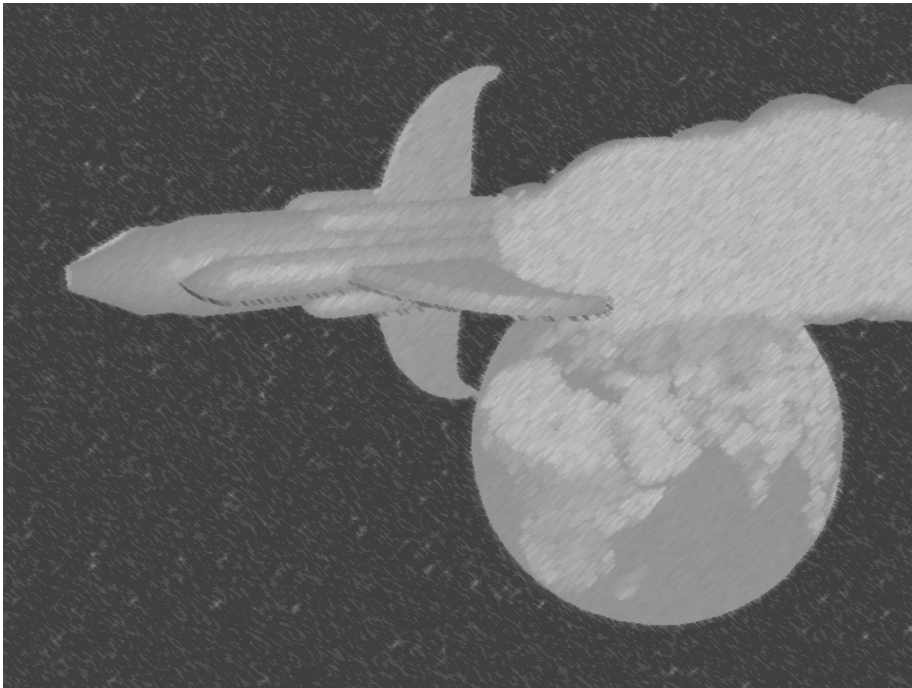


2456 Using the D20 System

Kertis Henderson
kertishenderson@gmail.com

February 7, 2021



Contents

| | |
|---|------------|
| Introduction | v |
| Changes | vii |
| 1 Character Creation and Advancement | 1 |
| 1.1 Abilities | 2 |
| 1.2 Race | 3 |
| 1.3 Career | 3 |
| 1.4 Description and Background | 4 |
| 1.5 Saving Throws | 4 |
| 1.6 Skills | 6 |
| 1.7 Feats | 6 |
| 1.8 Equipment | 6 |
| 1.9 Levelling Up | 7 |
| 2 Races | 9 |
| 2.1 Human Races | 10 |
| 2.2 Gennies | 11 |
| 2.3 Racial Modifiers | 12 |
| 3 Careers | 15 |
| 3.1 Rocket Pilot | 16 |
| 3.2 Warrior | 17 |
| 3.3 Scout | 17 |
| 3.4 Engineer | 18 |
| 3.5 Rogue | 19 |
| 3.6 Medic | 20 |
| 3.7 Base Attack Bonuses | 20 |
| 4 Skills | 21 |
| 4.1 Skill Rules | 22 |
| 4.2 Skill Descriptions | 22 |

| | |
|----------------------------------|-----------|
| 5 Feats | 37 |
| 5.1 Feat Rules | 38 |
| 5.2 Feat Descriptions | 38 |
| 6 Equipment | 51 |
| 6.1 Money | 52 |
| 6.2 Weight and Gravity | 52 |
| 6.3 Weapons | 52 |
| 6.4 Armor | 55 |
| 6.5 Equipment Quality | 56 |
| 7 Rocket Ships | 59 |
| 7.1 Rocket Systems | 60 |
| 7.2 Types of Rockets | 61 |
| 7.3 Ship Construction | 62 |
| 7.4 Pricing and Sales | 68 |
| 7.5 Space Travel | 69 |
| 7.6 Space Combat | 71 |

Introduction

Welcome to the 2456 Campaign Setting for the D20 Game System. While many of the rules and statistics contained in this document may be new to you, the spirit of the rules is very much recycled from older works. So, feel free to add to or modify these rules in any way you see fit.

This document contains the rules for conducting a campaign set in the world of 2456. The world's history and other roleplaying notes aren't present. The setting and other modules are available from other sources. It is assumed that the DM is familiar with those aspects of the setting.

We'll begin with character creation, which is probably the biggest modification to the D20 rules in this setting. We'll then move on to descriptions and details about races, careers, skills, feats, and equipment. Then, we'll visit the changes to combat and other rules in 2456. Finally, a brief outline of rockets and travel in the solar system will be given.

I hope you enjoy using these rules as much as I enjoyed creating them.

Changes

2004-02-20

- Initial release

2004-08-27

- Modified racial bonuses
- Added range increments to rocket combat.
- Spelling, grammar, and typos.

2005-02-12

- Added critical attack information for equipment.
- Added abilities for Rogue.
- Spelling, grammar, and typos.

2018-08-28

- Brought back out of retirement.

2018-10-04

- Fixed typos and omissions.
- Thank you to Peter Perry for the edits!

2021-02-07

- Added Improved Improvised Weapons feat and gave it for free to the Engineer career.
- Added improvised weapons section.
- Gave each character one free Weapon Focus feat at first level.

Chapter 1

Character Creation and Advancement

There are seven steps to creating a character in 2456. First, one must generate the characters's ability scores. Then, a race must be chosen, and the appropriate racial modifiers applied. Next, a career must be chosen. Then a character's description and background should be authored. After the character's personality is worked out, their skills should be chosen. Next, initial feats are picked. Finally, the starting equipment is purchased or otherwise acquired. We'll handle each of these steps in turn.

1.1 Abilities

This game setting uses the six standard D20 abilities, as well as an additional seventh ability. Any normal method of generating these seven scores can be used. If one uses a point-based system, it's important to compensate for the additional ability by granting additional points to use. For example, if you use a system in D&D 3E that give a new PC 30 points with which to make 6 skills, you might consider giving them 35 points for generation in 2456.

It's also important to note that low scores aren't so bad. Your typical Engineer probably wouldn't have a high CHA score. If they did, the party's Rogue or Pilot might not have a very big advantage. A few low ability scores give the other party members the chance to shine.

1.1.1 STR - Strength

A character's Strength score is a measure of how physically strong that character is. It also covers a few related areas. A character's endurance, stamina, and muscle bulk are also related to their Strength score.

1.1.2 DEX - Dexterity

A character's Dexterity score is a measure of their hand-eye coordination, agility, reaction time, and reflexes. High dexterity is important for combat, piloting / driving, and stealth, so it's a very important ability in this setting.

1.1.3 CON - Constitution

The Constitution score is a measure of a character's physical and mental toughness. A high Constitution score indicates a resistance to pain, trauma, and hardship.

1.1.4 INT - Intelligence

Intelligence is a measure of how smart a character is. It also measures their memory, reasoning ability, and learning rate. It is vital to have at least an average intelligence in this setting, as a low-Intelligence character would not likely survive in outer space.

1.1.5 WIS - Wisdom

The Wisdom score is a measure of common sense and overall daily experience. A character with a very low Wisdom score (even with a high Intelligence) would possibly open his rocket's reactor core to get a good view of how fusion works.

1.1.6 CHA - Charisma

A character's Charisma score is an indication of their persuasiveness and personability. It *can* indicate how physically attractive said character is, but doesn't have to. A high Charisma score is required to be a good leader or con artist.

1.1.7 TECH - Technical Knowhow

This is an ability that is not native to D20. The Technical Knowhow score is a measure of a character's knowledge and passion for working devices, be it electronic or mechanical. A character with a low Technical Knowhow score might not be able to use an unfamiliar videophone, while one with a high score might be able to tap into that same phone to get free phone calls.

1.2 Race

The choice of race is not an arbitrary one. A character's race can affect starting possessions, connections, and skills, as well as their acceptance in many parts of the solar system. We'll discuss the effects that the choice of a race will have on a character. The actual racial descriptions will come in Chapter 2.

The first big effects that race has on a character are Racial Modifiers. These modifiers affect the character's ability score (not their ability modifier). For instance, if a character's INT score was originally 12 (with a +1 ability modifier) and they were Lunarian (which gives them a +1 INT racial modifier), their new INT score would be 14 with a new INT modifier of +2.

The second big effect that race can have on a character is a social one. For instance, a Lowlander character probably wouldn't fit in very well in a campaign set on Mars, either physically or socially. It's probably best that the races of all party members be chosen at the same time. If this wasn't planned out, you might have some party members that can't easily exist in the same location as others.

1.3 Career

The next choice is that of career. A "career" is analogous to a D20 "class". There are six careers to choose from. There are no requirements for careers, although you might want to take abilities and race into consideration before choosing a career. For instance, a Terran with a very low DEX score might make a very poor Rogue.

Career descriptions and details are given in Chapter 3.

1.4 Description and Background

There's a lot of variety available in the creation of a character's background. One must pick a character's home planet, family history, and how they came to be associated with the team they are now working with. There seem to be three major ways for a character to begin adventuring:

NEO A character typically joins NEO to fight some injustice caused them by RAM, or simply to defend Earth.

RAM A character may join RAM to get to the top of the political heirarchy, or (if the character is a gennie) because RAM created them.

Pirate The life of a space pirate attracts many, for reasons ranging from personal power to massive wealth.

1.5 Saving Throws

A character has eight saving throw modifiers. The base modifiers each start at zero, and they each increase by one at levels 3, 6, and every 3rd level after.

Explosion / Plasma

Electrical Shock

Paralysis / Stun / Fall

Toxic Atmosphere / Gas / Poison

Suffocation

Radiation

Extreme Heat

Extreme Cold

There are racial bonuses for saving throws. They are listed in Chapter 2.

Saving throws in 2456 are pretty specific. Some checks require multiple rolls. As a rule, all checks should be done in the order that the checks are listed here. For instance, if a character is on a rocket ship that explodes, they will more likely perish from the explosion than from suffocation, and certainly more than from extreme cold. So, always make saving throws in this order.

1.5.1 Explosion / Plasma

This is the threat of explosive fire or plasma damage. The standard explosion check is DC 14. If this check is succeeded, the character need only take half the normal damage.

1.5.2 Electical Shock

This check must be made when enough current is passed through a character's body to endanger them. Typically, a good shock can cause 1d10 HP damage, but a successful save will cut this in half. The standard DC is 13.

1.5.3 Paralysis / Stun / Fall

This is the saving throw for any major physical trauma. If a character saves versus a stun or paralysis attack, they escape the effect altogether.

A fall causes a variable amount of damage:

| | HP per 10 ft. | Maximum Damage |
|----------------|--------------------------|---------------------------|
| Earth | 1d6 | 20d6 |
| Venus | 1d6 | 18d6 |
| Mars | 1d4 | 10d4 |
| Mercury | 1d4 | 8d4 |
| Luna | 1d2 | 8d2 |
| Large Asteroid | 1 | 10 |

This falling damage is halved on a successful saving throw. The standard DC is 15.

1.5.4 Toxic Atmosphere / Gas / Poison

This is the saving throw for a physiological attack. Anything that is chemical or biological in nature would require this throw. A successful throw means that the effects of the poison, disease, or gas are avoided. The standard DC is 14.

1.5.5 Suffocation

Suffocation is a little different. You can make a saving throw once, but you must still deal with the situation again the next round...and again...until, well...you get the idea. A character typically takes 2d10 HP of damage for each round that they can't breathe. A character may hold their breath for up to a number of rounds equal to half their Constitution ability, rounded up. The standard DC for this is 16.

1.5.6 Radiation

Radiation is everywhere. When it becomes dangerous, a saving throw may be required. Radiation doesn't always damage a character immediately. It usually takes 1d6 hours for radiation to have any adverse affect. (If the radiation is strong enough to kill a character instantly, then it does so automatically with no saving throw.) After this time, the character makes the saving throw. On success, the damage is halved. The damage should be between 1d4 and 1d8 per round of exposure, depending on the source. (The damage dice used should be determined by the GM.) If a character never removes themselves from the radiation and the radiation dose is enough to kill them (as secretly rolled by the GM), then they are not permitted a saving throw. The standard DC for this is 13.

1.5.7 Extreme Heat / Cold

When a character is exposed to extreme heat or cold, they must make this saving throw. This is in a very extreme circumstance: the bright side of Mercury, the Arctic wastes of Earth, and so on. Damage can be from 1d4 to 1d8 HP per hour, which is halved on a successful saving throw. (The damage dice used should be determined by the GM.) The standard DC is 13.

1.6 Skills

The character can start with any number of skills, but they can never have more than 4 points in any skill at level 1. This means that a new character will probably have at least 4 skills.

Starting characters are given $(8 + \text{INT modifier}) \times 2$ skill points to work with. After each new level, they are then given $(8 + \text{INT modifier})$ more skill points to spend. *Warriors are an exception to this rule. Please see Chapter 3 for more information on warriors.*

1.7 Feats

A character gets one feat at character creation and gets additional feats at 3rd level and every 3rd level after, just like in D20.

Each character gets one Weapon Focus feat for free at 1st level. This can be taken for any single weapon type, regardless of proficiency or BAB. Multiple Weapon Focus feats may be taken, but only the first free feat ignores the proficiency and BAB requirements.

1.8 Equipment

Equipment can be assigned or bought, just like in D20. A starting character could get $1d10 \times 200$ credits to use, although this is heavily dependent on the

campaign. For instance, characters who are new NEO Terran recruits might get far less than Martian aristocrats working for RAM.

1.9 Levelling Up

When a character gains enough experience to reach the next level, they are immediately given their new skill points to spend. They do not get their increase to AC, BAB, saving throws, or ability scores, nor do they get new feats or special career special abilities until they spend all of these skill points. However, there are certain skills that cannot be improved without formal training.

Here's an example. Consider "Jock" the Rocket Pilot. Jock has just hit level 2. Let's say for the sake of argument that he gets 3 new skill points to spend. From his adventures up to this point, he learns (by the seat of his pants) how to better Pilot Rocket Ship, Maneuver in Zero G, and Use Rocket Belt. He can learn these skills without formal training. So, when he "dings" at level 2, he can immediately use his increase to BAB and saving throws.

Now, consider "Chooch" the Medic. Chooch has also just hit level 2 while fighting alongside Jock. He also gets a number of new skill points. Now, Chooch wants to learn how to better Diagnose illnesses. Since this requires academic study, his attacks will not improve, nor will his saving throws. Thus, he is still considered to be a Level-1 Medic. He can still spend skill points on Maneuver in Zero G, and those points are immediately active.

Some feats require training or study as well. However, if a character doesn't use a new feat slot, it won't prevent him from levelling up in any way.

Chapter 2

Races

2.1 Human Races

Human races are evolved from the *homo sapiens* that roamed and ruled Earth for thousands (or millions) of years before its exploitation and abandonment in the 22nd century. They all share the same basic needs and environmental tolerances. Survival of the fittest has changed the average Lunarian's height, for instance, but it hasn't yet given them any tangibly different features. The largest differences in races are social.

2.1.1 Terran

Terrans are native to Earth. They're the direct descendants of the original inhabitants of the planet for millions of years. They can range from 5 to 6 feet tall and have varying skin tones and hair colors.

2.1.2 Martian

Martians are genetically suited to the low-gravity, low-pressure, dark surface of Mars. They are tall beings, ranging from 6 to 7 feet tall, although they tend to be thin and boney.

2.1.3 Lunarian

Lunarians inhabit Luna, the moon of Earth. Since Luna has no significant atmosphere and very little gravity, Lunarians have evolved to fit their domed or underground dwellings. They're typically between 4 and 5 feet tall, and they have large, sensitive eyes.

2.1.4 Venusian

Venusians are the smooth-skinned inhabitants of the harsh planet Venus. They are tolerant of the high pressures present on their world. There are different Venusian societies that exist on different parts of the planet. Although they can be more resistant than Terrans (see the next section for a table of resistances), they appear to be very similar.

2.1.5 Mercurian

Mercurians occupy the extreme world of Mercury. They dwell on the surface, below the surface, and in orbital stations around the planet. They are typically 5 to $5\frac{1}{2}$ feet tall, and are stocky. They are very hardy due to their ever-changing and extremely challenging environment.

2.2 Gennies

Gennies are manufactured from the genes of various animals. They can be either lab-manufactured animals or the offspring of such constructs. Although gene splicing is common for many human races, they are not to the extent that is present in gennies.

The creation of a genie can take years of planning and testing. Depending on the goals and methods used, gennies can take on the personality and spirit of anything from a sentient, human-like being, to an animal or plant that's specialized for a particular climate, to an almost robotic creature with a single purpose.

Although a myriad of possibilities exist, the gennies that will be described for use as Player Characters are limited to the most common, social, sentient races that are based on humans. Descriptions of these beings follow.

2.2.1 Tinker

Tinkers are small, furry creatures that thrive in small, cramped areas. They are typically 2 or 3 feet tall, and can range from 60 to 80 pounds in weight. They have very dextrous limbs and a natural curiosity and technical skill, making them very good engineers. They have low-light vision.

2.2.2 Worker

Workers have been bred for raw strength at the expense of everything else, especially intelligence. The genotype is one of the earliest widely-successful applications of modern genetics. As such, the genotype has been sold and resold, causing the existence of many slight variations in this race.

2.2.3 Terrine

Terrines were designed to be skilled warriors. They were created with the addition of shark genes to a human, as well as a few other animals. (Other types of genes can be added at character creation with the consent of the GM.) This makes them tall (6 or 7 feet), muscular warriors with one-track minds.

2.2.4 Delph

The Delph is a cross between a human and a dolphin. Delphs tend to be huge (7 or 8 feet tall, 200 to 400 pounds) but very nimble in water. They have rubbery skin and webbed hands and feet. They breathe air, but can stay underwater for up to two hours, going against the normal suffocation rules.

2.2.5 Lowlander

These thick, reptilian humanoids inhabit the lowlands of Venus. They can be 4 to 5 feet tall, and weigh 200 to 300 pounds. Their lives are mainly agricultural,

and they are the best-organized race that is not controlled directly by man. They are very resistant to heat and are the only race that can naturally live in the lowlands of Venus.

2.2.6 Desert Runner

Desert Runners are catlike humanoids that roam the Martian surface. They are nomadic and are typically found herding other beasts. They are designed to be fiercely competitive. Desert Runners will group together in packs with the dominant male leading.

2.3 Racial Modifiers

The choice of race can increase or decrease a character's abilities. The following table lists each race and their associated Ability and Saving Throw modifiers.

2.3.1 Human Modifiers

| Ability | Terran | Mart. | Lun. | Ven. | Merc. |
|---------------------------------|--------|-------|------|------|-------|
| Strength | 0 | -1 | -2 | 0 | -1 |
| Dexterity | 0 | +1 | +1 | -1 | +1 |
| Constitution | +2 | -1 | -1 | +1 | +1 |
| Intelligence | +1 | +1 | +2 | 0 | 0 |
| Wisdom | 0 | -1 | +1 | +1 | 0 |
| Charisma | 0 | +1 | 0 | -1 | 0 |
| Technical Knowhow | -1 | 0 | +1 | 0 | 0 |
| Saving Throw | | | | | |
| Explosion / Plasma | -1 | 0 | 0 | 0 | 0 |
| Electrical Shock | +1 | 0 | +1 | +1 | -1 |
| Paralysis / Stun / Fall | +1 | -1 | 0 | +1 | +1 |
| Toxic Atmosphere / Gas / Poison | 0 | +1 | -1 | +3 | 1 |
| Suffocation | 0 | +1 | +2 | -2 | +1 |
| Radiation | 0 | +1 | +2 | +1 | +3 |
| Extreme Heat | 0 | -1 | -1 | +3 | +4 |
| Extreme Cold | 0 | +2 | -1 | -3 | -4 |

2.3.2 Gennie Modifiers

| Ability | Tink. | Work. | Terrine | Delph | Low. | Des. |
|------------------------------------|-------|-------|---------|-------|------|------|
| Strength | -2 | +3 | +2 | +2 | +2 | -1 |
| Dexterity | +3 | 0 | +2 | 0 | -1 | +2 |
| Constitution | -2 | +3 | +2 | +1 | +1 | +1 |
| Intelligence | +2 | -2 | -2 | 0 | 0 | 0 |
| Wisdom | +2 | -1 | -2 | 0 | -1 | -1 |
| Charisma | 0 | -3 | -3 | +1 | -3 | -1 |
| Technical Knowhow | +3 | -1 | -1 | -2 | +1 | -1 |
| Saving Throw | | | | | | |
| Explosion / Plasma | -3 | +1 | +3 | +2 | +2 | 0 |
| Electrical Shock | +2 | 1 | +3 | -2 | +2 | 0 |
| Paralysis / Stun / Fall | 0 | +3 | +2 | -1 | 0 | 0 |
| Toxic Atmosphere / Gas / Poison | -1 | 0 | +2 | +1 | +4 | 0 |
| Suffocation | 0 | 0 | -1 | +4 | -4 | +2 |
| Radiation | +2 | 0 | -1 | 0 | +1 | +2 |
| Extreme Heat | 0 | 0 | +1 | -4 | +6 | -3 |
| Extreme Cold | 0 | 0 | +1 | +2 | -6 | +2 |

Chapter 3

Careers

Careers are the equivalent of D20 classes. Just like in other campaign settings and genres, in 2456 it's a good idea to have a party that is well-rounded¹. It would be nice to have one character of each class in an adventuring party. However, due to the fact that 6 players is a pretty big group, it might not be possible to have one PC of each class.

So, here are the main classes:

3.1 Rocket Pilot

Hit Dice: 1d6

Career Skills: Drive Jetcar
 Drive Groundcar
 Maneuver in Zero G
 Notice
 Pilot Fixed Wing
 Pilot Rocket
 Pilot Rotorwing Craft
 Use Rocket Belt

Special Abilities: For every even-numbered level a +1 adjustment to charisma involving the opposite sex and same race.
 Gets +2 bonus to all skills involving piloting or driving

Rocket Pilots are the coolest beings in space. They can outmaneuver and outromance anyone out there, often at the same time.

¹It's a good idea from both a player perspective and from a PC perspective. From a player perspective, having only one warrior in the party means that character will get to shine when the group sees combat. Having only one rocket pilot means that there will be no fighting about who gets to fly the ship. So, each player gets to have more fun. From a PC perspective, it makes sense to have a wide range of skills. You never know when you might need a lock picked or a hidden trail discovered.

3.2 Warrior

Hit Dice: 1d10

Career Skills: Battle Tactics
Demolitions
Leadership
Maneuver in Zero G
Move Silently
Notice
Repair Weapon
Use Rocket Belt

Special Abilities: For every even-numbered level +1 specialization bonus for weapon of your choice. Added to attack and damage rolls
Can attack twice per round with fists
Gets 1 extra feat at 1st level and at every even-numbered level thereafter. Each feat taken by this bonus must be a combat-oriented feat. The ones listed in the *D20 SRD* for the Fighter's bonus will work, as well as any feats approved by the DM for this use.
Starts with $(4 + \text{INT modifier}) \times 2$ skill points.
Gets $(4 + \text{INT modifier})$ more skill points per each additional level.

These are professional fighters who lead teams or armies into battle.

3.3 Scout

Hit Dice: 1d8

Career Skills: Animal Riding
Befriend Animal
Climb
Move Silently
Notice
Planetary Survival
Planetology
Tracking

Special Abilities: For every level get +1 bonus to all career skills.

Scouts are planetary explorers and loners with a special talent for survival.

3.4 Engineer

Hit Dice: 1d8

Career Skills: Jury Rig
Maneuver in Zero G
Notice
Repair Electrical
Repair Life Support
Repair Mechanical
Repair Nuclear Engine
Repair Rocket Hull

Special Abilities: Gets the Improved Improvised Weapons feat at level 1.

Engineers are tough rocket-engine technicians who can fix anything... or so they claim.

3.5 Rogue

Hit Dice: 1d6

Career Skills: Bypass Security
Climb
Fast Talk / Convince
Hide in Shadows
Move Silently
Notice
Open Lock
Pick Pocket

Special Abilities: Gets +2 for all career skills
Gets Sneak Attack +1d6 at 1st level. (See D20 for a description of Sneak Attack.) At every odd-numbered level thereafter, the bonus for a Sneak Attack goes up by 1d6. So, at 3rd level, the Rogue gets a +2d6 Sneak Attack, at 4th level, the Rogue gets a +3d6 roll, and so forth.
Gets Uncanny Dodge at 4th level. (See D20 for a description of Uncanny Dodge.)
Gets Improved Uncanny Dodge at 4th level. (See D20 for a description of Improved Uncanny Dodge.)
Gets a special ability at 10th level and every three levels thereafter (10th, 13th, 16th, 19th, etc.). This ability may be chosen from Crippling Strike, Defensive Roll, Improved Evasion, Opportunist, or Skill Mastery. (See D20 for a description of these abilities.)

These are gamblers and information traders who play both sides against the middle.

3.6 Medic

Hit Dice: 1d6

Career Skills: Diagnose
 Life Suspension Tech
 Treat Critical Wounds
 Treat Disease
 Treat Light Wounds
 Treat Poisoning
 Treat Serious Wounds
 Treat Stun / Paralysis

Special Abilities:

These are 25th-century physicians who can perform incredible medical feats.

3.7 Base Attack Bonuses

| Level | Rocket Pilot | Warrior | Scout | Engineer | Rogue | Medic |
|-------|--------------|---------------|-----------|----------|-------|-------|
| 1 | +0 | +0 | +0 | +0 | +0 | +0 |
| 2 | +0 | +1 | +0 | +0 | +0 | +0 |
| 3 | +1 | +2 | +1 | +0 | +1 | +0 |
| 4 | +1 | +3 | +2 | +1 | +1 | +1 |
| 5 | +2 | +4 | +2 | +1 | +2 | +1 |
| 6 | +2 | +5 | +3 | +1 | +2 | +1 |
| 7 | +3 | +6/+1 | +4 | +2 | +3 | +2 |
| 8 | +3 | +7/+2 | +4 | +2 | +3 | +2 |
| 9 | +4 | +8/+3 | +5 | +2 | +4 | +2 |
| 10 | +4 | +9/+4 | +6/+1 | +3 | +4 | +3 |
| 11 | +5 | +10/+5 | +6/+1 | +3 | +5 | +3 |
| 12 | +5 | +11/+6/+1 | +7/+2 | +3 | +5 | +3 |
| 13 | +6/+1 | +12/+7/+2 | +8/+3 | +4 | +6/+1 | +4 |
| 14 | +6/+1 | +13/+8/+3 | +8/+3 | +4 | +6/+1 | +4 |
| 15 | +7/+2 | +14/+9/+4 | +9/+4 | +4 | +7/+2 | +4 |
| 16 | +7/+2 | +15/+10/+5 | +10/+5 | +5 | +7/+2 | +5 |
| 17 | +8/+3 | +16/+11/+6/+1 | +10/+5 | +5 | +8/+3 | +5 |
| 18 | +8/+3 | +17/+12/+7/+2 | +11/+6/+1 | +5 | +8/+3 | +5 |
| 19 | +9/+4 | +18/+13/+8/+3 | +12/+7/+2 | +6/+1 | +9/+4 | +6/+1 |
| 20 | +9/+4 | +19/+14/+9/+4 | +12/+7/+2 | +9/+4 | +6/+1 | +6/+1 |

Chapter 4

Skills

4.1 Skill Rules

A character's skills represent those talents that have been acquired through training and education. For instance, the might to lift a large weight is a natural ability, and is thus an ability. However, climbing is a skill because it takes time to learn how to use footholds and climbing equipment. Each skill is associated with a particular ability that is most crucial to the use of that skill. So, a strong character with a certain level of climbing experience would be a better climber than a weak character with the same training.

A character gets a number of skill points that is unrelated to their career. So, a new character would receive the same number of starting skill points and new points per level whether they become a rogue or a warrior. The reason for this difference from stock D20 is because of the technical nature of everything in this setting. A knight in a fantasy campaign that is dumb as a rock can get by, but a warrior in 2456 that can't use a rocket belt or a smart bomb would be very short-lived. So, a character's survival can be directly related to the number of skill points that they have.

This doesn't mean that every character of the same level will be equally trained. The use of cross-class skills is sufficiently penalized to prevent this homogeneity.

The character can start with any number of skills, but they can never have more than 4 points in any skill at level 1. This means that a new character will probably have at least 4 skills.

Starting characters are given $(8 + \text{INT modifier}) \times 2$ skill points to work with. After each new level, they are then given $(8 + \text{INT modifier})$ more skill points to spend. As per D20 rules, a character cannot put more than the level + 3 points into any skill, with the exception of the warrior as noted in the Careers section..

Career Skills are those skills that are relatively easy for a character of a particular class to learn. General Skills are those skills that are more difficult to learn. "Career Skills" are known in D20 as "Class Skills", and "General Skills" are known in D20 as "Cross-Class Skills". Career skills can be purchased at a cost of one rank per point spent. General skills can be purchased at a cost of one rank per two points spent.

Certain skills are exclusive to certain classes. For instance, only a medic can take Treat Disease. This is due to the immense amount of training and education required to use these feats.

4.2 Skill Descriptions

4.2.1 Acrobatics

Ability: Dexterity
Does Not Require Training

The skill necessary for performing balancing, juggling, and other unusual feats of physical dexterity.

4.2.2 Animal Empathy

Ability: Charisma

Does Not Require Training

SEE D20.

4.2.3 Astrogation

Ability: Intelligence

Prerequisites: Astronomy: 4, Mathematics: 5

Requires Training

The character has a working knowledge of how to plot a spaceship course, calculate the movement of astronomical bodies, and take sights on the stars.

4.2.4 Astronomy

Ability: Intelligence

Requires Training

This character has a working knowledge of planets, stars, and other heavenly bodies. He can locate and identify constellations and planets through a telescope and knows basic astronomical facts, such as planet size, distance, and composition.

4.2.5 Battle Tactics

Ability: Intelligence

Requires Training

The character knows the basic principles of success in small-group combat. On a successful check, he can use hand signals and brief verbal commands to direct the other members of his group during a firefight on the ground. Each ally who can hear or see the character gets a +1 to Attack. Use of this skill doesn't take any time, and lasts until the combat situation changes significantly (new robots, surprise, etc.).

4.2.6 Bypass Security

Ability: Technical

Does Not Require Training

The skill of tracing and neutralizing electronically-based alarm systems, including cameras, microphones, pressure sensors, and other alarms.

4.2.7 Climb

Ability: Dexterity
Does Not Require Training

SEE D20

4.2.8 Communications Operation

Ability: Technical
Does Not Require Training

A character with this skill is adept at using communication devices, and at diagnosing possible malfunctions or problems in those devices. This skill also increases a character's chance of punching a communication signal through adverse conditions, such as jamming or asteroid fields, and of tracing a communication signal to its source.

4.2.9 Cryptography

Ability: Intelligence
Prerequisites: Mathematics: 4
Requires Training

The character has an extensive knowledge of codes and cyphers, both past and present. He can decipher or create codes for many applications.

4.2.10 Demolitions

Ability: Technical
Does Not Require Training

The character is adept at using, installing, and defusing grenades, bombs, and other pyrotechnic devices. On a successful check, a grenade or bomb does maximum damage. If the character or someone else in the group succeeds at a Notice Skill check, it may be possible for the character to detect and/or disable a bomb or some other kind of timed explosive device.

4.2.11 Design Engineering

Ability: Intelligence
Prerequisites: Mathematics: 2, Physics: 2
Requires Training

The character is capable of designing bridges, buildings, airfields, monuments, and other works of civil engineering.

4.2.12 Diagnose

Ability: Intelligence
Does Not Require Training

A character with this skill is able to identify the specific cause of ailment. The DC of this check is related to how obscure the ailment is and how much time the user is willing to spend. The skill is only necessary for identifying illnesses or other injuries, and is not necessary to determine the nature of an obvious external wound. This is at the DM's discretion.

4.2.13 Disguise

Ability: Intelligence
Cannot Use With 0 Skill Points
Does Not Require Training

SEE D20.

4.2.14 Distract

Ability: Charisma
Does Not Require Training

The character is able to provide a diversion by attracting the attention away from the actions of another character.

4.2.15 Drive Groundcar

Ability: Dexterity
Does Not Require Training

This skill allows the character to drive any type of small, wheeled ground vehicle.

4.2.16 Drive Heavy Ground Vehicle

Ability: Dexterity
Cannot Use With 0 Skill Points
Does Not Require Training

The required skill for driving tanks, heavy trucks, tractors, and other large ground vehicles.

4.2.17 Drive Jetcar

Ability: Dexterity
Cannot Use With 0 Skill Points
Does Not Require Training

This skill allows the character to drive any type of small vehicle using jet propulsion for movement.

4.2.18 Drive Motorcycle

Ability: Dexterity
Does Not Require Training

A character with this skill may drive any type of powered two-wheeled or three-wheeled vehicle.

4.2.19 Etiquette

Ability: Charisma
Requires Training

The character is able to fit into a cultural group, avoid insulting or inappropriate behavior, and recover gracefully from social blunders.

4.2.20 Fast Talk / Convince

Ability: Charisma
Does Not Require Training

The skill of talking others into doing what you want them to do, using voice, mannerisms, persuasive arguments, and occasionally sex appeal. This effect lasts for 1d6 minutes.

4.2.21 First Aid

Ability: Technical
Does Not Require Training

The character is capable of providing minimal first aid: stopping bleeding, bandaging wounds, or otherwise stabilizing a noncritical condition. Success allows the character to cancel 1d6 points of damage that some character has endured during a combat encounter that is underway or has just ended. This skill is usable only once per character during any combat encounter. For example: “Jock” the pilot sustains 4 points of damage in a firefight. His friend “Chooch” can use first aid, and does so to cancel 1 of these hit points. So, Jock is down 3 hit points. Chooch cannot use First Aid again until the next battle,

but Jock can certainly try himself. If Jock is still down a few hit points in the next battle, nobody can use First Aid on him to cancel the damage taken in the previous battle. They can only heal the damage caused in the current battle.

4.2.22 Handle Animal

Ability: Charisma
Cannot Use With 0 Skill Points
Does Not Require Training

SEE D20.

4.2.23 Hide

Ability: Dexterity
Does Not Require Training

SEE D20.

4.2.24 Hypnosis

Ability: Charisma
Requires Training

The skill of using voice tones, hand movements, and vocal commands to mesmerize others. A successful check may allow the user to impart reasonable commands or suggestions in the mind of the hypnotized party. The recipient must be willing to be hypnotized. The effect lasts for 1d10 hours maximum, and can be ended prematurely by another successful check.

4.2.25 Intimidate

Ability: Charisma
Does Not Require Training

SEE D20.

4.2.26 Jury Rig

Ability: Technical
Prerequisites: Repair Mechanical: 2, Repair Electrical: 2
Cannot Use With 0 Skill Points
Does Not Require Training

The character has the ability to temporarily fix a damaged or malfunctioning component, no matter what type of device or ship component it is. A Jury Rig check will cancel up to 2d10 points of damage to any ship component. However,

jury-rigged repairs are not permanent, and will fail in 1d6 rounds. When this occurs, a second skill check may be made at a higher DC.

4.2.27 Knowledge

Ability: Intelligence
Does Not Require Training

SEE D20. Biology, Botany, Chemistry, History, Geology, Law, Economics, Literature, Metallurgy, Planetology, Ship Lore, etc.

4.2.28 Leadership

Ability: Charisma
Does Not Require Training

The character has the skill of leading groups of all sizes, both in combat and social activities. A successful check may allow the character to give orders and be obeyed, as long as those ordered are willing to be led. If the check is failed, the user must wait at least one day to try again.

4.2.29 Library Search

Ability: Intelligence
Does Not Require Training

This skill covers the ability to use a computer or data file to search out specified information. The user has sufficient knowledge of research procedures to locate files, uncover facts, and present them in a usable fashion.

4.2.30 Life Suspension Technology

Ability: Intelligence
Requires Training

The character is adept at maintaining and operating suspended animation devices, and of diagnosing possible malfunctions or problems with the equipment. If successfully used, within five rounds after a character has been killed, a life suspension device will keep the character from dying. Later, a medic can attempt to restore hit points to the doomed character. However, a second check is required at this point. A failed second check means that the doomed character did not survive reanimation. Whoops.

4.2.31 Maneuver in Zero G

Ability: Dexterity

Cannot Use With 0 Skill Points

Does Not Require Training

Characters with this skill are adept at moving in a zero-gravity environment, using handholds and body movements to steer themselves. A character who fails this check receives a penalty to his AC.

4.2.32 Mathematics

Ability: Intelligence

Requires Training

The character is capable of performing complex mathematical operations, deducing theorems and calculating most math problems, as well as creating new mathematical formulae.

4.2.33 Memorize

Ability: Intelligence

Does Not Require Training

The ability to remember information and useful facts.

4.2.34 Mimic

Ability: Intelligence

Does Not Require Training

The ability to mimic the vocal patterns and sounds of others. This includes not only human voices, but also animal and environmental sounds.

4.2.35 Move Silently

Ability: Dexterity

Does Not Require Training

SEE D20.

4.2.36 Navigation

Ability: Intelligence

Prerequisites: Astronomy: 3

Requires Training

The character has a working knowledge of how to calculate a course on a planet using sightings of stars and other landmarks.

4.2.37 Notice

Ability: Wisdom
Does Not Require Training

SEE D20.

4.2.38 Open Lock

Ability: Technical
Does Not Require Training

SEE D20.

4.2.39 Physics

Ability: Intelligence
Requires Training

The character is capable of working out complex physics formulae, theorems, and problems.

4.2.40 Pick Pocket

Ability: Dexterity
Does Not Require Training

SEE D20.

4.2.41 Pilot Fixed Wing Craft

Ability: Dexterity
Cannot Use With 0 Skill Points
Does Not Require Training

This skill is used to pilot any type of fixed-wing aircraft.

4.2.42 Pilot Rocket

Ability: Dexterity
Cannot Use With 0 Skill Points
Does Not Require Training

A character with this skill can pilot a rocket ship of any type, in or out of atmosphere.

4.2.43 Pilot Rotorwing Craft

Ability: Dexterity
Requires Training

This skill is used to pilot “Dragonfly” rotor vehicles, helicopters, and other vehicles that fly by means of rotating blades.

4.2.44 Pilot Ship / Submarine

Ability: Dexterity
Cannot Use With 0 Skill Points
Does Not Require Training

This skill is used to pilot seagoing ships, small submersible vessels, and other aquatic craft.

4.2.45 Planetary Survival

Ability: Wisdom
Prerequisites: Planetology: 2
Does Not Require Training

The character has a working knowledge of how to survive in wilderness conditions on all planets of the solar system. He or she knows what foods are edible and where they can be found, how to trap native game, locate shelter and drinking water.

4.2.46 Planetology

Ability: Intellegence
Requires Training

The character has a working knowledge of the planets of the solar system. This includes flora and fauna, hazards, major geological and climatological information, as well as basic history.

4.2.47 Programming

Ability: Intelligence
Prerequisites: Mathematics: 2
Requires Training

The character is adept at programming computers, both planetside and on rocket ships.

4.2.48 Read Lips

Ability: Wisdom
Does Not Require Training

The ability to discern the essence of a conversation by watching the lip movements of others, as long as the conversation is in a language the user understands.

4.2.49 Repair Computer

Ability: Technical
Prerequisites: Repair Electrical: 8
Requires Training

A character with this skill is adept at maintaining and repairing computer systems, and diagnosing electrically-based problems. This does not allow the user to program a computer, however. A successful use of this skill can fully repair a computer. Use may require suitable tools, depending on the severity of the repair.

4.2.50 Repair Electrical

Ability: Technical
Requires Training

A character with this skill is adept at repairing electrical circuits, working with electrical components, and diagnosing electrically-based problems. A successful use of this skill cancels 2d10 points of damage to a ship's sensors, or can fully repair any other small electrical component. Use may require suitable tools, depending on the severity of the repair.

4.2.51 Repair Life Support

Ability: Technical
Prerequisites: Repair Mechanical: 5, Repair Electrical: 6
Requires Training

The skill of repairing and maintaining life support systems. Successful use cancels 2d10 points of damage to the life support systems of a ship or some other self-contained environment. Use may require suitable tools, depending on the severity of the repair.

4.2.52 Repair Mechanical

Ability: Technical
Cannot Use With 0 Skill Points
Does Not Require Training

A character with this skill is capable of repairing machinery-devices that rely primarily on mechanical components. Success cancels 2d10 points of damage to a ship's controls, or can fully repair any smaller mechanical device. Use may require suitable tools, depending on the severity of the repair.

4.2.53 Repair Nuclear Engine

Ability: Technical
Prerequisites: Repair Mechanical: 2
Requires Training

The character is adept at the repair, upkeep, and installation of nuclear rocket engines and related subsystems, as well as diagnosing problems and modifying engine designs to a limited extent. Success restores 2d10 to a damaged ship engine. Use may require suitable tools, depending on the severity of the repair.

4.2.54 Repair Rocket Hull

Ability: Technical
Prerequisites: Repair Mechanical: 2
Does Not Require Training

The character knows how to patch, restructure, and otherwise modify rocket ship hulls. Use may require suitable tools, depending on the severity of the repair.

4.2.55 Repair Weapon

Ability: Technical
Cannot Use With 0 Skill Points
Does Not Require Training

A character with this skill is able to restore a damaged weapon to full normal capacity. This skill would not recharge a weapon that is out of power or make a weapon usable if it's out of ammunition. Use may require suitable tools, depending on the severity of the repair.

4.2.56 Ride

Ability: Dexterity
Does Not Require Training

SEE D20.

4.2.57 Sensor Operation

Ability: Technical
Does Not Require Training

The skill of operating rocket ship sensors. This skill also increases a character's chance of locating hidden astral bodies, tracking or evading rockets, and diagnosing sensor system problems.

4.2.58 Shadowing

Ability: Wisdom
Does Not Require Training

The ability to follow people in urban areas without being observed. This is primarily a stealth-based activity, as opposed to Tracking, which is an observational skill.

4.2.59 Speak / Read Language

Ability: Intelligence
Cannot Use With 0 Skill Points
Does Not Require Training

The character is able to speak and read the specified language. One is always able to speak and read English. This must be taken for each additional language.

4.2.60 Tracking

Ability: Wisdom
Does Not Require Training

The ability to find, interpret, and follow tracks and signs in a wilderness environment.

4.2.61 Treat Critical Wounds

Ability: Intelligence
Prerequisites: Treat Serious Wounds: 8
Requires Training

A character with this skill is able to treat extremely severe injuries. Successful use of this skill restores $3d8+3$ hit points. Treatment time is 10 rounds. Frequency of use is the same as for Treat Light Wounds, with the additional limitation that the medic cannot use this skill and another Treat Wounds skill on the same patient during any single battle. A character can use this skill on himself at very great difficulty. The use of this skill requires a medical kit. See equipment details for more information.

4.2.62 Treat Disease

Ability: Intelligence

Prerequisites: Diagnose: 5

Requires Training

Once a successful check has been made, the character knows the proper treatment for curing a given illness. Successful use of this skill usually restores the patient to full function in $1d10+2$ hours. Treatment time is 10 rounds. The use of this skill requires a medical kit. See equipment details for more information.

4.2.63 Treat Light Wounds

Ability: Intelligence

Requires Training

The character has mastered the surgical techniques of this craft well enough to treat minor injuries: flesh wounds, laser burns, and other types of minimal damage. Successful use of this skill restores $1d8$ hit points to the patient, but the patient cannot regain hit points that would put his total above his normal maximum. Treatment time is 1 round. This skill can be used no more than once on any single individual during or immediately after any single combat encounter. The use of this skill requires a medical kit. See equipment details for more information.

4.2.64 Treat Poisoning

Ability: Intelligence

Prerequisites: Diagnose: 3

Requires Training

After a successful check, the character will know the proper treatment and antidotes for any extremely lethal poison or dose of radiation. Successful use usually restores the patient to full function in $1d10+1$ rounds. Treatment time is 1 round. The use of this skill requires a medical kit. See equipment details for more information.

4.2.65 Treat Serious Wounds

Ability: Intelligence

Prerequisites: Treat Light Wounds: 6

Requires Training

At this level, the character has enough skill to deal with broken bones, concussions, serious weapon wounds, and burns. Successful use restores 2d8+1 hit points. Treatment time is 3 rounds. Frequency of use is the same as for Treat Light Wounds, with the additional limitation that the medic cannot use this skill and another Treat Wounds skill on the same patient during any single battle. The use of this skill requires a medical kit. See equipment details for more information.

4.2.66 Treat Stun / Paralysis

Ability: Intelligence

Requires Training

With this training, the character knows how to treat the effects of sonic stunners, paralyzation drugs, and other types of paralyzing agents. This skill will not cure paralyzation caused by injury. Successful use usually restores a patient to full function in 1d4 rounds. Treatment time is 1 round. The use of this skill requires a medical kit. See equipment details for more information.

4.2.67 Use Rocket Belt

Ability: Dexterity

Does Not Require Training

Characters with this skill are able to maneuver while wearing a rocket belt or a space belt better than someone who is not skilled.

Chapter 5

Feats

5.1 Feat Rules

A character gets one feat at character creation and gets additional feats at 3rd level and every 3rd level after, just like in D20. Feats are used exactly how they are in stock D20.

5.2 Feat Descriptions

5.2.1 Alertness

Benefit: The character gets a +2 bonus on all checks to notice something by sight, sound, smell, or other senses.

5.2.2 Ambidexterity

Prerequisites: Dex 15+.

Benefit: The character ignores all penalties for using an off hand. The character is neither left-handed nor right-handed. **Normal:** Without this feat, a character who uses his or her off hand suffers a -4 penalty to attack rolls, ability checks, and skill checks. For example, a right-handed character wielding a weapon with her left hand suffers a -4 penalty to attack rolls with that weapon. **Special:** This feat helps offset the penalty for fighting with two weapons.

5.2.3 Armor Proficiency (heavy)

Prerequisites: Armor Proficiency (light), Armor Proficiency (medium).

Benefit: See Armor Proficiency (light). **Normal:** See Armor Proficiency (light).

5.2.4 Armor Proficiency (light)

Benefit: When a character wears a type of armor with which the character is proficient, the armor check penalty applies only to Balance, Climb, Escape Artist, Hide, Jump, Move Silently, Pick Pocket, and Tumble checks. **Normal:** A character who is wearing armor with which she is not proficient suffers its armor check penalty on attack rolls and on all skill checks that involve moving, including Ride.

5.2.5 Armor Proficiency (medium)

Prerequisites: Armor Proficiency (light)

Benefit: See Armor Proficiency (light). **Normal:** See Armor Proficiency (light).

5.2.6 Blind-Fight

Benefit: In melee, every time a character misses because of concealment, the character can reroll the miss chance percentile roll one time to see if the character actually hit. An invisible attacker gets no bonus to hit the character in melee. That is, the character doesn't lose a Dexterity bonus to Armor Class, and the attacker doesn't get the usual +2 bonus. The invisible attacker's bonuses do still apply for ranged attacks, however. The character suffers only half the usual penalty to speed for being unable to see. Darkness and poor visibility in general reduces the character's speed to three-quarters of normal, instead of one-half.

5.2.7 Cleave

Prerequisites: Str 13+, Power Attack.

Benefit: If the character deals a creature enough damage to make it drop (typically by dropping it to below 0 hit points, killing it, etc.), the character gets an immediate, extra melee attack against another creature in the immediate vicinity. The character cannot take a 5-foot step before making this extra attack. The extra attack is with the same weapon and at the same bonus as the attack that dropped the previous creature. The character can use this ability once per round.

5.2.8 Combat Reflexes

Benefit: When foes leave themselves open, the character may make a number of additional attacks of opportunity equal to the character's Dexterity modifier. The character still may only make one attack of opportunity per enemy. The character may also make attacks of opportunity while flat-footed. **Special:** A rogue with the Combat Reflexes feat still can only make one attack of opportunity in a round if he uses his opportunist ability to make that attack.

5.2.9 Dodge

Prerequisites: Dex 13+.

Benefit: During the character's action, the character designates an opponent and receives a +1 dodge bonus to Armor Class against attacks from that opponent. The character can select a new opponent on any action. **Note:** A condition that makes the character lose his or her Dexterity bonus to Armor Class (if any) also makes the character lose dodge bonuses. Also, dodge bonuses stack with each other, unlike most other types of bonuses.

5.2.10 Endurance

Benefit: Whenever the character makes a check for performing a physical action that extends over a period of time (running, swimming, holding the character's breath, and so on), the character gets a +4 bonus to the check.

5.2.11 Exotic Weapon Proficiency

Prerequisites: Base attack bonus +1 or higher.

Benefit: The character makes attack rolls with the weapon normally. Normal: A character who uses a weapon without being proficient with it suffers a -4 penalty on attack rolls. Special: The character can gain this feat multiple times. Each time the character takes the feat, it applies to a new weapon.

5.2.12 Expertise

Prerequisites: Int 13+.

Benefit: When the character uses the attack action or full attack action in melee, the character can take a penalty of as much as -5 on the character's attack and add the same number (up to +5) to the character's Armor Class. This number may not exceed the character's base attack bonus. The changes to attack rolls and Armor Class last until the character's next action. The bonus to the character's Armor Class is a dodge bonus. Normal: A character not capable of the Expertise feat can fight defensively while using the attack or full attack action to take a -4 penalty on attacks and gain a +2 dodge bonus to Armor Class.

5.2.13 Far Shot

Prerequisites: Point Blank Shot.

Benefit: When the character uses a projectile weapon, such as a bow, its range increment increases by one-half (multiply by 1.5). When the character uses a thrown weapon, its range increment is doubled.

5.2.14 Flyby Attack

Prerequisites: Fly speed.

Benefit: When flying, the creature can take a move action (including a dive) and another partial action at any point during the move. The creature cannot take a second move action during a round when it makes a flyby attack. Normal: Without this feat, the creature takes a partial action either before or after its move.

5.2.15 Great Cleave

Prerequisites: Str 13+, Power Attack, Cleave, base attack bonus +5

Benefit: As Cleave, except that the character has no limit to the number of times the character can use it per round.

5.2.16 Great Saving Throw

Benefit: The character gets a +2 bonus to all saving throws of one particular type. This saving throw type must be declared when the feat is taken.

5.2.17 Improved Bull Rush

Prerequisites: Str 13+, Power Attack.

Benefit: When the character performs a bull rush, the character does not draw an attack of opportunity from the defender.

5.2.18 Improved Critical

Prerequisites: Proficient with weapon, base attack bonus +8 or higher

Benefit: When using the weapon the character selected, the character's threat range is doubled. Special: The character can gain this feat multiple times. The effects do not stack. Each time the character takes the feat, it applies to a new weapon.

5.2.19 Improved Disarm

Prerequisites: Int 13+, Expertise.

Benefit: The character does not suffer an attack of opportunity when the character attempts to disarm an opponent, nor does the opponent have a chance to disarm.

5.2.20 Improved Improvised Weapon

Benefit: The character does not suffer a -4 penalty to attack rolls with improvised weapons that they are familiar with. An engineer, as an example, would be familiar with engineering tools. A character with a sports background would be familiar with some sports equipment.

5.2.21 Improved Initiative

Benefit: The character gets a +4 bonus on initiative checks.

5.2.22 Improved Trip

Prerequisites: Int 13+, Expertise.

Benefit: If the character trips an opponent in melee combat, the character immediately gets a melee attack against that opponent as if the character hadn't used the character's attack for the trip attempt.

5.2.23 Improved Two-Weapon Fighting

Prerequisites: Two-Weapon Fighting, Ambidexterity, base attack bonus of +2 or higher.

Benefit: In addition to the standard single extra attack the character gets with an off-hand weapon, the character gets a second attack with the off-hand weapon, albeit at a -5 penalty. Normal: Without this feat, the character can only get a single extra attack with an off-hand weapon.

5.2.24 Improved Unarmed Strike

Benefit: The character is considered to be armed even when unarmed—that is, armed opponents do not get attacks of opportunity when the character attacks them while unarmed. However, the character still gets an opportunity attack against any opponent who makes an unarmed attack on the character.

5.2.25 Leadership

Prerequisites: The character must be at least 6th level.

Benefits: Having this feat enables the character to attract loyal companions and devoted followers, subordinates who assist her. See Table: Leadership for what sort of cohort and how many followers the character can recruit.

Table: Leadership

Leadership Cohort -- Number of Followers by Level --

| Score | Level | 1st | 2nd | 3rd | 4th | 5th | 6th |
|-----------|-------|-----|-----|-----|-----|-----|-----|
| 1 or less | - | - | - | - | - | - | - |
| 2 | 1st | - | - | - | - | - | - |
| 3 | 2nd | - | - | - | - | - | - |
| 4 | 3rd | - | - | - | - | - | - |
| 5 | 3rd | - | - | - | - | - | - |
| 6 | 4th | - | - | - | - | - | - |
| 7 | 5th | - | - | - | - | - | - |
| 8 | 5th | - | - | - | - | - | - |
| 9 | 6th | - | - | - | - | - | - |
| 10 | 7th | 5 | - | - | - | - | - |
| 11 | 7th | 6 | - | - | - | - | - |
| 12 | 8th | 8 | - | - | - | - | - |
| 13 | 9th | 10 | 1 | - | - | - | - |
| 14 | 10th | 15 | 1 | - | - | - | - |
| 15 | 10th | 20 | 2 | 1 | - | - | - |
| 16 | 11th | 25 | 2 | 1 | - | - | - |
| 17 | 12th | 30 | 3 | 1 | 1 | - | - |
| 18 | 12th | 35 | 3 | 1 | 1 | - | - |
| 19 | 13th | 40 | 4 | 2 | 1 | 1 | - |
| 20 | 14th | 50 | 5 | 3 | 2 | 1 | - |
| 21 | 15th | 60 | 6 | 3 | 2 | 1 | 1 |
| 22 | 15th | 75 | 7 | 4 | 2 | 2 | 1 |
| 23 | 16th | 90 | 9 | 5 | 3 | 2 | 1 |
| 24 | 17th | 110 | 11 | 6 | 3 | 2 | 1 |
| 25+ | 17th | 135 | 13 | 7 | 4 | 2 | 2 |

Leadership Score: A character's Leadership score equals his level plus any

Charisma modifier. In order to take into account negative Charisma modifiers, Table: Leadership allows for very low Leadership scores, but the character must still be 6th level or higher in order to gain the Leadership feat and thus attract a cohort. Outside factors can affect a character's Leadership score, as detailed in Table: Leadership Modifiers.

Cohort Level: The character can attract a cohort of up to this level. Regardless of the character's Leadership score, he can't recruit a cohort of his level or higher.

Number of Followers by Level: The character can lead up to the indicated number of characters of each level.

Table: Leadership Modifiers

General Leadership Modifiers

| The Leader Has a Reputation of ----- | Leadership Modifier ----- |
|---|------------------------------|
| Great prestige | +2 |
| Fairness and generosity | +1 |
| Special power | +1 |
| Failure | -1 |
| Aloofness | -1 |
| Cruelty | -2 |

Cohort-Only Leadership Modifiers

| The Leader | Leadership mod. |
|--|-----------------|
| Has an animal companion | -2 |
| Recruits a cohort of different moreals | -1 |
| Caused the death of a cohort | -2* |

*Cumulative per cohort killed.

Follower-Only Leadership Modifiers

| The Leader | Leadership mod. |
|---|-----------------|
| Has a stronghold, base of operations, guildhouse, and so on | +2 |
| Moves around a lot | -1 |
| Caused the death of other followers | -1 |

Special Cohorts: With the DM's permission, a leader may seek out a special cohort who is not a member of the standard PC races (the common races).

Followers: A leader attracts followers whose morals are close to his own. These characters have gear appropriate to NPCs of their level. As the leader's Leadership rises, he can attract more followers. If his Leadership goes down, followers may desert. Replacing Cohorts and Followers: If a leader loses a cohort

or followers, he can generally replace them, according to his current Leadership score. It takes time (1d4 months) to recruit replacements. If the leader is to blame for the deaths of the cohort or followers, it takes extra time to replace them, up to a full year. Note that the leader also picks up a reputation of failure, which decreases his Leadership score.

5.2.26 Martial Weapon Proficiency

Benefit: The character makes attack rolls with the weapon normally. **Normal:** A character who uses a weapon without being proficient with it suffers a -4 penalty on attack rolls. The character can gain this feat multiple times. Each time the character takes the feat, it applies to a new weapon.

5.2.27 Mobility

Prerequisites: Dex 13+, Dodge.

Benefit: The character gets a +4 dodge bonus to Armor Class against attacks of opportunity caused when the character moves out of or within a threatened area. **Note:** A condition that makes the character lose the Dexterity bonus to Armor Class (if any) also makes the character lose dodge bonuses. Also, dodge bonuses stack with each other, unlike most types of bonuses.

5.2.28 Mounted Combat

Prerequisites: Any "Drive" Skill.

Benefit: Once per round when the character's mount/vehicle is hit in combat, the character may make a Drive check to negate the hit. The hit is negated if the character's Drive check is greater than the attack roll (essentially, the Drive check becomes the mount's Armor Class if it's higher than the mount's regular AC).

5.2.29 Multiattack

Prerequisites: Three or more natural weapons.

Benefit: The creature's secondary attacks with natural weapons suffer only a -2 penalty. **Normal:** Without this feat, the creature's secondary natural attacks suffer a -5 penalty.

5.2.30 Multidexterity

Prerequisites: Dex 15+, three or more arms.

Benefit: The creature ignores all penalties for using an off hand. **Normal:** Without this feat, a creature who uses an off hand suffers a -4 penalty to attack rolls, ability checks, and skill checks. A creature has one primary hand, and all the others are off hands; for example, a four-armed creature has one primary hand and three off hands. **Special:** This feat replaces the Ambidexterity feat for creatures with more than two arms.

5.2.31 Multiweapon Fighting

Prerequisites: Three or more hands.

Benefit: Penalties for fighting with multiple weapons are reduced by 2. **Normal:** A creature without this feat suffers a -6 penalty to attacks made with its primary hand and a -10 penalty to attacks made with its off hands. (It has one primary hand, and all the others are off hands.)

Special: This feat replaces the Two-Weapon Fighting feat for creatures with more than two arms. The Multidexterity feat further reduces penalties for off-hand attacks.

5.2.32 Point Blank Shot

Benefit: The character gets a +1 bonus to attack and damage rolls with ranged weapons at ranges of up to 30 feet.

5.2.33 Power Attack

Prerequisites: Str 13+.

Benefit: On the character's action, before making attack rolls for a round, the character may choose to subtract a number from all melee attack rolls and add the same number to all melee damage rolls. This number may not exceed the character's base attack bonus. The penalty on attacks and bonus on damage applies until the character's next action.

5.2.34 Precise Shot

Prerequisites: Point Blank Shot.

Benefit: The character can shoot or throw ranged weapons at an opponent engaged in melee without suffering the standard -4 penalty.

5.2.35 Quick Draw

Prerequisites: Base attack bonus +1 or higher.

Benefit: The character can draw a weapon as a free action instead of as a move-equivalent action.

5.2.36 Rapid Shot

Prerequisites: Point Blank Shot, Dex 13+.

Benefit: The character can get one extra attack per round with a ranged weapon. The attack is at the character's highest base attack bonus, but each attack (the extra one and the normal ones) suffers a -2 penalty. The character must use the full attack action to use this feat.

5.2.37 Run

Benefit: When running, the character moves five times normal speed instead of four times normal speed. If the character makes a running jump, increase the distance or height cleared by one-fourth, but not past the maximum.

5.2.38 Shot on the Run

Prerequisites: Point Blank Shot, Dex 13+, Dodge, Mobility.

Benefit: When using the attack action with a ranged weapon, the character can move both before and after the attack, provided that the character's total distance moved is not greater than the character's speed.

5.2.39 Simple Weapon Proficiency

Benefit: The character makes attack rolls with simple weapons normally. **Normal:** A character who uses a weapon without being proficient with it suffers a -4 penalty on attack rolls.

5.2.40 Skill Focus

Benefit: The character gets a +2 bonus on all skill checks with that skill. **Special:** The character can gain this feat multiple times. Its effects do not stack. Each time the character takes the feat, it applies to a new skill.

5.2.41 Spring Attack

Prerequisites: Dex 13+, Dodge, Mobility, base attack bonus +4 or

Benefit: When using the attack action with a melee weapon, the character can move both before and after the attack, provided that the character's total distance moved is not greater than the character's speed. Moving in this way does not provoke an attack of opportunity from the defender the character attacks. The character can't use this feat if the character is in heavy armor.

5.2.42 Stunning Fist

Prerequisites: Dex 13+, Improved Unarmed Strike, Wis 13+, base at

Benefit: Declare that the character is using the feat before making an attack roll (thus, a missed attack roll ruins the attempt). It forces a foe damaged by the character's unarmed attack to make a Fortitude saving throw (DC 10 + one-half the character's level + Wis modifier), in addition to dealing damage normally. If the defender fails his saving throw, he is stunned for 1 round (until just before the character's next action). A stunned character can't act and loses any Dexterity bonus to Armor Class. Attackers get a +2 bonus on attack rolls against a stunned opponent. The character may attempt a stunning attack once per day for every four levels attained, and no more than once per round.

5.2.43 Toughness

Benefit: The character gains +3 hit points. Special: A character may gain this feat multiple times.

5.2.44 Track

Benefit: To find tracks or to follow them for one mile requires a Wisdom check. The character must make another Wilderness Wisdom check every time the tracks become difficult to follow, such as when other tracks cross them or when the tracks backtrack and diverge. The character moves at half normal speed (or at normal speed with a -5 penalty on the check). The DC depends on the surface and the prevailing conditions:

| Surface | DC |
|-----------|----|
| ----- | -- |
| Very soft | 5 |
| Soft | 10 |
| Firm | 15 |
| Hard | 20 |

Very Soft Ground: Any surface (fresh snow, thick dust, wet mud) that holds deep, clear impressions of footprints.

Soft Ground: Any surface soft enough to yield to pressure, but firmer than wet mud or fresh snow, in which the creature leaves frequent but shallow footprints.

Firm Ground: Most normal outdoor surfaces (such as lawns, fields, woods, and the like) or exceptionally soft or dirty indoor surfaces (thick rugs, very dirty or dusty floors). The creature might leave some traces (broken branches, tufts of hair) but leaves only occasional or partial footprints.

Hard Ground: Any surface that doesn't hold footprints at all, such as bare rock or indoor floors. Most streambeds fall into this category, since any footprints left behind are obscured or washed away. The creature leaves only traces (scuff marks, displaced pebbles).

Condition DC Modifier

| Condition | DC Modifier |
|--|-------------|
| ----- | ----- |
| Every three creatures in the group being tracked | -1 |
| Size of creature or creatures being tracked:* | |
| Fine | +8 |
| Diminutive | +4 |
| Tiny | +2 |
| Small | +1 |
| Medium-size | 0 |
| Large | -1 |
| Huge | -2 |
| Gargantuan | -4 |

Colossal -8

Every 24 hours since the trail was made +1

Every hour of rain since the trail was made +1

Fresh snow cover since the trail was made +10

Poor visibility:**

Overcast or moonless night +6

Moonlight +3

Fog or precipitation +3

Tracked party hides trail (and moves at half speed) +5

*For a group of mixed sizes, apply only the modifier for the largest size category.

**Apply only the largest modifier from this category.

If the character fails a Wisdom check, the character can retry after 1 hour (outdoors) or 10 minutes (indoors) of searching.

Normal: A character without this feat can use the Tracking skill to find tracks, but can only follow tracks if the DC is 10 or less.

5.2.45 Trample

Prerequisites: Any "Drive" skill, Mounted Combat.

Benefit: When the character attempts to overrun an opponent while mounted, the target may not choose to avoid the character. If the character knocks down the target, the character's mount may make one hoof attack against the target, gaining the standard +4 bonus on attack rolls against prone targets.

5.2.46 Two-Weapon Fighting

Benefit: The character's penalties for fighting with two weapons are reduced by 2.

5.2.47 Weapon Finesse

Prerequisites: Proficient with weapon, base attack bonus +1 or higher.

Choose one light weapon. Alternatively, the character can choose a rapier, provided the character can use it in one hand, or a spiked chain, provided the character is at least Medium-size. Benefit: With the selected weapon, the character may use a Dexterity modifier instead of a Strength modifier on attack rolls. Since the character needs the second hand for balance, apply the armor check penalty of any shield worn to attack rolls. Special: The character can gain this feat multiple times. Each time the character takes the feat, it applies to a new weapon.

5.2.48 Weapon Focus

Prerequisites: Proficient with weapon, base attack bonus +1 or higher. (Each character can take this feat one time at 1st level regardless of their proficiencies or BAB. These requirements can be waived only one time and only at 1st level.)

The character can choose “unarmed strike” or “grapple” for the character’s weapon for purposes of this feat. The character can choose “ray,” in which case the character is especially good with rays. Benefit: The character adds +1 to all attack rolls the character makes using the selected weapon. Special: The character can gain this feat multiple times. Its effects do not stack. Each time the character takes the feat, it applies to a new weapon.

5.2.49 Weapon Specialization

Choose one type of weapon. The character is especially good at inflicting damage with this weapon. Benefit: The character adds +2 to all damage inflicted with the weapon the character has specialized with. If the weapon is a ranged weapon, the target must be within 30 feet. Special: The character can gain this feat multiple times. Its effects do not stack. Each time the character takes the feat, it applies to a new weapon.

5.2.50 Whirlwind Attack

Prerequisites: Int 13+, Expertise, Dex 13+, Dodge, Mobility, base

Benefit: When the character performs the full attack action, he or she can give up all regular attacks and instead make one melee attack at the full base attack bonus against each opponent within 5 feet.

Chapter 6

Equipment

This section explains material goods, the money system, and has a brief list of items that can be purchased.

6.1 Money

There are two major forms of currency. The first is the bank card. The second is hard currency. Although different planets may have different notes and coins, they all represent the same basic unit of currency: The Credit. Most vendors and good-standing establishments will accept both currency and cards. However, in other situations, such as buying a stolen item on the black market, you can only use cold, hard, cash.

A starting character could get $1d10 \times 200$ credits to use, although this is heavily dependent on the campaign. For instance, characters who are new NEO Terran recruits might get far less than Martian aristocrats working for RAM.

6.2 Weight and Gravity

Gravity isn't exactly the same everywhere. On larger, denser planets gravity is much stronger than on moons or asteroids. The following table gives the strength of gravity as compared to the surface of Earth. It also gives a multiplier to the amount of weight a character can carry on a given planet.

| Planet | Gravity (% of Earth) | Weight Multiplier |
|---------|-------------------------|----------------------|
| Mercury | 33% | $\times 3$ |
| Venus | 90% | $\times 1.1$ |
| Earth | 100% | $\times 1$ |
| Luna | 16% | $\times 6$ |
| Mars | 38% | $\times 2.5$ |

For other locations, such as asteroids, the figures can vary. For instance, on one particularly large asteroid, the gravity is 5% of Earth's. This means that a character can carry 20 times the weight that they can on Earth. This might make sense from a purely theoretical point of view, but with weight usually comes girth. It is up to the GM to decide if 20 times a character's weight allowance is simply too much to handle.

6.3 Weapons

There are two types of weapons in 2456: melee and ranged. While melee weapons have their uses, ranged weapons have become much more preferred. Note that many of the standard weapons from D20 can be used. They aren't mentioned here, since you presumably already know about them.

6.3.1 Melee Weapons

Melee weapons are used at close range and make direct contact with their target. These weapons are used most often when in space. While ranged weapons can hit their target from meters away, they can also rupture the hull of a typical rocket, sending everyone involved headfirst into the void of space.

Melee weapons have advanced a lot in the past few hundred years. They are smarter, lighter, and sturdier. They still have the additional advantage of not needing to be reloaded.

Here is some information about some melee weapons:

| Weapon | Cost (cr.) | Wgt. (lbs.) | Size | Dmg. | Crit. |
|------------|------------|-------------|---------------------------|------|----------|
| Mono Knife | 200 | 1 | 6"-8" handle, 4"-6" blade | 1d6 | 19-20 ×3 |
| Mono Sword | 2000 | 4 | 6"-8" handle, 24" blade | 1d10 | 19-20 ×2 |
| Polearm | 100 | 8 | 6' long | 1d10 | ×2 |

6.3.2 Ranged Weapons

Ranged weapons have also advanced in the last few centuries. This advancement has made ranged weapons very popular, but has also been a reason for caution. All but the best marksmen avoid using them aboard spacegoing vessels or on asteroid bases.

There are two main kinds of ranged weapons. The first is the missile weapon. These are plasma launchers, rocket launchers, and good ol' hand grenades. The other type is the gun. There are laser guns, needle guns, sonics guns, among other types.

Ranged weapons have a rate of fire. This is the number of times per round that the weapon can be discharged. This includes reloading time. For instance, if Jock's laser pistol clip is empty, it's assumed that it takes him six seconds (one round) to drop his clip, reload the weapon, and fire again.

Here are a few ranged weapons:

| Weapon | Cost (cr.) | Wgt. (lbs.) | Size | Dmg. | Rng. Incr. (ft.) | Rt. of Fire | Shts. | Crit. |
|-----------------------|------------|-------------|-------------|-----------------|-------------------------|-------------|-------|-------------|
| Laser Pistol | 300 | 1 | 9" long | 1d8 | 200 | 3/2 | 7 | ×2 |
| - Capacitor Clip | 25 | 4 oz. | 3" x2" x1" | | | | | |
| Laser Rifle | 600 | 5 | 36" long | 1d12 | 750 | 1 | 14 | 19-20 ×2 |
| - Capacitor Clip | 50 | 4 oz. | 6" x2" x1" | | | | | |
| Rocket Pistol | 400 | 3 | 6" long | 1d10 | 100 | 2 | 5 | ×2 |
| - Stupid Ammo Clip † | 20 | 1 | 5" x2" x1" | | | | | |
| - Smart Ammo Clip | 50 | 1 | 5" x2" x1" | | | | | |
| - Chaff Pack* | 50 | 2 | 2" shell | | | | 5 | |
| - Aerosol Mist Pack ◊ | 50 | 2 | 2" shell | | | | 5 | |
| Rocket Rifle | 500 | 6 | 24" long | 2d8 | 500 | 1 | 10 | ×2 |
| - Stupid Ammo Clip † | 40 | 2 | 10" x2" x1" | | | | | |
| - Smart Ammo Clip | 100 | 2 | 10" x2" x1" | | | | | |
| - Chaff Pack* | 50 | 2 | 2" shell | | | | 5 | |
| - Aerosol Mist Pack ◊ | 50 | 2 | 2" shell | | | | 5 | |
| Needle Gun | 200 | 2 | 18" long | 1d3 | 75 | 3 | 20 | ×3 |
| - Needle Ammo Clip | 10 | 1 | 4" x3" x1" | | | | | |
| Bolt Gun | 250 | 2 | 18" long | 1d4 | 100 | 2 | 10 | ×3 |
| - Bolt Ammo Clip | 10 | 2 | 4" x3" x1" | | | | | |
| Heat Gun | 400 | 2 | 6" long | 2d6 | 15 | 1 | 7 | ×2 |
| - Plasma Tank | 80 | 1 | 5" x2" x2" | | | | | |
| Microwave Gun | 350 | 2 | 4" long | 1d10 | 100 | 2 | 10 | ×3 |
| Sonic Stunner | 300 | 2 | 6" x3" x1" | Spc.‡ | 10 | 1 | 14 | - |
| Desert Runner | | | 12" wide | | | | | 19-20 |
| Crossbow | 100 | 4 | 18" long | | 50 | 1 | 10 | ×2 |
| - Bolt Clip | 5 | 2 | 4" x3" x1" | 1d4 | | | | |
| - Shell Clip | 10 | 4 | 4" x3" x1" | 1d8 | | | | |
| Stun Grenade | 50 | 1 | 4" dia. | Stun 15 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Dazzle Grenade | 50 | 1 | 4" dia. | Shock 15 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Gas Grenade | 50 | 1 | 4" dia. | Gas 20 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Explosive Grenade | 50 | 1 | 4" dia. | 4d10 10 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Chaff Grenade * | 50 | 1 | 4" dia. | 1d4 25 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Aerosol Mist Grnd. ◊ | 50 | 1 | 4" dia. | 1d4 10 ft. | STR × $\frac{50}{9}$ | 1 | 1 | - |
| Grenade Launcher | 500 | 3 | 36" long | | 50 | 1/2 | 1 | - |
| Rocket Launcher | 1000 | 30 | 72" long | 5d10 | 250 | 1/2 | 1 | - |
| - Rocket | 100 | 2 | 6" long | 20 ft. | | | | |
| Plasma Thrower | 800 | 35 | 72" long | 4d10 | 100 | 1/2 | 1 | - |
| - Plasma Cartridge | 80 | 2 | 10" x5" x5" | 25 ft. | | | | |

†Shooter takes a -2 modifier to Attack Bonus.

‡On a successful hit, the target must make a Save vs. Paralysis DC 15 or fall unconscious for 1d8+2 rounds. When they awake, they are disabled (they act like they have 0 hit points) for 1d4 rounds.

* On detonation, a 25-foot radius is filled with tiny metal flakes. In calm air or vacuum, they disperse in 10 minutes. In wind or other circumstances, they can disperse in as little as one minute. During the time that the chaff field remains, the particles provide protection from smart shells and radar beams. Any shells that enter the field will detonate upon entering it. Radar systems whose targets lie inside the chaff field will lock onto the chaff instead. Any creatures within the 25-foot radius of the field takes 1d4 damage upon detonation and must make a Save vs. Explosion or be blinded for 1d4 minutes.

◇ On detonation, a 100-foot radius is filled with a spray of mist. In calm air, the mist disperses in 10 minutes. In wind or other circumstances, it can disperse in as little as one minute. This mist diffuses any laser energy passing through it. The laser is rendered harmless and does no damage. Any creatures within 10 feet of the explosion takes 1d4 damage.

6.3.3 Improvised Weapons

An adventurer may use things that aren't normally considered weapons to inflict damage on someone or something. These things are called Improvised Weapons. A character takes a -4 penalty to their attack roll when wielding or throwing an improvised weapon. (See the feat "Improved Improvised Weapon" to see how this penalty can be avoided.)

| Size | Examples | Damage |
|------------|---|--------|
| Diminutive | ashtray, significant paperweight | 1 |
| Tiny | fist-sized rock, mug, screwdriver, flashlight, wrench | 1d2 |
| Small | bottle, drill, fire extinguisher, flower pot, helmet, metal panel, vase | 1d3 |
| Medium | bar stool, brick, briefcase, trash can lid, nail gun | 1d4 |
| Large | empty trash can, guitar, computer monitor, office chair, tire iron | 1d6 |
| Huge | 10-foot ladder, oil barrel, bench, sawhorse | 1d8 |
| Gargantuan | desk, dumpster, file cabinet, large furniture, vending machine | 2d6 |
| Colossal | 4-person vehicle, traffic light, telephone pole | 2d8 |

6.4 Armor

An adventurer will also need armor. The evolution of armor has necessarily kept up with that of weaponry. So, you'll find some information about armor below.

| Weapon | Cost (cr.) | Weight (lbs.) | AC Bonus |
|------------------------|-----------------------|--------------------------|---------------------|
| Smart Clothes | 1,000 | 30 | +2 |
| - Replacement Tunic | 500 | | |
| - Replacement Pants | 300 | | |
| - Replacement Gloves | 100 | | |
| - Replacement Boots | 100 | | |
| - Spacesuit Backup | 200 | 10 | |
| - Utility Belt | 200 | 5 | |
| - Power Pack | 25 | 1 | |
| - ECM Package | 50 | 8 oz. | |
| - Stealth Unit | 25 | 8 oz. | |
| - Security Pack | 35 | 5 | |
| - Communications Pack | 50 | 10 | |
| Space Suit (12 hr.) | 200 | 25 | +1 |
| Space Suit (24 hr.) | 300 | 25 | +1 |
| Space Suit (72 hr.) | 400 | 25 | +1 |
| Space Suit (168 hr.) | 500 | 25 | +1 |
| Light Body Armor | 250 | 15 | +2 |
| - Replacement Torso | 75 | | |
| - Replacement Arm | 30 | | |
| - Replacement Leg | 40 | | |
| - Replacement Helmet | 25 | | |
| Medium Body Armor | 600 | 25 | +3 |
| - Replacement Torso | 200 | | |
| - Replacement Arm | 70 | | |
| - Replacement Leg | 80 | | |
| - Replacement Helmet | 110 | | |
| Heavy Body Armor | 1,500 | 35 | +4 |
| - Replacement Torso | 450 | | |
| - Replacement Arm | 180 | | |
| - Replacement Leg | 240 | | |
| - Replacement Helmet | 210 | | |
| Battle Armor (heavy) | 2,500 | 75 | +6 |
| Battle Armor w/ Fields | 3,000 | 80 | +8 |

6.5 Equipment Quality

The statistics and prices listed in this chapter have been for *standard* items. Just as there are different brands of equipment in real life, there are various types of equipment in 2456. Equipment manufactured on Mercury, for instance, is generally of better quality than the same type of item made on Mars. The reasons for these differences are varied.

The table below outlines the difference in quality for five different types of

equipment. The price multipliers are multiplied by the price of a standard item (those items listed earlier in this chapter) to get the total value of the item. As an example, a standard laser pistol costs 300 credits, while a Venusian laser pistol costs 2,400 credits.

All Ammunition and refills are universal for a particular type of item. For instance, that Venusian laser pistol takes the same ammunition and clip as a Mercurian laser pistol.

| Origin | Price Multiplier | AC Bonus | Attack/ Damage Bonus |
|---------------|-----------------------------|-----------------|---------------------------------|
| Standard | 1 | 0 | 0 |
| Martian | 2 | +1 | +1 |
| Venusian | 8 | +2 | +2 |
| Mercurian | 18 | +3 | +3 |
| Lunarian | 32 | +4 | +4 |

Chapter 7

Rocket Ships

Rocket ships are to 2456 what naval ships were to the 18th century and what airplanes were to the 20th century. They provide interplanetary transportation, defense, offense, and even recreation. They carry flags, cargo, people, weapons, and pride.

Although many people in the 2456 universe have little to do with rocket ships, it is an exciting part of the setting that few campaigns will do without. Provided below is some information about parts of the ship, ship design and financing, space travel, ship docking, and ship combat.

7.1 Rocket Systems

Rocket ships are made of decks: concentric discs stacked upon each other. While a rocket is on the ground, the engines are at the bottom, while the control deck is at the top. So, the “bottom” of the decks are toward the ground. While in flight, the rocket engine provides acceleration toward the “top” of the ship. So, again, there’s a gravity-like force that keeps this illusion of the “bottom” of the deck. A typical rocket ship has seven systems, which are described below.

Sensors/Communications This system is a combination of sensory equipment - which tells the user where the ship is going (and what’s coming at it) - and communications equipment - radio equipment that’s used to send and receive messages. This system also includes computer equipment on larger vessels.

Controls This system allows the user to steer the ship.

Life Support This includes air filtration, water and air recycling, environmental control, and sometimes the equipment to grow food for long journeys.

Fuel This not only includes the physical fuel that is consumed by the engines, but it also includes the equipment to store the fuel. The fuel must also be pumped and regulated by this system.

Engine This system is a large and complicated system that moves the ship. It’s almost always at the bottom (rear) of the rocket and it is usually complicated enough to require at least one person to operate it.

Weapons Shipboard weapons are very large compared to their handheld cousins. Each weapon typically requires one person at it to use. They are varied in design, but they all have one common purpose: to destroy other rocket ships.

Hull The hull is what keeps everything from being sucked away into space. It is required for every other system to operate. One hole in the hull isn’t enough to destroy the vessel, as it was in the 20th century. The hull is usually smart enough to seal itself or close off any damaged decks to save the rest of the ship. This system also includes the areas that are not used by the other systems: cargo space or living quarters, for example.

7.2 Types of Rockets

There are many types of rockets. They vary greatly in size, purpose, and construction. While they all have the same basic systems and some common design (decks, engines at the bottom), there are many varieties of rocket ship. Here are some basic designations with short descriptions.

7.2.1 Fighter

Fighters are small, light, fast rockets that typically carry one or two people. Some are designed to be flown in the atmospheres of specific planets. Others are designed to be flown in the vacuum of space. Regardless of where they were designed to be flown, they cannot fly in other atmospheres.

Fighters are small enough to be carried in the cargo holds of other ships, typically Battlers. Their short ranges make this necessary, as fighters cannot make interplanetary flights without something to carry them.

7.2.2 Cruiser

Cruisers present perhaps the best option for gameplay. They are large enough to hold a crew of 6 to 20 people, but most require only 2 or 3. Interplanetary travel is possible with cruisers, made possible by their larger engines, larger fuel supplies, and (perhaps most importantly) their crew accommodations. While typically not five-star, cruisers can quarter their crew comfortably enough to allow trips of a few weeks or more.

7.2.3 Asterover

Asterovers are ugly, bulky vessels with the capability to travel from a planet to orbit around that same planet, then back again. They can travel within only one planet's orbit. So, intraplanetary travel can be done with an asterover, but not interplanetary travel.

7.2.4 Battler

Battlers are huge. There is nothing to compare them to from previous centuries. They can be miles in length and carry crews that sometimes number in the thousands. Though they are designed specifically for interplanetary or deep-space flight, they must occasionally contact the atmosphere of a planet to gather necessary materials for their fusion engines.

A deep-space war fleet consists of at least one battler surrounded by a dozen cruisers of different sizes. The battlers can carry fighters that complement the cruisers well. Since fighters are limited to where they can fly, having multiple battlers with different types of fighters can be a very good idea.

7.2.5 Transport

Transports seem little more than giant cargo holds with tiny cockpits and engines strapped to them. They sometimes have no armament. If they do have weaponry, it is small and utilitarian. The crew is small, usually just two people.

7.2.6 Freighter

Freighters are ships that fall on the spectrum somewhere between transports and cruisers. They are designed to carry lots of cargo, but they also are designed for defense (or offense, as many pirates use freighters). They carry a somewhat larger crew (Perhaps the size of a PC party?) for support and defense. Freighters offer another good opportunity for gameplay.

7.3 Ship Construction

Now, we'll go into ship construction. This isn't about *how* the ship is constructed, but it's about *what* goes into the ship. This can be useful for at least two reasons.

Firstly, GMs can construct ships. While most, if not all, GMs enjoy creating NPCs and putting some thought and character into their creation, ships can give an even bigger thrill. A GM can create not only the antagonistic characters that are tailing the adventuring player party, but the GM can also take as much time to create their vehicle.

Secondly, the player party can have fun creating their own ship. Granted, a first-level party will rarely be able to walk to the shipyard and order a new vessel to be constructed with custom specifications. They can, however, understand if a used light cruiser that they intend to buy is a good deal or not. Later in the game, of course, they can go back to the shipyard and create that custom ship.

So, ship construction is important. Let's go step by step.

7.3.1 Weight and Dimensions

This is where it all begins. We must first ask, "What kind of ship are we making, and how big is it?" While the type of ship isn't necessary to know at the beginning, the weight is crucial, and it narrows down the type of ship. The weight of the ship is expressed in multiples of 5 Earth tons. Some typical sizes of ships are expressed below.

| Ship Type | Weight (tons) |
|-----------------|---------------|
| Fighter | 10-20 |
| Asterover | 20-30 |
| Scout Cruiser | 20-50 |
| Medium Cruiser | 55-200 |
| Heavy Cruiser | 205-500 |
| Light Freighter | 30-50 |
| Heavy Freighter | 55-80 |
| Light Transport | 80-200 |
| Heavy Transport | 205-350 |
| Space Liner | 500-800 |
| Battler | 1000-5000 |

The length of a rocket is determined by multiplying the weight of the rocket by 2. That is: $l = wt. * \frac{2 \text{ ft.}}{1 \text{ ton}}$. The width of the rocket is found by dividing the length by 4. So, $w = \frac{l}{4} = wt. * \frac{1 \text{ ft.}}{2 \text{ tons}}$. So, a 100-ton ship is 200 ft. long and 50 ft. wide.

7.3.2 Cargo

Cargo space is a function of the overall weight of the ship. Half of the ships weight can be used for cargo space. So, a 100-ton vessel has 50 tons of usable cargo space. Now, cargo space must be shared with weapons. One weapon space takes up 10 tons of cargo space.

7.3.3 Speed and Maneuverability

Ships' performance characteristics can vary. This variation can be described with speed.

Maneuvers are the smallest action that a ship can take. These include *movement* and *turning*.

Speed is defined as the number of *maneuvers* that a ship can make per round.

Some suggested speed ratings for ships are listed below by the ship's weight. Note that these are suggested ratings. Although most all ships that would be encountered follow the table below, there are many that do not (both faster and slower). Also listed are reactions bonuses and AC Bonuses related to a ship's speed.

| Weight (tons.) | Speed | Initiative Bonus | AC Bonus |
|---------------------------|--------------|-----------------------------|---------------------|
| 10-15 | 5 | +4 | +4 |
| 20-45 | 4 | +2 | +2 |
| 50-100 | 3 | 0 | 0 |
| 105-200 | 2 | -2 | +1 |
| 205-500 | 1 | -4 | +2 |
| 505 and up | 1 | -6 | +3 or more |

The initiative bonus is used when a battle begins, and is a rating of how responsive the ship is to the controls. So, a faster ship will probably take its turn before a slower ship, all else being equal.

The AC bonus is also used in battle. It stacks with the ship's natural AC. Both of these statistics will be discussed in more detail later.

7.3.4 System Hit Points

Each ship system has a number of hit points. These systems can be damaged independently of each other. The number of hit points that a system has is a multiple of the weight (in tons) of the vessel. Some information and notes about each of these systems are listed below.

| System | Hit Points | Notes |
|----------------------|-----------------------|--|
| Hull | wt. \times 4 | At 50% HP, the ship loses half of its speed, rounded down, to a minimum of 1. At 0 HP, the ship falls apart. Anyone on board without protection for space will die immediately. |
| Sensors and Comm. | wt. \times 1 | When reduced to 0 HP, no sensor use or ship-to-ship communications are possible. The ship is blind. Everyone on board gets -5 modifier to all ship-to-ship attack rolls, and the ship gets a -3 AC modifier. When the system is repaired, these modifiers aren't in effect any more. |
| Controls | wt. \times 1 | When reduced to 0 HP, the ship can't maneuver. It travels in a straight line a maximum of 2 spaces per round (or less, if the ship's speed is less). If the ship is in an atmosphere, there's a 50% chance that the ship will begin to fall like a rock. |

| | | |
|--------------|----------------|--|
| Life Support | wt. \times 2 | At 0 HP, there's no heat, air purification, or radiation shielding on the ship. Anyone on board that does not have a space suit (or equivalent protection) must make a Save vs. Suffocation. |
| Fuel | wt. \times 3 | At 0 HP, the engine runs out of fuel. It drifts randomly (maximum 2 spaces per round, roll 1d6 for direction). If in atmosphere, the ship will crash in 1d4 rounds. |
| Engine | wt. \times 3 | At 50% HP, the ship loses one point of speed, down to a minimum of 1. At 25% HP, the ship loses 3 points of speed from maximum, down to a minimum of 1. At 0 HP, the engine is dead. The ship drifts randomly (maximum 2 spaces per round, roll 1d6 for direction). If in atmosphere, the ship will crash in 1d4 rounds. |
| Weapons | 10 | When a weapon is reduced to 0 HP, it is destroyed. If that weapon was being manned, the gunner must make a Save vs. Explosion or take 1d10 points of damage from the exploding weapon. |

7.3.5 Armor

A ship has an armor class as a whole, just like characters in D20. This involves more than just the physical armor on the hull. A ship's electronic jamming system, radar-elusive paint, and physical armor all contribute to the base AC. Speed and Maneuverability also contribute to the ship's AC, but the bonus granted by speed is listed above in Section 7.3.3.

Here are some suggested AC values for different vessels. These are added to the base armor class of 10, as for any D20 character. Again, these are suggested values and they can be modified to fit the ship. The cost value will be discussed in section 7.4.2.

| AC | Name | Cost | Notes |
|-----|------------------|------|---|
| +0 | None | 0% | Some ships just don't have extra armor. This would be rare, but would be most common on small, cheap vessels. |
| +2 | Civilian | 20% | This is the most basic armor that can be added. It includes basic physical armor. It's used on many interplanetary vessels that don't expect to see combat. Examples might be luxury space liners, asteroverters, and transports. |
| +4 | Basic Military | 40% | This armor is used on many smaller cruisers and fighters. It consists of basic physical armor as well as basic electronic jamming. |
| +6 | Military | 60% | This is typically found on cruisers of over 100 tons. It includes basic electronic jamming as well as upgraded physical armor. |
| +8 | Maximum Military | 80% | This can be found on smaller cruisers as well as other smaller vessels. It only uses basic physical armor (which allows it to be used on smaller vessels), but it uses upgraded electronic jamming. |
| +10 | Battler Class | 100% | This armor is named so because it is usually found on battlers. It consists of upgraded physical armor and upgraded electronic jamming. |

7.3.6 Weapons

There are 8 basic weapons than can be loaded onto a rocket ship. They are listed below, as well as their ranges, damage, and other statistics. These statistics and the use of weapons will be discussed in Section 7.6.

Laser weapons are advancements of the coherent light-emitting devices invented in the 20th century. They come in two varieties: *beam* and *pumped*. Beam lasers are able to be fired over a period of time (sweeping out an area), making them easier to aim. Pumped lasers fire single rounds almost instantly, making them harder to aim and causing more damage than beam lasers. Both types of lasers require adequate amounts of the ship's power to charge.

Gyrocannons fire explosive shells with a short range. Although they aren't as

potent as other weapons, their price, reload capacity, and reliability make them very popular.

Missile weapons are similar to their cousins from the 20th century in that they are warheads (either conventional or nuclear) that are propelled by rockets. However, even though rockets are somewhat self-guided, they aren't completely effective. One reason is that ships can defend against missiles with lasers. Another reason is that rocket ships are very heavily shielded against explosions and radiation. So, missiles are very smart, but still require skill and persistence.

There are three types of missile mounts on a rocket: *Light*, *Heavy*, and *Kinetic*. Kinetic missile mounts (or *K. cannons*) are very large weapons that can typically fit only on larger vessels.

Acceleration Guns are weapons that launch projectiles at other rockets. They use a magnetic field to propel a round at tremendous speed. The rounds are sometimes composed of rock or metal, but their results are invariably the same: gaping holes in the side of another vessel.

One weapon per ship may be controlled by the pilot by installing it into a particular cell on the rocket. It can be used as normal by any other person on the ship, as well. However, a weapon that has been installed in this cell is linked to the control system, so that the pilot can attack with it from the bridge. Note that only one person may fire any weapon per turn, no matter where it's installed.

A ship weapon has the same range restrictions as a missile weapon in D20. That is, there is no range penalty within one range increment, and there's a -2 attack penalty for each *full* range increment of distance. However, there's no maximum range for a rocket's weapon. A beam laser, for instance, can theoretically hit a target thousands of miles away. The chances of it hitting a target at that range, however, is very slim.

| Type | Price (cr.) | Rng. Inc. (ft.) | Size | Shots | Dmg. | Hit Bonus | Reload Cost (cr.) | Reload Weight (lbs.) |
|--------------------------------|----------------|-----------------------|------|----------|------|--------------|-------------------------|----------------------------|
| Beam Laser | 1,000 | 3,000 | 1 | ∞ | 2d8 | +1 | - | - |
| Pumped Laser | 1,500 | 2,000 | 2 | ∞ | 4d8 | 0 | - | - |
| Gyrocannon | 2,000 | 2,000 | 1 | 50 | 3d6 | +1 | 100 | 400 |
| Missile Mount | 2,000 | 3,000 | 1 | 4 | 3d30 | 0 | 300 | 400 |
| Heavy Missile Mount | 3,000 | 3,000 | 2 | 4 | 4d30 | -1 | 900 | 1200 |
| K. Cannon | 10,000 | 2,000 | 5 | 6 | 7d30 | -3 | 1500 | 4000 |
| Light Ac- celeration Gun | 2,500 | 1,000 | 1 | 15 | 6d6 | -1 | 200 | 1500 |
| Heavy Ac- celeration Gun | 5,000 | 1,000 | 2 | 10 | 9d6 | -2 | 400 | 3000 |

7.4 Pricing and Sales

Rocket ships are sold and traded just like the automobiles of the 20th century. You can buy them new in a showroom, custom-built from an assembly line, or in a used ship yard. Let's begin by laying out pricing and options on a rocket ship.

7.4.1 Base Price

The base price of a ship is 10,000 credits per ton of weight. That is: $P = W * \frac{10,000\text{cr}}{\text{ton}}$. Now, that's the price for a ship in excellent condition. A ship that has taken damage or is in ill-repair will probably cost less. To determine the exact condition of an unknown ship that's in poor repair, you can roll a percentile for each ship system. For each roll, that particular system has a number of current hit points equal to your rolled percent of its maximum hit points. That is, if a ship has 90 maximum engine hit points and a 50% is rolled for the engines, that ship has 45 current engine hit points.

7.4.2 Armor

In the table in section 7.3.5, we mentioned a cost value for each armor type. This value is added on to the base price of the ship before adding any other costs.

For example, if a 30-ton vessel had Basic Military Armor (AC +4), then its armor cost would be 40% of its base cost (40% of 300,000 credits is 120,000cr.) That makes this vessel worth 420,000 credits!

7.4.3 Weapons

The cost of weapons is added on after armor. Since weapons are modular, many new ships don't even have any. Each weapon takes up a number of weapon spaces. A weapon space is the same as 5 tons of cargo. Technically, empty weapon spaces are used to hold cargo.

For example, if we have a 30-ton rocket, it can hold 15 tons of cargo. So, we can trade 10 tons of cargo space for two weapon spaces, leaving 5 tons of cargo room. Now, a beam laser takes up 1 weapon space, so we can accommodate 2 beam lasers.

7.4.4 Financing

Just like in the 20th century, few people can afford to buy a vehicle with straight currency. It's possible to finance the purchase of a ship, and this is a fairly commonplace event. Down payments of 20% to 30% are usually required, with the balance paid in monthly installments over (typically) 5 years. Interest (typically 10% to 20%) is charged on the principle as soon as the ship is purchased.

For example, suppose a character wanted to buy a 30-ton vessel for 300,000 credits. If they can afford a down payment of 75,000 credits (25%), the principle is then 225,000 credits. Now, if the interest is 10%, their balance is 247,500 credits. Over 5 years, that comes out to 4,125 credits per month. Of course, late fees may apply.

7.5 Space Travel

Aquiring a ship is just the first step. What remains are docking fees, fuel and maintenance, navigation, repairs, and many other everyday problems.

7.5.1 Ports and Fees

While many ships spent most of their time flying, every ship has to dock at some time. Spaceports can be classified in one of three ratings, according to size:

Class A spaceports typically have repair facilities, construction yards, hotels, and possibly cities nearby.

Class B spaceports have repair facilities with replacement parts on hand (parts can be between 50% and 75% available. That is, roll a percentile for each required part. If the port has a 60% part availability, the roll must be 60 or under. If it is above 60, then the part must be ordered, and it will take some time to be delivered.)

Class C spaceports usually have little more than a radio building and a few hangars. What makes a Class C spaceport differ from, say, an empty field, is the surface of the launch pad that is specially coated to withstand the force a rocket's fusion engine.

Spaceports usually charge fees for docking rocket ships. The fees depend on the size and quality of the facility, the area that it's in, and the proximity of other ports. In other words, it can vary greatly. Docking at a Class C spaceport might cost as little as 50cr per day. Docking, security, and taxes at a nicer spaceport might cost as much as 200cr per day.

7.5.2 Fuel

There's been one constant in the universe for the last few hundred years: the need to buy fuel. Rocket fuel is not cheap. It costs approximately 20cr per hit point of fuel. This can vary for the same reasons that docking fees vary, but it doesn't vary as much.

7.5.3 Repairs and Supplies

Rocket ships aren't indestructible. They often need to be repaired. Rocket system repairs can be done by a qualified engineer (one that has the appropriate skills). See the appropriate skills for rules on this.

However, it isn't always possible (or reasonable) to repair a ship system. Most systems are modular, so replacement parts can be purchased. The costs of these modules are listed below. (Weapons prices are listed in section 7.3.6.)

| Sensor System | Cost (cr.) |
|---------------------|---------------|
| Sensor System | 4,000-6,000 |
| Commo. System | 4,000-6,000 |
| Life Support System | 7,000-9,000 |
| Fuel System | 8,000-10,000 |
| Nuclear Engine | 20,000-40,000 |

Complete replacement of a rocket system takes 1d6+4 hours. A trained engineer can be hired for around 50cr per hour. Hulls can't be replaced, but they can be repaired by a professional. A professional can fix 1 hit point of hull damage per hour, at a rate of about 100cr per hour. Again, these rates can go up or down, depending on the situation.

7.5.4 Navigation

To explain briefly, rockets work in the following way. They take off vertically, pushing away from the surface on which they were docked. They power most of the way to their destination. When they are very close to landing, they flip about and thrust in the reverse direction. (Yes, I know this isn't physically

realistic, but it makes things more fun.) They land tail-first. When in space, they can dock without landing, but they must be moored. A rocket's engine is supplemented by control thrusters placed about its hull. These are used for steering and for docking purposes.

When a ship is in an atmosphere, it can move 1,000mph per point of speed that it has. While rockets typically have large fins on them, they're meant for movement in an atmosphere. The fins have no effect on the rocket's control while in space. A ship burns 1hp of fuel per hour per 1,000mph of speed.

7.6 Space Combat

Space combat is similar to ranged combat. However, there are a number of rules that must be applied. We'll discuss the basics of ship combat.

Initiative is rolled per rocket ship. The initiative modifier of each ship is used. There are no AC penalties for being "flat-footed." For each ship's turn, every character on board can make their actions in any order. At the beginning of each ship's turn, however, a "pilot" must be designated. This is the only character that can control that ship until a new pilot is designated. Thus, only one character may control a ship per turn.

Each character may make a regular D20 turn. However, since all turns for the occupants of a ship happen together (in terms of initiative), they may happen in any order. Thus, a crewman may move to a weapon, a pilot may steer the ship, then the same crewman may fire the weapon.

Refocusing is not allowed for individuals, but only for entire ships. Readied actions may be used by individuals.

7.6.1 Actions

The actions that a character may make, in addition to the standard actions from D20, are explained below.

Movement can be made only by the pilot. Movements are a move-equivalent action. Each hex grid that a ship moves consumes one speed point. Each turn of 60 degrees also uses one speed point. The pilot can use no more speed points per turn than their ship has.

Attacks can be made by anyone. This is a standard action. A pilot can only use a weapon that has specifically been designated to be controlled by the pilot. (See section 7.3.6.) A character may only fire one weapon per round, and they may only fire one time per round. Before an attack roll is made, the player must declare what they are aiming at. See section 7.6.2 for information on aiming. Then, a normal D20 attack is rolled, using the offensive character's ranged attack bonus (minus any aiming penalties) and the defending ship's AC. Then damage is rolled normally, and the damage is applied to whatever was aimed at.

Reloading a Weapon is a full-round action. It takes time to retrieve the ammunition, load it, then man the weapon again.

Jury Rigging a system is a full-round action. The character must already be in position to make the repairs at the start of the round.

Moving On Ship is a move-equivalent action when the movement is only on one deck or from a deck to another adjacent deck. If the movement is more than a deck away, then it is a full-round action. The traversal of one deck by ladder is equivalent to a 20-foot movement.

Assisting another character is a full-round action. The assisting character must be in position to help at the beginning of the round. If the character helps a gunner, the gunner gets a +1 attack bonus. If the character helps someone making a skill check, the character making the check gets a +1 to their skill check rolls. This bonus cannot apply to piloting checks of any kind, but can apply to navigation or communications (any non-piloting check).

7.6.2 Aiming

A character may aim at another vessel as a whole, or they may aim at a particular system on that vessel. (A weapon may aim directly at a creature that is not onboard a ship, thus doing 10 times the amount of damage rolled.)

If a character aims at a ship as a whole, then 1d12 must be rolled if a hit is scored. The result of that roll determines where the shot was aimed.

If a character is in a section that is damaged, they must make a save vs. explosion or suffer an explosion damage of 1d10 HP.

| 1d12 Roll | Ship System Hit |
|-----------|------------------|
| 1 | Sensors / Commo. |
| 2 | Controls |
| 3 | Life Support |
| 4-5 | Fuel |
| 6-7 | Engine |
| 8 | Weapon |
| 9-12 | Hull |

If a weapon is aimed at, then the weapon that is hit is determined randomly. If a character chooses to aim at a specific system (a “called shot”), the following attack modifiers are applied:

| Ship System | Attack Modifier |
|--------------------|------------------------|
| Sensors / Commo. | -6 |
| Controls | -6 |
| Life Support | -4 |
| Fuel | -3 |
| Engine | -3 |
| Any Weapon | -3 |
| Specific Weapon | -6 |
| Hull | -1 |

Index

- abilities, 2
- AC, 65
- AC bonus, 63
- acceleration gun, 68
- acceleration guns, 67
- acrobatics, 22
- aerosol mist grenade, 54
- aiming, 72
- aircraft, 30
- alertness, 38
- ambidexterity, 38
- animal empathy, 23
- animals, 27
- armor, 55, 65, 68
- armor proficiency, 38
- assist, 72
- asterover, 61, 63
- astrogation, 23
- astronomy, 23
- atmosphere, 5, 71
- attacks, 71

- BAB, 20
- bank card, 52
- base attack bonus, 20
- base price, 68
- battle armor, 56
- battle tactics, 23
- battler, 61, 63
- beam laser, 68
- blind fight, 39
- body armor, 56
- bolt gun, 54
- bull rush, 41
- bypass security, 23

- called shot, 72

- careers, 3, 16
- cargo, 63
- chaff grenade, 54
- charisma, 3
- class A spaceports, 69
- class B spaceports, 69
- class C spaceports, 69
- cleave, 39, 40
- climb, 24
- cohorts, 43
- cold, 6
- combat, 71
- communication, 60, 64
- communications, 70
- communications operation, 24
- companions, 42
- computer programming, 31
- computers, 31, 32
- constitution, 2
- controls, 60, 64
- convince, 26
- credits, 52
- critical, 41
- critical wounds, 34
- crossbow, 54
- cruiser, 61, 63
- cryptography, 24
- currency, 52

- dazzle grenade, 54
- Delphs, 11
- demolitions, 24
- desert runner crossbow, 54
- Desert Runners, 12
- design engineering, 24
- dexterity, 2
- diagnose, 25

- disarm, 41
- disease, 35
- disguise, 25
- distract, 25
- dodge, 39
- drive groundcar, 25
- drive heavy ground vehicle, 25
- drive jetcar, 26
- drive motorcycle, 26

- ECM, 56
- electrical shock, 5
- electrical systems, 32
- endurance, 39
- engine, 60, 65
- engineers, 18
- engines, 33
- equipment, 6, 56
- equipment quality, 56
- etiquette, 26
- exotic weapon, 40
- expertise, 40
- explosion / plasma, 5
- explosive grenade, 54
- extreme heat / cold, 6

- fall, 5
- far shot, 40
- fast talk / convince, 26
- feats, 6, 38
- fees, 69
- fighter, 61, 63
- financing, 69
- first aid, 26
- flyby attack, 40
- followers, 42
- freighter, 62
- fuel, 60, 65, 70
- fuel system, 70

- gas, 5
- gas grenade, 54
- gennies, 11
- gravity, 29, 52
- great cleave, 40
- great saving throw, 40

- grenade launcher, 54
- grenades, 54
- ground vehicles, 25
- groundcars, 25
- gyrocannon, 66, 68

- handle animal, 27
- heat, 6
- heat gun, 54
- heavy acceleration gun, 68
- heavy body armor, 56
- heavy cruiser, 63
- heavy freighter, 63
- heavy ground vehicles, 25
- heavy missile mount, 68
- heavy transport, 63
- helicopters, 31
- hide, 27
- hit points, 64
- hull, 33, 60, 64, 70
- humans, 10
- hypnosis, 27

- improved bull rush, 41
- improved critical, 41
- improved disarm, 41
- improved improvised weapon, 41
- improved initiative, 41
- improved two-weapon fighting, 41
- improved unarmed strike, 42
- improvised weapon, 41, 55
- initiative, 41, 71
- initiative bonus, 63
- intelligence, 2
- intimidate, 27

- jetcars, 26
- jury rig, 27, 72

- K. Cannon, 67, 68
- knowledge, 28

- landing, 70
- language, 34
- laser, 66, 68
- laser pistol, 54
- laser rifle, 54

- leadership, 28, 42
- leadership modifiers, 43
- length, 63
- levelling up, 7
- library search, 28
- life support, 32, 60, 65, 70
- life suspension technology, 28
- light acceleration gun, 68
- light body armor, 56
- light freighter, 63
- light transport, 63
- light wounds, 35
- locks, 30
- Lowlanders, 11
- Lunarian equipment, 56
- Lunarians, 10

- maneuver in zero g, 29
- maneuvers, 63
- martial weapon proficiency, 44
- Martian equipment, 56
- Martians, 10
- mathematics, 29
- mechanic, 33
- medics, 20
- medium body armor, 56
- medium cruiser, 63
- melee weapons, 53
- memorize, 29
- Mercurian equipment, 56
- Mercurians, 10
- microwave gun, 54
- mimic, 29
- missile, 67
- missile mount, 68
- mobility, 44
- money, 52
- mono knife, 53
- mono sword, 53
- motorcycle, 26
- mounted combat, 44
- mounts, 44
- move silently, 29
- movement, 71, 72
- multiattack, 44
- multidexterity, 44

- multiweapon fighting, 45

- navigation, 29, 70
- needle gun, 54
- notice, 30
- nuclear engine, 70
- nuclear engines, 33

- open lock, 30

- paralysis, 36
- paralysis / stun / fall, 5
- physics, 30
- pick pocket, 30
- pilot, 67, 71
- pilot fixed wing craft, 30
- pilot rocket, 30
- pilot rotorwing craft, 31
- pilot ship / submarine, 31
- planetary survival, 31
- planetology, 31
- plasma, 5
- plasma thrower, 54
- point blank shot, 45
- poison, 5, 35
- polearm, 53
- ports, 69
- power attack, 45
- precise shot, 45
- pricing, 68
- programming, 31
- pumped laser, 68

- quality, 56
- quick draw, 45

- race, 3
- races, 10
- racial bonuses, 4
- racial modifiers, 3, 12
- radiation, 6
- ranged weapons, 53
- rapid shot, 45
- read, 34
- read lips, 32
- readied actions, 71
- refocus, 71

- reloading, 71
- repair computer, 32
- repair electrical, 32
- repair life support, 32
- repair mechanical, 33
- repair nuclear engine, 33
- repair rocket hull, 33
- repair weapon, 33
- repairs, 70
- research, 28
- ride, 34
- rocket belt, 36
- rocket hull, 33
- rocket launcher, 54
- rocket pilots, 16
- rocket pistol, 54
- rocket rifle, 54
- rocket systems, 60
- rocket weapons, 66
- rockets, 30, 60
- rogues, 19
- rotorwing craft, 31
- run, 46

- sales, 68
- saving throw, 40
- saving throws, 4
- scout cruiser, 63
- scouts, 17
- sensor operation, 34
- sensors, 60, 64, 70
- serious wounds, 36
- shadowing, 34
- ship construction, 62
- ships (naval), 31
- shock, 5
- shot on the run, 46
- simple weapon proficiency, 46
- skill focus, 46
- skills, 6
- smart clothes, 56
- sonic stunner, 54
- space liner, 63
- space suit, 56
- space travel, 69
- speak / read language, 34

- speed, 63, 71
- spring attack, 46
- standard equipment, 56
- stealth unit, 56
- strength, 2
- stun, 5, 36
- stun grenade, 54
- stunning fist, 46
- submarines, 31
- subordinates, 42
- suffocation, 5
- supplies, 70
- survival, 31

- technical knowhow, 3
- Terrans, 10
- Terrines, 11
- Tinkers, 11
- toughness, 47
- toxic atmosphere / gas / poison, 5
- track, 47
- tracking, 34
- trample, 48
- transport, 62
- treat critical wounds, 34
- treat disease, 35
- treat light wounds, 35
- treat poisoning, 35
- treat serious wounds, 36
- treat stun / paralysis, 36
- two-weapon fighting, 41, 48

- unarmed strike, 42
- use rocket belt, 36

- Venusian equipment, 56
- Venusians, 10

- warriors, 17
- weapon, 33, 72
- weapon finesse, 48
- weapon focus, 49
- weapon proficiency, 46
- weapon specialization, 49
- weapons, 52, 60, 65, 66, 69
- weight, 52, 62, 63, 68

whirlwind attack, 49
width, 63
wisdom, 3
Workers, 11
wounds, 34–36

zero g, 29