	4
Apps	-

Note: The machine gun is useful only against Planetary scale targets, not starships. Damage: 2d6+4/bullet in bursts of up to 200 bullets. For each bullet, raise chance to hit by 5% (but never more than double).

SPEED	22
HANDLING	20
SIZE	6

Hit Points	6
Shields	6
Armor	-
Weapons	Laser x2 (2d6) Missiles (3d6)
Apps	Targeting +10%
Hit Locations	Cockpit 01-17 Weapons 18-68 Engine 69-85 Maneuver 86-00

Starfighter: Very Fast

Wedge shaped interceptor appreciated for its high speed.

Cockpit	1
Weapons	3 (2 Laser, 2d6 each, 1 missile, 3d6)
Engine	1 (Thrust Rating 130)
Maneuver	1 (Thrust Rating 110)
Cargo	None (only personal/survival gear)
Hyperspace	1 (tiny; no module added)
Shields	6
Armor	-
Apps	Targeting +10%

Starfighter: Fast & Fragile II

An upgraded version of the Fast & Fragile. Slightly faster and with more firepower. Still not outrunning the Very Fast Starfighter though.

Cockpit	1
Weapons	3 (Laser x2, 3d6 each, Missiles)
Engine	1 (Thrust Rating 125)
Maneuver	1 (Thrust Rating 115)
Cargo	None (only personal/survival gear)
Hyperspace	-
Shields	-
Armor	2
Apps	-

Small Bomber

A dual-body bomber, similar to the Fast & Fragile, carrying a good load of missiles.

Cockpit	1
Weapons	4 (Laser x2, Missiles (Proton), Missiles (Concussion))
Engine	2 (Thrust Rating 55)
Maneuver	2 (Thrust Rating 55)
Cargo	None (only personal/survival gear)
Hyperspace	-
Shields	-
Armor	2
Apps	-

Small Bombers may be upgraded to include: Hyperdrive (1 module); the proton torpedo launchers can carry six torpedoes each; the missile launchers can carry ten missiles each. Further variants of the Bomber: Heavy Bomber (w. 2 ordnance pods); the Lander (with an extra personnel pod for troops); B Shuttle (with the ordnance pod converted for passengers); Boarding Craft (with the ordnance pod converted to carry clamps, a hull cutter and a boarding party).

SPEED	21
HANDLING	19
SIZE	6

Hit Points	6
Shields	-
Armor	2
Weapons	Laser x2 (3d6) Missiles (3d6)
Apps	-
Hit Locations	Cockpit 01-20 Weapons 21-60 Engine 61-80 Maneuver 81-00

SPEED	12
HANDLING	12
SIZE	9

Hit Points	9
Shields	-
Armor	2
Weapons	Laser x2 (1d6) Missiles P (3d6) Missiles C (3d6)
Apps	-
Hit Locations	Cockpit 01-11 Weapons 12-55 Engine 57-78 Maneuver 79-00

SPEED	11
HANDLING	7
SIZE	44

Hit Points	44
Shields	5
Armor	2
Weapons	Laser x2 (1d6) Ion Gun (2d6+1) Missiles (3d6)
Apps	-
Hit Locations	Cockpit 01-14 Open space 15-69 Weapons 70-81 Engine 82-93 Maneuver 94-00

Shuttle

This is a generic framework for a Shuttle. Use the various interiors below for different purposes.

Cockpit	6
Open Space	24
Weapons	5 (2 Laser, 1 Ion Cannon, 2 Missiles)
Engine	5 (Thrust Rating 100)
Maneuver	3 (Thrust Rating 100)
Hyperspace	1 (tiny – no modules added)
Shields	5
Armor	2
Apps	-

Optional interiors: A. Staterooms 6 (x4 = 24). B. Passengers 20 + Cargo 4 (= 24). C. Cargo 24.

Starfighter: Fast & Fragile III

Prototype for a more technically advanced Starfighter, the project later abandoned due to high costs.

SPEED	20
HANDLING	18
SIZE	6

Hit Points	6
Shields	2
Armor	2
Weapons	Blaster x2 (2d8+1)
Apps	Targeting +15%
Hit Locations	Cockpit 01-20 Weapons 21-60 Engine 61-80 Maneuver 81-00

Cockpit	1
Weapons	2 (Blaster, 2d8 each)
Engine	1 (Thrust Rating 120)
Maneuver	1 (Thrust Rating 110)
Cargo	None (only personal/survival gear)
Hyperspace	-
Shields	2
Armor	2
Apps	-

Capital Ships

The ships described on the following pages are constructed with the aid of the capital ship rules on page 91. Modules are used as normal, but the concept of Size Rating (SR) is used to keep the calculations easier. This also means that the exact number of modules aren't as important as for smaller ships.

Most capital ships are armed with high-power turbolasers.

Individual turbolasers are very powerful (the beam carries roughly three or more times the energy of a standard laser cannon beam). Each turbolaser occupies 5 modules, as follows:

One turbolaser (base damage 1D6): 1 module
Damage upgrade to 3d6 (+2 steps): 2 modules
Range increase +50% to 30 (+2 steps): 2 modules

Dual or Heavy turbolaser turrets have further upgrades: Range increased to +100% (up to 40, costing 4 modules) and damage to 4d6 (3 steps, costing 3 modules) for a total of 8 modules each.

Keep the following modifiers in mind too: When the difference in Size Rating is 4 or 5, the larger attacker is at *Hard* in Gunnery. For the smaller attacker Gunnery rolls are *Easy*. A Size Rating difference of 6 or more, Gunnery will be at *Formidable/Very Easy*.

When the difference in Speed is 5 or higher, the faster ship gets *Easy Pilot* rolls. This modifier evens out the odds for small and fast ships, especially against a heavily armed opponent.

SPEED	12
HANDLING	5
SIZE	2048 (SR12)

Hit Points	2048
Shields	10
Armor	7
Weapons	Laser x2 (4d6) Laser x4 (3d6) (Gunnery 65%)
Apps	-
Hit Locations	Cockpit 01 Crew 02-12 Passengers 13-25 Engine 26-37 Maneuver 38-42 Cargo 43-00

Corvette

As a vessel of state, the ship features dining rooms for hosting state dinners as well as conference rooms suitable for negotiations with interstellar dignitaries.

Cockpit	10
Passengers	57 (6 staterooms, 33 regular)
Crew	46 (hot bunking)
Sickbay	40 (10 patients)
Open Space	340
Weapons	28 (2 dual turbolasers à 8 modules, 4 single turbolasers à 5 modules)
Engine	250 (Thrust Rating 100)
Maneuver	100 (Thrust Rating 100)
Cargo	1200
Escape Pod	8
Hyperspace	3 (tiny – no modules added)
Shields	10
Armor	7
Apps	-

In wartime, cargo holds can be configured as barracks accommodation for troops. Allow one module per trooper (hot bunking; personal storage, in-flight rations and other war materiel), giving a capacity of 1500 troopers.

Destroyer

These behemoths not only have terrible fire power, but the size is so outrageous it will scare any attacker.

Crew	37000 (hot bunking)
Troops	9700 (hot bunking)
Open Space	10000
Sickbay	400 (100 patients)
Hangar Bay	1450
Cargo Hold	1450
Tractor Beam	10
Escape Pods	100
Weapons	550
Engine	4950 (Thrust Rating 120)
Maneuver	2500 (Thrust Rating 120)
Hyperspace	5 (tiny – no modules added)
Shields	20
Armor	10
Apps	Targeting +15%, Sensors +15%

SPEED	10
HANDLING	5
SIZE	65K (SR17)

Hit Points	65000
Shields	20
Armor	10
Weapons	60 Turbolasers (4d6) 60 Ion Cannons (2d6+1) (Gunnery 65%)
Apps	Targeting +15% Sensors +15%
Hit Locations	-

Hangar Bay: Can carry 72 Starfighters (720 modules); 8 shuttles (80 modules); 20 Walkers (200 modules); 30 Small Walkers (300 modules); 15 Troop Transports (150 modules).

Weapons: 60 Turbolaser batteries (8 modules each = 480 modules); 60 Ion Cannons (60 modules); 10 Tractor beam projectors (10 modules). For regular sized ships (below SR13) roll 1d6 to determine how many weapons can target the ship in a combat round (though creative flying will lower that. For larger ships, double to 2d6 per ship.

SPEED	8
HANDLING	6
SIZE	32K (SR16)

Hit Points	32000
Shields	15
Armor	7
Weapons	Laser x4 (3d6) Ion Cannon x4 (3d6) Laser x4 (4d6) (Gunnery 65%)
Apps	Targeting +15% Sensors +15%
Hit Locations	-

Frigate

This frigate is essentially a smaller Destroyer, often used for patrol missions.

Crew	19000
Troops	4000 (6 staterooms, 33 regular)
Sickbay	400 (100 patients)
Open Space	4000
Hangar Bay	800
Tractor Beam	10
Weapons	280
Engine	2000 (Thrust Rating 120)
Maneuver	1500 (Thrust Rating 120)
Cargo Hold	1200
Escape Pod	10
Hyperspace	4 (tiny – no modules added)
Shields	15
Armor	7
Apps	Targeting +15%, Sensors +15%

Hangar Bay: 72 Starfighters, 2 Shuttles = 74 ships needing 10 modules each = 740 modules. Add 60 modules for ATVs, speeder bikes, etcetera = 800 modules.

Weapons: 4 turbolaser batteries (40 x 5 = 200), 4 ion cannon batteries (40), 4 point-defense laser batteries (40).



Life forms

This chapter contains a few example life forms to be used in encounters or scenarios. They were developed to be generic enough to be useful in many situations, but still with some ties to their environments.

STR	2d6+12	[19]
CON	3d6	[10-11]
SIZ	3d6+6	[16-17]
INT	4	[4]
POW	2d6+6	[13]
DEX	2d6+12	[19]
CHA	1d6	[3-4]

Move	8 m
HP	18
Weapons	Bite 60% (2d6) S Claws 75% (1d6) M
Armor	AP 4 (Skin)
PP	12
Dmg Mod	+2d6
Skills	Endurance 65%, Evade 70%, Perception (Heat) 65%, Stealth 75%, Track 50%, Willpower 50%

Reptore

Forest dwelling predator using heat sensitive glands to spot prey. See illustration on page 146.

Strangeness	30
Classification	Carnivore (Ambusher)
Habitat	Forest (Tropical to Temperate)
Advantages	Armor (Skin, AP 4), Stealth (Hide, Silent)
Disadvantages	Hibernation (Daytime deep sleeper), Cubs (For 3 months/year)
Behavior	Aggressive
Social	Semi-single (3 individuals sharing territory)
Communication	Heat (Max range 50 m, normal range 5 m)
Biosphere	Earth-like atmosphere
Body Plan	Bilateral, Endoskeleton. Limbs: 4
Universals	Sharp, Extra sense (Heat), Reduced sense (Sight), Three sexes (Birth-giver, Protector, Teacher)

The Reptore is a fearsome predator. A master of stealth, it strikes without much warning from its hiding place in the undergrowth, using its size to ground the victim. With claws and teeth it quickly inflicts lethal damage.

At home in forests undisturbed by civilization it is a territorial creature. Three individuals share the same area but rarely encounter each other. Like all life forms on the planet it has three sexes: One individu-

al giving birth (1-3 cubs), a protector taking care of the cubs during the first six months and thereafter a teacher is educating them in the art of hunting. After 18 months cubs leave to seek out their own territory.

Eye sight is not very well developed in life forms on the planet, relying instead on heat sensitive glands on the head, working best during the night. This means most life forms, including the Reptore, sleeps during the day. To compensate for its high-energy hunting habits, it goes into a hibernation-like state during the day (trusting its hiding skills for security).

Deep-Sea Gobbler

Large aquatic builder on the verge of primitive civilization.

Illustration on page 186.

Strangeness	50
Classification	Omnivore
Habitat	Oceans (Tropical to Arctic)
Advantages	Size, Armor (Skin, AP 4), Builder, Language (Simple)
Disadvantages	Disease-ridden (1 in 10 are born with defect fins; see details below)
Behavior	Easily angered (protecting territory & eggs)
Social	Small group (12-20), Territorial
Communication	Sound (Max range 10 km, normal range 200 m)
Biosphere	Water oceans
Body Plan	Bilateral, Endoskeleton. Limbs: 0
Universals	Asexual, Aquatic (Motile 2)

Despite its fish-like appearance, in evolutionary terms the Deep-Sea Gobbler is very far from a fish. It is an egg laying species, brooding its 2-3 large eggs in structures built by a mixture of sand and saliva. The structure (often found on the brink of continental shelves) resembles a half-ruined sand castle and usually houses 12-20 individuals, constructed with their nimble mouths/beaks as manipulators.

Supporting Species

Reptore main prey: Several hole dwelling species (SIZ 3-15) grazing the undergrowth, looking like puffy lizards.

STR	6d6+24	{45}
CON	4d6+18	{32}
SIZ	6d6+24	{45}
DEX	2d6+3	{10}
INT	8	{8}
POW	4d6	{14}
CHA	1d6	{3-4}

Move	6 m (Water)
HP	39
Weapons	Bite 75% (5d6) H Ramming 75% (2d6) H
Armor	AP 4 (Skin)
PP	14
Dmg Mod	+2d6
Skills	Build nest 50%, Endurance 50%, Evade 30%, Hunt (Underwater) 75%, Perception 75%

Supporting Species

The oceans are mainly dominated by elongated shell-clad swimmers, using their rudimentary arms/fins in an almost propeller like fashion.

A handful species similar to the Gobbler exist, but are quite rare. They do not have the Gobbler's high INT.

As they are asexual, they take turns laying eggs. Deep inside their buildings, where water temperature is more easily controlled, the eggs are kept in relative safety.

With the size of a killer whale and a quite territorial mind-set, the Deep-Sea Gobbler may appear aggressive at times. Water vehicles, floating or submerged, have a good chance of being attacked if they enter Gobbler territory. With its strong jaws it can bite through unarmored hulls or ram a vessel. If injured below half its hit points, it will withdraw to the safety of the "castle" (and the rest of the clan).

Because of a virus, 1 in 10 Gobblers are born with defect fins, making them very poor swimmers. If studied carefully, these individuals can be seen to frequently stay in the built structure, improving on it to become something almost architectural. Within a few generations these individuals will form the basis of a shift towards primitive civilization relying on underwater buildings, cattle and farming.

STR	2d6+8	(14)
CON	3d6	(10-11)
SIZ	3d6+6	(16-17)
INT	1d6+6	(9-10)
POW	2d6+6	(13)
DEX	3d6	(10-11)
APP	1d6	(3-4)

Move	6 m
HP	14
Weapons	Bite 60% (1d6) M Claws 75% (1d6) L
Armor	AP 2 (Skin)
PP	13
Dmg Mod	+1d6
Skills	Endurance 30%, Evade 75%, Perception 95%, Stealth 95%, Track 65%

Woog

Subterranean dweller using its keen senses to stay out of sight.

Illustration on page 187.

Strangeness	50
Classification	Omnivore (Scrounger)
Habitat	Underground
Advantages	Enhanced perception (Hearing, Scent), Stealth, Intelligence
Disadvantages	Rare habitat, Food scarcity
Behavior	Hiding
Social	Single
Communication	Sound
Biosphere	Earth-like atmosphere
Body Plan	Bilateral, Endoskeleton. Limbs: 4
Universals	Fine Manipulation, Asexual

On planets where the Woog are found, they sometime take on a mythical aspect. They are rarely encountered, or even seen, and they have a

remarkable way of just disappearing. Mostly this is thanks to their keen hearing and scent. But also a good knowledge of their underground habitats.

Why the Woog, despite their low tech level, are spread to what seems like a random collection of planets, is hotly debated among scientists. Most seem to believe that the Woog over millennia have sneaked on-board starships, later to disembark unnoticed at the next stop.

A Woog is seldom violent. Most of the time only the traces of their visits will be found (stolen food or tools). If encountered they will try to flee, disappearing almost magically. If cornered they will put up a short fight, only enough to clear a way out.

Lava Swamp Morac

Heat-loving beast sometimes used for riding.

See illustration on page 84.

Strangeness	30
Classification	Herbivore (Grazer)
Habitat	Wetlands
Advantages	Size, Armor (Skin, AP 6), Heat Resistant
Disadvantages	Rare habitat (Lava Swamp)
Behavior	Patient/Watchful
Social	Small group (12-20), Wandering
Communication	Low frequency sound (Max range 10 km, normal range 20 m)
Biosphere	Earth-like atmosphere
Body Plan	Bilateral, Endoskeleton
Universals	Sharp, Perception (Low frequency sound)

The Lava Swamp Morac is the largest animal able to survive the boiling waters of the lava-heated wetlands on Somol. Wandering up to 300 km in a year - almost crossing an entire continent - it moves slowly but steadily in groups of 10-20 individuals.

Every autumn they return to the boiling wetlands to lay their soft eggs in makeshift nests, kept warm and protected by the hot surroundings.

STR	6d6+24	(45)
CON	3d6+16	(26-27)
SIZ	6d6+32	(53)
INT	6	(6)
POW	2d6+6	(13)
DEX	3d6	(10-11)
APP	2d6	(6-7)

Move	8 m
HP	40
Weapons	Trunk 75% (2d6) H Tusk 50% (5d6) L Trample 50% (10d6 vs downed foe) L
Armor	AP 6 (Skin)
PP	13
Dmg Mod	+5d6
Skills	Endurance 50%, Evade 50%, Long-Range Communication 75%, Perception (Listen) 75%, Will-power 75%

One of the indigenous intelligent species on Somol have also learned to use the Morac for transportation and harvesting duties. By hitching a ride the gatherers are taken deep into the lava swamps on the safety of the Morac's backs, for the riders to harvest the Imquilla flowers. Highly efficient slings are utilized by the riders to keep predators at a distance during the long journey.

Supporting species

Grazer: Tree-hanging, long rodents in massive herds grazing the trees.
 Predator: The main predator is what looks like a cat-bear hybrid. Comes in several subspecies, and two of them are capable of downing a weak Morac. They cannot enter the lava swamps though.

STR	1d6+4	(7-8)
CON	1d6+4	(7-8)
SIZ	2d6+6	(13)
DEX	3d6	(10-11)
INT	2d6+6	(13)
POW	2d6+12	(18-19)
CHA	2d6	(6-7)

Move	6 m
HP	10
Weapons	Blaster 60% (1d8) N'Awr 75% (1d4) S
Armor	AP 2 (Skin)
PP	18
Dmg Mod	-
Skills	Endurance 50%, Evade 50%, Perception 60%, Stealth 75%, Track 60%, Willpower 75%

Grept

Intelligent psionic species with a strictly hierarchical society.

See illustration on page 131.

Strangeness	30
Classification	Omnivore (Gatherer)
Habitat	Semi-Open/Bush land
Advantages	Intelligence, Armor (Chitin, AP 2)
Disadvantages	Hierarchy, Fragile
Behavior	Suspicious
Social	Small group or herd
Communication	Sound (Max range 20 m, normal range 5 m), Psionic (Range 20 m)
Biosphere	Earth-like atmosphere
Body Plan	Bilateral, Exoskeleton. Limbs: 4
Universals	Psionic

The Grept is an intelligent species of natural psionics from the Dellon system. Their tech level is high (TL11) but, for reasons not very well understood, they have not developed space travel technology. The planet of Dellon is one of the few examples of psionic abilities emerging early in the evolutionary process, resulting in low level psionics being very common among all life forms.

The dwellings of the Grept reflect the strict hierarchy of society. Cities, both small and large, are circular and divided into five Spheres. Each Sphere is assigned to one of the psionic classes, with lower classes never being allowed into a higher Sphere. This is to “keep the spiritual aether untainted” in the words of the higher classes. Members of the higher Spheres can freely enter the lower ones, but it is not done frequently (and they are not very welcome). Barriers between Spheres are psionic in nature; no physical boundaries reveal their existence and only a psionic can detect them.

The psionic abilities of all Dellon’s life forms spring from a small internal organ called the Aeron, located in the chest. It’s a hazelnut-sized neural node and works like a hyper-connected appendix to the brain (also located in the chest).

The Aeron and its function has been well understood for about 600 years, but ritual extractions of the organ had taken place much earlier. A Grept can live without an Aeron only for a few days, both loosing its powers, but also becoming a mindless drifter. Aérons are sometimes extracted as punishment, as a result of duelling, as plain revenge or in religious rituals. As the victims no longer have any psionic sensibility, they are completely cut off from society, not being considered as individuals.

Even animals will see their Aeron being cut out at times, mostly for ritualistic reasons. But medical experiments are conducted on them too. There is a secret movement of physicians trying to transplant Aérons, initially to save lives, but eventually to break the strangling mold of the Spheres. As the Spheres are linked to the psionic fingerprints, transplanting an Aeron from high to low may allow for the boundaries to be crossed more freely.

The Grept & Non-Psionic Characters

Non-psionic characters visiting Dellon will be treated in equal parts with fascination and contempt. The Grept will be unsure whether the visitors are gods or non-entities; only inanimate objects and the dying lack aether minds. This uncertainty, if utilized wisely by the characters, can benefit them in their dealings with the Grept. Local physicians supporting the secret movement of Grept liberation are also likely to show an interest in the characters - the medical possibilities of living entirely without an Aeron will be very exciting to them.

Psionic Powers of the Grept

Members of the two lower Spheres (4 and 5) will know the following powers (no rolls required in most cases):

Find Water & Food: A Grept always knows where to find food and water.

Broadcast Emotion: A simple way of telling everyone your emotional state.

Locate Mind: A Grept can always keep track of 5-10 close individuals. The further away an individual is, the less precise the power.

Use the above, plus powers from the psionics chapter for the three upper spheres (1-3):

Third Sphere: 2 powers at 30%

Second Sphere: 3 powers at 50%

First Sphere: 5 powers at 70%

Equipment

N’Awr: A cylindrical dagger, the N’Awr, is used to literally punch out an Aeron, and it is still carried by many as part of the traditional Grept armament.

Appendix A

Starship Design Walkthrough

This is a walkthrough of the starship design rules in more detail. It covers the creation of a typical starship for player characters, housing 4 people for longer periods of time. It can be hard to pinpoint exactly what type of ship this is, so I will call it an Explorer. It has a good cargo hold, a sick bay, a small common area and is lightly armed. (The cubicles can theoretically hold two people, but then it will be a bit too crowded for any real privacy. As a temporary solution, if the number of players vary between scenarios, it should be fine though).

Step 1

The first step is to determine the ideal number of people that's going to use the ship. As stated above, I'm going for 4 people. That's 1 pilot and 3 crew members or passengers.

Step 2

Let's start with the cockpit. 1 Module would be enough, but as some of the storytelling action often happens in the cockpit, I'm making it 3 Modules. The second cockpit Module will be ideal for a gunner. I add "Cockpit, 3" under the Modules heading on the starship sheet.

Step 3

As the ship must be functional for longer trips, cubicles are needed: that means 4 Cubicle Modules per person, a total of 16 Modules. I add "Crew (4), 16" to the sheet.

Step 4

Time to add a common room. As it will be a combined meeting, dining & hanging out type of space, I make it a bit bigger than necessary: 15 Modules.

modules	
Cockpit	3
.....	
.....	
.....	
.....	
.....	
.....	
.....	
.....	
.....	

Step 5

Cargo holds are always difficult to determine the size of, but I'll go for 22 Modules here. Not big enough for a regular trader, but enough to fit an ATV and some dandy exploration equipment (not included in the purchase though...).

Step 6

Characters tend to get hurt a lot, so a good 4 Module sick bay is needed. And as a precaution I throw in an Autodoc too (2 Modules). That's 6 Modules.

Step 7

The ship also needs reasonable hyperspace capabilities: 3 Modules. The ship will be able to go 3 hexes per jump when used together with a standard subsector map.

Step 8

Regarding weapons, two lasers will do (one operated by the pilot, the other by the gunner). I'm upping damage to 2d6 though, using the rules from the advanced combat rules. This will take 2 Modules.

Step 9

This is what the list of Modules looks like now (sidebar):

Step 10

All in all, 67 Modules so far. I take a moment to look through what Modules I have. Flicking through the rulebook, I make sure I haven't missed any of the functions the ship needs. After some consideration, I decide that I'm happy as it is. (The main reason for double-checking at this stage, is to avoid recalculating Speed and Maneuver more than necessary).

Step 11

Now that the ship's layout is firmly set, it's time for Engines and Maneuver; I grab my iPhone calculator. I will try with a Thrust Rating (TR) of 70, and see how it works. I start with a size 1/10th of the total Modules, just to get my bearings on the Speed and Maneuver values: 7 Engine Modules and 7 for Maneuver. Let's see what Speed and Maneuver values we get with that:

modules	
Cockpit.....	3
Crew (4).....	16
Open Space.....	15
Cargo hold.....	22
Sick Bay.....	4
Autodoc.....	2
Hyperspace.....	3
Weapons.....	2
.....	

$$\text{SPEED} = \frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$$

$$\text{HANDLING} = \frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$$

SPEED	8
HANDLING	12
SIZE	87

TR multiplied with the number of Engine (or Maneuver) Modules:
 $70 \times 7 = 490$. That's the total TR.

Total ship Modules will now be $67 + 7 + 7 = 81$

Total TR divided by ship Modules: $490 / 81 = 6$

Speed and Maneuver at 6 is a bit low for what I had in mind. So, either I increase the number of Modules or raise TR. Let's try 10 Modules of each; if that's not enough, I will raise the TR. The new calculations look like this:

$70 \times 10 = 700$ in total TR

Total Modules: $67 + 10 + 10 = 87$

$700 / 87 = 8$

8 is still a bit low. Raising TR to 100:

$100 \times 10 = 1000$ in total TR

Total Modules is the same: $67 + 10 + 10 = 87$

$1000 / 87 = 12$ (11.5 rounded up)

Speed and Maneuver at 12 is a good start! I will keep 12 for Maneuver, but go back to TR70 for the Engine Modules (the engine, I decide, is a bit old).

Step 12

That means ship stats are ready!

Step 13

Armor and Shields are next. In the context of the intended setting, Armor will be fine at 2 and Shields at 7. The values can be determined in one of two ways: either by deciding what is normal in the setting, or just add as much as the ship builder affords. As I'm not doing the economic calculations for this ship, I'm going for the first method here.

Step 14

For the remaining attributes I go for: Stealth (no), Streamlining (yes) and Apps (no). I will not use Recovery, to keep any combats simpler.

Step 15

If you don't want to use Hit Locations, the ship is done! Just set General Hit Points to 87 and you're good to go. I prefer Hit Locations for the detailed story hooks they can provide though, so stay with me for a few moments if you want to see how they work.

shields	7
armor	2
hyperspace	3

Step 16

To calculate Hit Locations, I bring out my calculator again. I'm dividing the number of Modules for each individual section with the total number of Modules. So, for the cockpit it's $3/87=0.03$. Times 100, we get 3. Thus, the Hit Location table starts like this:

Cockpit 01-03

Step 17

Next, cubicles (Crew): 16 Modules. $16/87=0.18$. Multiplied by 100, we get 18. Just take the last number in the table (3) and add 18 to that: the range will be between 04 and 21.

Cockpit 01-03
Crew 04-21

Step 18

For the rest of the sections it looks like this (sidebar):

Step 19

That's it! The ship is done. I will call it Aajege, a Simmedh word meaning a spring of water. But there's one more thing I want to add...

Step 19

I'm planning for this ship to be slightly old, a bit battered and to have some personality. I'm halving hit points for some of the sections (Open Space and Cargo Hold) and take away 3 Hit Points each from Engines and Maneuver. I also set Ship Condition to -20; all Pilot rolls will be Hard, just as all Mechanics rolls. The GM is also free to call for Pilot rolls for standard maneuvers, and any failed such roll may result in a malfunction. (See more about Ship Condition at page 101). Just enough to keep the players on their toes, not relying too heavily on their tech.

Hit Locations	Hit Points
01-03 Bridge	3
04-21 Crew	16
22-38 Open Space	15
39-63 Cargo Hold	22
64-69 Sick Bay	4
70-71 Autodoc	2
72-74 Hyperspace	3
75-76 Weapons	2
77-87 Engines	10
88-00 Maneuver	10

Appendix B

Starship Combat Example

Colin Brett has been so kind as to let me publish his test run of the starship combat rules. See more of Colin's work at <http://www.colinabrett.me.uk/>

Introduction

An example of starship combat in M-SPACE. Presented in "mechanical" and "narrative" formats, to describe the dice rolls and story aspects of a space battle. First, the ships.

SPEED	6
HANDLING	5
SIZE	110

Hit Locations	Hit Points
01-05 Bridge	5
06-11 Engines	6
12-16 Manoeuvre	5
17-35 Sick Bay	20
36-75 Crew Compartm.	50
76-80 Ion Cannon	5
81-84 Port Laser	4
85-88 Starboard Laser	4
89-96 Open Space	8
97-00 Hyperspace	3

Gamma Star – Solar Federation Patrol Ship

Bridge	5
Crew	50 (12 Crew members)
Weapons	13
Engine	6 (Thrust Rating 100)
Maneuver	5 (Thrust Rating 100)
Sick Bay	20
Hyperspace	3
Open Space	8
Shields	-
Armor	-
Apps	-

Weapons: Dorsal Ion Cannon (5): Damage 2D6+1, range 10, 360 degree arc. Port Laser (4): Damage 2D6. Starboard Laser (4): Damage 2D6.

Captain Kurt Torrance

A tough, no-nonsense, by the books ship captain with a strong sense of duty and fair play... except when dealing with pirates, whom he considers the "scum of the universe."

DEX 8

Action Points 2

Pilot 85%

General Crew Skills

Gunnery 80% , Mechanics 70%

Speeding Blade – Pirate Raider

Bridge	4
Crew	30 (7 Crew members)
Weapons	4
Engine	7 (Thrust Rating 70)
Maneuver	5 (Thrust Rating 70)
Sick Bay	1 (Autodoc)
Open Space	8
Hyperspace	3
Shields	-
Armor	-
Apps	-

Weapons: Prow Blaster (2): Damage 1D10, 90 degree forward arc. Stern Blaster (2): Damage 1D8, 180 degree rear arc

Captain Sasha Reeves

Hot-headed and somewhat reckless, she is wanted for numerous acts of piracy and smuggling and has been on the run for three standard years.

DEX 11

Action Points 2

Pilot 75%

General Crew Skills

Gunnery 75%, Mechanics 50%

SPEED	8
HANDLING	6
SIZE	62

Hit Locations	Hit Points
01-07 Bridge	4
08-19 Engines	7
20-28 Manoeuvre	5
29-30 Sick Bay	1
31-80 Crew Compartm.	30
81-84 Prow Blaster	2
85-88 Stern Blaster	2
89-96 Open Space	8
97-00 Hyperspace	3

The Scenario

The Gamma Star has been tracking the Speeding Blade. The Solar Federation vessel has one chance to capture or destroy the pirate before it escapes into an asteroid field. The GM controls the Gamma Star, while the PCs (Pirate Characters :) are aboard their ship, the fleeing Speeding Blade. Despite being pirates, and therefore “bad guys”, the PCs are regarded as the protagonists in this encounter, while the GM controls the antagonists.

The Situation (“Round 0”)

a) Mechanics

*Initiative for the first round:
1d10 + Handling*

*Choose Offensive or Defensive
Positioning.*

Both Captains order their crews. Initiative for the first round is made on D10 + Handling of the vessel. Torrance rolls D10 + 5, for a total of (3 + 5 =) 8; Reeves rolls (6 + 7 =) 13. A win for the pirate vessel. The captains must then choose whether to perform Offensive or Defensive actions. The pirate ship won initiative and the Captain elects to take Defensive actions, sensible against such a heavily armed warship. The Solar Federation vessel elects to take the Offense. Their actions will take place in Round 1, below.

b) Narrative

Aboard the Gamma Star ...

+++ SitRep to Captain Torrance +++

“We have her, sir. The Speeding Blade is heading towards an asteroid field.”

“Move to intercept before she gets in amongst the asteroids otherwise we’ll never find her.”

“Aye aye, Captain.”

Meanwhile, on the bridge of the Speeding Blade...

“We’ve been pinged, Captain! SolFed frigate closing fast!”

“All hands to battle stations. Prime cannons fore and aft. Flank speed to the asteroid field.”

“Aye aye, Captain.”

Round 1

a) Mechanics

The Speeding Blade has initiative at the start of this encounter.

Reeves begins Defensive manoeuvres and rolls 90% on her Pilot roll, a failure. Torrance makes Offensive Manoeuvres and rolls 61%, a success. This grants Torrance one level of success and he chooses the Dominate Special Effect, making his Gunnery rolls Easy (80% + 20% = 100%) this round.

Torrance's skilled Piloting grants him Gunnery initiative. He opens fire with the Dorsal Ion Cannon: a Gunnery roll of 74 is a hit. Reeves fires back with the stern blaster; gunnery is at Hard because of her Defensive Positioning. A roll of 05%, scoring a critical hit.

Torrance rolls 4 points of damage to the Speeding Blade's Sick Bay (location roll 29). The Sick Bay occupies one module and therefore has only one Hit Point; the Autodoc is in wrecks. It can't be repaired until they land next time. All pirates roll 1d4-1 for personal damage.

Reeves hits the Gamma Star's Crew Compartments (location roll 54%). She picks Maximum Damage as Special Effect (she has one Success Level higher than Torrance), for a total of 8 Hit Points damage.

Pilot initiative next round will go to the pirate vessel, as it had the highest success level in the last roll.

b) Narrative

Sasha Reeves knows she is heavily out-gunned and starts a series of tight turns and shifts in relative altitude. Torrance pursues with great skill, allowing him to target the fleeing pirate more easily. Gunfire lances through space, resulting in little more than scorched paint work.

Round 2

a) Mechanics

Reeves continues Defensive Manoeuvres and makes the first Pilot roll. With a 28% she scores a normal success.

Torrance continues the Offensive and rolls 41%, a success.

Both Captains made the same levels of success (one each), so no Special Effects are applicable. Gunnery initiative remains with Reeves.

Reeves fires with the Stern Blaster: a roll of 03 is a critical hit again! Torrance opens fire with both Port and Starboard Lasers, respectively rolling 81% (a miss) and 25%, a hit. This grants Reeves one level of suc-

Defensive Positioning: Make you harder to hit, but it's also more difficult for your own gunners to hit.

Success vs Failure: one success level grants one Pilot Special Effect.

Initiative changes to the participant with the highest level of success in the previous roll.

A section is beyond quick-fix repairs when hit points are reduced to their full negative value or lower.

Success vs Critical: one level of success grants one Gunnery Special Effect.

Initiative changes to the participant with the highest level of success in the previous roll.

When there are several cannons firing, match opposing rolls as far as possible. The best roll is used when success levels are compared.

Initiative remains unchanged when Levels of Success are equal.

cess and Gunnery initiative. She picks Maximum Damage (8). Location rolled: Crew Compartments.

Torrance's location roll is 56, Crew Compartments for 7 points of damage.

Initiative next round will stay with Reeves and she will make the first Pilot roll.

b) Narrative

Torrance continues his pursuit of the Speeding Blade, maintaining weapons lock on the fleeing pirate. Reeves seems unable to lose him. He fires both laser batteries and blows a hole in the side of the pirate ship. He smiles grimly.

Reeves retaliates in kind, the Speeding Blade's Stern Blaster lancing through the Crew Quarters.

Round 3

a) Mechanics

Successful Defensive Positioning: both ships' gunnery at Hard.

Reeves had one level of success in the previous Gunnery round: this grants her the Pilot initiative this round. She continues Defensive Manoeuvres and rolls 66% on her Pilot skill, a normal success; both ship's gunnery rolls will be Hard (-20%).

Torrance rolls 18% on Pilot skill and maintains Offensive Manoeuvres. Both Captains made the same levels of success (one each), so no Special Effects are applicable. Gunnery initiative remains with Reeves.

Reeves fires with the Stern Blaster, scoring 21%, a normal hit. Torrance retaliates with the Port Laser, rolling 54%, a hit.

Reeves rolls 7 points of damage against the Gamma Star's Dorsal Ion Cannon. The Cannon has only 5 hit points and so is disabled until repaired. All aboard Gamma Star rolls 1d4-1 for personal damage.

A hit exceeding a technical section's hit points renders it useless until repaired. All crew members must also roll for any personal damage.

Torrance hits the Crew Compartments again. Damage is 10 points. Crew Compartment hit points are more than halved (30-7-10=13).

Initiative next round will stay with Reeves, as both gunnery rolls were at the same Success Level.

b) Narrative

The pursuit remains close, both Captains using every gramme of their skill to gain an advantage.

Reeves is sickened by the losses her ship is sustaining. That Ion Cannon will be the death of us all, she thinks. She orders her gun crews to open fire and is rewarded when the Ion Cannon is hit with withering Blaster fire. Revenge is sweet!

Round 4

a) Mechanics

Reeves maintains Defensive Manoeuvres but rolls 90% for her Pilot skill, a failure. Her own ship's gunnery rolls will be Hard, but Gamma Star's gunnery is unaffected.

Torrance rolls 64% Pilot skill, granting him one level of success, for which he chooses the Dominate Special Effect, raising his Gunnery skill to 100%.

The SolFed ship fires first with Port and Starboard Lasers. These roll 22% and 35% respectively. The Speeding Blade retaliates with a 19% from the Stern Blaster.

Torrance scores normal hits for 2 points (against the Speeding Blade's Engines (not sufficient to disable the engines) and 7 points versus the Crew Compartments (only 6 hit points left in that section!).

For Reeves, it's a hit against (location roll 31) the Gamma Star's Sick Bay, scoring 3 points (not enough to disable the medical facilities).

Initiative next round will be with Torrance.

b) Narrative

The ships continue their zig-zag race to the asteroid field.

Reeves, for the first time in three standard years, buckles herself into the pilot seat as the ship shakes under the pounding of the Gamma Star's lasers.

Torrance, for his part, is looking over damage assessments from the Speeding Blade. All in all, he thinks, things are going rather well.

Round 5

a) Mechanics

Torrance has the Pilot initiative but rolls a piloting failure. Reeves maintains Defensive Manoeuvres and this time rolls 24% Pilot skill. A success, which grants her one level of success over her opponent. Reeves gains Gunnery initiative this round and chooses the Dominate

Typically, crew compartments, open spaces and cargo bays are easy to hit, but they will not affect the ship very much. To get around this, use Special Effects like Marksman and Choose Location.

Failing Defensive maneuvers results in a gunnery penalty (-20%) only for the evading ship.

With hit locations, general hit points are not used.

Three successful Mechanics skill rolls are needed to take a damaged section on line again (restored to 1 hit point; this is only a temporary fix).

Special Effect, which will make her Gunnery rolls Easy (75% + 20% = 95%).

Rather than maintain his offensive this round, Torrance elects to repair the Dorsal Ion Cannon. He sends his best starship mechanics (losing the opportunity to open fire, as they were also gunners – lousy planning) and the Mechanics' skill roll is 21%, a success. Only two more successful rolls are needed to get it online again.

The pirate vessel opens fire, rolling 93%. Torrance returns fire with both lasers, rolling 34% and 14%.

Reeves roll would normally be a miss but her Piloting skill and choice of Special Effect makes this a hit instead. The damage roll is 4 versus the Crew Compartments (location roll 41).

Torrance hits the Crew Compartments (location roll 62), and Open Space (96). Damage rolls are 4 and 6 for Port and Starboard respectively.

Initiative next round will be with Reeves, as levels of success are the same.

b) Narrative

Torrance wants his Ion Cannon back on line. With it, he will be able to vapourise the Speeding Blade. He locks autopilot onto the pirate vessel and relays orders to the repair crews.

"Damn!" shouts Reeves as yet another burst of laser hit. Crew compartments will not stand another hit now, with only 2 hit points left. At least she has the satisfaction of seeing the SolFed ship being scorched too.

Round 6

a) Mechanics

Reeves chooses Offensive Positioning this time and her Pilot roll is 51%, a success. Torrance maintains Offensive posture and rolls 91%, another Pilot roll failure.

Reeves has one level of success and this time chooses Dominate, intending to take the fight to her pursuer. Her Gunnery skills are Easy (or 95%) this round.

The Speeding Blade turns and fires the Prow Blaster, rolling a 57%, a normal hit. Torrance fires back with Starboard Laser, rolling 58%, a hit.

Reeves hits the Gamma Star's Port Laser. The damage is 5 points, sufficient to disable the Laser.

Torrance makes 7 points of damage against the Speeding Blade's Open Space, hit points now below zero for that section. Rolling 1d6 on the Area Damage Table: the crew mess has a hull breach. Unless repaired, it will be in complete vacuum in 10 rounds. Everyone in the crew also take 1d4-1 hit point damage. Movement around the ship is also restricted, as security doors seal off the mess.

Initiative next round will remain with Reeves.

b) Narrative

With her ship badly mauled, Reeves elects to fight, not flee. She is sure her crew would support the decision, though there is no time for a bridge conference. She skillfully whips the Speeding Blade 180 degrees and flies straight at the Gamma Star. The specially augmented Prow Blaster catches the SolFed ship's Port Laser and she watches it blown into smithereens.

Torrance cannot believe the audacity of this common pirate. His Port Laser damaged, he retaliates with the Starboard Laser, striking a satisfactory hit against the Speeding Blade.

Round 7

a) Mechanics

Reeves rolls 03 on her Pilot skill (Offensive), a critical success. Torrance responds with a 15% Pilot roll, a normal success. Reeves chooses Dominate Special Effect again.

Reeves gains Gunnery initiative.

The Speeding Blade fires its Prow Blaster, this time rolling 22% (a hit). The Gamma Star returns fire with the Starboard Laser. It rolls 91%, a miss. One Gunnery Special Effect for Reeves.

Reeves hits the Gamma Star's Engine systems (location roll 09), for 8 points of damage (picking Maximum Damage). This is sufficient to disable the Gamma Star's engines (which have 6 Hit Points).

Initiative next round will be Reeves'.

For a hit exceeding a crew section's hit points, a roll on the Area Damage Table is made.

Just as in regular combat, finding weak spots like engines, maneuver, weapons, etcetera, is a very effective.

b) Narrative

The Speeding Blade continues her near-suicidal charge at the Gamma Star. Reeves' skills, audacity and sheer luck win out as the row Blaster destroys the enemy's drive system. The Gamma Star is adrift in deep space, maneuvering thrusters at least allowing for some movement.

Round 8

a) Mechanics

Reeves has Pilot initiative and rolls 08, another critical success (10% of Pilot skill 75 = 7.5, round up to 8).

Torrance, with disabled engines, is unable to pursue. The GM rules his Pilot skill roll is Formidable this round (85% - 40% = 45%). With a 16%, the SolFed ship turns towards the pirate vessel.

Reeves has one level of success in Piloting, so elects to take the Withdraw special effect.

The pirate vessel makes a parting shot from the Stern Blaster, rolling 59%, a hit against the Gamma Star's Sick Bay, for 3 points of damage. As Torrance is not firing back, she automatically receives a Special Effect: she picks Maximum Damage (8 points).

Torrance dispatches his mechanics to get the engines online again.

b) Narrative

It is a narrow escape. Reeves pulls a safe distance away from the Gamma Star and punches the badly damaged Speeding Blade into Hyperspace.

Torrance sees the pirate vessel vanish from his scanner screens and curses the enemy. I'll get you next time, he vows. But for now, he has more important matters to deal with.

Critical hits are 10% of the skill value.

Withdraw is a good Special Effect for getting out of a fight before being blown to pieces.

Acknowledgments

I would like to thank everyone at the forums of *BRP Central* for their generous attitude and open-minded discussions. Without them, M-SPACE would not have survived beyond its first iteration.

I'm also in great debt to Paolo Guccione at *Alephtar Games* for his brilliant idea of a generic conflict resolution mechanic for d100-games.

Lastly, I'm happy to have found a good home for M-SPACE with *The Design Mechanism*. Lawrence and Pete have made me feel very welcome.

I dedicate this book to Katarina & Olle.

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M - SPACE

player

name

.....

home world

.....

culture

.....

career

age

str

con

siz

dex

int

pow

cha

action points

damage modifier

exp modifier

healing rate

initiative

luck points

move rate

wealth

standard %

athletics str+dex

boating str+con

brawn str+siz

conceal dex+pow

customs int x2

dance dex+cha

deceit int+cha

drive dex+pow

endurance con x2

evade dex x2

first aid dex+int

influence cha x2

insight int+pow

locale int x2

native tongue int+cha

perception int+pow

ride dex+pow

sing pow+cha

stealth dex+int

swim str+con

willpower pow x2

.....

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.....

professional %

acting cha x2

acrobatics str+dex

art pow+cha

astrogation int x2

bureaucracy int x2

commerce pow+cha

comms int x2

computers int x2

courtesy int+cha

craft dex+int

culture int x2

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demolitions int+pow

disguise int+cha

electronics dex+int

engineering int x2

forgery dex+int

gambling int+pow

knowledge int x2

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language int+cha

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professional %

lockpicking dex x2

mechanics dex+int

medicine int+pow

musicianship dex+cha

navigation int+pow

oratory pow+cha

pilot dex+int

starship

.....

politics int+cha

research int+pow

science int x2

astronomy

astrobiology

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.....

seamanship int+con

seduction int+cha

sensors int+pow

sleight dex+cha

streetwise pow+cha

survival con+pow

teach int+cha

track int+con

M - SPACE

player

combat styles	%
.....	
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.....	
.....	
.....	
gunnery ^{dex+pow}	
unarmed ^{str+dex}	

locations	ap	hp
01-03 right leg
04-06 left leg
07-09 abdomen
10-12 chest
13-15 right arm
16-18 left arm
19-20 head

passions	%
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fatigue
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power points
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powers	%
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equipment
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description
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M - SPACE

player

name

home world

culture

career

age

str

con

siz

dex

int

pow

cha

action points

damage modifier

exp modifier

healing rate

initiative

luck points

move rate

wealth

standard %

athletics str+dex

boating str+con

brawn str+siz

conceal dex+pow

customs int x2

dance dex+cha

deceit int+cha

drive dex+pow

endurance con x2

evade dex x2

first aid dex+int

influence cha x2

insight int+pow

locale int x2

native tongue int+cha

perception int+pow

ride dex+pow

sing pow+cha

stealth dex+int

swim str+con

willpower pow x2

professional %

acting cha x2

acrobatics str+dex

art pow+cha

astrogation int x2

bureaucracy int x2

commerce pow+cha

comms int x2

computers int x2

courtesy int+cha

craft dex+int

culture int x2

demolitions int+pow

disguise int+cha

electronics dex+int

engineering int x2

forgery dex+int

gambling int+pow

knowledge int x2

language int+cha

professional %

lockpicking dex x2

mechanics dex+int

medicine int+pow

musicianship dex+cha

navigation int+pow

oratory pow+cha

pilot dex+int

starship

politics int+cha

research int+pow

science int x2

astronomy

astrobiology

seamanship int+con

seduction int+cha

sensors int+pow

sleight dex+cha

streetwise pow+cha

survival con+pow

teach int+cha

track int+con

M - SPACE

player

combat styles %

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.....
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.....

gunnery ^{dex+pow}

unarmed ^{str+dex}

hit points

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serious wound.....

passions %

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power points

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powers %

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equipment

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description.....

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