

SHADOWS OVER SOIL

2ND EDITION



SHADOWS OVER SOL

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INTRODUCTION

Welcome to ***Shadows Over Sol***, a science fiction horror roleplaying game where you and your team venture into the hungry void of outer space. You'll explore derelict spaceships, make deals with shady corporations and confront the bioengineered monstrosities encroaching on your every move. If you're lucky, you might even survive!

So strap on your vac suit and power up the comms. For an enterprising team willing to brave the horrors, there's always a profit to be made.

Welcome to the Dark Future

Somewhere out in the void a spaceship makes its way from Mars to Ceres. Its voyage will take six months. Its crew sleeps the time away, deep in stasis.

The crew is made up of people from three distinct subcultures, each with their own views and ideology. These subcultures often disagree—sometimes violently. None of them know it yet, but three months ago, two of these subcultures went to war.

When the ship left Mars, it departed from a Unitech docking facility. In another two months, when it reaches Ceres, it is scheduled to dock with a different corp. This corp has taken sides in the subcultural conflict. What happens will not be pretty.

Three of the passengers have smuggled guns on board. Most of the crew is armed. One passenger has a knife implanted in her arm. When the ship wakes them up, a day away from port, they will get news of the conflict.

The violence will be slow to start, with everyone still recovering from stasis sickness. But some are going to begin applying augmented reality tags to likely targets. Others will get their guns. Not everyone is going to want to dock at the scheduled port for fear of reprisals or worse, but the captain won't have a change of course, and there will be blood.

The fighting starts shortly after the passengers are awoken ahead of schedule. A mutiny is in progress while disoriented passengers stumble around, some fearful and others dangerous in their own right. The herd instinct takes over and people panic.

Blood in zero-G doesn't drain the way it does in a gravity well; instead, it bulges out from a wound in large bubbles. Recoil scatters it about and it gets everywhere.

The mutiny is a failure. With a wounded crew and scattered passengers, the ship makes its scheduled dock, but outside there's an eerie silence—a radio silence. When the airlock opens, even worse things await. Everyone hears the echoes down the empty colony hallways, some even catch a glimpse of a twisted and inhuman silhouette, but no one sees the bioengineered claws in the darkness.

Welcome to the future of ***Shadows Over Sol***.

Themes

Shadows Over Sol draws on a number of prominent themes that recur throughout science fiction and horror media.

The first of these is **isolation**. Space is unbelievably vast. Voyages take months or years. Stations are but small specks of life in a vast sea of death. When the horror starts, no one is coming to help, and often there's nowhere to run.

Social change is another important theme. The future is a different world with different social norms and different technologies. Subcultures see the world through their lenses, and this social distance can play into the themes of isolation.

Despite the horror the future brings, technology and human exploration march ever onward. This ties in the theme of **new horizons**. Humanity is always pressing outward with the next distant expedition or colony, and it's always inventing new ways to do new things.

The counter to the themes of social change and new horizons is the **fear of the unknown**. Exploration, new technologies and new ways of social operation bring with them risk, novel dangers and systems that are ripe for abuse. This is where science fiction meets horror.

Finally, the theme of **conspiracy** wraps it all up. With every new discovery, every social evolution and every lingering fear, there will always be those looking to suppress or exploit them for their own purposes.

Recommended Media

Science fiction and horror are both wide and varied genres, but below we have selected a few books, games and movies that we feel provide ample inspiration when running or playing ***Shadows Over Sol***.

- ▶ ***Alien***: The 1979 film directed by Ridley Scott is a classic piece of sci-fi survival horror. Its sequel, *Aliens* (1986), has more of an action-horror feel, but is also good in its own way.
- ▶ ***Eclipse Phase***: A well-designed tabletop roleplaying game set in the Sol system but with a decidedly more transhumanist and wildly speculative bent to its science fiction.
- ▶ ***Europa Report***: Sci-fi horror flick, which serves as a character drama throughout its first half and a creature feature in its second. Good for its depiction of hard science.
- ▶ ***The Expanse***: Series of sci-fi novels and associated novellas by James S. A. Corey. The first novel, *Leviathan Wakes*, is stellar and the series shares many similar themes. The television adaptation is solid, too.
- ▶ ***Mothership***: Expertly crafted minimalist sci-fi horror roleplaying game with a deliberately retro vibe, intended to invoke the feel of 80's horror flicks.
- ▶ ***The Thing***: We recommend the 1982 film directed by John Carpenter. It's a well-sculpted piece of survival horror where the protagonists are caught between the alien thing, the harsh Antarctic environment and justified paranoia.
- ▶ ***Transhuman Space***: Another transhumanist roleplaying game set in the Sol system, this one Powered by GURPS. Of particular note, it has a wealth of well thought out source books.

Playing the Game

To play ***Shadows Over Sol*** you will need a group of friends, writing utensils, some paper, a few ten-sided dice (d10's) and a deck of poker cards.

Play is designed to take place in one or more game sessions. A few hours one evening for a session should suffice.

ACTIONS

During the game, each player declares actions taken by her character. When an action might fail in an interesting way, the GM should call for a test to determine the result. To do this, the player rolls a d10 and adds its value to her relevant stat, as well as to any relevant skill. For example, if the GM called for a Strength test, she would add her character's Strength value.

If this total meets or exceeds a target number (TN) set by the GM, the action is successful. However, if the total falls short, the attempt failed in some way. For a complete description of the action mechanic, see page 98.

BOONS & BANES

Circumstances can make some tests easier or harder. Positive circumstances grant one or more boons (+), while negative circumstances impose one or more banes (-). For each of these, roll an extra d10. Boons allow you to use the higher die value when determining your total. They also allow you to make pairs. Banes, on the other hand, force you to use the lower of the die values. You also run the risk of critical failure if you get two or more 1's when making a test with a bane.

If a test has both boons and banes, each boon cancels out a bane and vice versa before the roll is made.

PAIRS

If multiple dice are rolled due to boons and have matching values, you may choose to add the values of two of the matching dice together. This is called a pair.

EDGE

Edge represents the subtle advantages your character has in the narrative or in the world at large—call it fortune, fate or karma. It is represented by a pool of tokens.

After any test has been made, but before the results have been announced, you may opt to push your luck by spending an Edge. Pick up your dice and reroll, adding an extra boon (+) to the test. You may opt to take whichever result is better.

CONSEQUENCES

Actions often result in consequences, which are lasting status effects that affect either a particular character or part of the game world. These can be used to represent anything from bleeding to being uncontrollably angry, or from being knocked down to being overcome with fear. A list of common consequences is provided as an appendix, see page 310.

NEW TO ROLEPLAYING GAMES?

My friend, you are in for a treat! Tabletop roleplaying games (RPGs) are a wildly fun and collaborative hobby where you, and a handful of your friends, weave sci-fi tales of conspiracy and peril. That said, there is more to the hobby than we could reasonably cram into this humble introduction. We recommend that you hop onto the internet right now and do a quick search. This will tell you more than we ever could in these few pages. Then, once you've gotten an idea of how tabletop roleplaying games work, come right back and explore the dark future of *Shadows Over Sol*. Good gaming!

WHAT IS *SAGA MACHINE*?

Saga Machine is the tabletop roleplaying system used by *Shadows Over Sol*, as well as our other game lines. It combines an exciting action mechanic with meaningful consequences.

The rules of every *Saga Machine* game are tailored to that game's genre and themes, adapting a solid core and bringing in custom-made supporting subsystems. This strikes a balance between the ease of going from one *Saga Machine* game to another, and the rules being tailored to the genre.

Various incarnations of *Saga Machine*, including this one, have been released under the Open RPG Creative (ORC) license and are available for use in third-party games.



Setting Glossary

The following terms are used throughout *Shadows Over Sol*.

- ▶ **Augmented Reality (AR):** The use of virtual tags, which overlay a user's perception of the real world.
- ▶ **Corp:** Short for corporation. Usually used to refer to one of the titanic megacorps, which dominate the halls of power.
- ▶ **Entro:** Major subculture. Entros thrive on discord and are usually highly critical of authorities, social class and corporate power.
- ▶ **Expret:** Major subculture. Exprets value aesthetics and creative expression in all things, placing a great emphasis upon forms that appeal to the emotions.
- ▶ **Former:** Major subculture. Formers often fetishize the pursuit of perfection and work ethic, and are usually associated with a higher class lifestyle.
- ▶ **Ganymede Conference:** Important meeting of world leaders, which established the current status quo and set many of the rules of space travel.
- ▶ **Geneline:** A standard package of screening, edits and upgrades made to an individual's genome before she is born.
- ▶ **Ghostman:** Major subculture. Ghostmen often mix fatalism with an urgent drive to seize the day. They also tend to reject the false niceties that make up social etiquette.
- ▶ **Heed:** Major subculture. Heeds exalt in having new experiences, with a particular emphasis on baser instincts and animal drives.
- ▶ **Implant:** An augmentation implanted into the body. Usually divided into bioware (made from living components) and cyberware (made from machinery).
- ▶ **Neoret:** Major subculture. Neorets look back on the past, often taking inspiration from it or reinventing old traditions for the new era.
- ▶ **Net, the:** Computer network used by various machines across the Sol system; it is one of the pillars of life in the twenty-third century.
- ▶ **Serv:** Major subculture. Amalgamation of various conservative religious groups, often lumped together by the rest of society under the Serv banner.
- ▶ **Simspace:** A virtual space laid out in three dimensions, in which users are represented by avatars. Usually shared between multiple users on the net.
- ▶ **Sol:** The Sun, a yellow G2V main sequence star around which Earth and the other planets orbit. Also the scientific name for the solar system.
- ▶ **Subculture:** One of a variety of break-away cultural groups organized around the net, which now dominate twenty-third century society.
- ▶ **Techno:** Major subculture. Technos prize the seemingly inevitable march of progress, culture, and most of all, technology.
- ▶ **Thorium Power:** The dominant form of energy production are fission reactors utilizing the thorium fuel cycle.

Mechanics Glossary

The following terms are used by the *Saga Machine* system.

- ▶ **Action:** Any task performed by a character. In the combat system, the term specifically refers to tasks performed by a character on her turn.
- ▶ **Action Point (AP):** A unit of how many actions or reactions a character can perform during a round of combat.
- ▶ **Bane (⊖):** Circumstances that make an action harder may force a bane. Roll an additional die, or flip an additional card, and use the lowest one to resolve the test.
- ▶ **Boon (⊕):** Circumstances that make an action easier may grant a boon. Roll an additional die, or flip an additional card, and use the highest one to resolve the test.
- ▶ **Consequence:** A status effect, or result of an action, that produces a lasting effect on a character or part of the game world.
- ▶ **Edge:** A score representing the character's good fortune. Provides a pool of points, or hand of cards, that can be used to influence tests.
- ▶ **Extended Action:** An extended and lengthy action, often consisting of three tests.
- ▶ **Pair:** When resolving a test with one or more boons, any two matching values on the dice or cards may be added together and used in place of the original value.
- ▶ **Game Master (GM):** The player who runs the game, narrating events and deciding the actions of the non-player characters.
- ▶ **Margin:** The amount by which an action succeeded or failed. The difference between the target number and the total.
- ▶ **Non-Player Character (NPC):** Characters controlled by the game master. They include all the minor characters in the story, as well as prominent allies and enemies.
- ▶ **Player Character (PC):** A character controlled by one of the players. These characters are typically the protagonists of the story.
- ▶ **Reaction:** An action in the combat system that is triggered and resolved outside of a character's turn.
- ▶ **Round:** In the combat system time is divided into rounds, each representing about three seconds. Every round, each character gets a turn.
- ▶ **Tally:** The total accumulated margin needed for an extended action to be successful.
- ▶ **Target Number (TN):** A number representing the difficulty of an action. To succeed, the total achieved by a test must be equal to or greater than this number.
- ▶ **Test:** When an action risks failure, the game master may call for a test. Roll a die or flip a card and add its value to the character's relevant skill and stat.

CHARACTERS

Horror would be nothing without characters to terrify, and science fiction would be little without characters to make the future happen.

Understanding Characters

Mechanically, characters consist of four parts: an array of stats, some number of skills, a few traits and some derived scores. Each of these components are described in the sections that follow.

STATS

Shadows Over Sol divides a character's capabilities into eight different ratings, each representing how good the character is at a broad category of actions. These ratings are called stats and are scored for human characters on a scale of 1 to 10. The higher the number, the better the character is in that category of actions.

On this scale, a historical human with wild type genes—entirely middling in all aspects—would be rated a 4 in each stat. A modern human, with the ubiquitousness of basic genetic screening and upgrades, would average around a 5. The highest rating within human potential is 10. Any rating higher than that is clearly super-human, and is the domain of truly dreadful monstrosities.

The eight different stats are divided evenly into two groups: physical and mental. Physical stats represent some physical aspect of the character, while mental stats represent some mental aspect. The various stats are described below.

STRENGTH (STR)

Your character's strength is a measure of her muscle and physical prowess. It helps determine how much she can lift and how hard she can punch.

DEXTERITY (DEX)

Your character's dexterity is her fine motor coordination, flexibility and balance. It helps determine her athletic ability, aim and manual dexterity.

SPEED (SPD)

Your character's speed is a measure of how fast she moves, her gross motor coordination, reflexes, agility, reaction time and her ability to get out of the way.

ENDURANCE (END)

Endurance is a measure of your character's toughness, health, constitution and stamina. It helps her resist disease and keep from getting winded after a long jog.

INTELLIGENCE (INT)

Intelligence is an indicator of how quickly your character learns, how much she knows and what her capability is in terms of logical reasoning and deduction.

PERCEPTION (PER)

Your character's perception is a measure of how alert she is, how good her senses are and how quickly she processes new information.

CHARISMA (CHR)

Your character's charisma is her force of personality, presence and bearing. It's used when trying to make friends, influence others or strike a deal.

DETERMINATION (DET)

Determination is your character's resolve, mental fortitude and grit. It's used when resisting fear or other mental effects, and in seeing things through to the bitter end.

SKILLS

The eight stats represent innate capabilities—after all, everyone has some degree of strength, intelligence or perception. Skills, on the other hand, are the mechanical representation of capabilities that are learned.

When your character in *Shadows Over Sol* makes a test, the action may have a relevant skill as well as the relevant stat. When this is the case, how skilled your character is in that particular area modifies the test (see page 99).

SKILL RANKS

Skills come in five ranks of increasing expertise. In addition, there is a sixth category—unskilled—for those who do not possess training in the relevant area. When making a test, add the value of the relevant skill to the total. The ranks are described below.

- ▶ **Unskilled (0):** Your character does not have experience in this area. When making an unskilled test, use only half the value of the relevant stat.
- ▶ **Proficient (1):** Your character has basic training in the area in question.
- ▶ **Professional (2):** Your character is as skilled as a competent, entry level professional.
- ▶ **Expert (3):** Your character has extensive experience in the field.
- ▶ **Master (4):** Your character is a master of the area in question.
- ▶ **Grandmaster (5):** Your character is world-renowned in this skill.

SPECIALIZED SKILLS

Some skills are denoted as Specialized skills. This means that the skill is actually a set of related skills that are grouped together under one heading. Each related skill is called a Specialization, and is usually presented in parentheses afterward. For example, the Vehicles skill may have the spacecraft specialization, which would be written as **Vehicles (Spacecraft)**.

When you gain training in a specialized skill, you must pick an appropriate specialization. You are then trained in tasks related to that specialization. The description of every specialized skill includes a list of example specializations. These lists are noncomprehensive. The GM may allow other specializations.

SKILL LIST

There are twenty general skills available in *Shadows Over Sol*. Below is a table of all skills. Specialized skills are denoted by an asterisk (*). Complete descriptions of each skill can be found beginning on page 52.

Skill			
Academics*	Empathy	Melee	Streetwise
Animals	Expression	Persuasion	Survival
Athletics	Investigation	Projectiles	Thievery
Awareness	Language*	Socializing	Trade*
Deception	Medicine	Stealth	Vehicles*



TRAITS

In addition to stats and skills, your character may also have a number of other capabilities, such as possessing contacts, membership in a subculture, corporate backing or having a particular weakness. These types of abilities are modeled as traits: special features that apply to a character. A list of traits can be found beginning on page 57.

AMBITIONS

Ambitions are statements about what your character hopes to achieve. They provide a way to earn experiences. For a full description, see page 48.

WEAKNESSES

Weaknesses are traits that represent your character's deficiencies or flaws. They are usually wholly negative or restrictive, hindering your character in some way. These traits have no cost, but provide an additional way to gain Edge. For a full description, see page 60.

SCORES

Scores are the final mechanical component of your character. They are a variety of numerical values, most of which are derived from her stats. More on each score can be found in their own sections, but the basics are given below.

- ▶ **Armor:** The capability of your character to resist damage.
Usually this is provided by literal armor, although some creatures have durable hides that act as armor.
- ▶ **Defense:** The ability of your character to avoid being struck by attacks in combat.
Formula: Median of Dex, Spd and Per.
- ▶ **Edge:** How much fate favors your character. Determines how many Edge to gain at the beginning of a session.
Formula: Determined by Geneline.
- ▶ **Encumbrance:** The number of items of significant size your character can carry before being hindered by their weight or bulk.
Formula: Median of Str, Dex and End.
- ▶ **Health:** A measure of how much damage or exhaustion your character can suffer before being threatened with death.
Formula: Str + End.
- ▶ **Lifestyle:** A short descriptor of your character's relative level of wealth, possessions and other non-liquid assets.
Formula: Average.
- ▶ **Move:** How many meters your character can move per action taken in combat.
Formula: Median of Spd, End and Det.
- ▶ **Willpower:** Your character's ability to avoid being overwhelmed by mental effects, such as fear or paranormal compulsions.
Formula: Median of Int, Chr and Det.

Character Creation

You will need a character to play *Shadows Over Sol*. This is the persona you adopt when playing the game, the individual you pretend to be in the game world. Before play begins, create a character using the rules below.

OVERVIEW

Character creation in *Shadows Over Sol* takes place over the course of three basic steps. These establish the character's concept, capabilities and stats. The different steps are outlined below:

- ▶ **Pick Geneline:** Pick a geneline from the provided list, representing your character's genetic modifications and aptitudes. This helps establish her starting stats, as well as her Edge score.
- ▶ **Choose Role:** Your character's role helps to determine her training and learned capabilities, as well as how she fits into the team. Select a role from the provided list, then record its associated skills and gear.
- ▶ **Finishing Touches:** Throughout life, everyone picks up a few hobbies, specialty skills or contacts. Choose two for your character, then optionally pick a weakness, record ambitions and calculate a few scores.

CHARACTER CONCEPT

The most important part of character creation is to begin to envision your character. Who is she? What does she do for a living? What is she good at? What does she struggle with? It is from this vision that the remainder of character creation follows.

Regardless of the vision that begins to form, two key questions to ponder are: "Who is your character as a person?" and "What is she going to do within the context of the campaign?"

If the first question is not answered adequately, what you have is not really a character, so much as a collection of stats. If the second question is not answered well, you may have an interesting concept, but otherwise might find yourself with little to do during the actual game. You should also keep in mind the type of campaign the GM is preparing.

The GM is preparing to run an action horror campaign about a criminal gang on Mars. Thinking this over, the player decides that she wants to play a genetically perfected hitman from the slums. She names him Finneus.

GENELINES

Most people living in 2214 possess genes that have some amount of modification. Mods that protect against disease, genetic defects or—among spacers—loss of bone density due to microgravity are particularly common.

Gene modifications are typically applied directly to a genome before birth. Others are inherited from one's parents. A rare few even have genes that were edited sometime after birth as a patch job.

While there are many different commercial genelines available for prospective parents to purchase, all but the most exotic or experimental fall into a broad category.

PICK GENELINE

Begin by picking your character's geneline. Each provides an array of stat values, sometimes with specific requirements, as well as a value for your character's Edge score.

Next, assign each stat a value from the geneline's array. The areas in which your character excels should be given the highest values, while the areas in which she is the weakest should be given the lowest. Some genelines require that you put a sufficiently high value in one or more stats. For more information on stats, see page 10.

Finally, record the Edge score provided by the geneline. You may also optionally choose an entry on the geneline's associated Development table to generate a life event for your character.

The available genelines are listed in the following sections.

Finneus' player looks over the available genelines and immediately seizes on Modern Superman. She then writes down that geneline's stat array and decides on Strength 6, Dexterity 5, Speed 8, Endurance 5, Intelligence 4, Perception 4, Charisma 4 and Determination 6. She also records that he has Edge 1.

Looking over the geneline's table of Development Events, Finneus' player doesn't see any that are a perfect fit, but she decides to go with Family Feud—only instead of another family, his parents' feud is with the corps!

ATHLETE DELUXE

An upmarket geneline targeted at those who want to provide their child with a genetic disposition favoring athleticism and physical capability, the Athlete Deluxe package is often purchased by those who dream of raising a future sports star or who want to make up for family genes that convey poor physical ability. As a deluxe geneline, its cost is outside the means of most parents, and as such it isn't commonly found among manual laborers, despite its obvious applications.

► **Stats:** [8, 7, 6, 6, 4, 4, 3, 3]

► **Requirement:** Both Strength and Endurance must be 7 or greater.

► **Edge:** 2

Card	Development Event
------	-------------------

A – 2

Legal Troubles: You got into a spot of trouble with the authorities. Maybe you started running with a bad crowd, or maybe it was all a misunderstanding.

3 – 4

Mentorship: Someone during your adolescence acted as an important mentor. Maybe this was to teach you valuable skills or maybe it was more of a personal mentorship.

5 – 6

Disfigurement: An accident during your adolescence left you disfigured or scarred. This likely has had an effect on both your social status and abilities.

7 – 8

Childhood Sports: You excelled in many different sports as a child. This may have left you with a competitive personality or an overconfidence in your own physical abilities.

9 – 10

Tough Love: Your parents let you learn things the hard way. It may have been cold, but it built up your strength of will.

J – Q

Military School: You were enrolled in a prestigious military academy. There you learned discipline, the basics of tactics and prepared to one day be an officer.

K – Jo

Organ Donor: Your parents cloned you for spare organs in case they needed them. They did. You survived the procedures, but now your body is failing.

BUDGET UPGRADE

Families who cannot afford a standard genetic upgrade for their child often opt for a budget upgrade. While not as full-featured as the standard packages, it does provide crucial protection against most common genetic diseases, as well as a modest boost to the child's inborn capabilities. Those with a budget upgrade often lag behind their peers during development, but some take these difficulties in stride, as it drives them to work harder and focus in order to become competitive.

► **Stats:** [7, 6, 6, 5, 5, 4, 4, 3]

► **Edge:** 4

Card	Development Event
A – 2	Net Lifeline: There were few other children near your age around growing up, and so you had to rely on the net as your social lifeline. You may still.
3 – 4	Religious Upbringing: Not every religious person is a Serv. Maybe you were thinking of joining the clergy, or perhaps you simply went through a devout phase.
5 – 6	Witness: As an adolescent you witnessed a violent crime and quickly had to go into hiding, lest the perpetrator hunt down you or your family.
7 – 8	Early Indenture: You went into debt and were forced into a contract of indenture. Perhaps you eventually paid it off, fled in breach of contract or are still paying it off.
9 – 10	Corridor Urchin: You grew up squatting in the abandoned corridors of one of the system's largest colonies, or on the streets of one of the cities back on Earth.
J – Q	Gang: In your adolescence, you joined a gang and participated in its petty disputes—wearing its colors and helping to patrol its territory.
K – Jo	Slum Runner: As an adolescent, you ran errands for smugglers, dodging security and drones. One day, a job went bad, and you barely escaped—others weren't so lucky.

CELEBRITY DELUXE

Some prospective parents have both considerable wealth and dream of their child being a celebrity, dancer, model or similar. These parents may opt for a celebrity deluxe geneline. This upgrade provides a genetic disposition geared towards being an outgoing and charismatic individual. As a deluxe geneline, however, its cost is prohibitive for most families.

► **Stats:** [8, 7, 6, 6, 4, 4, 3, 3]

► **Requirement:** Both Perception and Charisma must be 7 or greater.

► **Edge:** 2

Card	Development Event
A – 2	Friend: You had a very close friend growing up who had a major influence on your life. Perhaps you are still friends, or perhaps this turned to enmity.
3 – 4	Pregnancy: A pregnancy forced you to step into a role of responsibility during your adolescence. Perhaps it involved you, a partner, a close sibling or even a parent.
5 – 6	Popular Kid: You were one of the popular kids growing up, and were always surrounded by the adulation of your peers.
7 – 8	Child Celebrity: You gained some amount of celebrity as a child, perhaps as a cast member of a popular vid, or serving as a face of a brand being promoted by a corp.
9 – 10	Hunted: You were groomed to inherit your family's power until you uncovered a secret you weren't meant to see. Ever since you've been on the run, hunted by their security.
J – Q	Kidnaping: Held for ransom by desperate ex-employees, your family refused to pay, using you as a negotiation chip. You were rescued, but it became clear you were expendable.
K – Jo	Quarantine: A viral outbreak on your family's private orbital left you locked inside with the infected. Security protocols failed. The only way out was stepping over bodies.

GENIUS DELUXE

Life is harder when you're dumb. Some prospective parents don't want their child going through that, so they pour considerable financial resources into purchasing an upgrade that will ensure the largest possible boost to their kid's intelligence. This geneline does just that, providing a genetic disposition towards memory and quick learning. As a deluxe upgrade, however, it is outside the means of most families.

- **Stats:** [8, 7, 6, 6, 4, 4, 3, 3]
- **Requirement:** Both Intelligence and Determination must be 7 or greater.
- **Edge:** 2

Card	Development Event
A - 2	Subcultural Rebel: You switched subcultures during your adolescence. Perhaps this was a way to rebel against your family or maybe your entire family made the switch.
3 - 4	Runaway: You ran away from home and it changed your life. Maybe you stowed away on a ship bound for space, or picked up unusual skills during your time away.
5 - 6	Missing Years: For some reason you have a large gap in your memory during your adolescence. You have no idea what happened to you.
7 - 8	Private Tutors: Your education included a private tutor who vanished one night. You later found encrypted files she left behind, with secrets about your family.
9 - 10	Corporate Creche: Raised in a corp facility, you knew no family—only training, psych conditioning and quotas. The first time you saw the sky was on a recruitment poster.
J - Q	Washout: You were one of the best—an elite student at a prestigious academy. Then you cracked under pressure, failed out and lost everything, leaving you to scrape by.
K - Jo	Special Program: Your parents signed you up for a “special program” through their corp; cutting-edge cognitive acceleration. The nightmares and other side effects were downplayed

GROUNDSTIDE STANDARD

The single most common category of genelines, the groundside standard package provides a well-rounded set of upgrades commonly chosen by those living in a gravity well. It includes all the usual protections against genetic diseases, as well as a resistance to many transmissible diseases usually found among large populations. Resistance to environmental pollutants and modest developmental upgrades are also added into the mix.

► **Stats:** [7, 6, 6, 6, 5, 4, 4, 3]

► **Requirement:** Two of your physical stats must be 6 or greater.

► **Edge:** 3

Card	Development Event
A – 2	Pet: Growing up you had a memorable family pet. It may have been an unusual species, such as an uplift, or it may simply have colored you for life as a “cat person,” etc.
3 – 4	Moved Frequently: Your family moved so frequently that you never really grew attached to anywhere. You feel restless when you remain in any one place for long.
5 – 6	Subcultural Change: Your family switched subcultures when you were a child leaving you familiar with both, but perhaps not fully part of either.
7 – 8	Many Parents: You have many parents. Perhaps they were part of a group marriage, or you were in a situation where several families collectively took care of the children.
9 – 10	Conscripted: During your adolescence, you were conscripted into the armed forces of a corp, nation-state or paramilitary organization.
J – Q	Problem Sibling: A sibling of yours repeatedly found herself on the wrong side of the law, and she attempted to involve you in her shady dealings as well.
K – Jo	Stasis Mistake: A medical debt scheme put you into stasis as a kid. You woke up years later, with everyone you knew gone and your body struggling to adjust.

MODERN SUPERMAN

Genelines in the modern superman class represent the best well-rounded upgrades that money can buy. As such, they are usually only purchased for the offspring of the exceedingly rich or influential. Children with these upgrades typically excel in multiple fields, quickly surpassing their peers, and often find themselves either at the pinnacle of popularity or isolated because of it.

- **Stats:** [8, 6, 6, 6, 5, 4, 4, 4]
- **Edge:** 1

Card	Development Event
A – 2	Fall From Power: Initially wealthy or powerful, your family suffered a scandal that forced them down the social ladder. Its shadow may still linger over you.
3 – 4	Clone: You are a gene-upgraded clone of someone—likely someone rich or powerful. While you are your own person, this has overshadowed your development.
5 – 6	Experimental Variant: As the best that money can buy, many Modern Superman genelines are custom engineered, but they are not always without quirks or side effects.
7 – 8	Corporate Education: Your family enrolled you in the most prestigious school operated by their corp, which taught you a variety of subjects, including brand loyalty.
9 – 10	Family Feud: Your family was involved in a feud with another prominent shareholder, perhaps as the result of a past violence, a hostile takeover or failed negotiations.
J – Q	AI Companion: Raised in luxury, your only real friend was a corp-built AI companion. Then, one day, it was deleted—without warning or explanation. You never got over it.
K – Jo	Initiation Ritual: Your childhood social circle was an elite “future leaders” group. Then one night, you saw their initiation ritual—and knew walking away wasn’t an option.

SPACER'S STANDARD

Life in space is dramatically different from life in a gravity well. As such, the standard genelines chosen by spacers differ from those typically selected by groundside parents. While all the usual protections against genetic diseases are still included, the spacer's standard package also includes resistance to bone degradation due to microgravity, as well as a higher tolerance to radiation. This is coupled with modest mental and developmental upgrades.

► **Stats:** [7, 6, 6, 6, 5, 4, 4, 3]

► **Requirement:** Two of your mental stats must be 6 or greater.

► **Edge:** 3

Card	Development Event
A – 2	Gravity-Stunted: You grew up in a low gravity environment, making you taller and thinner than otherwise. You still feel uncomfortable in “normal” gravity environments.
3 – 4	Orphaned: You lost your parents as a child. Perhaps you were then raised by someone else in the subculture, distant family or left among the station corridors.
5 – 6	Gravity Change: A move led to a major gravity adjustment. This likely caused hardship, as you had to adapt to heavier gravity with limbs not yet equipped for it.
7 – 8	Moving Up: Your family experienced a significant leap upward in wealth. Perhaps someone landed a good corp job, blundered into fame or inherited a windfall.
9 – 10	Systems Failure: A spacecraft your family was on suffered a catastrophic failure. You made it to a lifepod. They didn't. And you watched them suffocate in the void.
J – Q	Fringe Family: Growing up, your family was involved in some sort of rebel or fringe group, such as the Sovereign Liberation Front or Harbingers of the Divine Form.
K – Jo	Refugee: Food shortages, sabotage or fighting doomed the station or colony where you were born. When rescue arrived, it was too late. You barely escaped the horrors.

WILD TYPE

Those with a wild type genome don't have any sort of gene upgrade. Instead, they simply have whatever genetic material their parents naturally provided them with. Children with this sort of genome are becoming a rarity outside of those in remote locations, the impoverished or within certain religious groups. They frequently lag behind their peers in development, and are susceptible to numerous genetic diseases.

► **Stats:** [7, 6, 5, 5, 5, 4, 4, 3]

► **Edge:** 5

Card	Development Event
A – 2	Net Isolation: You grew up with limited net access. As a result, you are more likely to rely on your own stored knowledge than most others.
3 – 4	Illness: An illness as a child took its toll on you. Perhaps it left you scarred or deformed in some way. This would be a good justification for a weakness.
5 – 6	Many Siblings: You have numerous siblings, and always had other children around. This has led you to either prize your alone time, or to avoid being alone at all costs.
7 – 8	Abandoned: In your adolescence you were abandoned. Perhaps your family left you when they moved, or maybe you were lost during a major conflict or natural disaster.
9 – 10	Marriage: You married early. Perhaps you were pressured into it by your family. Maybe it ended in disaster, or perhaps you are happily married still.
J – Q	Societal Fringe: Your adolescence was spent living on the fringes of society, learning how to get by without connections, a credit rating or new technology.
K – Jo	Fight Scars: You were thrown into illegal fights as a child—entertainment for rich voyeurs. You got out, but the scars remind you: win or die, no one ever fights fair.

ROLES

Roles represent broad science fiction horror archetypes. They are also a way to help quickly define your character's key strengths and responsibilities on the team. Each provides a selection of skills, as well as a package of starting gear.

CHOOSE A ROLE

It is now time to pick your character's role. Review the list on the following pages and select one. It may be worth discussing your choice with the rest of your gaming group.

Once your character's role has been chosen, assign each of its listed skills a value from the array below. A specialization must be chosen for any skill marked with an asterisk (*).

[4, 3, 2, 2, 1, 1]

Then pick one of your chosen role's listed gear packages and record the indicated items on your character sheet. Finally, you may optionally choose an entry on the role's associated Training table to generate a life event for your character.

The available roles are listed on the following pages.

Finneus' player looks over the list of roles and considers choosing either Enforcer or Operative. Eventually, she decides to go with Enforcer. She records that role's six skills and then assigns each a value. She goes with: Athletics 3, Awareness 1, Melee 2, Projectiles 4, Stealth 2 and Streetwise 1.

She then looks through the Enforcer's available gear packages and goes with: Ballistic Clip, P&W Coverjack, USD-383 Light Pistol. She writes that down.

Finally, she looks over the role's table of Training Events. As none seem like a good match, she decides to skip taking one. Instead she comes up with a story about how Finneus' parents pushed him to work against the corps, but he wasn't good for much other than muscle.

CUSTOM ROLES

If none of the listed roles seem like a good fit for your character's concept, the GM may allow you to create your own. Select six skills suitable for the custom role, assigning each a value from the array shown on page 24. Then purchase two to five items of suitable gear, costing up to a total of 500 π . Keep any remaining money. Finally, decide on a name for your custom role and record it.

NARROW ARCHETYPES

Some common science fiction archetypes are defined by proficiency in a specific, narrow field. To play a character embodying one of them, choose a role with the relevant skill, assigning it the highest possible value. Then, flavor the role's other choices as appropriate for the archetype. A few notes on playing some of these archetypes can be found below.

- ▶ **Hacker:** Consider choosing the Operative, Scientist or Technician role, then prioritize the Academics (Computers) skill.
- ▶ **Medic:** Consider choosing the Scientist or Suit role, then prioritize the Medicine skill.
- ▶ **Pilot:** Consider choosing the Roughneck or Technician role, then prioritize the Vehicles* skill.

DRIFTER

Drifters survive on the fringes of society, moving between outposts and colonies, often unseen and unnoticed. Skilled at navigating harsh environments, recycling goods and living off what others toss away, they know how to avoid trouble—or stir it up when necessary. In the desolate reaches of space, their instincts are their greatest asset.

► **Skills:** Animals, Awareness, Empathy, Stealth, Survival, Thievery



Card Gear Packages

- ♠ Camera, Hand Terminal, Toolkit (Animals), 75¤
- ♥ Backpack, Ballistic Clip, Hand Terminal, USD-383 Light Pistol, 70¤
- ♦ Combat Utility Knife, GPS Tracker, Hand Terminal, Survival Kit, 100¤
- ♣ Backpack, Flashlight, Rope, Toolkit (Thievery), USD-07 Shockstick, 90¤

Card Training Event

- A – 2** **Vagabond:** You spent a fair amount of your early career drifting from job to job and station to station, looking for work, cheap thrills or a purpose.
- 3 – 4** **Exiled:** You were charged with a crime and, whether truly guilty or not, exiled from a particular station, nation-state or colony.
- 5 – 6** **Indentured:** An unannounced sweep left you indentured to a corp, where you were forced to repeatedly perform hard labor.
- 7 – 8** **Remember the Dead:** A fellow drifter died at your side, but before she expired, she whispered to you where she hid something of value.
- 9 – 10** **Favored Pet:** You acquired a favorite pet who may still be by your side, despite years of wandering the corridors or hopping between stations.
- J – Q** **Food Shortages:** You went through a period without an adequate food supply. Its desperation left its mark on you.
- K – Jo** **On the Run:** Perhaps you skipped out on a contract, a heist went bad or you broke out of jail. Regardless, everywhere you go, bounty hunters seem to follow.

ENFORCER

Enforcers are the muscle of the team, specializing in combat and security. Tasked with maintaining order in lawless zones or repelling hostile forces, they excel in close-quarters and ranged combat. In the harsh, isolated reaches of the Sol system, their brutal efficiency is often the crew's last line of defense.

► **Skills:** Athletics, Awareness, Melee, Projectiles, Stealth, Streetwise



Card Gear Packages

- ♠ Disposable Cuffs, Hand Terminal, P&W Coverjack, USD-07 Shockstick
- ♥ Ballistic Clip, Hand Terminal, Medikit, USD-383 Light Pistol
- ♦ Ballistic Clip, P&W Coverjack, USD-383 Light Pistol
- ♣ Biomonitor, Combat Utility Knife, Hand Terminal, Unitech C3 Vac Suit, 125□

Card Training Event

- A – 2** **Corp Military:** Small-scale military conflicts are a staple of corporate dealings and cultural clashes. It also pays well. You got your start doing that sort of work.
- 3 – 4** **Security:** Security services maintain order on most colonies throughout the Sol system, although some are little better than criminals. For a time, you joined one.
- 5 – 6** **Gambling:** You were involved in a high-stakes gambling match. Regardless of whether you won or lost, there were bad feelings and accusations of cheating.
- 7 – 8** **Mutiny:** After serving under an incompetent boss, those in your unit staged a mutiny. You may have participated, fought back or simply took the opportunity to walk away.
- 9 – 10** **Suicide Mission:** You were ordered to participate in a nearly-suicidal mission. You may have refused, abandoned your post or even somehow have survived.
- J – Q** **Patron's Betrayal:** Your unit was betrayed by your employer and was left to die. While you survived, not everyone was so lucky.
- K – Jo** **Saved:** A fellow enforcer died, saving your life in combat. You still remember her, and may have a keepsake or feel you owe her family.

FIXER

Fixers are the masters of deals and connections, thriving in the gray areas of corporate and colony law. Whether arranging discreet trades, brokering alliances or smoothing over dangerous situations, they know how to get things done. In the lawless edges of the Sol system, their network of contacts can mean survival or disaster.

- **Skills:** Deception, Empathy, Language*, Persuasion, Socializing, Streetwise
- **Specializations:** For Language specializations, see page 54.



Card Gear Packages

- ♠ AR Glasses, Backpack, Hand Terminal, Medikit, Translation Software, 170¤
- ♥ AR Implant, Hand Terminal, Stimulox, USD-07 Shockstick, 25¤
- ♦ Combat Utility Knife, Hand Terminal, Microbug, Voice Mask, 155¤
- ♣ AR Glasses, Ballistic Clip, Hand Terminal, USD-383 Light Pistol, 50¤

Card Training Event

- A – 2** **Sales Agent:** A great deal of money can be made peddling various wares to the masses. You entered the workforce as a “sales agent.”
- 3 – 4** **Corridor Regular:** You spent time garnering contacts among the workers and day-to-day people of the corridors or streets.
- 5 – 6** **Declared Trouble:** Someone in power saw your growing network of contacts as a threat and declared you a public enemy.
- 7 – 8** **Betrayed:** One of your contracts betrayed you, handing over your information to a rival gang, corp, syndicate or other foe.
- 9 – 10** **Hard Deal:** After being taken in by security, the authorities offered you a deal: rat out your contacts or face the consequences.
- J – Q** **Partner:** For a time you worked closely with a partner, and while you eventually went separate ways, you still owe her a few favors.
- K – Jo** **Silent Benefactor:** A powerful but unknown figure backed your rise. One day she may call in her favor, and refusing isn’t an option.

OPERATIVE

Operatives are covert specialists, adept at gathering intelligence, infiltrating secure locations and executing high-risk missions. Whether working for corporate interests or underground movements, they thrive in the shadows, manipulating and deceiving others to achieve their objectives. In a world of shifting allegiances, their loyalty is often to the highest bidder.

- **Skills:** Academics*, Deception, Investigation, Stealth, Streetwise, Thievery
- **Specializations:** For Academics specializations, see page 52.



Card Gear Packages

- ♠ Disposable Cuffs, Hand Terminal, Somnitol, USD-07 Shockstick, 175 α
- ♥ Ballistic Clip, Toolkit (Thievery), USD-383 Light Pistol
- ♦ E-Lockpick, Hand Terminal, Magnetic Grapnel
- ♣ Combat Utility Knife, Disguise Kit, Hand Terminal, 75 α

Card Training Event

- A – 2** **Crime Pays:** Crime persists for a reason: the rewards are often worth the risks. You were involved in a criminal enterprise and gained skills from the experience.
- 3 – 4** **Wet Work:** You were offered a large sum as part of a contract to kill someone. You may have refused, may have warned the target or even accepted the offer.
- 5 – 6** **Risky Heist:** Alongside an eclectic crew, you took part in a risky heist, attempting to steal something of great value from a corp or other power.
- 7 – 8** **Turf War:** When a turf war broke out among the local criminal underworld, you were contracted to infiltrate one of the gangs.
- 9 – 10** **Corporate Espionage:** For a time you worked for a corp, digging up dirt and collecting intel on their rivals.
- J – Q** **Deep Cover:** You spent years undercover inside a criminal syndicate, extremist cell or rival corp. Some still don't know you were never really one of them.
- K – Jo** **Burned Identity:** A mission went sideways, forcing you to erase your old identity. Unfortunately, the past has a way of catching up with you.

ROUGHNECK

Roughnecks are hard-working, blue-collar specialists, skilled in heavy labor and machinery. Whether operating mining rigs or handling cargo in zero-G, they're accustomed to tough conditions and even tougher people. When things go wrong, their brute strength and no-nonsense attitude can be the team's saving grace.

- **Skills:** Athletics, Melee, Socializing, Streetwise, Trade*, Vehicles*
- **Specializations:** For Trade and Vehicles specializations, see page 56.



Card Gear Packages

- ♠ Flashlight, Hand Terminal, Power Tool, Rope, Toolkit (Welder), 70ꝰ
- ♥ Hand Terminal, Toolkit (Mechanic), Unitech C3 Vac Suit
- ♦ Baton, Hand Terminal, Power Tool, P&W Coverjack, 70ꝰ
- ♣ Backpack, Flashlight, Geiger-counter, Plasma Cutter, 10ꝰ

Card Training Event

- A – 2** **Miner:** You worked as an asteroid miner. While much of the manual labor is automated, humans are still needed to oversee the sites, machines and surveys.
- 3 – 4** **Grunt:** Manual labor is still needed when automation is either insufficient or impossible, and you got your start doing that sort of gruntwork.
- 5 – 6** **Artisanal Labor:** Hiring manual laborers is trendy among the Former and Expret subcultures: a sign of wealth. For a time you worked that sort of contract.
- 7 – 8** **Hard Times:** Difficult times fell upon you, leaving you without work for an extended period and threatening to render you destitute.
- 9 – 10** **Indebted:** Too many bills and too few contracts left you indebted to a shady creditor, whether a cut-throat corp, criminal enterprise or mysterious benefactor.
- J – Q** **Religious Experience:** While out performing a job, isolated in the void of space, you had what could be called a religious experience.
- K – Jo** **Tunnel Rat:** You spent years crawling through the underbelly of off-world colonies, patching up bulkheads and leaks. Something you found still keeps you up at night.

SCIENTIST

Scientists are the team's experts on analyzing unknown phenomena, from bioengineered monstrosities to orbital anomalies. Equipped with cutting-edge knowledge and research skills, they provide crucial insights that often determine survival. Their curiosity drives them, but in dangerous environments, knowledge can be a double-edged sword, leading to terrifying discoveries.

- **Skills:** Academics*, Empathy, Expression, Investigation, Language*, Medicine
- **Specializations:** For Academics and Language specializations, see pages 52 and 54, respectively.



Card Gear Packages

- ♠ AR Glasses, Hand Terminal, Medikit, Regenasone, 150 $\square$
- ♥ Disposable Test Kit, Hand Terminal, Toolkit (Biology), 150 $\square$
- ♦ Data Chip, Hand Terminal, Stimulox, Toolkit (Engineering), 25 $\square$
- ♣ Biometric Reader, Combat Utility Knife, Hand Terminal, Toolkit (Chemistry), 125 $\square$

Card Training Event

- A – 2** **Medical:** As the human population grows, so too does the need for medics. You started in the medical field, whether as a physician, nurse or clinical researcher.
- 3 – 4** **Breakthrough:** You were on the edge of an exciting scientific breakthrough when you were immediately and inexplicably removed from the project.
- 5 – 6** **Ivory Tower:** Academia is an institution unto itself, where knowledge is passed down through teaching or publications. You spent years receiving a broad education.
- 7 – 8** **Wealthy Patron:** For a time your research was funded by a wealthy patron, but it ended on questionable terms. She may believe that she still has rights to your work.
- 9 – 10** **Accident:** There was a terrible accident in a lab while you were present. You barely escaped. To this day the circumstances seem suspicious to you.
- J – Q** **Plagiarism:** While under considerable stress to complete a project, you were pressured to plagiarize another scientist's work.
- K – Jo** **Expedition:** You were part of an expedition to a remote part of the Sol system during which one or more members of your team mysteriously vanished.

SUIT

Suits are corporate representatives, diplomats or executives, skilled in negotiation and manipulation. Tasked with protecting business interests or brokering deals, they excel at navigating complex social dynamics. In the cutthroat world of corporate boardrooms and backroom plotting, their smooth talk can open doors—or conceal dangerous ulterior motives.

- **Skills:** Deception, Expression, Language*, Medicine, Persuasion, Socializing
- **Specializations:** For Language specializations, see page 54.



Card Gear Packages

- ♠ Biomonitor, Hand Terminal, Personal Assistant, 150α
- ♥ AR Glasses, Disguise Kit, Hand Terminal, 50α
- ♦ Hand Terminal, P&W Coverjack, Radio Comm, USD-07 Shockstick, 25α
- ♣ AR Implant, Hand Terminal, P&W Coverjack

Card Training Event

- A – 2** **Nepotism:** You got your foot in the door of your first real career through good old-fashioned nepotism. It could have even been some fancy corp work.
- 3 – 4** **Luxury and Excess:** For a time you lived the high life—exclusive parties, off-world vacations, vices. Then it all came crashing down, leaving you in debt or disgrace.
- 5 – 6** **Brushed Shoulders:** You brushed shoulders with someone with true power, such as the leader of a corp, nation-state or secret project.
- 7 – 8** **Assassination Attempt:** Someone wanted you eliminated and hired an assassin to do the dirty work. Thankfully you survived.
- 9 – 10** **Discredited:** One of your corporate rivals worked in the shadows, seeking to unfairly discredit you and contributions.
- J – Q** **Investment:** You invested in a particular venture—perhaps a new corp, expedition or colony—but have yet to see a return and communications have been opaque.
- K – Jo** **Project Oversight:** You managed a classified corporate project that suddenly shut down. The official reason doesn't add up, and someone is still watching you.

TECHNICIAN

Technicians keep vital systems running in high-stress environments where failure is not an option. Specializing in diagnostics and repair, they handle mechanical breakdowns, electrical malfunctions and equipment sabotage. Often isolated in dangerous areas, a technician's quick thinking and practical knowledge are essential to surviving hostile, unpredictable threats.

- **Skills:** Academics*, Awareness, Investigation, Projectiles, Trade*, Vehicles*
- **Specializations:** For Academics, Trade and Vehicles specializations, see pages 52, 56 and 56, respectively.



Card Gear Packages

- ♠ Hand Terminal, P&W Coverjack, Toolkit (Mechanic)
- ♥ Encryption System, Workstation
- ♦ AR Glasses, Hand Terminal, Unitech C3 Vac Suit, 150¤
- ♣ Backpack, Combat Utility Knife, Hand Terminal, Toolkit (Engineering), 125¤

Card Training Event

- A – 2** **Net Work:** Your early days of employment were spent on the net—either writing code, upkeep nodes or producing new content, such as AR tags.
- 3 – 4** **Stolen Efforts:** A rival technician stole your work, claiming it as her own. As a result, she was promoted, while you were kicked to the curb.
- 5 – 6** **Trade Secret:** While working for a corp or other organization, you were charged with protecting an important trade secret.
- 7 – 8** **Fieldwork:** Your employer sent you out into the field to test some of their new designs. You learned unexpected things from the experience.
- 9 – 10** **Security Breach:** A system you designed or maintained was hacked, leading to major consequences. Were you careless, or was it an inside job?
- J – Q** **Prototype Engineer:** You helped develop a next-gen piece of hardware or software. It worked—too well. Now it's been classified, weaponized or disappeared entirely.
- K – Jo** **Smuggled Parts:** You helped move restricted or stolen tech past security checkpoints. You told yourself it was just business—until you saw what it was for.

FINISHING TOUCHES

By this point, your character is almost complete. All that's left is to add some finishing touches—such as choosing a couple extras, picking out weaknesses and calculating a few scores.

If you are quickly preparing a character for a single-session game, the only necessary steps here are choosing extras and calculating scores. The rest can be easily skipped.

CHOOSE EXTRAS

In life, everyone picks up a few hobbies, specialty skills or contacts. Round out your character by choosing two items from the list below. The same option may be selected twice.

- ▶ **Contact:** It often pays to know people who know people. Gain a Contact trait, specifying a specific useful acquaintance. A table of useful contact types can be found on page 43.
- ▶ **New Skill:** Gain either a new skill of your choice at rank 2, or three skills of your choice at rank 1. A specialization in one of the Academics, Language, Trade or Vehicles skills may be particularly fitting.
- ▶ **Subculture:** Society has splintered into numerous subcultures, each with their own values and support network. Gain a Membership trait, specifying the subculture with which you identify. A table of major subcultures can be found on page 43.

CUSTOM EXTRAS

If none of the listed extras seem like a good fit, the GM may allow you to pick your own. This gives you 6 experiences to put into any stats, skills or traits of your choice.

Finneus' player looks over the list of extras and decides to take Thievery 2 as a new skill, as it was the main reason she at one point considered the Operative role. She then decides that he is part of the Entro subculture, which would explain his parents' feud with the corps.

Card	Contact	Card	Contact
A♥♦	Agricultural	A♠♣	Artistic
2♥♦	Bureaucratic	2♠♣	Celebrity
3♥♦	Communications	3♠♣	Construction
4♥♦	Corporate	4♠♣	Criminal
5♥♦	Custodial	5♠♣	Educational
6♥♦	Engineering	6♠♣	Entertainment
7♥♦	Environmental	7♠♣	Executive
8♥♦	Familial	8♠♣	Financial
9♥♦	Hacker	9♠♣	Industrial
10♥♦	Legal	10♠♣	Mechanical
J♥♦	Medical	J♠♣	Merchant
Q♥♦	Military	Q♠♣	Scientific
K♥♦	Security	K♠♣	Service
R-Jo	Subcultural	B-Jo	Transport

Card	Subculture	Pg
♠, ♥♦	Entro: Subculture that thrives on discord and is usually highly critical of authorities, social class and corporate power.	170
♠, ♠♣	Expret: Subculture that values aesthetics and creative expression in all things, placing a great emphasis upon forms that appeal to the emotions.	172
♥, ♥♦	Former: Those in this subculture often fetishize the pursuit of perfection and work ethic, and are usually associated with a higher class lifestyle.	174
♥, ♠♣	Ghostman: Subculture that mixes fatalism with an urgent drive to seize the day. They also tend to reject the false niceties that make up social etiquette.	176
♦, ♥♦	Heed: Those in this subculture exalt in having new experiences, with a particular emphasis on baser instincts and animal drives.	178
♦, ♠♣	Neoret: Subculture that looks back on the past, often taking inspiration from it or reinventing old traditions for the new era.	180
♣, ♥♦	Serv: Amalgamation of various conservative religious groups, often lumped together by the rest of society under the Serv banner.	182
♣, ♠♣	Techno: Subculture that prizes the seemingly inevitable march of progress, culture, and most of all, technology.	184

PICK A WEAKNESS

The most interesting characters usually have some sort of weakness, whether it's a vice, personality flaw or physical shortcoming of some kind. In *Shadows Over Sol*, these sorts of flaws are represented by Weakness traits.

All Weakness traits are similar in that they are optional, have no experience cost and each present some kind of drawback. In return, when that drawback negatively affects your character in some significant way, she gains an Edge (see page 103). This makes Weakness traits a good mechanism for gaining Edge during play.

A table of common Weaknesses can be found below. Full descriptions of all Weakness traits can be found starting on page 60. While picking out one or two for your character is recommended for any game longer than a single session, doing so is optional.

Finneus' player is a bit lost on coming up with a weakness, so she decides to flip a card and take a random Dark Secret. She draws an Ace and gets Killer, which she decides fits, even if it is a bit on the nose. For a related weakness she selects Obligation, and decides that he owes favors to a local criminal syndicate.

Card	Weakness	Card	Weakness
A♥♦	Absent-Minded	A♠♣	Allergy
2♥♦	Amnesia	2♠♣	Bad Back
3♥♦	Bad Eyesight	3♠♣	Bothersome Habits
4♥♦	Compulsive Behavior	4♠♣	Cowardice
5♥♦	Crippled	5♠♣	Doomed
6♥♦	Enemy	6♠♣	Fat
7♥♦	Flashbacks	7♠♣	Hard of Hearing
8♥♦	Honesty	8♠♣	Impulsive
9♥♦	Insomniac	9♠♣	Lecherous
10♥♦	Obligation	10♠♣	Phobia
J♥♦	Poor	J♠♣	Rival
Q♥♦	Scrawny	Q♠♣	Secret
K♥♦	Stutter	K♠♣	Suspicious
R-Jo	Ugly	B-Jo	Wanted

DARK SECRET

Horror is filled with characters that harbor dark secrets. Some of these may be extraordinary, while others are mundane albeit no less dark. You may optionally choose a dark secret, which may inform your choice of weakness.

Card Dark Secret

- A Killer:** At some point in the past you were driven to take a human life. It may have been the life of a parent or abusive spouse. Perhaps it was the life of a business partner or extortionist threatening to expose your other secrets.
- 2 Drug Fiend:** You are addicted to some sort of drug, to a point beyond mere substance abuse. You may have squandered your family fortune in pursuit of sweet oblivion, or even performed questionable acts to get your fix.
- 3 Silent Witness:** You were a witness to a heinous crime, but did not intervene or inform the authorities. Coming forward now might mean the scorn of your friends or family, as well as the threat of dangerous acts by the perpetrator.
- 4 Blackmailer:** You know the dark secret of another character—a dangerous NPC or perhaps another player character. Furthermore, you're blackmailing her, asking your victim for a large sum or for questionable favors in return for your silence.
- 5 Debauched:** You are addicted to sensual pleasure of some sort not looked kindly upon by polite society. You may have even led others down this path.
- 6 Voices:** Sometimes you hear voices in your head. Sometimes they even tell you to perform terrible acts. And usually you resist, but those times you do not...
- 7 Plunderer:** At some point in the past you stole something of great worth. You may not even realize its true value. Nevertheless, there are those who want it back, and who are not willing to forget or forgive.
- 8 Shady Debt:** You have somehow become indebted to a questionable lender, one who will stop at nothing in order to see that they're paid back. You may even be driven to desperate acts in order to pay the debt off.
- 9 Past Associations:** At some point in the past you were a member of a terrorist organization, a cult or some other group that, were it known, would result in your scorn, and possibly danger from the group you left.
- 10 Sadist:** You harbor an inner desire to bring harm to others, delighting in their suffering. You may regularly resist this urge, or you may secretly indulge when no one is there to catch you.
- J Expedition Survivor:** You are the sole survivor of an expedition to somewhere out in the void. To put it mildly, the expedition ended in disaster, and you were forced to perform the most heinous of acts to survive.
- Q Uncanny Double:** There is another person out there who looks exactly like you and who regularly sullies your good name. Perhaps she is a twin, a clone, a surgical lookalike or simply happens to have a similar appearance.
- K On the Take:** Perhaps you are a spy working for a clandestine organization, or maybe you are simply corrupt. Regardless, you regularly receive payments for small hostile acts or hidden information.
- Jo Inhuman:** You are secretly not fully human. You may be an escaped trans-genetic experiment, a half-synthetic construct or even someone with an AI-enhanced consciousness.

CALCULATE SCORES

Now that your character's starting stats, skills and traits are finalized, take a moment to calculate her derived scores.

- ▶ **Armor:** The capability of your character to resist damage. Usually this is provided by literal armor.
- ▶ **Defense:** The ability of your character to avoid being struck by attacks in combat.
Formula: Median of Dex, Spd and Per.
- ▶ **Edge:** How much fate favors your character. Determines how many Edge to gain at the beginning of a session.
Formula: Determined by Geneline.
- ▶ **Encumbrance:** The number of items of significant size your character can carry before being hindered by their weight or bulk.
Formula: Median of Str, Dex and End.
- ▶ **Health:** A measure of how much damage or exhaustion your character can suffer before being threatened with death.
Formula: Str + End.
- ▶ **Lifestyle:** A short descriptor of your character's relative level of wealth, possessions and other non-liquid assets.
Formula: Average.
- ▶ **Move:** How many meters your character can move per action taken in combat.
Formula: Median of Spd, End and Det.
- ▶ **Willpower:** Your character's ability to avoid being overwhelmed by mental effects, such as fear or paranormal compulsions.
Formula: Median of Int, Chr and Det.

Sitting down to calculate Finneus' scores, his player notes that he has Armor 3, Defense 5, Edge 1, Encumbrance 5, Health 11, Move 6 and Willpower 4.

WHAT'S A MEDIAN?

For those of you who need a refresher, the median value is the middle value in an ordered series. So, for example, if you're asked to take the median value of Str 6, Dex 7 and End 4, the median value is 6. It's not the highest; it's not the lowest; it's the middle value.

GATHERING THE TEAM

Talk to the other players and discuss how your characters know each other. Did they meet before the campaign begins or are they encountering each other for the first time? If the GM has a specific premise or type of horror in mind, it is also a good idea to discuss it with each other.

All of the players sit down and discuss how their characters know each other. They decide that they all met while locked up for minor crimes in Chi Chen, and that they're now trying to establish a reputation in the Martian colonies.

CAMPAIGN LANGUAGE

The GM, or players collectively, should select a campaign language to be the language shared by all characters on the team. When in doubt, just pick the language in which the game is being run. All player characters automatically know this language for free.

AMBITIONS

Think about your character's goals and come up with both a long-term ambition and two short-term ambitions. Alternatively, the GM may assign one or more of these starting ambitions, to help hook characters into the campaign's events from the start.

Finally, the group should work together to come up with one party ambition, which all player characters share. For more on ambitions, see page 48.

The GM has specific plans for the campaign and decides to assign the initial party ambition once the team receives their first mission hook. The GM also gives all characters one short-term ambition: "Do something big that will help build the right kind of reputation."

This leaves Finneus' player with one short-term and a long-term ambition to come up with. She decides the short-term is: "Find a better gun." She then decides that his long-term ambition is: "Find a way to escape his obligations to the Rakhimov Syndicate."

BEGIN PLAY!

Your character is now ready for play. Submit your character sheet to the GM for approval and prepare to experience the dark future.

Character Advancement

Nothing ever stays the same, least of all the player characters. As a ***Shadows Over Sol*** campaign continues, most characters achieve their goals, grow and advance in their abilities.

AMBITIONS

Each player character has three personal ambitions and either the group works together to come up with, or the GM assigns, a fourth party ambition. These are statements about what your character hopes to accomplish. Two of these ambitions should be short-term personal goals, such as might be achieved during a single session. The third personal ambition should be a longer-term goal, taking multiple sessions to complete. The party ambition may be either a short-term or a long-term goal. Examples include:

- ▶ Get a job with Unitech.
- ▶ Pick a fight with Wu's scrappers.
- ▶ Discover who sabotaged the ship.

USING AMBITIONS

The GM can use the characters' Ambitions to inform her plans when preparing a session, helping her tailor the game to the players' interests. Additionally, during a session, you might look over your character's Ambitions if you want a reminder of what to do next.

ACHIEVING AMBITIONS

When your character achieves one of her ambitions, you should point this out during the game. If the GM agrees, an experience is added to the group pool (see page 50). Then pick a new ambition to replace the one that was just achieved.

Ambitions may also grant an experience at the end of any session during which your character made substantial progress towards them (GM's discretion on what qualifies). When this happens, you do not need to erase the ambition until it has actually been achieved.

LEAVING AMBITIONS BLANK

If you don't know what your character plans to achieve next, it's okay to leave an ambition blank for a while. Ideally, some goal will present itself before long. Just take the time to think things through and declare the ambition once you have something in mind.

ABANDONING AMBITIONS

Ambitions that are no longer relevant to your character may be swapped out between sessions, during downtime, when your character rests for the night or with the GM's permission.

NO DOUBLE DIPPING!

Every ambition should be individual and discrete, with as little overlap as possible. You may never resolve two ambitions by undertaking the same task!

WHAT MAKES A GOOD AMBITION?

Ambitions serve several purposes. They help give direction to players who are at a loss about what to do next, they allow the GM to more easily plan the next session and they serve as interesting fodder for roleplaying and dramatic conflicts. Ambitions are also a way for players to outline the parts of the game they find most interesting and to reward them for being proactive.

Good ambitions serve each of these goals. In addition, a well-chosen ambition should:

- ▶ Be measurable, finite and quantifiable. It should be clear exactly when an ambition has been achieved and what is necessary to achieve it.
- ▶ Trigger, add to or resolve a conflict. In short, an ambition should add something interesting to the game. It should heighten the drama or further the plot in some way.
- ▶ Be interesting to the player. Pick something that you want to pursue and play through in the game. Don't pick boring ambitions!

EXPERIENCES

Over the course of a campaign, as the characters achieve ambitions, they will accumulate experiences. Between sessions or during downtime, these may be spent to increase stats, advance skills or purchase new traits.

For a plausible rate of growth, each character should earn somewhere around three experiences per session.

GROUP EXPERIENCE POOL

When experiences are earned, they go into a group experience pool. At the end of each session, these experiences are paid out evenly to all player characters, with any remainder left in the pool. This means that player characters always gain an equal number of experiences.

There are five player characters in Miles' campaign. Over the course of this session they earned 17 experiences. At the end of the session, 3 experiences are distributed to each character, with 2 experiences remaining in the group pool.

INCREASING STATS & SKILLS

Increasing a stat or a skill costs a number of experiences equal to the stat or skill's new value, purchased one rank at a time. For example, this means that it would take five experiences to increase from Strength 4 to Strength 5.

Skills may not go above five. Stats may not be advanced beyond 10.

PURCHASING TRAITS

A number of traits are available for purchase (see page 57). Every trait has a listed experience cost which must be spent to acquire it. Some traits also have other requirements, which must be met before purchase. Unless specified otherwise, each trait may only be purchased once.

Skills

Skills represent capabilities that are learned. When you make a test, the action may have a relevant skill as well as a relevant stat. When this is the case, modify the test based on whether your character possesses the skill in question. For the full rules, see page 102.

SKILL RANKS

Skills are rated from 1 (proficient) to 5 (world class). In actions where a skill is relevant, this rating adds to the total, along with the value of the relevant stat. The different skill ranks are described below.

- ▶ **Unskilled (0):** Your character does not have experience in this area. When making an unskilled test, use only half the value of the relevant stat.
- ▶ **Proficient (1):** Your character has basic training in the area in question.
- ▶ **Professional (2):** Your character is as skilled as a competent, entry level professional.
- ▶ **Expert (3):** Your character has extensive experience in the field.
- ▶ **Master (4):** Your character is a master of the area in question.
- ▶ **Grandmaster (5):** Your character is world-renowned in this skill.

DEFAULT STATS

Every skill has a listed default stat which is used unless the text specifies otherwise. For example, “make an **Awareness-10** test” means make a TN 10 test using the Awareness skill and its default stat (Perception). **Det/Awareness-10**, on the other hand, means make a TN 10 test using Determination as the stat, rather than the default.

SPECIALIZED SKILLS

Some skills are denoted as specialized skills. This means that the skill is actually a set of related skills that are grouped together under one heading. Each related skill is called a specialization, and is presented with parentheses. For example, the Vehicles skill may have the spacecraft specialization, which would be written as Vehicles (Spacecraft).

When you gain training in a specialized skill, you must pick an appropriate specialization. You are then trained in tasks related to that specialization. The description of every specialized skill includes a list of suggested specializations. These lists are noncomprehensive. The GM should allow other reasonable specializations.

SKILL LIST

There are twenty general skills available in *Shadows Over Sol*. Descriptions of each are provided below. Specialized skills are denoted by an asterisk (*) and include a list of example specializations.

Skill			
Academics*	Empathy	Melee	Streetwise
Animals	Expression	Persuasion	Survival
Athletics	Investigation	Projectiles	Thievery
Awareness	Language*	Socializing	Trade*
Deception	Medicine	Stealth	Vehicles*

ACADEMICS*

Academics is a broad skill with many specializations, each representing an area of formal education. Specializations include all of the liberal arts and sciences, as well as the humanities and natural philosophy. It does not cover applied cultural knowledge or artistic expression: for those, use Socializing or Expression, respectively.

► **Default Stat:** Intelligence

► **Example Specializations:** Astronomy, Biology, Chemistry, Computers, Demolitions, Economics, Engineering, History, Law, Physics, Politics, Theology, Warfare

ANIMALS

Even in the twenty-third century there are those who work with animals. This skill covers interacting with them in a variety of ways—from reading their warning signs to training them to do tricks. The skill also includes riding a mount, herding and recognizing the sounds of common beasts. It does not include tracking, for that use Survival.

► **Default Stat:** Determination

ATHLETICS

The Athletics skill covers any number of athletic activities—from climbing to jumping, and from racing to tumbling. The skill includes both aerobic and anaerobic activities, as well as feats of strength.

► **Default Stat:** Strength

AWARENESS

Awareness is more than general perception; it is a skilled alertness regarding your surroundings. Awareness allows you to notice an ambush, spot someone in a crowd or notice a strange smell when entering a building. It does not include more ponderous activities, such as reading a person's body language or investigating a murder; these are covered by Empathy and Investigation, respectively.

► **Default Stat:** Perception

DECEPTION

The Deception skill includes telling convincing lies, giving off inaccurate body language, sleight of hand and disguising yourself as someone else. Additionally, Deception is useful when gambling, acting or partaking in other activities which involve deceiving others.

► **Default Stat:** Charisma

EMPATHY

Empathy is the skill used to read a person's body language and tone of voice. It's used to get an idea of a person's emotional state or to give some insight into her motivations. Empathy is not a lie-detector. It might let you know that another person seems unusually nervous, but it wouldn't tell you she's nervous because of a specific lie.

► **Default Stat:** Perception

EXPRESSION

The Expression skill covers musical and theatrical performance, as well as artistic expression and public speaking. Use it to play an instrument, teach a class, create a beautiful painting, deliver a rousing speech or reenact a famous play.

► **Default Stat:** Endurance

INVESTIGATION

Investigation is the art of looking into an unknown matter and trying to make sense of what is found, often by piecing together seemingly disparate clues. The Investigation skill covers searching a particular area for hidden objects, as well as other aspects of investigation—such as questioning witnesses, checking the right nodes on the net and asking useful questions.

► **Default Stat:** Perception

LANGUAGE*

Language is the skill of speaking, reading or writing a particular tongue. It covers vocabulary, grammar and the use of common idioms. Unless a trait indicates otherwise, characters who are proficient in a language can both speak and read it.

By default, all characters begin with one rank of Language in their native tongue.

► **Default Stat:** Intelligence

► **Example Specializations:** Arabic, Bengali, English, French, Hindi, Mandarin, Portuguese, Russian, Spanish, Wu

MEDICINE

This is the skill of applied healing knowledge. It's used to apply first aid, treat injuries and other medical conditions, make practical diagnoses, cure poisons, perform surgery and dress wounds.

► **Default Stat:** Intelligence

MELEE

Despite the prevalence of guns, simple fistfights remain the most common type of violence in the Sol system. Melee is the skill used for hand-to-hand combat. It covers street fighting, wrestling, fencing, boxing and any other activity mimicking close combat. It does not cover thrown weapons, bows or guns; for those use Projectiles.

► **Default Stat:** Strength

PERSUASION

The Persuasion skill covers a variety of tactics to get other people to see things your way or to otherwise comply with your requests. It covers sweet-talking, formal diplomacy, browbeating, fast-talking and intimidation. It does not include carousing, seduction or putting people at ease; for those use Socializing.

► **Default Stat:** Charisma

PROJECTILES

The Projectiles skill covers firing, maintaining and operating any number of personal firearms or other projectile weapons, from lasers and flamethrowers, to archaic bows and javelins. It does not cover hand-to-hand weapons—for those, use Melee—nor does it cover stationary or mounted artillery—for those, use Academics (warfare) or Trade (soldier).

► **Default Stat:** Dexterity

SOCIALIZING

The Socializing skill is all about getting other people to like you. Use this skill to pick up rumors, put your rivals at ease, make a play at seduction or distract others with small talk. Additionally, this skill covers knowledge of the appropriate subcultures, slang and etiquette. It does not cover convincing others to see things your way or gaining deep insight into what people are feeling. For those, use the Persuasion or Empathy skills, respectively.

► **Default Stat:** Charisma

STEALTH

The Stealth skill covers hiding and generally sneaking around. It includes any aspect of remaining hidden, from fitting into small hiding spaces to tailing people without notice, and from setting ambushes to sneaking by guards. It does not include sleight of hand or shoplifting; for those, use the Deception or Thievery skills, respectively.

► **Default Stat:** Speed

STREETWISE

This is the skill of street smarts and gleaning information that others want suppressed. It covers being familiar with how things are actually done on stations and in urban environments, as well as using that to your advantage. Furthermore, it includes knowledge of where to find illegal goods, which corridors to avoid during the night cycle and what might damage one's reputation.

► **Default Stat:** Determination

SURVIVAL

The Survival skill covers the ability to live outside the bounds of civilization, as well as applied knowledge of local flora and fauna. It's used to forage for food, both in the wilderness and in station waste bins, applying practical knowhow of what's edible and what's dangerous. This skill also covers tracking, scrounging up salvageable goods and gathering basic natural resources.

► **Default Stat:** Endurance

THIEVERY

Under the auspices of the Thievery skill fall many simple but questionable proficiencies. This includes the ability to pick locks, breaking and entering, disabling simple security devices, larceny and picking pockets. It does not include con artistry or sleight of hand; for those, use Deception. Nor does it include remaining hidden; for that, use Stealth.

► **Default Stat:** Dexterity

TRADE*

This is a broad skill with many specializations, each representing a particular trade—such as plumbing, welding, carpentry or hair-dressing—or an applied field of engineering or craftwork. It can be used to mend a pair of boots, repair a groundcar, cook a tasty meal or lay suitable ductwork. It does not cover artistry, for that use the Expression skill.

► **Default Stat:** Dexterity

► **Example Specializations:** Armorer, Brewer, Carpenter, Chef, Electrician, Mechanic, Plumber, Soldier, Welder

TRADE SUBSTITUTION

The purview of the various Trade specialties frequently overlaps that of other skills. The GM is encouraged to accept an appropriate Trade specialty in lieu of the usual skill when a relevant test is made. For example, a character with Trade (Chef) might be able to substitute that skill in place of Investigation when ascertaining whether food has been tampered with.

ALTERNATIVE DEFAULT STATS

Not every trade is based around using your hands. At the GM's discretion, certain Trade specializations may have a different default stat.

VEHICLES*

This skill is used to operate vehicles. Each specialization represents a different type of craft. This includes anything from sailing ships to archaic carriages, and from spacecraft to groundcars. It does not include the design or maintenance of such vehicles; for that use the Trade skill.

► **Default Stat:** Speed

► **Example Specializations:** Aircraft, Ground, Spacecraft, Submersible, Teamster, Watercraft

Traits

Traits represent special features, flaws or abilities possessed by a character. Among other things, these include contacts and weaknesses.

TRAIT FORMAT

For ease of use, traits are listed in a standard format, which is shown below. It consists of the trait's name, experience cost, requirements, special options and a description.

TRAIT NAME

- ▶ **Cost:** The experience cost.
- ▶ **Requirement:** Any requirement necessary to purchase the trait is listed here.
- ▶ **Special:** Additional options, if any, are listed here.

Finally, the trait's description is written below.

PURCHASING TRAITS

Traits are purchased using experiences. The cost varies from trait to trait and is listed under each entry. Some traits also have requirements that must be met before they can be purchased. Unless specified otherwise, a trait may only be purchased once.

GENERAL TRAITS

A list of general traits follows. Weaknesses are listed in their own section beginning on page 60.

CONTACT

- ▶ **Cost:** 3 experiences
- ▶ **Requirement:** An existing NPC may only be taken as a contact with the GM's permission.
- ▶ **Special:** Each contact must be purchased separately.

You have made an important contact whom you may call upon for information, skill use or small favors. Contacts are generally helpful, but won't go too far out of their way or put themselves in jeopardy. For rules on bonds, see page 263.

If this trait is gained during character creation, come up with a brief description of the contact. If gained during character advancement, specify someone you encountered during the session with whom you interacted in a friendly manner and who would be inclined to continue to think well of you.

A table used to help generate ideas for likely contacts can be found on page 43.

FAVOR

- **Cost:** 1 experience
- **Special:** Each favor must be purchased separately.

Someone owes you a significant favor that can be called in at a later time. This grants you a single-use Contact that may be called in for one defined task, lasting no more than a day. For rules on bonds, see page 263.

MEMBERSHIP

- **Cost:** 3 experiences
- **Requirement:** An existing subculture, corp or other influential group may only be taken as a membership with the GM's permission.
- **Special:** Each membership must be purchased separately.

You are a full member, in good standing, of a major subculture, powerful corp or influential organization that you may call upon for information, skill use or small favors. The group may be generally helpful, but won't go too far out of its way or put itself in jeopardy. For rules on bonds, see page 263.

If this trait is gained during character creation, the player should work with the GM to select an appropriate group. If gained during character advancement, specify a group the character was invited to join during the session.

A table describing the major subcultures can be found on page 43. A section listing the Big 5 megacorps can be found on page 188.

PATRON

- **Cost:** 6 experiences
- **Requirement:** You must already have the patron as a Contact or Membership. An existing NPC or group may only be taken as a patron with the GM's permission.
- **Special:** Each patron must be purchased separately.

There is a powerful individual, subculture, corp or organization who acts as your patron, providing you with support or limited assistance, but expecting favors and your loyalty in return. Patrons may go out of their way, expending resources or putting assets in danger, to help you. For rules on bonds, see page 263.

If this trait is gained during character creation, come up with a brief description of the patron. If gained during character advancement, specify a Contact or Membership you have, whom you encountered during the session, with whom you interacted in a friendly manner and who would be inclined to improve their opinion of you.

STATUS

- **Cost:** 6 experiences
- **Special:** May be purchased once by player characters, or up to five times by influential NPCs; each time it represents an incrementally higher status.

You possess a high social status, perhaps as a wealthy dilettante, subcultural celebrity or corporate executive. Increase your Lifestyle by a rank per rank of this trait. You gain a + per rank of this trait on social tests in situations where you can leverage your status to your advantage. In similar situations, you may also impose a - per rank on social tests targeting you.

A table of example statuses is shown below.

Status	Examples
0	Worker, Scientist, Scrapper, Thug
1	Captain, Corp Middle Management
2	Station Administrator, Subcultural Celebrity
3	Corp CEO, Subcultural Demagogue
4	Megacorp Executive Board, Nation-State Leader
5	Megacorp CEO

Chang is a naval captain, serving in Unitech's corporate (Status 1). However, he has been kidnapped, brought to Miskan Station and stripped of his gear. While helpless and on a hostile station, he is unable to leverage his status to his advantage and thus does not benefit from the + on social tests. To rectify this, he aims to escape, acquire a pistol and radio Unitech for aid.

WEAKNESSES

Weaknesses are a special category of trait that each represent a flaw, defect or quirk that makes your character's life more difficult. They have no associated cost, and can be freely chosen at character creation—or afterward, with the GM's permission.

Whenever a weakness trait would significantly hinder your character during play, it provides a benefit by allowing you to immediately gain an Edge. This can be done up to once per hour per Weakness.

The list of available Weaknesses is below.

ABSENT-MINDED

Always absent-minded and spacey, most of the time you are in a world of your own. This imposes a  on tests that require remaining alert or recalling past details.

ALLERGY

You have an allergy to a specific common substance. If you suffer a critical failure while in a location that may contain the substance, you have been exposed and have an allergic reaction. This imposes a  on all tests until you can get away from the source of the allergy and recover for a few minutes.

AMNESIA

There is some period of your life which you simply cannot remember. You automatically fail all attempts to remember it. What were you doing? Why can you not remember? Work with the GM to figure out the details.

BAD BACK

You find yourself unable to lift as much gear as might otherwise be expected. Perhaps you have a condition that restricts the mobility of your arms or a delicate spinal condition. Regardless of the cause, this applies a -2 penalty to your Encumbrance score.

BAD EYESIGHT

You have poor vision. You suffer a  on tests that rely primarily on sight. This might be correctable with glasses, in which case the bane does not apply, but neither do you gain an Edge for the weakness hindering you.

BOTHERSOME HABITS

Many people have some odious personal habits, and you are one of them. This might be bad hygiene, a consistent and awful sense of humor or an aura of pure arrogance. Whatever its nature, your habits impose a  on all social tests where you might offend others.

COMPULSIVE BEHAVIOR

You have a strong urge to indulge in some specific behavior. This could be compulsive gambling, drinking, sex, etc. When you suffer a critical failure in the presence of this temptation, you gain the Desire (Indulge) consequence.

COWARDICE

You are not very brave, and are likely to run or freeze up when faced with danger. This imposes a  on all aggressive tests when faced with a spooky or dangerous situation. This is also applied to tests made to resist fear.

CRIPPLED

While you are able to walk, your legs do not function anywhere near a jog, let alone a run. You take a -2 penalty to your Move score (min 1) and automatically fail all attempts to run, jump, jog or otherwise move quickly by foot.

DOOMED

You are dying, and it is only a matter of time until you expire. This could be due to a chronic illness, slow poisoning or other medical condition. Whenever you suffer a critical failure on an Endurance-based test, make a tally mark next to this Weakness. Once the number of tally marks exceeds your Endurance, you finally die (although the GM may allow you to finish out the scene for dramatic effect).

ENEMY

Many people have enemies, but one of yours is unusually persistent. The first time in a session in which you suffer a critical failure, your enemy may make an appearance and try to foil you in some way. This could be anything from indirect interference with your plans, to direct physical confrontation. For rules on bonds, see page 263.

FAT

Carrying around a lot of extra weight can be disadvantageous in many situations. This imposes a  on tests made to run, walk lightly or squeeze yourself into small spaces.

FLASHBACKS

Flashbacks can be caused by traumatic experiences, mental illness or drug use. Whenever you suffer a critical failure during a stressful event, you experience flashbacks. This can confuse and disorient you, imposing the Dazed consequence.

HARD OF HEARING

You have a poor sense of hearing. You suffer a  on all tests that rely primarily on listening. This might be correctable with a hearing aid, in which case the penalty does not apply, but neither do you gain an Edge from the weakness hindering you.

HONESTY

Some people just aren't able to lie very well. Maybe something in your face gives you away, or maybe deep down inside you simply feel guilty. You suffer a  on all attempts to deceive, lie or cover up the truth.

IMPULSIVE

You have the tendency to act on impulse, giving in easily to provocations or enticement. This applies a -2 penalty to your Willpower score.

INSOMNIAC

Insomnia plagues you during the night, causing you to not sleep well. Anytime you suffer a critical failure, you do not sleep well later that night. This causes you to not count that night's sleep for the purpose of natural healing or ridding yourself of the Fatigue consequence.

LECHEROUS

Distractions of a sexual nature are many and varied, and you are particularly lured by them. You suffer a  on all tests made to resist seduction or where your lecherous nature may serve as a significant distraction.

OBLIGATION

You have a significant obligation that you owe to an outside party—perhaps a large debt, dependent or corporate indenture. For rules on bonds, see page 263.

PHOBIA

Irrational fear can be paralyzing. You have something of which you are uncontrollably and irrationally afraid. You suffer a  to all tests made in the presence of the subject of your phobia.

POOR

Unfortunate economic circumstances have brought you to a point where you are notably poorer than the average member of your society. This reduces your Lifestyle by two ranks. In addition, if this weakness is gained during character creation, halve any starting money.

RIVAL

You have a rival who wishes to upstage, inconvenience or play cruel jokes on you. The first time in a session in which you suffer a critical failure, your rival may make an appearance. This differs from an Enemy in that a Rival does not necessarily seek to do you harm, and may even be friendly most of the time. For rules on bonds, see page 263.

SCRAWNY

Your physique is stick-thin and lacking significant bulk or muscle. You suffer a  on any test made to resist being knocked around, such as actions to avoid being knocked down, grappled or blown over.

SECRET

People will often go to great lengths to protect their most personal and hidden secrets. You have one such secret. If you suffer a critical failure while events related to the secret are under review, you accidentally let something slip, or evidence otherwise surfaces that hints at it. If the secret gets outed, this Weakness is usually replaced with Enemy, Wanted or another fitting weakness.

STUTTER

You possess a serious stutter, which gets in the way of speeches and other verbal communication. You suffer a  on tests that require significant amounts of speaking.

SUSPICIOUS

You are suspicious of everyone's motives—even those of your own allies, fearing that you will suffer misfortune at the hands of another. You suffer a  on all Group Effort tests, regardless of whether you are acting as primary or secondary.

UGLY

Some people are beautiful to gaze upon. You are quite the opposite. This could be a natural unattractiveness or the result of some disfiguring injury. Regardless, you suffer a  on tests where a standard of beauty would apply.

WANTED

You are wanted for crimes by a major corp or other sizable group. If you suffer a critical failure while going through a region controlled or policed by this group, the local security or other agents will try to arrest you.

GEAR

In the twenty-third century, gear is essential. Without it, humanity is simply a bunch of hairless primates with a capacity for language and existential angst. With the right gear, humanity has tamed the land, built civilization and reached outward towards the stars.

Money

Money is a complicated fiction, and in the future it has become even more complicated. No longer are currencies backed by nation-states: they're abstracted digital measures issued by megacorps, protected by cryptographic algorithms and shuffled around wirelessly.

In space, Unitech's influence is so pervasive that its currency, the Unitech microcredit (¤), has become the *de facto* currency of choice beyond Earth.

Lifestyle

Lifestyles can vary a lot. Different subcultures, habitats and levels of wealth: all of these play a part in how a character lives. Despite these variations, however, all but the most austere tend to possess a variety of mundane items and accoutrements used to live their lives—from clothes, to chairs, to simple electronics, to even the humble toothbrush.

These possessions are represented by the Lifestyle score, which takes the form of a short descriptor that ranges from Broke to Obscenely Rich. See the table and descriptions below.

Lifestyle	Brief Description	Day	Month
Broke	Little money or property.	5¤	150¤
Poor	One fifth average wealth.	20¤	600¤
Struggling	Half the average money and property.	50¤	1,500¤
Average	The default lifestyle; about average.	100¤	3,000¤
Comfortable	Better lifestyle than most; twice average wealth.	200¤	6,000¤
Wealthy	Five times average wealth and possessions.	500¤	15,000¤
Very Wealthy	Wealth and possessions are 20 times average.	2,000¤	60,000¤
Filthy Rich	Access to almost anything; 100 times average wealth.	10,000¤	300,000¤
Obscenely Rich	Staggeringly opulent lifestyle; 500 times average.	50,000¤	1,500,000¤

- ▶ **Broke:** The character is technically homeless and possesses little. She may have access to a lockbox at a local shelter or may have a corridor or abandoned hab in which she regularly squats. There she has access to items for personal hygiene and the ability to get a spare change of clothes, if necessary. If the character lives on a ship, she is likely a stowaway, leeching off the rest of the ship for life support amenities, such as water and air.
- ▶ **Poor:** The character has a coffin-sized room she can sleep in and an attached lockbox she can use to store her belongings. This comes with access to shared hygiene facilities. She likely has a pass for the local public transit. If the character is living on a ship, this is the lowest lifestyle rating covering room and board, including paying for her own air and water.
- ▶ **Struggling:** The character has a small hab she shares with several other people. There is enough shared furniture to fill the space, and she has the usual living amenities. She also likely has a pass to use the local mass transit.
- ▶ **Average:** The character has a small hab to herself in a residential complex somewhere. Groundside, this is likely to consist of two to three small rooms. On a station or ship, this is likely to be a single small room. She has enough furniture to fill her space, as well as the usual living amenities. She also likely has basic insurance and has a pass to use the local mass transit or a membership in a groundcar share.
- ▶ **Comfortable:** The character has a medium-sized hab to herself, with all the usual amenities. She has basic but reliable insurance and possibly owns a light ground transport, such as a bicycle or moped. She also has full access to public transit.
- ▶ **Wealthy:** The character has a medium-sized hab to herself in a convenient location. It is fully outfitted with good quality amenities. She has good insurance. Groundside, she is likely to own a groundcar. On a ship or station, she is likely to have membership in a transport share.
- ▶ **Very Wealthy:** The character has a large hab to herself, which may even be a freestanding building, such as a traditional house. She likely has a luxury groundcar or a very basic air or space transport. She has comprehensive insurance. She may also be a member of selective clubs or consumer networks.
- ▶ **Filthy Rich:** The character has a large hab to herself, which is either freestanding with surrounding land or in the very best of locations, such as a penthouse suite with a roof garden. She may have multiple groundcars or a luxury air or space transport. Her hab only has the highest quality accoutrements, and she has the best insurance. She likely has several services she regularly pays for, such as part-time servants who will clean her hab or pilot her around.
- ▶ **Obscenely Wealthy:** The character has a large hab in the best of locations and possibly several additional smaller ones. She likely has several personal attendants she keeps on her payroll for mundane tasks and is a member of multiple exclusive clubs or consumer networks. She has numerous groundcars or a luxury air or space transport, such as a yacht. She has the highest quality accoutrements and the very best insurance.

STARTING LIFESTYLE

Unless the GM's particular campaign premise specifies otherwise, all characters begin with an Average lifestyle. This may be modified by the character's traits, such as Status, Poor and Stigmatized.

COST OF LIVING

Those seeking to maintain their lifestyle must pay bills and keep up appearances. After all, if you repeatedly appear poorer than you are, people will begin to assume that you are poor.

Maintaining your lifestyle requires regularly spending half the listed value for your rank in cost of living expenses (see the table on page 64). The GM may decide whether to track this daily or monthly. If you fail to make a payment, you lose access to your lifestyle's goods and services, as well as the benefits of any traits that increase your Lifestyle, until the next payment is made.

GOODS AND SERVICES

A benefit of Lifestyle is that while you are home, you are assumed to have access to Common availability goods with a cost equal to or less than your rank's daily value. So, for example, a Comfortable character is assumed to have access to common goods that cost 200 π or less. This benefit is lost if you failed to pay your most recent cost of living expenses.

LABOR, LIFESTYLE AND WAGES

One way to think about the cost of goods and services is in terms of hours or days of labor.

Each job a character might work supports a particular Lifestyle. Laboring at that job for one day produces a daily wage equal to the daily amount listed for that Lifestyle (see the table on page 64). For example, if being an engineer supports a Comfortable lifestyle, then a typical daily wage is 200 π .

Working a job involves making a test—usually TN 10 and involving a Trade skill of some kind. The GM may opt whether to handle this daily or monthly. Jobs with variable income bring in their typical daily or monthly wage, modified by 10% per margin of success or failure. Jobs with fixed income simply bring in their usual wage, but too many failures—or any critical failure—may result in being fired or some other disciplinary action.

Dado spends a day busking in the station's marketplace. This job supports a Broke lifestyle and working it calls for an **Expression-10** test. He makes the test and gets a 16, giving him a success with Margin 6. This means he increases his earnings by 60%. Since a typical daily wage for a Broke lifestyle is 5 π , Dado makes 8 π that day.

RAISING OR LOWERING LIFESTYLE

You may increase your Lifestyle a rank by voluntarily paying the new rank's cost of living expenses for three months in a row. So, for example, to raise from Average to Comfortable, you would pay 6,000ꜛ a month for three months.

Similarly, your Lifestyle is decreased a rank if you fail to pay your cost of living expenses for three months in a row.

Encumbrance

You can only carry so many things around with you before you begin to get bogged down by their sheer bulk. This is represented by encumbrance points.

In general, every piece of equipment takes one point, although item properties may alter this. You may only lug around so many encumbrance points before it begins to be a problem. The amount you may carry without issue is called your Encumbrance score. It is calculated using the formula below.

$$\text{Encumbrance} = \text{Median of Str, Dex \& End}$$

BEING ENCUMBERED

If you are carrying more points than your threshold you are said to be encumbered. While encumbered, you gain the **Hindered** consequence. You can rid yourself of this consequence by putting down what you are carrying. You cannot carry more than five times your encumbrance threshold.

CONTAINERS

Containers allow you to carry gear more efficiently. Equipment whose encumbrance points fit in a container do not count against your encumbrance threshold.

CARRYING CHARACTERS

In general, characters are bulky and difficult to carry efficiently. A character takes up a number of encumbrance points equal to her Strength + Endurance. If she is Size 2 or greater, multiply this by her Size.

Availability

Some items are more common than others. To represent this, each piece of equipment has an availability rating of Common, Uncommon, Rare or Exotic.

Common items are assumed to be freely available at most stations or colonies with any degree of commerce. Uncommon and Rare items, however, at the GM's discretion, may require a successful **Streetwise** test to locate. The GM is free to assign a + or - to the test for larger or smaller settlements, respectively. Failure means that you were unable to locate the item for sale, but may try again next week. Exotic items are particularly rare and are only available at the discretion of the GM. See the table below.

Availability	Test	# for Sale
Common	Freely available	Many
Uncommon	Streetwise-10	1d10
Rare	Streetwise-12	1
Exotic	Determined by GM	1

Buying & Selling

The prices listed in this chapter represent typical listings, but these may vary by location. In some places prices are subject to haggling. Haggling is handled as a Persuasion vs. Persuasion test. Success knocks 10% off of the base price, while success by Margin 5 or more knocks 20% off.

Selling an item to a merchant usually nets 20% of the base price. This can be increased to 30% of the base price with a successful Persuasion vs. Persuasion test, or 40% with success by Margin 5 or greater.

Gear Properties

Gear is often a matter of common sense. However, a few special properties are used to differentiate items. General gear properties are listed below, followed by properties specific to weapons and armor.

ENCUMBRANCE PROPERTIES

The following item properties affect the encumbrance system.

- ▶ **Big X:** This item is large enough or heavy enough that it takes more than one encumbrance point, where X is the number of points required.
- ▶ **Container X:** This item is designed to carry others inside of it. It can carry the indicated number of encumbrance points. When these items are inside the container, they do not count towards your encumbrance total.
- ▶ **Neg:** This item has negligible weight and does not require any encumbrance points to carry. At the GM's discretion, toting around large quantities of negligible items may add up to a point.
- ▶ **Worn:** This item is designed to be worn and only counts toward encumbrance if it is being carried.

ITEM QUALITY

The item properties listed below represent the quality of individual pieces of equipment.

- ▶ **Fine:** This item demonstrates exceptional craftsmanship or capability. At the discretion of the GM, it might provide a one-time + or similar benefit. Such items typically sell for at least 200% of their usual value.
- ▶ **Poor:** This item displays poor workmanship or maintenance. While it still functions, at the discretion of the GM it might impose - or break on a failed test. Poor quality items usually sell for about 75% of the usual amount.

TECHNOLOGICAL PROPERTIES

The following item properties represent the technological capabilities of the gear in question.

- ▶ **Computer X:** This item provides raw computing capability. The rating is a general measure of its processing power, bandwidth, memory, processing speed, etc. For each point by which the rating increases, its capability increases an order of magnitude. See the computing rules on page 156.
- ▶ **Implant X:** This item is implanted in the host's body. It takes up no encumbrance. The rating is an indicator of the strain it puts on the host's immune system. Once a host's total rating from all implants exceeds her Endurance, she suffers a - on all Endurance-based tests.
- ▶ **Software X:** This item is software. It takes up no encumbrance, but to be of use, it must be run on a machine with a Computer property rating at least as high as the program's Software rating. See the computing rules on page 156.

THE RIGHT TOOL FOR THE JOB

Not having the correct tool can make a task more difficult or even impossible. Using an improvised tool imposes **-** on relevant tests, while lacking a tool entirely imposes a **- -**, or at the GM's discretion, might even make the task impossible.

WEAPON PROPERTIES

Weapon properties affect how weapons interact with the combat system or other rules. The different properties are listed below:

- ▶ **Auto X:** Weapons with this property are capable of automatic fire and suppressive fire. The higher the rating, the more shots they put in the air at once (see page 117).
- ▶ **Blast X:** The attack is an area effect, covering a sphere with the specified radius in meters. Some blasts may also specify a larger secondary radius, separated by a slash, in which a lesser effect occurs (see the weapon's description). The attacker specifies the center point of the blast and then makes a TN 10 test, usually using the Projectiles skill. On a failure, the blast is off-target in a random direction determined by the GM. It strays a number of meters equal to the margin of failure, capped at half the distance between the attacker and target. See Area Effects on page 117.
- ▶ **Close:** This weapon may be used in a grapple or other close combat without penalty.
- ▶ **Cone X:** The attack is an area effect, covering a 20° cone originating from the attacker and extending the indicated number of meters. See Area Effects on page 117.
- ▶ **Feeble:** Halve the damage dealt with the weapon, after adding any extra damage from the Margin and before subtracting armor.
- ▶ **Hands 2:** This weapon requires two hands to use effectively. A weapon without this property may be used one-handed.
- ▶ **Grenade:** This weapon is some form of grenade or something similar. It uses the rules for grenades (see page 119).
- ▶ **Ignores:** This weapon ignores armor entirely. Do not subtract the target's Armor score from the damage dealt.
- ▶ **Parry X:** The listed bonus is added to Defense when the Parry reaction is taken.
- ▶ **Pierce X:** Weapons with this property ignore the indicated number of points of Armor.
- ▶ **Range X:** May attack targets up to the listed range in meters. Attacking at up to twice the this range is possible, but imposes a **-** on the attack.

- ▶ **Reach X:** This weapon is designed to attack targets up to the indicated distance in meters.
- ▶ **Reload X:** Requires the indicated number of actions to reload.
- ▶ **Shield:** A shield may be used to parry ranged attacks, excluding firearms.
- ▶ **Shots X:** This property indicates how many shots the weapon can hold before it needs to be reloaded. A weapon without this property may only hold one shot.
- ▶ **Str X:** Use the listed value as the Strength requirement for the weapon, rather than the weapon's damage (see page 120).
- ▶ **Stun:** This weapon is designed primarily to stun its target. If it deals damage, the target also gains a Stunned consequence. If after this attack she has three or more Stunned consequences, she also collapses unconscious for 1d10 hours.
- ▶ **Thrown:** This weapon is thrown, leaving the wielder without it once an attack is made. Unless otherwise listed, a thrown weapon has a range equal to the attacker's Strength.
- ▶ **Wraps:** A foe halves her Parry bonus when parrying an attack from this weapon.

ARMOR PROPERTIES

Armor properties apply to different varieties of armor, and are described below.

- ▶ **Armor X:** The armor rating indicates how much to subtract from the damage dealt by incoming attacks.
- ▶ **Ballistic X:** This armor is constructed using a ballistic gel, nanoweave or other material that is difficult to pierce. Use this rating in place of Armor against piercing attacks.
- ▶ **Bulky X:** Bulky armor inhibits movement when worn. It imposes a  on Athletics and Speed-based tests, including all tests made to run, climb, balance, jump or swim. In addition, it decreases the wearer's Move score by the indicated number (min 1).
- ▶ **Powered X:** Movement in this armor is aided by an internal power source. When worn, it provides  to all Strength-based tests and the indicated bonus to the character's Encumbrance score. These benefits are lost if the power source is removed.
- ▶ **Reflect X:** This armor is constructed with reflective and refractive material that scatters or absorbs heat. Use this rating in place of Armor against burning attacks.
- ▶ **Sealed:** This armor is sealed for use in a vacuum or other hostile environment, provided the character has an adequate air supply. It also protects against sonic attacks and gas-based agents.

Arms

Humans have killed other humans since our species first crawled out of the primordial ooze. As time has gone on, we have invented new and creative ways to bring each other's lives to premature and messy ends. Below are a wide cross-section of ways this is commonly done in the twenty-third century.

BALLISTIC PROJECTILES

It has been said, "God made man, but Samuel Colt made them equal." Whatever the case may be, ballistic projectiles have been a favored method of murder for centuries. The following guns are common in the twenty-third century.

Weapon	Damage	Range	Shots
USD-383 "Wasp" Light Pistol	5 pi	Per ×2	6
USD-720 "Widowmaker" Heavy Pistol	6 pi	Per ×2	6
USD-1200 "Amazon" Light Rifle	7 pi	Per ×3	1
USD-3200 "Valkyrie" Heavy Rifle	8 pi	Per ×3	1
Xenocom X4 Machine Pistol	5 pi	Per ×2	15
Xenocom X8 Machine Rifle	7 pi	Per ×3	30

USD-383 "Wasp" Light Pistol: A personal protection favorite, the USD-383 "Wasp" Light Pistol is ready to lock and load! Take aim at your favorite shooting range or when your life is in danger. The gun is small enough to fit most holsters or to slip into a purse! It comes with patent-pending rubberized grip and is available in gunmetal gray, matte black, racing stripe red or powder pink.

USD-720 "Widowmaker" Heavy Pistol: The ultimate man-stopper, the USD-720 "Widowmaker" Heavy Pistol is sure to leave you standing and your enemies taking a dirt nap. A long-time favorite of bounty hunters and security forces the Sol system over, this sleek .50 caliber handgun is now available on the open market! Order yours today!

USD-1200 "Amazon" Light Rifle: The rifle you need when you're on the go, the USD-1200 "Amazon" Light Rifle has been designed from the ground up for easy transportation and assembly. With balancing range, magazine capacity and ease of maintenance, the Amazon gets the job done. Satisfaction guaranteed. Some assembly required.



Reload	Properties	Cost	Availability
2	Close	300¤	Common
2	Close	600¤	Uncommon
2	Hands 2	200¤	Common
2	Hands 2	500¤	Uncommon
2	Auto 5, Close	1200¤	Rare
3	Auto 5, Hands 2	900¤	Rare

USD-3200 “Valkyrie” Heavy Rifle: The USD-3200 “Valkyrie” Heavy Rifle is a masterpiece of twenty-third century engineering, combined with sleek twenty-second century aesthetics. Own the best designed and best looking heavy rifle on the market! It comes with two autofire settings and a designer gun case. Remember, Valkyrie means quality.

Xenocom X4 Machine Pistol: The Xenocom X4 Machine Pistol is a military favorite. Coming with the best fully automatic capability of any pistol on the market, the X4 outdoes the competition. Pick yours up and feel the ballistic power in your hand. Place an order for the entire unit. Outfit your squad with the best!

Xenocom X8 Machine Rifle: When you want maximum staying power, you want the Xenocom X8 Machine Rifle. Combining the best in range and magazine capacity with the best in full-auto heat suppression technology, the Xenocom X8 is second to none. Pair with our range finder or tracer round extras for the ultimate military battlefield kit.

LASER PROJECTILES

Laser weapons are bulkier and have fewer shots between reloads than their ballistic counterparts. Nevertheless, their recoil-free nature means that they have a distinct advantage in low gravity environments.

Weapon	Damage	Range	Shots
USD-490L “Indra” Light Laspistol	5 burn	Per ×2	5
USD-840L “Horus” Heavy Laspistol	6 burn	Per ×2	5
USD-2280L “Zeus” Light Lasrifle	7 burn	Per ×3	10
USD-4700L “Thor” Heavy Lasrifle	8 burn	Per ×3	10
Xenocom L3 Machine Laspistol	5 burn	Per ×2	10
Xenocom L8 Machine Lasrifle	7 burn	Per ×3	20

USD-490L “Indra” Light Laspistol: In zero-G the professional soldier knows not to be caught with only a ballistic gun at hand, because dead is what she will be. Don’t let this happen to you. Take the USD-490L “Indra” Light Laspistol into your zero-G battles and you will never want to use another lasgun again!

USD-840L “Horus” Heavy Laspistol: The Horus is simply the best heavy laspistol on the market. Designed from heavy-duty metal alloys and with anti-heat ceramic plating, the Horus outshoots the competition. Plus, the Horus’ state of the art battery packs are guaranteed to hold the charges for months without unwanted discharge.

USD-2280L “Zeus” Light Lasrifle: Perfect for use on spaceships or stations across the system, the USD-2280L “Zeus” Light Lasrifle is jam-packed with all the essentials needed for successful space security. From its sleekly etched barrel to its finger-molded grip, the Zeus is a miracle for the professional security worker.

Reload	Properties	Cost	Availability
2	Close, Str 3	400¤	Common
2	Close, Str 4	800¤	Uncommon
2	Hands 2, Str 5	300¤	Common
2	Hands 2, Str 6	600¤	Uncommon
2	Auto 5, Close, Str 4	1600¤	Rare
3	Auto 5, Hands 2, Str 6	1200¤	Rare

USD-4700L “Thor” Heavy Lasrifle: Don’t be outgunned: carry the USD-4700L “Thor” Heavy Lasrifle. The best in range, accuracy and automatic fire capacity, every Thor heavy lasrifle is constructed from the finest materials and tested by the weapons experts at Utakar System Dynamics. So don’t be outgunned. Choose the best!

Xenocom L3 Machine Laspistol: The L3 Machine Laspistol is the latest military grade laspistol from Xenocom. Its heavy duty ionized battery contains enough charge for sustained fire, and its state of the art heatsinks support the highest rates of automatic fire. Make the best decision you’re ever made and pick yours up today!

Xenocom L8 Machine Lasrifle: When in combat, it’s best to remember: don’t let up. That’s why you need the Xenocom L8 Machine Lasrifle. With this high quality military grade laser rifle, you can keep the pressure on, pinning your enemies down with its automatic fire and keeping your allies out of the line of fire.



GRENADES

Where small arms fail, heavy arms may succeed. Either way, they're likely to leave collateral damage. Below one can find a variety of listings for grenades.

Weapon	Dmg	Rng	Properties	Cost	Avail
USD-9300 Frag Grenade	8 sm	Str ×2	Grenade	40☐	Rare
USD-9700 Stun Grenade	0 fat	Str ×2	Grenade, Ignores, Stun	30☐	Rare

USD-9300 Frag Grenade: The USD-9300 is the ultimate in frag grenade flexibility and reliability. It comes with two modes of operation: impact or timer. Simply arm the grenade and fling it at foes, or let it count down. The choice is yours!

USD-9700 Stun Grenade: Perfect for crowd control, the USD-9700 Stun Grenade is a wonder to behold. Just set the grenade to burst on timer or upon impact and let it go. Those caught in the primary blast radius must make an **End-18** test while those caught in the secondary blast radius must make an **End-14** test. On a failure, the target gains a **Stunned** consequence, on top of the one already imposed by the Stun property. Order yours today!

MELEE WEAPONS

Over the millennia, humanity has invented numerous melee weapons. In the twenty-third century, some of them still see common use.

Weapon	Dmg	Parry	Properties	Cost	Avail
Baton	4 sm	3	Close	30 α	Uncommon
Combat Utility Knife	3 cut	2	Close, Thrown	25 α	Common
Sinoex Monowhip XT	3 cut	0	Pierce 10	250 α	Rare
USD-07 "Firefly" Shockstick	3 sm	3	Close, Stun	150 α	Uncommon
Unarmed	2 sm	2	Close, Feeble	—	—

Baton: Batons are a tried-and-true classic when it comes to dealing out blows with a minimum of lethal force. Favored as a control weapon by light security forces the world over, it never hurts to have a baton at your side. Batons telescope for easy pocket storage. Available in both solid colors and faux-wood.

Combat Utility Knife: It's a weapon. It's a tool. It's both! Combat utility knives are a versatile weapon and tool, balanced for both hand-to-hand use as well as sudden throws. Knives can be used to cut rope, pry open simple doors or butter toast. Never leave home without one! The handle comes in a variety of custom styles.

Sinoex Monowhip XT: Crafted by the exotic materials experts at Sinoex, the Sinoex Monowhip XT is a coiled strand of near-monomolecular wire with a weight on the end held in a magnetized handle. Upon pressing a button, a power source in the handle causes the wire to uncoil and extend outward, providing the ideal cutting tool. Monowhips tear through armor like cardboard, but their limited tensile strength means they are typically one-use weapons, breaking after they successfully strike a target.

USD-07 "Firefly" Shockstick: Incapacitate your opponents with a nonlethal electric charge, using the USD-07 "Firefly" Shockstick. The Firefly is a telescoping baton that has a rubberized grip on one end. This insulates the wielder from the electric charge, which can be switched on or off using a button on the grip. If used to strike, the electrified end discharges, delivering a shock to the opponent intended to stun or incapacitate.

Unarmed: It doesn't get much more primal than old-school fisticuffs. Despite all the technological ways to go for blood, fistfights remain the most common form of violence in the Sol system. This listing represents the human capacity to attack with fists, feet or teeth.



AMMUNITION

Most projectile weapons require ammunition of some sort—whether bullets or battery power. These are sold in clips (for ballistic firearms) or batt-packs (for laser projectiles). Both clips and batt-packs are designed to be easily ejected and inserted. Below are some basic options for ammunition.

Item	Properties	Cost	Availability
Ballistic Clip	—	20 π	Common
Laser Batt-Pack	—	50 π	Common

Ballistic Clip: What are guns without clips of ammunition? Poorly-designed clubs! Don't bring a club to a gunfight. Ammunition is sold in clips fitting the gun in question. Most guns have their own standard for ammunition in terms of both caliber and cartridge design. The type of gun the ammo is designed for must be specified when the clip is purchased.

Laser Batt-Pack: Keep your lasers powered up and ready! Laser weapons are powered by high-density batt-packs, capable of releasing the tremendous charge necessary to power weaponized lasers in a small amount of time. The downside of these high-density batt-packs is that it takes serious industrial equipment to recharge them, meaning that batt-packs are typically bought as one-use items and the expended packs simply sold back to the manufacturer for pocket change. Each batt-pack holds the weapon's listed "shots" in charges. Like clips, batt-packs are typically manufactured for a single model of firearm.



Armors

The steady advance of new and more efficient ways to kill fellow human beings has spurred similar advancements in how to prevent those same human beings from becoming meaty red paste.

REPAIRING DAMAGED ARMOR

Remember that a piece of gear's Armor value decreases every time that damage penetrates it (see page 129). Armor damaged in this way can be repaired with an hour's labor per point lost and a successful **Trade (Armorer)-12** test. Each point repaired costs a quarter of the armor's listed value in parts. Armor reduced to a value of zero is beyond salvageable and cannot be repaired.

SELLING DAMAGED ARMOR

If attempting to sell damaged armor, treat it as having a base cost equal to half the listed value. Armor reduced to a value of zero is of little interest to most buyers and worth only 1d10⁺.

LIGHT & UTILITY ARMORS

The Sol system is a dangerous place, leading to the widespread use of both light and utility armors. Vac suits, in particular, are essential to life in space and are ubiquitous throughout the system. Wearing one of these usually won't raise too many eyebrows.

Item	Arm	Properties	Cost	Avail
USD-11h "Bulwark" Ballistic Suit	3	Ballistic 6, Worn	600▣	Uncommon
USD-24k "Aegis" Reflect Suit	3	Reflect 6, Worn	700▣	Uncommon
P&W Wide-Trim Designer Coverjack	3	Worn	200▣	Common
Unitech "Sunspot" C3 Vac Suit	2	Big 5, Bulky 1, Sealed, Worn	200▣	Uncommon

USD-11h "Bulwark" Ballistic Suit: Simply the best in light but durable ballistic protection, the USD-11h "Bulwark" Ballistic Suit stops bullets in their tracks. Utilizing Utakar's proprietary Shell-Stopper™ gel technology, the Bulwark hardens upon impact, distributing any resulting kinetic force throughout the body. Self-sealing gel closes in seconds. Designer pockets fit most common magazines. Available in black, charcoal, rosewood and navy.

USD-24k "Aegis" Reflect Suit: Do lasers threaten to give you health problems by burning holes into your flesh? Then look no further! The USD-24k "Aegis" Reflect Suit scatters lasers before they can scatter you. Constructed of bleeding-edge materials, the Aegis refracts laser light, leaving the wearer unharmed. Comes with either a frosted or glossy finish.

P&W Wide-Trim Designer Coverjack: Just because you need to wear armor doesn't mean you have to sacrifice style. With the Pfeiffer & Wu Wide-Trim Designer Coverjack you can have your cake and eat it, too! Designed for maximum comfort and discrete protection, all P&W coverjacks can pass as normal suits upon both visual and infrared inspection. Comes in a variety of designer colors! Power tie optional.

Unitech "Sunspot" C3 Vac Suit: The Unitech "Sunspot" C3 Vac Suit is the spacer's best friend. Capable of operating for up to six hours in complete vacuum and in a variety of pressure, radiation and atmospheric conditions, this space suit is truly the first in its class. Compressed air canisters connect at both hips, providing redundancy and allowing changes in the field. AR link included.

HEAVY & POWER ARMORS

Heavy armors—even the civilian models—are not casual wear. The bulky clamshell designs mark anyone wearing them as dangerous and looking for a fight.

Item	Armor	Properties	Cost	Avail
USD-38n “Knight” Tactical Suit	6	Big 4, Bulky 1, Worn	2000¤	Rare
USD-44p “Shogun” Combat Armor	10	Big 5, Bulky 2, Worn	10,000¤	Rare
Xenocom “Infinity” PowerShell Armor	12	Big 15, Bulky 3, Powered 5, Sealed, Worn	50,000¤	Exotic

USD-38n “Knight” Tactical Suit: Utakar’s latest design in heavy civilian armor, the USD-38n “Knight” Tactical Suit employs advanced safety measures to keep the wearer up and fighting. Built from the ground up for reliable protection, the Knight Tactical Suit is a must-have for any urban warrior. Straps and pockets carry extra magazines. Comes in a variety of patterns and colors. Available in both matte and gloss.

USD-44p “Shogun” Combat Armor: The best protection an infantryman can get, the USD-44p “Shogun” Combat Armor is the prize of the battlefield and tested by Utakar’s hands-on quality assurance experts. Remember, if you’re not wearing USD, you’re probably dead. Features an AR link, HUD, multiple gun holsters and clipped belt for carrying grenades. Customized paint jobs at no additional cost. Available in both matte and gloss.

Xenocom “Infinity” PowerShell Armor: Go beyond the usual limits with Xenocom “Infinity” Powershell Armor. The go-to choice of security professionals for more than three decades, Infinity power armor is rugged and reliable. Tailor-made for field maintenance and repair, the Infinity comes with HUD, AR link, a six-hour air supply, left and right arm weapon mounts and internal power cell. Holster points optional. Comes in a variety of colors.



Computing & Software

In 1969, the Apollo 11 mission went to the moon with less computing power than a late twentieth century graphing calculator. Pretty much any well-to-do resident of the twenty-third century would be aghast if asked to so much as walk across her hab with that little.

In the past three centuries, computers have been fruitful and multiplied. They are not found just in dedicated computing machines such as hand terminals and workstations; microcomputers can be found in any number of household appliances, packaging, clothing, tools and goods.

Rules for computing can be found on page page 156.

HARDWARE

No matter how divorced a citizen of the net might be from meatspace, it doesn't change the fact that every AR enhancement, simspace and piece of software is grounded in the physical machines that do the computing. These machines range from dime-sized micro-computers designed for electronic inventory or simple computations, to grand supercomputers operated by corps or universities.

Item	Properties	Cost	Avail
Microcomputer	Computer 1, Neg	10¤	Uncommon
Hand Terminal	Computer 3, Neg	100¤	Common
Workstation	Computer 5	400¤	Common
Mainframe	Computer 7, Big 10	2,000¤	Uncommon
Supercomputer	Computer 9, Big 20	50,000¤	Rare

Microcomputer: Are you tracking an object, calculating basic numbers or broadcasting a message on loop? Do you need only very basic computing and wireless ability? Then a microcomputer is what you're looking for! This dime-sized computer is capable of basic computations and processing. It has inbuilt wireless access. Due to its size, it has no display or other input or output features, requiring peripherals or wireless communication with another device.

Hand Terminal: The ubiquitous hand terminal is a must-have for anyone! These handheld computers work as video and audio comms. They are capable of IR and wireless connections; have an inbuilt camera, microphone and GPS; play games; do basic calculations; connect to the net; and interface with most common AR implants and glasses. Most also come with both voice and touch-screen controls.

Workstation: For serious computing needs, a workstation computer will excel! These computers are designed to be set on a desk or hung on a wall. They have the serious processing power needed for the most resource intensive games, extended scientific calculations and encryption. They can also serve as a makeshift server if needed. Workstation computers typically come with touchscreen and voice controls, as well as key inputs and sometimes simple biometric input.

Mainframe: Do you have the need for vigorous computing? Order a mainframe today! Mainframes are designed to go beyond personal computing needs. They host popular net nodes, serve as the main computers for spaceships, administrate corporate sites and sit on academic campuses. Mainframes are generally large machines, meant to remain wired in place and communicated with through individual workstations or hand terminals. Many have wireless capabilities, but this is often left turned off to take advantage of the superior bandwidth offered by wired connections.

Supercomputer: Some of the best computers that money can buy, supercomputers are typically found only in the most important corporate offices, used in the most computationally intensive academic problems or back the largest of the large net nodes. They are almost always designed to interface with personal hand terminals or workstations rather than with users directly. While supercomputers can be ported around in theory, they require extensive setup before they are operational.

SOFTWARE

Without software computers are little more than fancy paper-weights. Needless to say, a variety of software sees use across the Sol system, from anthropomorphized personal assistants, to a ship's navigation system.

Item	Properties	Cost	Availability
Encryption System	Software 3	100¤	Common
Encryption System, Pro	Software 5	400¤	Uncommon
Encryption System, Deluxe	Software 7	2,000¤	Rare
Encryption System, Ultimate	Software 9	10,000¤	Exotic
Expert System	Software 5	500¤	Uncommon
Personal Assistant	Software 3	200¤	Uncommon
Translation Software	Software 3	50¤	Common

Encryption System: Keep your private life private. Encryption is necessary for any sort of secure transaction using broadcast communication, such as browsing the net or speaking over radio comms. Most computers come with basic built-in encryption methods, but for those who want real security, bolstered encryption software is available. Better encryption packages make your encryption harder to break and your computer security harder to penetrate (see pages page 267 and page 273).

Expert System: Know your knowns and your known unknowns! An expert system is software that provides a database of knowledge and useful advice on a given topic. Every expert system is designed to support one skill, or sometimes a specific subfield of a skill. Consulting the database takes one minute. Doing so grants a + on an immediate, related test.

Personal Assistant: When you need a little bit of help, get a personal assistant! Personal assistant software uses adaptive algorithms to learn the wants, needs, schedule and habits of a particular user, looking up information and making suggestions without prompting. All personal assistant software requires several weeks to adapt to a new user, and most is given a customizable anthropomorphic avatar. This avatar can be projected onto the surrounding environment when viewed through AR. Many personal assistants have adjustable personalities as well.

Translation Software: Don't let the language barrier be an issue. Translation software provides real time on-the-fly translation between two languages. Most translation software is capable of outputting the translation in both speech and text, and often includes the ability to manually enter new vocabulary and idioms.

PERIPHERALS

Computers are great, but they still need methods of input and output. The most common methods are touch screens and voice commands, which are built into most computers, but other specialized peripherals exist.

Item	Properties	Cost	Availability
AR Glasses	Neg, Worn	50¤	Common
Biometric Reader	—	50¤	Uncommon
Data Chip	Neg	100¤	Common

AR Glasses: Join the AR revolution. Join the twenty-third century. AR glasses look a lot like typical glasses, except they project augmented reality (AR) information before the wearer's eyes. This allows the wearer to read AR tags, access AR data and overlay projections on the world around her. Doing this, however, requires wirelessly interfacing the AR glasses with a computer—typically a hand terminal.

Biometric Reader: For all your secure needs, you can rely on a biometric reader. A biometric reader is used as a secure input device to authenticate the identity of a computer user. Most readers scan fingerprints or retinas, although DNA readers exist as well. Typically they are connected to a host computer, which takes input from the device.

Data Chip: Data chips—for when the net just won't cut it! Data chips are small silicate chips intended to transfer data physically between computers. They are often used when transferal over the net would be deemed insecure or where no local net is available. A typical chip stores up to Software 5. Larger and smaller versions exist.



Covert Ops

Sinister things happen behind closed doors, sealed away from the eyes of the world. And where secrets are kept, others seek to discover them.

Item	Properties	Cost	Availability
Biometric Cracker	—	800¤	Rare
Chameleon Suit	Worn	800¤	Uncommon
Disguise Kit	—	300¤	Uncommon
Disguise Kit, Superior	—	3,000¤	Rare
Disposable Cuffs	Neg	50¤	Uncommon
E-Lockpick	—	200¤	Rare
IR Cloak	Bulky 1, Worn	800¤	Uncommon
Magnetic Grapnel	—	200¤	Rare
Microbug	Neg	120¤	Uncommon
Voice Mask	Worn	100¤	Rare

Biometric Cracker: A device that quickly cycles through biometric input used to open locks or secure areas. It is capable of imitating the input for fingerprints, irises, DNA and other common biometric methods. Wiring the device into a biometric reader is required, as it only fakes biometric data in digital form.

Chameleon Suit: You'll blend right in with this chameleon suit! This tight-fitting suit changes color as the wearer moves, similar to a chameleon. This aids the wearer's attempts at stealth, granting a + to related tests, but it does not fool infrared detection.

Disguise Kit: Be who you want to be with this disguise kit! A complete kit that contains makeup, clothes, prosthetic attachments, instant hair coloring and colored contacts. The basic version is enough to pull off most disguises, whereas the superior version grants a + to related tests.

Disposable Cuffs: These disposable cuffs are little more than metal-meshed tape that can automatically tighten over the limbs of their target once applied. Further struggles against the cuffs cause them to tighten more. Comes with 10 uses.

E-Lockpick: Never be sealed out of electronic doors again! This small device cycles rapidly through possible electronic lock combinations and patterns, gaining access to electronically-sealed doors or hatches. Typically this takes a few seconds. Attempts to access the locks may still be logged by locks capable of doing so.

IR Cloak: Do your enemies have the means of IR detection? Foil even that with this IR cloak! An IR cloak appears to be a thick poncho or tarp, which is usually matte black in color. It self-adjusts to the ambient temperature to fool infrared detection methods. This is usually coupled by cutting the lights or otherwise moving around in the dark to foil visible spectrum detection as well.

Magnetic Grapnel: Get to unreachable heights fast. Try a magnetic grapnel today! A coiled grapnel gun which can almost silently fire a magnetic grapnel, with a cord up to 30 meters. It can then be set to recoil itself, pulling the user towards its target at the rate of 5 meters per round. The cord can safely hold up to 180 kg (400 lb).

Microbug: Never miss a hidden event: use a microbug! A flea-sized recording device that captures both audio and video input. It can store up to 10 minutes of input on the device itself, but typically transmits its recording wirelessly. Transmission can be set to occur in short bursts, in a constant stream or at a specified time.

Voice Mask: Studies show that the largest cause of disguise failure is identification by voice. Change your voice today! Attaches to the wearer's throat, usually sitting on the shoulder or neck, beneath the collar. Once attached and turned on, it distorts the wearer's voice so as to be unrecognizable.



Implants

Implants are mechanical or biological items designed to be implanted in the owner's body. There, the implant works to replace or augment the owner's physical or mental capabilities. Implants are generally broken down into two categories: cyberware (mechanical implants) and bioware (biological implants).

There was a fad for implants in the late twenty-first and early twenty-second centuries, but aside from a few medical implants, cheap replacement limbs and the growing popularity of AR implants, today's implants are largely considered a failed technology.

Item	Properties	Cost	Availability
Adrenaline Booster Gland	Implant 2	3500¤	Rare
AR Implant	Implant 1	200¤	Common
Biomonitor	Implant 0	50¤	Common
Cybernetic Replacement Limb	Implant 1	400¤	Uncommon
Gun Arm Implant	Implant 1	800¤	Rare
Injector Unit	Implant 1	50¤	Uncommon

Adrenaline Booster Gland: A boost when you need it! An artificial organ implanted near the kidneys. Typically triggered through a pre-programmed biological input such as a tongue pattern or a series of finger taps, the implant gives a + to Strength-, Dexterity-, Speed- and Endurance-based tests for a number of rounds equal to the target's Endurance. Activating the gland is an action. After its primary effects wear off, the user gains 1d10 fatigue, as the after-effects of the gland leave her shaking and weakened. The gland cannot be used for another 24 hours because it has to remanufacture its artificial adrenaline.



AR Implant: Tired of bulky AR glasses? Internalize your augmented reality! This state of the art implant intercepts signals between the host's eyes and brain, injecting AR tags and other data into the visual signal. Operated through either voice or programmed eye movements, the AR implant comes with an encrypted wireless interface and a hard-wired off switch.

Biomonitor: A small, barely-invasive implant that periodically records simple medical data, such as blood pressure, pulse, heart rate and blood sugar. It comes with a small external switch that turns on the capability to communicate wirelessly with medical equipment. This aids in diagnosis and first aid on the host, granting a + to such endeavors.

Cybernetic Replacement Limb: Can't afford the cost of a regrowth treatment? This cybernetic limb has you covered! A week's training is required to regain full limb capability. Cybernetic arms and legs typically come complete with faux-skin, making them look less unnatural. A cybernetic limb will never have tactile input like a natural arm or leg, but in all other regards, cybernetic limbs function like the real thing.

Gun Arm Implant: Have your safety well in hand, or at least in arm, with this gun arm implant! Included is a concealed ballistic gun barrel and trigger mechanism, which embeds beneath the skin of the forearm. The gun can be programmed to fire with a simple flick of the arm, dealing 5 piercing damage, with the Close, Range Per $\times 2$, Reload 2 and Shots 3 properties, giving the element of surprise. Reloading requires opening a compartment in the arm and loading each bullet individually.

Injector Unit: Always have your drugs on hand when you need them with this injector unit! This implant is typically embedded in the thigh, and can be programmed to deliver a dose of a contained drug intravenously, all with the flip of a switch or a pre-programmed voice command. Holds three doses. Activating the injector unit is a reaction.

Medical

The snapping of bones, the rending of flesh and the irradiation of the body: all these things can be treated, or even cured, through the miracles of twenty-third century medicine. This is a good thing considering the horrors of space.

MEDICAL SERVICES

First aid can be applied easily enough in the field, but surgery typically requires large and expensive facilities, not to mention a skilled surgeon.

Item	Cost	Availability
Minor Surgery	200¤	Uncommon
Major Surgery	1000¤	Uncommon
Regrowth Therapy	2000¤	Rare

Minor Surgery: Suffering from a simple bone fracture, minor organ damage or moderate tissue damage? A variety of minor surgeries may be able to help you! This is required to remove some lasting consequences, including many on the Grave Wounds table (see page page 132). For full rules on surgery, see page page 139.

Major Surgery: Minor surgery not enough for your wounds? Major surgery may be just what the doctor ordered! This is capable of removing even more potent lasting consequences, including many of the worst Grave Wounds (see page page 130). For full rules on surgery, see page page 139.

Regrowth Therapy: Need a new arm, leg or bodily organ? Look no further! Lost limbs, digits, eyes and many other organs can be regrown, but this is expensive, takes time and requires frequent visits to the doctor to apply the next stage of the therapy. Limbs in the process of regrowth typically are tender and itch fiercely. For full rules on surgery and regrowth therapy, see page page 139.

MEDICAL EQUIPMENT

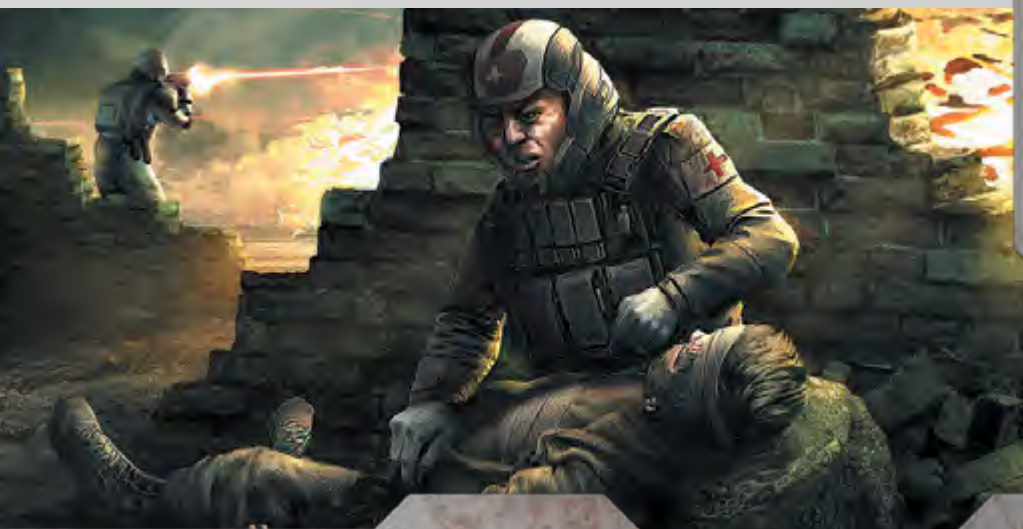
A variety of medical gear is commonly available in the twenty-third century. This equipment ranges from replacement limbs, to the tools of the physician's trade.

Item	Properties	Cost	Availability
Disposable Test Kit	Neg	50▣	Common
Medikit	—	100▣	Common
Surgery Kit	—	2,000▣	Rare

Disposable Test Kit: Have a specific condition that needs testing? That calls for a disposable test kit. This kit tests for a specific disease, toxin, drug or medical condition, such as sleep deprivation or pregnancy. It is typically administered through either drawing blood or through a urine sample. Results usually take a minute or two.

Medikit: Treat nagging injuries on the go! Counts as basic medical tools when applying first aid or as improvised tools if conducting minor surgery. Contains 10 uses.

Surgery Kit: Not all injuries happen within easy reach of a hospital or medical bay. For unexpected injuries in the remote reaches of space, there's the portable surgery kit. With a portable pack of surgeon's tools, diagnostic gear, cheap anesthetics and antibiotics, this kit counts as sufficient tools for minor surgery or improvised tools for major surgery. Contains 10 uses.





MEDICINAL DRUGS

Drugs see use throughout the Sol system in diverse areas, including medicine, recreation and paramilitary endeavors. They are used to treat medical conditions, to aid in combat and to hinder one's enemies.

The onset time of all drugs listed below assume they are injected directly into the bloodstream. Oral forms of most of these drugs are available, but have an extra half hour before they take effect. Some may be available in the form of patches, which take an additional minute to take effect. Finally, aerosol versions may be available. These have the same onset time as the injected versions, but require 10 times the dosage because they are less efficiently administered.

Item	Properties	Cost	Availability
Radasil	Neg	50¤	Uncommon
Regenasone	Neg	100¤	Uncommon
Somnitol	Neg	25¤	Uncommon
Stimulox	Neg	50¤	Uncommon
Torpestat	Neg	25¤	Uncommon
Verazine	Neg	200¤	Rare

Radasil: Don't let radiation get the best of you. Treat it preventatively with Radasil. If taken before radiation exposure, Radasil gives a + to resist the effects of radiation. Its protection lasts for 8 hours. Upon administration, however, the recipient gains 1d10 minus Endurance fatigue (min 0). Pack of 10 doses.



Regenasone: Get better faster with Regenasone! If administered during a day of rest and recovery, a dose of Regenasone speeds healing. That night, reduce all Wound consequences by 1d10 instead of the usual one. However, the patient also becomes lethargic; she gains 1d10 fatigue. Pack of 10 doses.

Somnitol: Prescribed for even the toughest insomnia, Somnitol will put you to sleep. If injected, Somnitol will put the recipient into a deep sleep in a number of rounds equal to her Endurance. Once asleep, she will remain unconscious for the next 8 hours unless awakened through a stimulant or by other chemical means. Pack of 10 doses.

Stimulox: Recommended by doctors system-wide! Use of this drug instantly awakens an unconscious individual, granting a + to Strength-, Dexterity- and Speed-based tests for the next 10 minutes. After this effect wears off, the recipient gains 1d10 fatigue. Pack of 10 doses.

Torpestat: Be the boss of pain. Don't let pain be the boss of you! A powerful pain-killer, once injected its effects last for 8 hours. During this time, the recipient does not suffer any penalties imposed by the Wound or Grave Wound consequences. The downside is that the drug also leaves her numb, imposing a - on all Dexterity- and Speed-based tests, as well as to any Perception-based tests relying on her sense of touch. Pack of 10 doses.

Verazine: When the perp won't talk, try Verazine! A psychoactive drug used in interrogations and for even less savory purposes. It causes the recipient to enter a hazy, dream-like state, becoming talkative and losing her internal filters. Injected directly into the bloodstream, Verazine takes about a minute to set in. Then, for the next 10 minutes, the recipient suffers -- on all tests made to deceive or to avoid simple mental trickery. Pack of 10 doses.

Sensors & Comms

In the twenty-third century, most communication still uses radio waves as a carrier, although laser communication is widespread in space, and at short distances, infrared (IR) becomes the norm.

PERSONAL COMMS

Communications are important. Without them we are all alone and isolated, floating in a tin can through the vast empty ocean of space. While many devices have built in comms for wireless transmission of data, these dedicated comms can be attached to various devices and used to boost their range.

Item	Properties	Cost	Availability
IR Comm	—	50¤	Uncommon
Laser Comm	—	50¤	Rare
Radio Comm	—	25¤	Common

IR Comm: Does your device not speak infrared? Get a dedicated IR comm! IR comms use infrared to transmit and receive data. This is useful only at very short ranges—usually no more than a few dozen meters.

Laser Comm: Direct your communication with a laser comm! Laser comms use lasers to transmit and receive data at a directed target. This limits the ability to intercept the data because it is not broadcast to the world, but rather directed at a specific point. This comm is good for 50 km (30 mi) in atmosphere, or 1000 km (620 mi) in space.

Radio Comm: The most common type of comms in the Sol system, radios broadcast in all directions. Some wavelengths have the ability to bounce off walls and atmospheric conditions, spreading their signal farther. This maximizes the distance of communication at the expense of being easy to intercept. Transmits up to a range of 8000 km (5000 mi).

SENSORS

Unbreathable gasses, extreme temperatures, vacuum, radiation, unbearable pressures, armed killers, viruses, explosives and weaponized biological terrors. Sometimes all that stands between you and them is a good sensor.

Item	Properties	Cost	Availability
Binoculars	—	25¤	Common
Camera	—	100¤	Common
Chem-sniff	—	300¤	Uncommon
Geiger-counter	—	50¤	Uncommon
Ladar Scanner	—	200¤	Uncommon
Night Vision Glasses	Worn	100¤	Uncommon

Binoculars: Don't let your enemies get close; spot them from afar with these binoculars! These are good for ×4 magnification, which negates a  on tests made to see at a great distance.

Camera: Be a pro photographer! Although most hand terminals come with a built-in camera, this dedicated one far surpasses the typical hand terminal camera in both speed and resolution.

Chem-sniff: Sniff out trouble with this chem-sniff! This olfactory sensor is able to detect and recognize substances by smell, comparing them against a database of commonly known scents.

Ladar Scanner: Ladar! Ladar! Ladar! These emit low-energy laser beams to detect and identify nearby objects. Although they are of limited use in detecting unknown objects due to the narrowness of their beams, they have remarkable resolution in identifying objects once they are known. This includes facial recognition and chemical recognition technologies.

Night Vision Glasses: Don't be caught in the dark without them. These night vision glasses can detect infrared, projecting a false-color image right before the wearer's eyes. Good for seeing objects in the dark, but less useful for reading or color detection.

Survival Gear

Numerous items of survival gear are useful in the field, from sources of illumination, to kits and tools used to support human life in a variety of conditions.

Item	Properties	Cost	Availability
Backpack	Container 5, Worn	30¤	Common
Flashlight	—	10¤	Common
Gecko-climbers	Worn	250¤	Uncommon
GPS Tracker	Neg	25¤	Common
Rope	Big 2	20¤	Common
Survival Kit	—	250¤	Uncommon
Survival Kit, Superior	—	2,500¤	Rare

Backpack: Strap things to your back so that you don't have to carry them in your hands! This designer backpack comes in a variety of colors and styles—perfect for any occasion!

Flashlight: While most hand terminals have basic flashlight functionality, they don't have the power of illumination possessed by this durable, high-output survival flashlight! Useful for exploration when the power has gone out, the visible light beam illuminates at 3000 lumens and up to 500 m away!

Gecko-climbers: Have a surface you need to scale? Try some Gecko-Climbers! These gloves and boots strap firmly to the limbs, allowing the climber to stick to most surfaces in a manner similar to a gecko. Only capable of supporting up to 100 kg (220 lb).

GPS Tracker: Always know your way around with this GPS tracker! Useful on any planetary body with GPS satellites, this simple GPS tracker has a small display for its coordinates and also can transmit wirelessly to any other wireless device.

Rope: You never know when you'll need some good, old-fashioned rope! Made of light, but durable synthetic fabrics, it coils into an easy-to-transport bundle. Comes in 50 m segments, capable of safely holding up to 200 kg (440 lb).

Survival Kit: Never get caught in the great outdoors without one! This robust kit contains water purification tablets, a set of disposable tests for food safety, a variety of ointments, food tablets, a small knife, a lighter, a signal flare and other useful odds and ends. The basic kit counts as sufficient tools for surviving in the wild, whereas the superior kit grants a + to related tests.

Tools & Construction

The twenty-third century holds many construction projects, from the grand vision of the ARC Project, to the minute day-to-day repairs that dominate the life of a ship's engineer.

Item	Properties	Cost	Availability
Demolition Charge	—	150▣	Rare
Plasma Cutter	—	400▣	Uncommon
Power Tool	—	100▣	Common
Toolkit	—	200▣	Uncommon
Toolkit, Superior	—	2,000▣	Rare
Workshop	Big 100	10,000▣	Exotic

Demolition Charge: A compact explosive which is useful in mining, boarding actions or construction. Deals 10 smashing damage plus the margin of success setting the charge, with the Blast 3 and Pierce 3 properties, to the unwary. Please follow basic safety precautions.

Plasma Cutter: A favorite in heavy duty construction work, ship repair and emergency boarding actions, plasma cutters cut through even the toughest metals and ceramics. They may also be wielded as an improvised weapon dealing 3 burning damage.

Power Tool: Try a dedicated power tool! Comes in a variety of shapes and sizes: from chainsaws, to magnetic drills. May serve as an improvised weapon, dealing 4 cutting, piercing or smashing damage, depending on the nature of the tool.

Toolkit: After using our toolkits, you'll feel naked without one! Each toolkit contains a selection of implements sufficient in performing small projects for a particular trade, academic field or other specialized area of skill. Different specializations require different toolkits. The superior version grants a + to related tests.

Workshop: A working space and larger set of equipment for performing all tasks related to a particular Trade specialization. Not easily portable. Each specialization requires a different set of equipment. Also grants a + to related tests.

SAGA MACHINE

Shadows Over Sol makes use of the **Saga Machine** system, adapted and expanded to fit the science fiction horror genre. In this chapter, we present the core of the **Saga Machine** system—the basics everyone needs to know.

Major subsystems, such as character creation and combat each get their own chapter. In addition, encumbrance rules can be found in the gear chapter and a few mechanics for monstrosities are presented in the adversaries chapter.

Playing the Game

To play **Saga Machine** you will need a group of friends, writing utensils, a few ten-sided dice (d10's) and at least one deck of playing cards.

Play is designed to take place in one or more game sessions. A few hours one evening for a session should suffice.

ALWAYS ROUND DOWN

Saga Machine only uses whole numbers. If you ever encounter a fraction during the game, always round down.

UNITS OF MEASUREMENT

When presenting units of measurement, we give the SI measure, followed by the US standard approximation in parentheses. For example: 0°C (32°F). The one exception is the SI meter, which is very similar to the US yard. For brevity, we simply state “meter.” The reader can treat any number of meters as the same number of yards without too much inaccuracy.



Tests

When an action might fail in an interesting way, the GM may call for a test to determine the result. To do this, roll a d10 and add its value to your character's relevant stat. The GM will decide which stat this is and may also call for a relevant skill.

The value of the stat and die added together is called the total. This is compared to a Target Number (TN). If the total meets or exceeds the target number (TN), the action is successful. However, if it is less than the TN, the attempt was unsuccessful.

Marek is trying to lift a fallen bulkhead, which has pinned one of his companions. The GM calls for a Strength test of average difficulty (TN 10). Marek has Strength 7. He rolls a d10, getting a 5. Adding these two values together gives him a total of 12. The action is a success and he lifts the bulkhead, allowing his companion to escape.

TEST CONVENTION

Saga Machine uses a simple convention to convey the important aspects of a test when referencing them in the text. Examples of this convention are given below:

- ▶ **Int-8:** Intelligence test with Target Number 8.
- ▶ **Det/Awareness vs. Stealth:** Determination test with the Awareness skill opposed by the Stealth skill with its default associated stat (Speed).
- ▶ **End/Survival-10 (Tally 10, 1 day):** Extended Endurance test with the Survival skill, TN 10, Tally 10, Interval of one day.
- ▶ **Panic-10:** Make a Panic test with TN 10 (see page 99).

TARGET NUMBERS

The target number (TN) of a test is chosen by the GM and represents how difficult an action is to perform. She may or may not choose to share it with the players, depending on whether the character would know the difficulty involved. A table of TN guidelines is presented below.

Difficulty	Target Number (TN)
Trivial	6
Easy	8
Average	10
Difficult	12
Daunting	14
Desperate	16
Absurd	18
Impossible	20

MARGIN OF SUCCESS OR FAILURE

Sometimes it might be necessary to figure out how successful or how much of a failure an action was. This can be achieved by calculating the margin of success or failure. To do this, take the difference between the target number and the total.

While attempting to track a suspect, Azure makes a Per-10 test, getting a total of 13. Since the target number was 10, she achieved a success with Margin 3.

CRITICAL SUCCESS AND FAILURE

If the result of a test meets or exceeds twice the target number, the action is said to be a critical success, and the GM may opt to declare that something extra beneficial happens.

Conversely, if the result of a test is at or below half the target number, the action is said to be a critical failure. This means that the character gains Stress (see page 111) and that the GM may opt to declare that something extra detrimental occurs. Critical failure also occurs when two or more 1's come up when making a test with a bane.

After resolving a critical failure, gain Edge until you have a number equal to your Edge score. If you already had that number or greater, instead gain a single Edge.

Gan is attempting to find a place to hide from some sort of crawling thing that didn't die when he shot it. This is a Per/Stealth-8 action. He makes the test, getting a total of 19: a critical success! The GM declares that not only does the creature not notice him, it gets distracted by passing fauna and bounds away through the alien underbrush.

Hassan wants to leap between moving groundcars to get away from the corporate goons chasing him. The GM decides this is an Athletics-12 action. Hassan makes the test, getting a total of 6: a critical failure! The GM declares that not only has Hassan's leap come up short, he bangs his head on the other groundcar, leaving him stunned. He also gains the Stressed consequence. In consolation, however, Hassan gets to draw Edge until he has a number equal to his Edge score.

BOONS & BANES

Circumstances can make some tests easier or harder. Positive circumstances may grant one or more boons (+), while negative circumstances impose one or more banes (-). For each of these, roll an extra d10 when resolving an action.

Boons allow you to use the higher of the die values to determine your total. They also allow you to make pairs (see page 102). Banes, on the other hand, force you to use the lower of the die values. You also run the risk of critical failure if you get two or more 1's when making a test with a bane.

If a test has both boons and banes, each boon cancels out a bane and vice versa before the roll is made.

Mylia is attempting to hack the security of a Unitech node, and the GM has awarded her + due to an earlier successful attempt. Because of this boon, she rolls an extra d10, getting a 4 and an 8. Since she has a +, she uses the higher of the two values to resolve the action: the 8.

William is attempting to convince station security to release his friends, but he is not familiar with the station's culture, so the GM has imposed -. He rolls an extra d10 getting a 7 and a 6. Since he has a -, he uses the lower of the two values: the 6.

Dado is attempting a tricky bit of negotiation with a criminal gang. The GM has imposed - due to past hostility, and Dado benefits from ++ due to both his reputation and a successful bribe. Since this test has both boons and banes, one + and the - cancel out, leaving the test with only a +. Dado rolls two d10's, getting a 1 and a 3. Since he has a +, he uses the higher of the two to resolve the action: the 3.

STRESS BOONS

The Stressed consequence and a few other mechanics grant a special type of boon known as a **Stress +** (see page 111). These function exactly like normal +'s, except that should the extra die from the boon be equal to or less than your character's Stress value, she suffers an automatic mental break (see page 113).

SKILLS

The eight stats represent innate human capabilities—after all, everyone has some degree of strength, intelligence and perception. Skills, on the other hand, are the mechanical representation of capabilities that are learned.

When a character in *Saga Machine* takes an action, the action might have a relevant skill as well as a relevant stat—this will likely be true for the majority of actions. When this is the case, the skill's value adds to the action as well as the value of the stat.

If a skill is required and the character does not possess it, not only is there no skill value to add, but use only half the value of the relevant stat. For more on skills, see page 51.

Milos is trying to sneak into a secret laboratory, avoiding any security. The GM calls for a Dex/Stealth-10 test. He has Dexterity 5 and Stealth 3. This means he adds a total of 8: his Dexterity, plus his Stealth. He then rolls a d10 and gets a 2, bringing the total to 10. Milos just barely sneaks inside before two guards pass by on patrol!

Jörgen has found himself in a footrace through a station corridor. The GM calls for a Spd/Athletics-10 test, but Jörgen has no Athletics skill. Since he is unskilled, he uses only half his Speed 7, rounded down. There is no skill value to add. He then rolls a d10 and gets a 9, giving him a total of 12. Somehow, despite his lack of training, he manages to win the race!

PAIRS

If multiple dice are rolled due to boons and have matching values, you may choose to add the values of two of the matching dice together. This is called a pair.

Ayana is attempting to intimidate her foes and benefits from a + due to her allies outnumbering the enemy. She rolls an 8 and an 8. Because these values match, she may add their values together to get a total of 16!

Argyro is calling out a gang leader in front of his crew. She benefits from a + due to her gear, a + due to the Bolstered consequence and a + due to group effort. She rolls four dice, getting 6, 6, 6 and 9. She may add two of those 6's together to make a pair, for a total of 12!

Edge

At the beginning of each session, draw a number of Edge tokens equal to your character's Edge score. Ideally, you should find some sort of counters to use—poker chips, glass beads, playing cards or even tally marks on paper might suffice. If you are the GM, draw a number of Edge equal to the number of players present at the session. These are shared between all NPCs.

Edge represents the subtle advantages your character has in the narrative or in the world at large—call it fortune, fate or karma. As you draw additional Edge or spend them, you can think of this as being lucky or as your luck running out. The GM may even require that you explain how your character has gotten lucky!

PUSHING YOUR LUCK

After any test has been made, but before the results have been announced, you may opt to push your luck by spending an Edge token. Pick up your dice and reroll, adding a **Stress**  to the test (see page 111). You may opt to take whichever result is better.

Mikolaj is trying to swing between loose elevator cables. Unfortunately, he rolls a 2. He decides to push his luck, spending an Edge token and rerolling the test with a **Stress** . Since he has a , he rolls two dice. He gets a 7 and a 3. He decides to take the second roll, keeping the 7 and discarding the 3.

Simeon is attempting to convince a corp investigator that he wasn't at the scene of the crime last night. Unfortunately, he has a weakness which imposes a  on this test. He rolls two dice, getting a 1 and a 5, which he doesn't think will be sufficient, so he spends an Edge token to push his luck. This time he gains a **Stress** , which cancels out his . He rolls a single die and gets a 10. Now Simeon is confident his ruse will succeed.

REDUCING STRESS

At any time, you may opt to reduce your Stress value by spending an Edge token. When you do this, remove a **Stressed** consequence. This lowers your Stress value by one (see page 111).

GAINING EDGE

Several mechanics allow you to draw additional Edge during play. These include Weakness traits and critical failures. When one of these applies, simply take the indicated number of Edge tokens and place them in front of you. Your number of tokens may go above your Edge score in this way.

Playing With Cards

An alternative way to play *Saga Machine* employs a deck of poker cards to resolve actions. Using cards in roleplaying games has a long and proud tradition. Those familiar with earlier editions of our games will already be familiar with this means of play.

SETTING UP THE DECK

Ideally, all players and the GM should each have their own deck of cards, but decks may be shared in a pinch.

At the beginning of every session, draw a hand of cards equal to your character's Edge score. If you draw a joker, discard it and redraw, then shuffle the joker back into the deck.

The GM also gets a hand, which is shared by all NPCs. The GM draws a number of cards equal to the number of players present at the session.

CARD VALUES

There are three types of cards found in the deck: value cards, face cards and jokers. Each is scored differently.

- ▶ **Value Cards:** Ace through 10 are worth the value printed on the card. This means that aces are low and worth one.
- ▶ **Face Cards:** Face cards (jack, queen and king) are worth 4, 5 and 6, respectively.
- ▶ **Jokers:** Any time a joker is used to resolve an action, the result is a critical failure. That means the GM gets to declare that something extra bad happens. Afterwards, draw cards into your hand until you have a number equal to your Edge score. If you already had that number of cards or greater in your hand, instead draw a single card. Then shuffle your discard pile into your deck. In this way, there are always two jokers in the deck. Jokers never sit in the discard pile.

RESOLVING TESTS

Use the following system to resolve a test whenever a player would otherwise roll a die: Flip a card off of the top of the deck, then add its value to the relevant stat and skill modifier, should one be applicable. Compare this total to the target number, as usual.

- ▶ **Banes** (☹): If the test would have a bane imposed on it, instead of rolling an extra d10, flip an extra card off of the top of the deck and keep the lowest value.
- ▶ **Boons** (😊): If the test would benefit from a boon, instead of rolling an extra d10, flip an extra card off of the top of the deck. Use your choice of the cards to resolve the action (usually the highest).
- ▶ **Pairs**: If multiple cards are flipped due to boons and have matching ranks, you may add the values of two of the matching cards together and take the total.

Mylia has snuck into a corporate office, where she is attempting to use the computer systems. The GM calls for an Academics (Computers)-12 test. Mylia has Intelligence 6 and Academics (Computers) 3. She flips a card off of the top of the deck, revealing 8♥. Adding these together, she gets a total of 17: a success! With practiced skill, she accesses the encrypted network.

Jiri is trying to design a novel genetic analysis that will detect fungus zombie infection. However, he keeps getting interrupted by said fungus zombies, which the GM decides imposes a ☹. This is an Academics (Biology)-12 test. He flips two cards off the top of the deck, getting the 2♠ and 10♣. Since he has a ☹, he uses the lowest value: the 2♠. He has Intelligence 5 and Academics (Biology) 4. This gives him a total of 11—a failure! Just when his research looks promising, zombies burst through the door and make a mess of his lab.

Hassan is in port shopping for unusual medical supplies. He is able to pay up to twice the going rate, which the GM feels merits a 😊. He also has the support of the rest of the party, adding another 😊. The GM then calls for a Chr/Medicine-10 test to locate the supplies. Hassan flips three cards off the top of the deck, revealing the 5♥, Q♠ and Q♦. These last two make a pair! Since he has Charisma 5, Medicine 3 and pairs, he gets a total of 18. His shopping trip is a stunning success.

EDGE

Instead of having a pool of Edge tokens, each player has a hand of cards that represents her character's Edge.

At the beginning of each session, draw a hand of cards equal to your character's Edge score. Draw back up to this number of cards each time a joker is used to resolve an action—that is, if the joker is not discarded due to boons. If you already had that number of cards or greater in your hand, instead draw a single card. Regardless, whenever a joker comes out, always reshuffle your discard pile into your deck.

PUSHING YOUR LUCK

After any test has been made, but before the results have been announced, you may opt to play a card from your hand, replacing any of the cards currently being used to resolve the action. If you have a , this is an excellent way to make pairs! Then flip the top card of the deck and use it to check for a mental break, exactly as if it were a card from a **Stress**  (see page 111).

Marek is creeping quietly through the darkened corridors of an abandoned space station, trying to avoid the monster that hunts him. He makes a Stealth test, revealing the 3♠. Marek doesn't, however, believe that this is good enough to avoid the creature, so he plays the 10♠ from his hand, replacing the 3♠. When added to his Speed 5 and Stealth 2, this gives him a total of 17. He hopes this will be enough! He then flips the top card of his deck to check for a mental break. He flips the 2♥, which is less than or equal to his Stressed 2 consequence. The pressure is too much. Something inside him snaps.

REDUCING STRESS

At any time, you may opt to reduce your Stress value by discarding a card from your hand. When you do this, remove a **Stressed** consequence. This lowers your Stress value by one (see page 111). The value of the card being discarded does not matter.

GAINING EDGE

When a mechanic would have you gain additional Edge, simply draw the indicated number of cards into your hand. Your number of cards in hand may go above your Edge score in this way.

Action Variations

Actions have many potential variations, including teamwork, being opposed by other characters and extended endeavors. The most common variations are presented below.

ROLL A D10

Sometimes a rule in *Saga Machine* calls for a player to “roll a d10.” To do this, simply roll a ten-sided die and take the result.

GROUP EFFORT

Sometimes multiple characters work together to accomplish a particular task, such as prying open a jammed airlock door or investigating a suspicious secret society.

Nominate one of the characters as the primary actor; the others will be secondary. Only the primary character’s total will matter directly; the secondary characters will provide a  or  to this test.

Have the secondary characters make the test first, albeit with TN 10. If one or more secondary character is successful, the primary character’s test is granted a . No more than one  may be granted in this way. On a critical failure, a  is imposed. Finally, have the primary character make the test and resolve as normal.

Gan is attempting to develop a new mounted laser design and has three engineers helping him. Each of the engineers makes the test and two are successful; this grants Gan a  for the successes. Finally, Gan makes the test with the granted . The laser design is a success!

OPPOSED ACTIONS

Many times a character wants to attempt some action that another character is actively trying to thwart. This is called an opposed action.

To resolve this sort of action, both players should make a test. The party with the highest total succeeds in what she was trying to accomplish. Ties are broken in favor of the character with the highest relevant stat, followed by the character with the highest Edge.

To push your luck in an opposed test, you must choose to do so before the opponent’s total has been revealed (see page 103).

Ernest is trying to sneak by an agitated cyberfiend. This is a Stealth vs. Awareness test. Ernest makes his test and gets a total of 14, while the cyberfiend makes her test and gets a 12. She fails to notice Ernest sneaking by.

EXTENDED ACTIONS

An extended action is a drawn-out endeavor where the time taken to complete the action is of particular importance, or where events can happen throughout the course of the endeavor that affect it in some way. Examples include a foot chase through a city street, repairing a boat moored at the dock before a volcanic eruption destroys the island or sneaking into a particularly well-guarded compound.

Extended actions are composed of a series of tests taken sequentially until the action is resolved. Each test represents the progress made over a particular Interval of time. The margin of success for each test is noted and added together to form a running total. This is called the Tally. The extended action is complete once the running total reaches the Tally required for the action. When the Tally is reached, the action is a success. Failure on an extended action is running out of time before the task can be completed.

Nadya is attempting to repair her spacecraft before a solar flare arrives. The GM declares this is an extended Trade (Mechanic)-10 action with an interval of a day and Tally 10. Nadya has three days before it arrives. The first day she makes a test and gets a total of 9. This is a failure, therefore she made no real progress towards her goal—not a good start! The next day she gets a 14, bringing her up to a total of Tally 4. Finally, on the third day she gets a total of 16. She is now at Tally 10, which is exactly the amount the extended action requires. She repairs her ship and sets off into space just in the nick of time.

TALLY GUIDELINES

Since the required Tally represents the amount of work an extended action will take to complete, it is useful to have some guidelines. Use the table below.

Amount of Work	Tally
Some	5
Lots	10
Tons	15

OPPOSED EXTENDED ACTIONS

An extended action can be opposed if two sides are actively working against each other. In this case, instead of a fixed Tally, the side with the highest accumulated total is successful.

THE RULE OF THREE

When in doubt, the GM should frame an extended action as a series of three intervals—that is, three tests are made and then the action is resolved one way or another. This gives ample time for the extended action to build a sense of tension without drawing out the endeavor to the point of boredom.

Consequences

In **Saga Machine**, actions are just half the equation. The other half is consequences: mechanical effects caused by actions. Consequences can represent many things, from experiencing fear or being on fire, to lusting after another character or being the life of the party. They are as many and as varied as the actions characters can take.

EFFECTS OF CONSEQUENCES

Consequences can have a variety of effects, from imposing weakness traits to ongoing damage. When in doubt, however, consequences should apply a  or a  to relevant tests.

DURATION OF CONSEQUENCES

Most consequences don't last forever. Many go away on their own, while others require some action to remove. When adjudicating consequences on the fly, the GM should use common sense. Being on fire might be removed by jumping into a lake. Bad rumors might be dispelled with good press. A mild case of lust might be removed with a cold shower. The consequences found in the appendix specify explicit removal conditions (see page 310).

STACKING CONSEQUENCES

Unless specified otherwise, a character may gain the same consequence multiple times. This represents a more severe or enduring effect. However, 's and 's from multiple instances of the same consequence are not additive. That is, for example, if you have two Hindered consequences, you only suffer  from being hindered; you do not suffer . Other effects, such as ongoing damage, are additive.

Each instance of a consequence is removed separately. For example, a character with two Dazed consequences will have to Focus twice to remove them both (see page 126).

THE RULE OF THREE

As a general rule of thumb, when a character builds up three or more instances of the same consequence, something more severe should occur. For example, perhaps instead of being Hindered, the character is fully restrained, or perhaps instead of suffering a  she instead suffers . The effect is left to the discretion of the GM.

CONSEQUENCE EXAMPLES

A number of example situations and their resulting consequences are given below. Note that in all of these cases, there is some clear benefit or hindrance—some exploitable by either party!

A list of consequences used by the various systems in *Shadows Over Sol* can be found in an appendix, starting on page 310.

Argyro is attacked by a group of hired thugs. She takes an action to dive for cover behind a passing groundcar, then attempts to hide. This grants her the Hidden consequence, which prevents the thugs from targeting her so long as she remains still and undetected.

Milos is attending a fancy party of Luna's most elite. Also in attendance is Mikko, a shipping magnate who tried to have him assassinated. He takes an action to gossip with the attending dilettantes, undercutting Mikko's credibility in social circles. This gives Mikko the Humiliated consequence, imposing a  on her social actions.

WORLD CONSEQUENCES

The GM may want some scenes to begin with consequences already in play. Clever players can use these initial consequences to their benefit. This can be a useful tool for the GM to promote certain behaviors. For example, the GM might want to promote caution in a scene by giving it a Hidden Danger consequence that makes ambushes or fear particularly easy. Or the scene might have a Noisy consequence, providing  to Stealth.

Stress, Panic & Mental Breaks

Space is stressful. It's one of the most hostile environments known to humanity, where one bad malfunction could send everything you know and love toppling out into the void—and that's before hostile kill-teams or bioengineered monstrosities enter the picture!

BECOMING STRESSED

Many situations are innately stressful. Each time your character suffers from a stressful event, she gains a Stressed consequence, representing her current level of psychological pressure and how close she is to a mental break.

Gain a **Stressed** consequence when your character experiences any of the following:

- ▶ Suffers a critical failure or succeeds on a Panic test (see page 112)
- ▶ Uses the Focus action to remove a consequence (see page 126)
- ▶ Encounters stressful events or situations, as determined by the GM

THE FOCUS ACTION OUTSIDE OF COMBAT

Outside of combat, it may be trivial to take a Focus action to clear your head for a moment, thereby shrugging off Fear, Dazed, Stunned or other consequences, but don't forget to gain a Stressed consequence when you do so!

STRESS BOONS (Stress +)

While stress has many long-term detrimental effects, it can also help you to focus at critical moments. Characters with the Stressed consequence may voluntarily take a special "stress boon" (Stress +) on any test they make. Pushing Your Luck also grants a Stress + (see page 103).

Stress +'s function exactly like normal +'s, except that should the result die or card from the boon be equal to or less than your character's Stress value, she panics (see page 111).

If using dice, it may help to keep track of dice from Stress +'s by rolling a different colored die. For cards, simply designate the last card flipped as representing the Stress +.

Should a Stress + be canceled by a -, always designate one of the remaining dice or cards as representing the character's stress, checking its value for panic as described below.

Jörgen is attempting to sneak past a sleeping monstrosity and has Stressed 2. When the GM calls for a Stealth test, Jörgen's player decides to voluntarily take a Stress +. He rolls two dice, one of the usual color and one of a different color representing his stress. He gets a 4 on the first die and a 2 on the one representing stress. Since this latter number is equal to or less than his stress value, he panics.

REDUCING STRESS

All Stressed consequences are removed after your character gets a good night's rest, unaffected by a source of stress. This rest is broken if she makes any sort of test, including to stay alert. You're not decompressing if you're on edge, watching for signs of trouble!

Alternatively, at any point, you may opt to spend an Edge to remove a Stressed consequence. This lowers your Stress value by one.

UNHEALTHY COPING MECHANISMS

If you're looking for ways to lower your overall stress, try developing some unhealthy coping mechanisms! Weaknesses like Bothersome Habits, Compulsive Behavior and Lecherous give you ways to gain Edge, which in turn can be spent to remove Stressed consequences.

PANIC

If stress grows too powerful it can boil over into hysteria, forcing you to make a Panic test. Check for panic when your character experiences any of the following:

- ▶ Suffers an unexpected attack or Grave Wound
- ▶ Panics due to a **Stress** + (see page 111)
- ▶ Encounters a truly horrifying creature or event, as determined by the GM

PANIC TESTS

A Panic test is a **Willpower** test—usually TN 12—but the GM may specify a higher or lower difficulty. On a success, your character's stress grows, but she manages to keep it in check. Gain a **Stressed** consequence. On a failure, the GM may opt to either look up the result on the table below or make up a suitable effect.

Margin + Stressed	Effect
1	Hesitate: Your rising panic causes you to momentarily hesitate. Lose an AP. If you don't have one to lose, instead lose one at the start of the next round.
2	Tremble: Your body trembles uncontrollably. Gain a Fear consequence with a relevant subject.
3	Spasm: You drop everything that you are holding. Gain a Fear consequence with a relevant subject.
4	Shock: The panic rises in your chest, leaving you dazed. Gain a Dazed consequence, as well as a Fear consequence with a relevant subject.
5	Stagger: You stagger for a moment as the panic sets in. Gain a Disabled consequence, as well as a Fear consequence with a relevant subject.
6	Freeze: You freeze up due to fear and anxiety. Gain a Stunned consequence, as well as a Fear consequence with a relevant subject.
7	Scream: You scream your lungs out. Gain a Fear consequence with a relevant subject. All friendly characters in earshot gain a Stressed consequence.
8	Collapse: You are completely overwhelmed. Gain a Prone and a Stunned consequence, as well as a Fear consequence with a relevant subject.
9	Fight or Flight: You may choose between spending your next three turns either fleeing or attacking the nearest character wildly with whatever weapon you have in hand. You also suffer a mental break.
10	Catatonic: You collapse into a catatonic state, staring blankly into the void. Gain a Prone and Stunned consequence, as well as a Fear consequence with a relevant subject. You also suffer a mental break.
11+	Heart Attack: Your heart seizes up, and you are left gasping for breath. Gain a Dying and Stunned consequence, as well as a Fear consequence with a relevant subject. You also suffer a mental break.



MENTAL BREAKS

When your character suffers a mental break, her stress sublimates into some sort of prolonged mental illness. This takes the form of a lasting consequence or weakness that does not go away until the character undergoes treatment (see below). You should work with the GM to come up with a suitable candidate. Some possibilities include:

- ▶ A Dazed, Desire, Fear or Fixation consequence with a relevant subject. It may not be removed without treatment.
- ▶ A primarily mental weakness, such as those shown in the table below.

Likely Weaknesses

Absent-minded	Amnesia	Bothersome Habits	Compulsive Behavior
Cowardice	Delusion	Depression	Fixation
Flashbacks	Impulsive	Insomniac	Intolerance
Multiple Personality	Phobia	Stutter	Suspicious

TREATMENT

With time and therapy mental breaks can be treated. A character who seeks out treatment may make a **Det-12** test each week. On a success, you may remove a consequence or weakness imposed by a mental break. Another character acting as a therapist may make a **Chr/Empathy-10** test to provide a +. Most therapists charge 200ꝰ per week for their labor.

COMBAT

At some point, the shit will hit the fan. Guns will be drawn. Blood will be spilt. Someone will begin the age-old practice of making holes in other human beings until one party lays gurgling in their own blood and other bodily fluids, twitching and dreaming of all the birthdays they'll never have. Scenes such as these call for the combat system.

Rounds

In combat, the action in the game is broken down into short increments of time called *rounds*. Each round represents three seconds in the game world, and in every round each combatant gets a *turn*.

BEGINNING OF THE ROUND

At the beginning of each round, before combatants take their turns, perform the following steps in order, marking the transition from one round to another.

- ▶ Reset to three Action Points (see page 114).
- ▶ Certain consequences, such as Bleeding and Dying, take effect. These are resolved in whatever order you wish.
- ▶ Make a **Defense** test. This sets your Defense and Willpower for the round (see page 122). The GM may make a single test for all enemies or opt to make individual tests for different enemies or groups of enemies.
- ▶ Declare whether you are taking a Fast Turn or a Slow Turn this round (see Turns on page 115).

ACTION POINTS

Most characters will gain three Action Points (AP) each round. These may be spent on your turn to take *actions*, or they may be spent during other parts of the round to take *reactions*. Every action or reaction normally costs 1 AP, unless it is specifically described as *free*.

We recommend tracking these points with physical tokens of some sort. Glass beads work well, as do poker chips.

At the beginning of the next round, all unspent AP are discarded—that is, Action Points do not carry over from round to round.



TURNS

Each round, turns are resolved in three phases:

- ▶ **Fast Turns:** Players who chose to take a fast turn this round resolve their turns first, in whatever order the players decide among themselves.
- ▶ **NPC Turns:** All NPCs take their turns, in whatever order the GM wishes. Certain enemies may have traits that allow them to take their turns outside of this phase.
- ▶ **Slow Turns:** Players who chose a slow turn resolve their turns at the end of the round. These, likewise, are resolved in whatever order the players decide.

SURPRISE

Taking the enemy by surprise gives you an initial advantage. Characters who are surprised begin combat with the Stunned consequence and cannot take a Fast Turn during the first round.

FAST TURNS VS. SLOW TURNS

Both fast turns and slow turns come with their own tactical benefits. Players who take fast turns may act before the enemy does that round. Players who take slow turns, on the other hand, have the benefit of spending AP for defensive reactions before they act in the round. This means they know exactly how many they have left to spend before the round ends.

Attacks

Ultimately combat is about violence, and attacking an opponent is likely to be one of the most common actions characters take. Unless a trait specifies otherwise, you may only make one attack per turn.

MAKING AN ATTACK

To perform an attack, first choose a target and then make an attack test. This typically calls for a combat skill—most commonly **Melee** or **Projectiles**—with a Target Number equal to the opponent's Defense total or Willpower total this round (see page 122). Generally speaking, physical attacks target Defense, while mental attacks target Willpower.

To target an opponent, they must be within range of your attack. If they are not, you need to move until they are within range (see page 70).

If the attack test is a success, you have scored a hit. For most attacks this means you then deal damage to the target. If the attack's total is twice the opponent's Defense total—or Willpower total, if that score was targeted—then you have scored a critical hit. This means you deal a **Grave Wound** instead of a **Wound** consequence (see page 313).

Keep in mind that before a hit is resolved, the opponent may choose to employ a defensive reaction (see page 122).

Azure is attacking a colony saboteur with her knife. She makes a Melee test and gets a total of 13. Since the saboteur's Defense total this round is 9, she scored a hit. If her attack total had been 18 or higher (twice the saboteur's Defense total), she would have scored a critical hit.

DAMAGE

When you score a hit, determine your margin of success and add its value to the damage of your weapon. This is the amount of damage that you deal. For more information on damage, see page 128.

CRITICAL HITS

If you score a critical hit, you deal a Grave Wound to your target (see page 130).

ATTACK OPTIONS & CIRCUMSTANCES

Below are a variety of attack options or other circumstances that can affect attacks.

AREA EFFECTS

Area effects target all characters within a specified area. A target caught in this area may take a Dodge reaction and make a **Defense-12** test. On a success, she moves a meter away or dives for cover, if available. This might move the character out of the affected area. Having cover halves damage.

Some area effects, such as blasts, may have a primary and secondary area. Characters caught in the primary area suffer the full effects, while those caught in the secondary area suffer half damage or some lesser effect specified in the attack's description.

If necessary, calculate the damage for each target by comparing the result of the test to invoke the effect to each target's Defense or Willpower TN, as appropriate. Margin of success adds to the base damage (see page 129). Margin of failure subtracts from the base damage.

AUTOMATIC FIRE

Some weapons are capable of firing a rapid string of shots at a target. These have the Auto property (see page 68). When choosing automatic fire, the attack gains a **+**, but a number of shots are expended equal to the weapon's Auto rating. Furthermore, an additional hit on the target is scored for every Margin 5 on the success. Reduce the damage of each subsequent hit by five, subtracting an additional five with each additional hit. If the attack is a critical hit, only the first hit deals a Grave Wound.

Gan fires a gun with Auto 5. He benefits from a **+** on his attack, using 5 bullets and scoring a critical hit with Margin 11. This means he gets two additional hits. Since his gun has Damage 5, he deals 16 on the first hit, 11 on the second and 6 on the third. Only the Damage 16 hit results in a Grave Wound. Both the Damage 11 hit and Damage 6 hit result in Wound consequences.

CONCEALMENT

Conditions such as darkness, smoke or heavy foliage may obstruct sight on a target, making her harder to hit. This imposes **-** or **--** for moderate or heavy concealment.

COVER

Targets behind hard cover are more difficult to hit because of the obstructing object. This imposes ● or ●● for moderate or heavy cover, respectively.

DUAL WIELDING

When wielding a weapon in each hand, you may attack or parry with either. This means that if one weapon is pinned or disarmed, you still have a weapon with which to attack. However, offhand attacks are made with a ● (see page 120).

GRAPPLING

Grappling is a special unarmed attack which involves grabbing a foe and bodily wresting control. When you grapple an opponent, make an unarmed attack. On a hit, the foe gains the **Hindered** consequence and may not take reactions until the grapple is broken. On a critical hit, the foe is dealt two Hindered consequences.

In future rounds, additional grapple attempts may be made. Each hit imposes an additional **Hindered** consequence. Once the foe has three such consequences, you have her pinned and she may not take physical actions until you release the grapple.

Otherwise, on her turn, she may attempt to break free. Doing so is an unarmed attack targeting the initial grappler. On a hit, she may remove a **Hindered** consequence. If this would remove her last consequence from the grapple, she may choose to either break free of the grapple entirely, or impose the Hindered consequence on her target, thereby continuing to grapple, but as the party in control.

While in a grapple, you may not take offensive or defensive reactions if your foe is in control. Even as the controlling party, you must voluntarily break the grapple in order to take one of these reactions. In addition, you may not take move actions while in a grapple, unless you both have control and your Strength is twice that of your foe.

When being grappled by multiple foes, add the Hindered consequences together to determine if you are pinned.

Only weapons with the Close property may be used in a grapple unimpeded. At the GM's discretion, other weapons might be usable in an improvised manner, suffering a ● to attack tests and dealing half damage.

GRENADES

Deploying a grenade or similar weapon calls for a **Projectiles-10** test, modified by range. Thrown grenades are treated as requiring Strength 3 (see page 76). On a success, the grenade arrives at the targeted location. On a failure, it deviates in a random direction a number of meters equal to the margin (capped at half the target distance).

Grenades are an Area Effect (see page 117). Anyone caught in the grenade's blast is subject to its damage or other effect. Unless specified otherwise, grenades are treated as having Blast 1/3 (see page 70), meaning anyone within a meter is within the grenade's primary area and anyone within three meters is within its secondary area. Those caught within the secondary area usually take half damage or a lesser effect; see the weapon's description for full details.

A target caught in either area may opt to take a Dodge reaction and make a **Defense-12** test. On a success, she moves a meter away or dives for cover, if available. This might move the character out of the affected area. Having cover halves damage.

Calculate damage for a grenade by comparing the result of the throw to each target's Defense TN. Margin of success adds to the weapon's base damage (see page 129). Margin of failure subtracts from the weapon's base damage.

László throws a frag grenade at a group of three cultists clustered together. As the center of the cluster is 20 meters away and László only has Strength 8, this throw suffers a  due to range. He gets a total of 9 on the test, which is a failure with Margin 1, so the grenade strays from the intended spot 1 meter in a random direction (determined by the GM). Despite being off-target, two of the cultists are still caught within the blast.

One of the cultists spends an AP to Dodge and gets a 13 on the test, meaning she was able to dive for cover. The other has no AP to spend, and thus cannot dodge. Both cultists are within the primary blast area.

The base damage of a frag grenade is 8 smashing. László then compares the result of his throw (9) with each cultist's Defense TN for the round (11 and 6). This gives the attack margin of failure 2 and margin of success 3, respectively, meaning it deals 3 damage (6, halved for cover) and 11 damage.

IMPROVISED WEAPONS

In a pinch, many objects can be picked up and used as weapons. At the GM's discretion, improvised weapons might deal damage as either a knife or baton. Others might only function as an unarmed attack (see page 77).

LINE OF FIRE

Ranged attacks that miss might still hit someone within their line of fire. This is worrisome if the line of fire includes allies!

At the GM's discretion, when you suffer a critical failure with a ranged attack, you hit the next nearest character in your line of fire. If that character is aware of your attack, she may take the Dodge reaction to automatically avoid it.

The possibility of this expands to any miss with an odd result if firing a ranged weapon into a melee engagement. This happens with any miss when firing into a grapple!

RANGED ATTACKS IN MELEE

You may not make a ranged attack while engaged in melee combat, unless your weapon has the Close property.

OFFHAND ATTACKS

Attacking with a weapon held in your offhand imposes  on the attack.

PULLING PUNCHES

You may opt to pull your blow in order to be less lethal. This must be declared before the attack test is made. If you choose to do this, you deal half damage, and if the attack would impose a Grave Wound, you instead deal a **Wound** and render the target unconscious for 1d10 hours.

At the GM's discretion, pulling your blow might not be possible with certain weapons, such as grenades. Additionally, some enemies may be immune to being rendered unconscious.

STRENGTH REQUIREMENTS

Not everyone is strong enough to lift a heavy weapon and use it effectively! For one-handed weapons, if your Strength is less than the damage value of your weapon, you suffer a  on all attacks you make with it. For two-handed weapons, you suffer this penalty if your Strength is less than half the weapon's damage value.

STUNTS

Sometimes you may want to do something tricky that goes beyond a simple attack. To do so, first describe what you are attempting, then make an attack test with a . If it is a success, the GM should come up with some extra benefit, based on your description. For example, you might be able to achieve any of the following:

- ▶ **Called Shot:** You may attack a specific location on a target's body. On a hit, the attack has an additional consequence determined by the GM. For example, aiming for the eyes might impose the Hindered consequence until the blood can be wiped away.
- ▶ **Disarm:** You may attempt to disarm your target. On a hit, she must make a Strength test with a TN equal to your attack total. If she fails, she is disarmed, with her weapon falling to the ground near her feet.
- ▶ **Driving Attack:** You may attempt to drive the foe backward. On a hit, you and the target move a meter in the foe's direction. At the GM's discretion, this might not work for foes that are two or more Sizes larger than you.
- ▶ **Targeted Weakpoint:** You may target a weak spot in your foe's armor, should one exist. The GM determines whether this is possible and whether a successful hit halves your enemy's Armor or whether it bypasses her Armor entirely. Particularly small gaps in armor may require a successful critical hit for this effect to be applied.
- ▶ **Unbalancing Attack:** You may attempt to unbalance your target. On a hit, the target must make a Speed test with a TN equal to your attack total. If she fails, she gains the Prone consequence.

SUPPRESSIVE FIRE

Any weapon capable of automatic fire can put enough shots in the air to make moving around potentially lethal. To do this, fire your weapon at its full Auto rating and choose a 20° cone originating from your position. Until your next turn, anyone entering this area must first succeed at a **Det-12** test.

Furthermore, anytime a character enters or begins her turn in the affected area, roll 1d10, then add +1 or +2 for moderate or heavy cover, respectively. If the result is equal to or less than your weapon's Auto property, she is hit. Treat the value on the die as the margin of success for the purposes of calculating damage.

Defense

One of the foremost goals of combat is to avoid being injured. The ability of a character to avoid physical attacks is represented by her Defense score. This is calculated using the formula below.

$$\text{Defense} = \text{Median of Dex, Spd \& Per}$$

DEFENSE TESTS

At the beginning of every round, make a **Defense** test. To do this, make a test, adding your Defense score instead of a stat. This gives you your Defense Total for the round. This total is the Target Number to hit you with a physical attack.

As with any test, you may use Edge to affect your total.

BOOSTING DEFENSE

If you are aware of an attack, you may use either the Dodge or Parry reactions to boost your Defense against it (see page 123).

Willpower

A character's Willpower score is the mental equivalent of Defense. It is used to resist intimidation, taunts and terror. Willpower is calculated using the formula below.

$$\text{Willpower} = \text{Median of Int, Chr \& Det}$$

WILLPOWER TESTS

At the beginning of the round, use the same die or card from your Defense test to determine your Willpower Total. This is the Target Number to hit you with a mental attack this round.

BOOSTING WILLPOWER

If you are aware of an attack, you may use the Resist reaction to boost your Willpower against it (see page 123).

DEFENSE AND WILLPOWER OUTSIDE OF COMBAT

If a character is attacked outside of combat, simply make a Defense or Willpower test on the spot and resolve as normal. Defensive reactions may only be used if the character is aware of the attack.

Reactions

Reactions are maneuvers that a character may take outside of her turn. Usually they are triggered by the action of an opponent. Each costs 1 AP.

Most reactions fall into one of two categories: offensive or defensive. To make either type of reaction, the character must be aware of the trigger. Additionally, defensive reactions must be declared before the attack test is made, and only one may be made per attack.

DODGE

Sometimes moving out of the way of an attack is best. This defensive reaction may be used against a physical attack. Make a new **Defense** test. You may opt to use its total in place of your Defense total, for the purposes of resolving this attack (see page 122).

As with any test, you may use Edge to affect your total.

HARRY

When an opponent moves to disengage with you, the Harry offensive reaction allows you to attack with a readied melee weapon. Simply declare the reaction and make an attack test. This opportunistic attack is not compatible with most attack options, such as grapples or stunts.

INTERCEPT

If not currently engaged with a foe, and an enemy moves to within your Move score in meters, you may declare this offensive reaction to immediately move up and engage them.

PARRY

Parry is a defensive reaction that allows you to use a weapon to deflect an incoming melee attack. Add your weapon's Parry bonus to your Defense total for the purpose of resolving the attack.

RESIST

The Resist defensive reaction may be taken to help repel mental attacks. Make a new test, adding your Willpower score instead of a stat. For the purposes of resolving this attack, you may opt to use the result as your Willpower Total (see page 122).

As with any test, you may use Edge to affect your total.

WAIT

To declare a Wait reaction, you must specify a trigger and its response during your turn. For example: "if she speaks, I shoot her" or "if she runs, I chase after her." Spend any required AP when the Wait is declared. If the trigger occurs before your next turn, you may perform the response as a free reaction.



Movement

Analysis is the enemy of horror. The more something can be understood, quantified and examined, the less horrific it becomes. The tension in horror comes from the unknown and from uncertainty. Chances are nothing the GM can possibly sketch out can compare to what the players can conjure up in their minds from snippets of description.

This being the case, *Shadows Over Sol* assumes a “theater of the mind” style of combat. A character’s position as she moves is simply described by the player or GM when it happens. Distances can be given ballpark estimates, or described as by an unreliable narrator.

MOVE SCORE

How much distance you can cover is represented by your Move score. Every move action you take allows you to move up to that many meters. To calculate your Move score, use the formula below.

$$\text{Move} = \text{Median of Spd, End \& Det}$$

ENGAGING AND DISENGAGING

When you move to where a foe is within your weapon’s reach in meters, you and that foe are said to be engaged. This means that it is possible to attack each other in melee combat. When you move away from a foe with whom you are engaged, this is called disengaging.

Disengaging with an enemy may trigger the Harry reaction. Similarly, moving close to an unengaged foe may trigger the Intercept reaction (see page 123).



DIFFICULT TERRAIN

Difficult terrain—such as shallow water or thick underbrush—may slow down movement. Each meter moved through difficult terrain counts as two meters of movement.

OBSTACLES

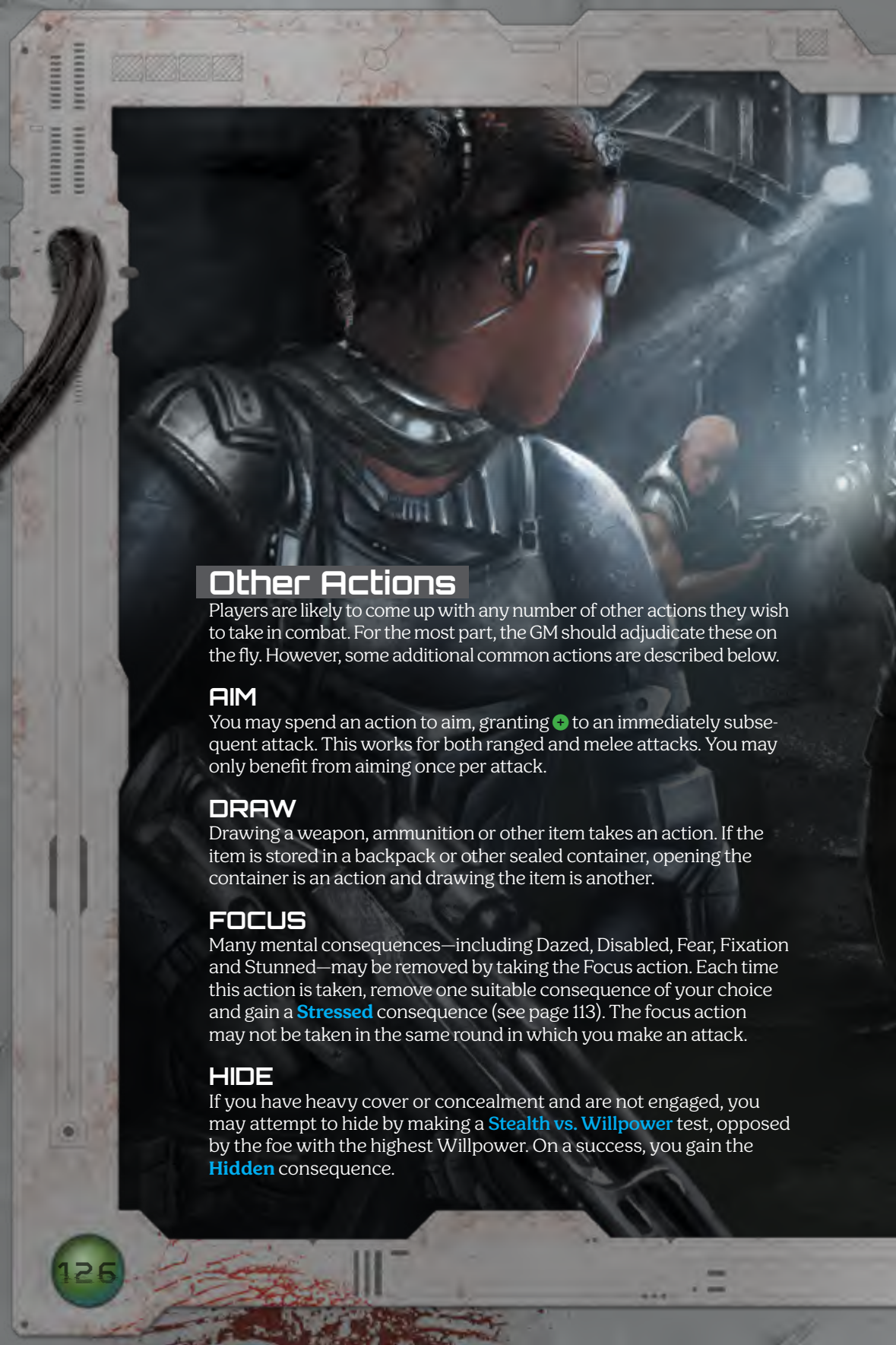
Some types of movement—such as balancing on a ledge, climbing a wall or vaulting over a rock—may require a test of some kind. If this test is failed, that move action is cut short. If you still have AP remaining, you may try again with another action.

SNEAKING

You may attempt to sneak up in combat, provided you have cover or concealment of some kind. Unless surprised, most combatants are considered active guards (see page 114).

USING A GRID

Some GMs prefer to use a grid to track movement and position in combat. Both square and hexagonal grids are common. If playing with a grid, treat every space as a meter across. In this way, your Move score is simply how many spaces you can move per action.



Other Actions

Players are likely to come up with any number of other actions they wish to take in combat. For the most part, the GM should adjudicate these on the fly. However, some additional common actions are described below.

AIM

You may spend an action to aim, granting + to an immediately subsequent attack. This works for both ranged and melee attacks. You may only benefit from aiming once per attack.

DRAW

Drawing a weapon, ammunition or other item takes an action. If the item is stored in a backpack or other sealed container, opening the container is an action and drawing the item is another.

FOCUS

Many mental consequences—including Dazed, Disabled, Fear, Fixation and Stunned—may be removed by taking the Focus action. Each time this action is taken, remove one suitable consequence of your choice and gain a **Stressed** consequence (see page 113). The focus action may not be taken in the same round in which you make an attack.

HIDE

If you have heavy cover or concealment and are not engaged, you may attempt to hide by making a **Stealth vs. Willpower** test, opposed by the foe with the highest Willpower. On a success, you gain the **Hidden** consequence.

INTIMIDATE

Through a few choice words or posturing, a target may be intimidated as an action. To do this, make a **Str/Persuasion vs. Willpower** test. On a success, the target gains the **Fear** consequence.

OBSERVE

You may maintain a state of heightened alertness by making an **Awareness vs. Stealth** test. On a success, you spot the nearest hidden foe, who loses the **Hidden** consequence.

STANCH BLEEDING

You may use bandages or a poultice to remove a target's **Bleeding** or **Dying** consequences. Make a **Dex/Medicine-10** test (see page 136).

TAUNT

By yelling taunts or other jeers as an action, a target may be distracted. To do this, make an **Expression vs. Willpower** test. On a success, the target gains a **Fixation** consequence with you as the subject.

TRICK

Once per combat, you may attempt to trick a foe, creating an opening that can be exploited. To do this, describe the trick and make an **Int/Deception vs. Willpower** test. On a success, the target gains a **Dazed** consequence.

Health & Wounds

In *Shadows Over Sol*, your character's physical well-being and stamina are represented by her Health score. This score represents the maximum amount of damage and fatigue you may take before being threatened with death or exhaustion. Use the formula below:

$$\text{Health} = \text{Strength} + \text{Endurance}$$

DAMAGE

When something harms your character's physical well-being, such as being struck with a weapon or suffering a great fall, you take damage. Damage imposes a Wound consequence with a value equal to the amount of damage taken and a subject describing the injury. So, for example, if you take 10 damage from a knife slash, you might gain the consequence: Wound (Rib Slash) 10.

DAMAGE TYPE

Damage comes in many different varieties—from the cutting of a blade to the toxins in a snake's bite. Some creatures have immunities, vulnerabilities or resistances to certain damage types. Often the type of damage is made clear in an attack's name or description, but if there's any doubt the GM decides the type. A list of damage types follows.

- ▶ **Burning (burn):** Damage from laser fire, extreme heat, electricity or open flame.
- ▶ **Corrosive (cor):** Damage from acid, disintegration or something similar. Often reduces Armor with any hit.
- ▶ **Cutting (cut):** Damage from long, open wounds caused by a slashing implement.
- ▶ **Fatigue (fat):** Damage from exhaustion or physical stress. Causes a Fatigue consequence instead of a Wound (see page 137). Often bypasses Armor entirely.
- ▶ **Freezing (fr):** Damage from frostbite or extreme cold.
- ▶ **Piercing (pi):** Damage whose impact is focused on a sharp point.
- ▶ **Smashing (sm):** Damage from blunt impact, like a crushing weapon or an explosive blast.
- ▶ **Toxic (tox):** Damage from poison, disease or a similar effect. Frequently applied in a way that bypasses armor.

DAMAGE AND MARGIN

All attacks list a damage value. When a hit is scored, they deal the indicated amount of damage, plus the attack's margin of success.

Mario shoots a ganger with his laspistol, achieving a hit with Margin 3. His laspistol is listed as Damage 5, therefore he deals 8 points of damage.

ARMOR

Armor reduces the damage suffered by your character from weapon strikes or similar effects by an amount equal to its value. Many creatures also have a tough hide that mimics armor. If this would reduce the damage to zero or less, no Wound is imposed.

Afterward, should any damage have penetrated the armor—that is, if the armor reduced the damage, but not to zero—decrease the target's Armor value by one. If the armor has the Ballistic or Reflect properties, reduce those by one as well.

Apply common sense regarding when armor subtracts from damage and when it does not. For example, armor likely applies to gunshots, but won't help against venom.

Azure shoots a soldier with her rifle, dealing 11 damage. The bandit is wearing a tactical suit (Armor 6). This subtracts from the damage he is dealt. Consequently, he only takes 5 damage. His tactical suit is then reduced to Armor 5.



WOUNDS

Any damage suffered by your character imposes a **Wound** consequence with a value equal to the damage dealt—after applying Armor, as well as any vulnerabilities or resistances.

This consequence may optionally be given a subject that is a brief description of the wound; for example: “bullet in shoulder” or “bashed in face.” If the GM feels that the wound would hinder a particular action, she may opt to impose a  on any relevant tests (see page 100).

Marek is mauled by a horrific creature, who deals him 7 damage. With no armor to reduce it, he takes the full amount. The GM decides that “clawed across chest” is a good descriptor. This means that Marek gains Wound (Clawed Across Chest) 7.

WOUND TOTAL

The total value of all of your character’s Wound consequences is called her Wound Total. For example, if you have Wound (Smashed Face) 3, Wound (Rib Cut) 4 and Wound (Banged Knee) 2, your Wound Total would be 9. Grave Wounds (see page 130) and Fatigue (see page 137) add to this total as well.

When your Wound Total equals or exceeds your Health score, you risk dying (see page 136).

Jörgen is in poor health. He has Wound (Acid Burns) 5, Grave Wound (Broken Arm) 4 and Fatigue (Asphyxiation) 6, for a Wound Total of 15. Unfortunately, he only has Health 12. With every new injury he risks death.

GRAVE WOUNDS

If you are struck with a critical hit, or if damage would push your Wound Total greater than or equal to your Health score, rather than taking a Wound, you instead take a **Grave Wound** consequence. These work like Wound consequences, except that they have more varied detrimental effects and are more difficult to heal.

When you gain a Grave Wound, the GM may opt to either flip on the Grave Wounds table below or make up a suitable effect.



Combat



RESEARCH



RESEARCH



Card **Grave Wound**

- A♠** **Winded:** The blow knocks the wind out of you. Immediately lose 1 AP. If you have 0 AP, instead gain 1 fewer AP next round.
- 2♠** **Numb Arm:** The attack glances off one of your arms, leaving it numb and tingly. Until the end of your next turn, any actions made with that arm suffer a .
- 3♠** **Momentarily Blinded:** Light from the attack or a blow to the head leaves you blinded. Until the end of your next turn, any actions that rely on sight suffer .
- 4♠** **Stumble Backward:** The shock of the blow sends you stumbling backward. Gain a Prone consequence.
- 5♠** **Bloody Gash:** The attack opens a bloody gash in your body, ripping away skin and exposing the flesh underneath. Gain a Bleeding (Fatigue) consequence.
- 6♠** **Concussive Blow:** The blow glances off your head, leaving you dazed and with a nasty gash. Gain two Dazed consequences.
- 7♠** **Exhausted:** The attack leaves you pained and exhausted, unable to carry on with the vigor you were able to muster before. Gain 1d10 fatigue.
- 8♠** **Broken Rib:** The attack slams into your ribs with a sickening crunch. Until you undergo minor surgery, suffer a  on all Strength-based tests.
- 9♠** **Broken Nose:** The blow slams into your face, snapping your nose and smearing blood. Until you undergo minor surgery, suffer a  on all Charisma-based tests.
- 10♠** **Herniating Entrails:** The attack tears open your abdomen, allowing your entrails to bulge out. Needless to say, the pain is considerable. Until you undergo minor surgery, suffer a  on all Endurance-based tests.
- J♠** **One-Armed:** The blow tears away your arm like pulled pork from the bone, leaving the limb ruined and several meters away. Until you undergo regrowth therapy, you are incapable of performing actions which depend on that arm.
- Q♠** **One-Legged:** The attack twists your leg away, cracking bone and ripping sinew. You fall down, your ruined leg trapped beneath. Gain a Prone consequence. Until you undergo regrowth therapy, you automatically fail all tests which depend on that leg.
- K♠** **Makeshift Lobotomy:** The attack rips your skull asunder, tearing away gaping chunks of bone and some precious brain-meats. Until you undergo major surgery, suffer  on all Charisma- and Perception-based tests.

Card Grave Wound

- A♥ Wobbly Leg:** The attack glances off one of your shins. Until the end of your next turn, any actions made with that leg suffer a  and your Move score is halved.
- 2♥ Jolt of Pain:** The blow sends a jolt of pain throughout your body, leaving you stunned and momentarily unable to act. Gain a Stunned consequence.
- 3♥ Distraction:** The pain of the attack causes you to lose focus. Until the end of your next turn, you may not take reactions.
- 4♥ Dazing Strike:** The attack leaves you reeling and dazed from the pain. Gain a Dazed consequence.
- 5♥ Face Down:** The force of the blow sends your spinning, slamming you face-first into the ground. Gain two Prone consequences.
- 6♥ Stunned:** An aspect of the attack catches you off guard, leaving you stricken and forcing you to reevaluate the situation. Gain two Stunned consequences.
- 7♥ Broken Toes:** The attack slams into your foot, crushing your toes and snapping bones with sickening pops. Until you undergo minor surgery, halve your Move score.
- 8♥ Twisted Back:** You twist with the blow, spraining your back with a worrying crunch. Until you undergo minor surgery, suffer a  on all Dexterity-based tests.
- 9♥ Split Skull:** The blow cracks your skull, causing swelling and a terrible headache. Until you undergo minor surgery, suffer a  on all Intelligence-based tests.
- 10♥ Broken Foot:** The blow crumples your foot like wet paper, leaving it a broken lump. Until you undergo major surgery, halve your Move score and suffer a  on all Speed-based tests.
- J♥ Trauma Response:** The attack leaves you with the sense that you are trapped in a waking nightmare. Gain two Dazed consequences and suffer  on the resulting Panic test (see page 111).
- Q♥ Concussion:** The attack tears through you sending waves and shock and pain throughout your body. Gain three Stunned consequences.
- K♥ Mortal Wound:** The attack rips through your guts, rending vital organs and arteries. While you're not yet dead, saving you is beyond the ability of medicine. Draw a card at the beginning of every round. If it's a joker, you die at the end of the round.

Card Grave Wound

A♦ Faint: A wave of pain and nausea leaves you feeling faint. Until the end of your next turn, any Strength-based tests suffer a -.

2♦ Headache: Blood loss or exhaustion leaves you with a momentary splitting headache. Until the end of your next turn, any Intelligence-based test suffers a -.

3♦ Bloody Face: The attack grazes your face, leaving a bloody smear over your nose and mouth. Until the end of your next turn, any Charisma-based test suffers a -.

4♦ Shock: The injury leaves your system in a state of shock. Until the end of your next turn, any Endurance-based test suffers a -.

5♦ Momentary Panic: A jolt of adrenaline caused by the wound leaves you shaky and on the edge of panic. Suffer a - on the resulting Panic test (see page 111).

6♦ Brush With Death: For a terrifying moment your heart stops, leaving you gasping for breath. Gain a Dying consequence.

7♦ Secondary Wound: The attack strikes your body twice, leaving a secondary wound in your flesh. Take 1d10 additional damage, applied as a separate wound.

8♦ Thunderstruck: The blow strikes your head, sending your vision spinning and your ears ringing. Until you undergo minor surgery, any Perception-based test suffers a -.

9♦ Shell Shocked: The attack connects with your head, leaving you in a vulnerable state of shock. Suffer -- on the resulting Panic test (see page 111). Until you undergo minor surgery, any Determination-based test suffers a -.

10♦ Broken Fingers: The attack strikes your hand and you feel one or more of your fingers snap. You drop anything held in that hand. Until you undergo minor surgery, any test made using that hand suffers a -.

J♦ Gushing Blood: Your body is ripped asunder as your fluids pour out like a faucet. Gain three Bleeding (Fatigue) consequences.

Q♦ Crushed Hand: The attack crushes your hand, twisting it in ways it was not meant to bend. Bones are broken and it's left a bloody mess. Until you undergo major surgery, you automatically fail any test which depends on that hand.

K♦ Spinal Break: Your spine cracks and fractures, causing you to fall prone. Gain a Prone consequence. Until you undergo major surgery, you may not stand nor move.

Card Grave Wound

A♣

Spasm: The pain of your wound sends spasms throughout your body. Until the end of your next turn, any Dexterity-based test suffers a -.

2♣

Sluggish: The shock of the attack ripples throughout your nervous system. Until the end of your next turn, any Speed-based test suffers a -.

3♣

Seeing Stars: The force of the attack leaves your senses reeling. Until the end of your next turn, any Perception-based test suffers a -.

4♣

Guard Down: The will to survive momentarily saps your willpower. Until the end of your next turn, any Determination-based test suffers a -.

5♣

Disarmed: The attack strikes your arm with a solid blow, causing you to drop anything currently being held.

6♣

Accidental Discharge: The blow involuntarily causes your hand to twitch. If you are holding a gun or similar projectile weapon it discharges. Make an attack on the nearest ally. If you are holding a melee weapon, deal its damage to yourself.

7♣

Lost Opportunity: The pain hinders your ability to react. Immediately lose all AP. If you have none, instead gain no AP next round.

8♣

Overwhelmed: The violence around you overwhelms your mental faculties. Gain an additional Stressed consequence.

9♣

Debilitated: Every wound makes it harder to go on, sapping your vigor and will. Gain an additional Stressed consequence, then gain 1d10 fatigue.

10♣

Makeshift Phlebotomy: The wound leaves you losing blood—a lot of it! Gain two Bleeding (Fatigue) consequences.

J♣

Popped Eye: The attack splatters one of your eyes, which is smeared down your face like jam. It does a number on the rest of your head as well. Until you undergo regrowth therapy, you suffer a - on all mental tests.

Q♣

Snapped Arm: The attack snaps your arm like a twig, leaving it hanging lifeless at your side. Until you undergo major surgery, you automatically fail any test which depends on that arm.

K♣

Shattered Leg: The attack shatters your leg, snapping it in several places. Until you undergo major surgery, you may not walk and automatically fail any test which depends on that leg.

Joker

Flip Twice: Flip twice more on the Grave Wound tables and the attacker takes her choice of the two results.

Marek is injured and fighting a hostile alien lifeform. He has Health 11 and already has a Wound Total of 8. Unfortunately he is bitten again, taking 6 damage after applying his Armor. As this would increase his Wound Total beyond his Health, instead of taking Wound 6, he gains a Grave Wound consequence. The GM then flips on the Grave Wounds table and determines that he gains: Grave Wound (One-Armed) 6.

NONHUMAN WOUNDS

As written, the Grave Wounds table assumes a human-like physiology. When dealing these wounds to non-human creatures, the GM should interpret the results creatively, narrating them in a way that is applicable to the creature in question.

DYING

When you take damage and your new Wound Total is greater than or equal to your Health score, you risk dying from your accumulated injuries. This imposes a **Dying** consequence (see page 311). Additionally, when your Wound Total reaches another multiple of your Health—for example, $2 \times$ Health—you take an additional Dying consequence. Once you have accumulated three Dying consequences, you expire.

If you have a Dying consequence, you must make an **Endurance** test at the beginning of every round, with a TN equal to the amount your Wound Total exceeds your Health. If successful, you stave off dying another round. If you fail, however, you gain an additional Dying consequence, or two with a critical failure. Remove a Dying consequence if you score a critical success.

The Dying consequence also restricts you to no more than 1 AP (see page 311).

Finneus has Health 10 and Wound (Arm Cuts) 9 due to a combat drone's spinning blade. He is then struck again, imposing Grave Wound (Thigh Gash) 10. This increases his Wound Total above his Health, which gives him the Dying consequence. At the beginning of the next round, he makes an End-9 test to avoid gaining another Dying consequence. Fortunately, he scores an 18—a critical success! This allows him to remove a Dying consequence. Finneus is still in the fight!

FATIGUE

Fatigue is a special type of damage that represents your character weakening or becoming tired. Rather than causing a Wound, it instead causes a **Fatigue** consequence (see page 310). These function similarly to Wound consequences, having both a value and optional descriptor, but they have a different effect and rules for recovery (see page 139).

When fatigue damage would cause a Grave Wound—such as with a critical hit or increasing your Wound Total to be greater than or equal to your Health—it instead forces you to make an **Endurance** test with a TN equal to the sum of your Fatigue consequences. On a failure, you fall unconscious for 1d10 hours.

Should fatigue increase your Wound Total to a greater multiple of your Health—for example, $2 \times$ Health—you gain a Dying consequence, as normal.

Azure is starving and takes 4 fatigue. This gives her a Fatigue (Starving) 4 consequence. As she already has Wound Total 10—due to Wound 3 and Fatigue 7—this pushes her to Wound Total 14, which exceeds her Health 13. Not only does she take a Fatigue consequence, she also suffers the penalties described on page 311 and must make an **End-11** test. If she fails this test, she falls unconscious for 1d10 hours. Should she reach Wound Total 26 from starvation, twice her Health, she begins dying.

HEALING DAMAGE

Damage may be healed in a variety of ways, from natural healing, to first aid, to skilled medical care.

NATURAL HEALING

Most creatures have the ability to heal naturally over time. For each day spent resting and relaxing in a clean and safe environment, remove all **Fatigue** consequences and reduce the value of all your **Wound** consequences by two. Reduce them by one for nights spent in the cold, sleeping on the hard ground or on edge in a dangerous environment.

Grave Wounds do not heal without the benefit of medical care (see page 130).

MEDICAL CARE

Those recovering under the care of a competent physician may heal significant injuries. The medic should make a **Medicine-12** test. On a success, the patient may heal both **Wound** and **Grave Wound** consequences as part of her natural healing (see page 138). The GM may decide whether to call for a test each day or whether to test for several days at a time.

A doctor may care for a number of patients at a time equal to her Intelligence.

FIRST AID

First aid may be used to patch up damage shortly after it occurs. Pick a **Wound** or **Grave Wound** consequence and make a **Medicine-10** test. On a success, the patient may reduce its value. **Grave Wounds** have their value reduced by one, while **Wounds** have their value reduced by an amount equal to the margin (min 1). This takes 10 minutes and a character may only benefit from first aid once per **Wound** or **Grave Wound**.

RECOVERING FATIGUE

It's possible to recover from some fatigue through rest and relaxation. After 10 minutes of rest and recovery, make an **End-10** test. On a success, reduce all of your **Fatigue** consequences by an amount equal to the margin. Any single **Fatigue** consequence may only benefit from this once. Also, keep in mind the "Not Until It's Over" rule (see page 139).

SURGERY

Some Grave Wounds have effects that require "surgery" to remove. This term is used to mean both literal surgery, as well as any other complicated medical procedure. To perform surgery, the medic must either have surgical equipment (see page 91) or the character must pay for treatment at a medical facility (see page 90).

When performing surgery, the physician should make a **Dex/Medicine-12** test. Regardless of success or failure, the patient gains a **Fatigue** consequence which cannot be healed for the duration of the recovery time. The value of this consequence, the operating time and the recovery time varies depending on whether this is a minor or major surgery. See the table below.

Surgery	Operating Time	Fatigue	Recovery Time
Minor	1 hour	½ Health - margin of success	One day
Major	1d10 hours	Health - margin of success	One week

THE "NOT UNTIL IT'S OVER" RULE

No amount of first aid is going to heal a person dying of starvation. Wounds and fatigue cannot be healed until what's causing them is no longer affecting the character. GMs and players should use common sense when tracking this.

DARK FUTURE

The future holds a million wonders and a million horrors. Two centuries from now, humankind has spread into space, taking our rivalries and struggles with us. We've conquered diseases, but created others. We've built new electronic networks, but let the old ties atrophy and die. With each new rise and fall, we keep changing.

Welcome to the Future

Don't try to get up. I've been told you're going to be too weak for that. I'm not a doctor, but take it from me that you have some recovery to go through. Don't worry, I know you're disoriented, but with all that's happened to you, that's only to be expected. Physically, you're going to be strapped to this bed for some time, but I'm more concerned about your social recovery.

As I said before, I'm not a doctor. I'm a historian. I've been told they found you frozen in your ship near one of the Lunar Lagrange points. According to our estimates, you've been in cryo almost two hundred years—since the early twenty-first century. It's now the early twenty-third century, and things are very different. They've called me in to help you adjust, as I specialize in understanding your era.

No, don't try to talk. Your tongue won't be fully working yet. Just lie back and let me try to fill you in on what you can expect from the brave new world. As I said before, many things have changed, and you're going to have to adapt to them quickly.

THE NETWORKED WORLD

We're plugged in, turned on, networked and wired in a way we never were before. From toddlers, we tune into a world of instant access and far-ranging communication. We see into the lives of others; we read their posts, stalk their feeds and comment on pictures of their breakfasts.

We may never see our neighbors. We may not even speak the same language, though they live just one hab over. Through the miracle of telepresence, telecommunication and telecommuting technologies, physical location means less than it ever has. I have more in common with people of my subculture in Tokyo than I have with those down the block.

If there's a linchpin of our society, it's the net. It's how we structure our lives, track our friends, jack into the social networks and pass our free time. Some of us spend more of our waking life in simspheres than here in meatspace.

SPLINTERING OF THE CULTURE

The thing about the net, though, is that it's easy to wall yourself off from the things you don't normally seek out. We all hit up our favorite news feeds, follow our favorite subcultural celebrities and cruise our choice of social media, but these are all places we self-select. They feed us back our own confirmation biases and market to us our own subcultural trappings. The media I consume, and the lens through which I obtain information about the world, may be radically different from what my neighbor sees. I understand that this had already started back in your time, but imagine it dialed up to an extreme.

This divides the culture. Over the last couple of centuries, the individual subcultures people live in have diverged so much they're becoming non-geographical cultures in their own right.

THE TRANSIENT POPULATION

Speaking of which, geographic location once meant something culturally. People broke themselves up into communities and post-tribal affiliations based on it—neighborhoods, cities, baronies, nation-states. I guess geographic location still means something today, if you're living in one of a handful of backwater underdeveloped locales. But for the most part, more than two centuries of the net, migrations and telepresence has led it to mean very little in most places, beyond what to wear when you're going outside.

With orbital flights that can take anyone anywhere on the planet within a few hours, and with high-speed communication systems that can let a user operate remotely from almost anywhere on the globe—and even from the far-flung reaches of the solar system, if you allow for a few minutes light lag—where you are physically often means very little in determining your opportunities. It also means very little in terms of what culture you absorb.

It also means people don't feel as much of a connection to some particular geographic place or nation, and are much more willing and able to move where the winds may take them. This has resulted in a population that is transient and fairly spread out. A worker no longer looks to the cities for jobs, as many jobs can just as easily be worked remotely. Population centers have spread out. Regions no longer have a homogeneous culture.

DECLINE OF NATION-STATES

Once nation-states were the major actors on the world stage. The globe was neatly carved into its various geographical regions. Each had its political leaders and most people lined up behind them, as if those invisible lines called borders were more than just a collective delusion.

Today nation-states are still around, but they're now the washed up has-beens on the world stage. The comparative meaninglessness of geographic location and the readiness of the population to move across borders has led to most folk not strongly identifying with nation-states. Sure, most are citizens of one or another—sometimes three or four. I'm also a citizen of three massively-multiplayer online games, but few people are going to fight and die over that—at least in meatspace.

Couple this decline of identifying with nation-states along with the general gutting of direct public powers, and you get to where the world is now. Most folk identify more with their subculture or corp than they do with that imaginary line they were born behind. A lot of people keep the same citizenship their entire lives and don't really think about it. Others play the citizenship market, seeking the best tax-for-social-benefits deal available to them at the moment. They'll switch citizenship a thousand or more times in their lives.

I'm sure many nation-states familiar to you still exist and have long traditions behind them, but today they are mostly shells of their former selves. They still collect taxes and employ military forces—although in practice that is mostly contracted out to private entities now. They provide some legal protections and have a court system, although this is also frequently contracted out. Almost all other social services come from a person's employer or are privately purchased.

CORPORATE RISE

With the decline of nation-states, it was just a matter of time until something stepped up to fill the power vacuum. Subcultural and ideological groups did that to an extent, but the corps filled most of the vacuum. This was less of a revolution than a gradual handing off of power. Prisons handed off to corps. Schools handed off to corps. Retirement plans. Healthcare. Police forces. Road maintenance. Courts. The nation-states held onto their national armies for a long time, but eventually even those were handed over. In the last few decades, the corps have started realizing that they can skip the governmental middleman, and get people to pay them directly for those services.

The effects of corporate rise manifest in many ways. Children are educated in corporate schools, which take the opportunity to cross-market to them other products produced by that school's parent corp and business partners. Militaries are manned by contracted corporate soldiers whose first loyalties are to their paychecks. Oftentimes contracts are subcontracted out several levels deep, leaving accountability behind in a trail of paperwork.

All this is doubly true in space. The corps funded most early space exploration, and the grasps of Earth governments were never very strong out in the void. Most corps in space have gotten used to operating as a law unto themselves, much like the British East India Company of old.

CRIME & PUNISHMENT

Here's something you might soon find relevant: if you run afoul of the powers that be, punishments are different than they were in your time, especially out here in space. Don't look at me like that! This is serious!

The good news is that capital punishments are rare—at least for the sort of crimes where a trial actually occurs. Back on Earth, they'll fine you, or if it's serious enough, incarcerate you for a time. Fines snowball indefinitely, and if you can't pay them, you're looking at a term of indenture.

Out here in space, though, life support is at a premium. Fines are still common, but when they don't suffice, authorities look to exile, indenture or corporal punishment. Exile is exactly what it sounds like, and the convicted party may not have a lot of say in where they're sent. As for corporal punishment, well, the removal of body parts is considered rather backward, but society has gotten rather good at inflicting large amounts of pain in a very cheap manner.

ALL ABOUT THE MONEY

Okay, here's something that should be familiar to you: it's still all about the money. Everyone wants it. Everyone needs it. Most folk don't have enough of it, and a few have too much. Sound familiar? Good. Here's where things begin to change.

Most money in your time is backed by a nation-state. They print it. They try to control inflation. It's good as long as the government remains solvent, or at least until the political leaders change their minds. But money is a complicated fiction. It's valuable because people say it is and treat it as valuable. If one currency begins to tank, you trade it in for another—or at least you try.

Currency today is an even more complicated fiction. A few nation-states still issue their own—usually in the form of bonds rather than physical money—but most common notes are backed by corps. After all, they're the major players on the political block now. A few subcultures have even tried issuing their own voucher currency, but those haven't worked out so well.

Money is rarely physical. It's mostly a series of bits sitting in various centralized accounts and transferred back and forth between computer systems as transactions take place. On a planetary network, this is almost instantaneous. In space, these transactions require synchronizing with financial databases minutes away by broadcast.

It's different on Earth, but out here the de facto standard for currency is the Unitech microcredit. That's because of Unitech's commercial dominance in space.

SHINY NEW TOYS

You're the third person we've revived from cryo. None were from as far in the past as you are, but each of them seemed very interested in one particular question: What sort of shiny new toys do people have to play with now? That is, what new bounties has technology brought the world? Let's cover that.

I understand that in your time, the world was still undergoing a revolution in computing and networking power. Today those technologies are mature. We have basic microcomputers everywhere, in everything from toasters to clothing. Most of those machines are dumb—even by the standards of your time—but they network regularly with more powerful machines, and this makes for a good deal of collective intelligence. Shops take digital inventories with the small computers in every product reporting their location. Refrigerators provide alerts when staple foodstuffs get low. AIs can plan a person's evening wear using the chips in her wardrobe.

The biological sciences have also undergone a considerable revolution. Most of us have had our genomes sequenced before birth, and have been screened for common genetic defects and developmental issues. Many, going on most of us, have also been genetically upgraded before birth for enhanced attractiveness, reflexes, durability or cognition.

Where computers and cognition meet is the realm of augmented reality: AR. We're currently in the middle of an AR revolution, just as you were in the middle of a computing revolution in your time. Many of us have implanted AR interfaces or cheaper external interfaces. This lets us look out at the world and see it enhanced with tags and other metadata. For example, I no longer have to remember folk's names most of the time—they just appear in my vision floating above each head. I also no longer have to keep a tablet with notes. It's all recorded.

I don't have time to go into every technological advance, but there are many: thorium reactors, cloning, vat-meat, transgenic modifications, biological implants, tissue engineering, low-sapient AIs, asteroid mining and quantum encryption. It's all too much to name at once, and I have limited time.

A FINAL WORD

Now pay very close attention: this is perhaps the single most important thing I have to say. I am not a doctor, and this is not a hospital. We are a resistance group based out of Mars. In a very short time—perhaps a few minutes now—Unitech troops will come bursting through that door, guns raised.

I'm going to be arrested, but I'm sure my ties at the university will pull me through. You, on the other hand, have no ties in this time. You have no electronic records. You have no established identity. In this panoptic day-in-age, that is unheard of. The troops are going to take you and they're going to ask a lot of questions. They're likely going to lie to you and tell you many half-truths about our time. Remember what I've told you. Remember that there are other points of view out there—in fact, many of them.

At some point in the future, we will contact you again. Don't worry, we have ways. Then we will come to collect on the debt of having revived you from your icy death.

Technology

New technologies are at the heart of science fiction. Time goes on; science advances. Some problems are solved and others are created. The dark future of ***Shadows Over Sol*** is no different.

SPACE TRAVEL

Space travel is necessary for human civilization to reach beyond the limits of Earth's upper atmosphere. In the twenty-third century, thousands of ships ply the void between the system's various planets, moons and asteroids.

ENGINES & THRUST

The core of any significant spacecraft is its thorium reactor, which uses nuclear fission to supply the power necessary for the ship's engines and other systems. This engine is almost always located on the back of a spacecraft, where it can be used to directly generate thrust in the form of fission-fragment rockets.

One of the largest technical issues in using fission to generate power is waste heat. A spaceship is in essence a large thermos flying through the void. Vacuum is a very good insulator. This means that the vast majority of the waste heat generated by the reactor is conducted to the rest of the ship. Running the thrusters for too long causes the ship's internal temperature to increase. Do this too often, and the passengers boil to death. In this way, engine efficiency—that is, how much waste heat the engines produce—is the limiting factor in the speed of space travel.

Fission-fragment rockets provide the thrust used in most interplanetary spacecraft. This design uses powerful magnetic fields to channel the output of the nuclear reaction to produce thrust. $\text{Momentum} = \text{mass} \times \text{velocity}$. The mass ejected from a fission-fragment rocket may not be much, but the particles are emitted at close to the speed of light, meaning sufficient thrust can be generated.

Short distance spacecraft, intended only for orbital trips or for short-term deployment, use a different design altogether. This category includes shuttles and fighters. These spacecraft are fueled by large-capacity batteries that maneuver with low-power ion thrusters. The batteries are recharged when connected to their parent craft or station.

DESIGN & HULLS

Spacecraft are designed very much like submarines. Most have a double-hulled design, with an inner hull and an outer hull. This provides redundancy, ensuring that the interior of the craft is not compromised. Between the inner and outer hulls is a space, often a meter or wider, that holds the ship's water reservoirs and waste deposits. It is also sometimes used for smuggling contraband. These water reservoirs serve as a heat sink for the reactor, channeling the waste heat into the mass closest to the surface of the ship, and thus closest to the cold void outside.

On civilian ships, the engine is often removed from much of the rest of the craft, separated by large metal and ceramic struts. This increases the amount of waste energy radiated into space, rather than absorbed into the rest of the ship. The downside is that this leaves the engines vulnerable to attack.

Military craft can't afford this vulnerability, and consequently have to pay a premium for better reactor efficiency. Many also carry a complement of fighters, which can be deployed for additional protection.

Shuttles and fighters are the exception to this design. By necessity, they need to be small to keep from consuming too much space within their parent craft. Consequently, they typically have only a single hull, and do not carry significant water or waste reservoirs.

Most military ships, including fighters, have hulls whose exteriors are covered with a special black paint designed to absorb most light, from the ultraviolet into the infrared. This often helps the craft avoid detection until the last minute. Civilian ships are painted in any number of colors or patterns, but black often arouses suspicion due to its military association.

BROADCASTING & RUNNING SILENT

Ships are trivial to detect when under thrust or when broadcasting radio comms. Any observer with the proper equipment can easily pick up the transmissions or a heat signature from the accelerating vessel. The Ganymede Conference also established rules for ships broadcasting their identification so that observers know the nature of the vessel.

There are times, however, when a ship might want to operate silently, avoiding detection as long as possible. This is most commonly done with military craft, but occasionally pirate or smuggler activity prompts other ships to run silent as well.

When running silent, the thrusters are cut and the vessel ceases broadcasting. This includes turning off the radio transponder, which under typical operation broadcasts the identity of the ship.

Ships seeking to communicate while avoiding detection rely on laser comms. These comms can only be detected or intercepted if the observer comes directly between the ship and its target. The downside is that they require a specific target to receive the signals, and this target must be within a straight line to the vessel, without interference.

HARD BURNS

When a ship enters combat or needs to make a sudden desperate maneuver it may perform what is called a *hard burn*. During a hard burn, a ship powers its engines and thrusters beyond their usual limits. This allows it to maneuver quickly, letting it dodge incoming attacks or otherwise avoid disaster. Unfortunately, it also results in a sharp increase to the internal temperature of the vessel, which may lead to technical complications. Hard burns may also involve G-forces that are hazardous to the crew.

Most ships are equipped with crash chairs to be used by the crew during hard burns. These are couch-like foam platforms that include various medical monitoring devices. During a hard burn, a crash chair provides padding as well as monitoring for a strapped in crew member's physical condition, administering drugs to help keep her alive and aware despite the G-forces acting upon her body.

STASIS

Voyages across the Sol system can take months or even years. This is a lot of time to remain trapped inside a small metal and ceramic box, with limited entertainment and even more limited mobility. The life support requirements alone can also be prohibitively expensive.

To counteract this, for most voyages lasting 30 days or more, all passengers and crew are put into a state of suspended animation known as *stasis*. This prevents the passengers from going stir-crazy and reduces the life support requirements to keep them alive.

While in stasis, a person's metabolism slows down to roughly a tenth of its usual rate.

On commercial ships, passengers are put into stasis first, followed by crew. Military vessels, however, frequently leave a skeleton crew awake throughout the voyage, cycling crew out of stasis every 30 days or so. Troops being transported are put into stasis for the entire journey.

For more information on stasis, see page 282.

SPACE HABITATS

Supporting human life requires food, water, living space, physical activity, protection from radiation, the right temperature range, the right atmospheric pressure, the right atmospheric composition and regular stimulus. All of these are naturally in short supply while out in the void.

LIFE SUPPORT LOOPS

Because many of the elements to support life are at a premium in space, almost everything gets recycled and reused. Human waste is filtered and its water extracted. Solid composts are used to fertilize plants that are grown along walls or in agricultural bays. These plants take carbon dioxide out of the atmosphere and give off oxygen. Many are grown to produce food. Runoff water is likewise recycled. Most stations have easily-found recycling capsules, in which waste can be deposited for processing. Everything eventually goes into one of these capsules, from worn out clothes to food wrappers, the material readied for reuse time and again.

In addition, all stations and colonies have air scrubbers. These take in ambient air and filter out moisture for reuse. They also filter out harmful dust and chemicals. In all but a few agricultural colonies, it is also necessary to inject additional oxygen into the air as well.

Even with all of this recycling, no ship or habitat in space has a completely closed life support loop. Every station and every colony in the system still depends, at least to some degree, on materials mined out of asteroids or other bodies—or more likely—shipped up out of Earth's gravity well.

The very best colonies may be able to go for years or decades without outside supply, but to this day the only completely closed life support loop is Earth itself.

GRAVITY

Earth has the strongest gravity one is likely to experience. The surface of Venus comes close, but few missions venture there due to its inhospitable nature. Everywhere else has much lower gravity. Mars has a third the gravity of Earth. Luna has a tenth. Even the artificial gravity of most space stations is closer to Mars than to Earth—lower gravity means rotating slower, which means less strain on the station's hull.



The human body begins to deteriorate unless it has regular impact and regular exercise. Lower gravity means lower impact and less exercise when moving about. It also means that in space, your body begins to quickly weaken unless you perform regular daily exercise. Spacer genelines are designed to help alleviate this problem for those lucky enough to have them, but gyms remain a popular recreational destination in habitats throughout the system. Those who don't get their daily exercise may weaken to the point where they will never be able to walk on Earth again.

On all but older tin can and asteroid stations, the inhabited areas rotate to produce artificial gravity through spin. This faux gravity doesn't feel the same as normal gravity. The Coriolis effect causes dropped objects to fall slightly to the side. Too tight of a spin causes those unaccustomed to spin-gravity to feel nauseous as they move around. Additionally, this artificial gravity can change dramatically as one moves towards or away from the axis of rotation, with the center of the spin being in microgravity and the outside rim of the spin having the most.

STRUCTURE

Space stations face many of the same design constraints as spacecraft. Typically, at their core is a Thorium reactor that supplies the station with its necessary power. As with spacecraft, the waste heat from this reactor is a concern, but as heat spikes from maneuvering aren't an issue, most stations can efficiently utilize large heat sinks.

Most space station hulls are made from a combination of metal and ceramic. Metal is used for the main supports and skeleton, as it is strong, durable and it can handle significant stress. Ceramic, on the other hand, is often used in the inner hull, especially surrounding the station's reactor, as it conducts heat less easily, while still being comparatively strong and durable. This allows heat to be channeled throughout the station where it is most needed.

Planetside colonies and asteroid habitats have a different design. These are typically drilled into the rock and consist of a series of tunnels. Building a colony this way allows the rock to act as radiation shielding, insulation and as a giant heat sink for the waste energy from the reactor. It also gives these colonies a narrow, maze-like quality which inhabitants often find comforting, and visitors find disquieting and disorienting.

NATURAL RESOURCES

Despite its hostility to life, space has many natural resources. Asteroids, planets and moons are mined for their minerals and other materials. Comets and the rings of gas giants are mined for water, which is used by colonies throughout the system, and in the Mars Terraforming Project. This latter use ignited the water trade, which runs from the outer solar system to the inner, bringing to Mars vast amounts of water.

SPACE ELEVATORS

Modern space travel wouldn't be possible without the aid of space elevators. Without them reaching orbit would be orders of magnitude more expensive.

These structures consist of long tethers which are anchored at the equator, and which stretch upward into geostationary orbit. At the far end of the tether rests a counterweight, which holds it taut and keeps the entire structure from collapsing downward. This counterweight usually consists of a geostationary space station or high dock at which ships can stop without the extra costs of entering the local gravity well.

SPACE STATIONS

A variety of different space station designs are used throughout the Sol system. Here are a few of the most common.

TIN CAN

The oldest space stations—a handful of which still see use—are so-called tin can stations. These are usually little more than a hollow metallic shell, which has been pressurized to hold atmosphere. Sometimes several such pressurized modules are connected by tethers. These stations typically are designed for no more than about a hundred inhabitants and provide no artificial gravity.

ASTEROID HABITATS

Another older design, asteroid habitats are constructed by hollowing out asteroids or other large celestial bodies. This offers natural radiation shielding and thermal insulation at low cost, but such stations lack spin gravity and often result in disorienting, claustrophobic environments. These habitats are still in use—typically as temporary mining stations or hidden outposts. While some are large enough to support thousands, most remain sparsely populated.

STANFORD TORUS

The most common space station design in use today, Stanford toruses reached peak popularity between the 2090s and the 2170s. These stations consist of a donut-shaped ring, usually around 2 km in diameter, which spins to provide artificial gravity, and usually houses around 10,000 residents. At the center is a hub, which is connected to the ring through a series of spokes that radiate outward. Connected to the hub are a series of mirrors that channel sunlight to the station's ring.

BERNAL SPHERE

A common design for space stations since the 2170s, a Bernal sphere is essentially a hollow spherical shell that rotates to provide spin gravity. These stations are typically around 16 km in diameter and house between 20,000 and 30,000 residents. Often at the poles—where the spin gravity is lowest—the material of the station is transparent, and a series of exterior and interior mirrors channel sunlight into the station.

O'NEILL CYLINDER

An upcoming design used in Mandala Station and a few other proposed stations, the O'Neill pattern consists of two counter-rotating cylinders, divided lengthwise into six sections each. These alternate between transparent sections to allow sunlight into the station, and "land area" upon which inhabitants of the station live. Each cylinder is usually about 5 km in diameter and up to 32 km in length. A typical O'Neill cylinder station is designed for up to 100,000 residents.

POWER GENERATION

The vast majority of power generated for human use comes from either thorium-based nuclear fission or solar energy. On Earth, wind energy and hydroelectric power are also used.

SOLAR POWER

Solar power is harnessed through large-scale arrays and used to supply energy to colonies, space stations and battery-powered vehicles. It is employed primarily in the inner solar system, where solar intensity remains high. Because the available solar energy drops exponentially with distance from the Sun, practical use is limited to the regions around Mercury, Venus, and Earth.

THORIUM POWER

Thorium-based nuclear fission is the cornerstone of space travel. It powers almost all spacecraft, stations and colonies from Mars outward. As thorium is an abundant element, it is cheaper and more easily attainable than uranium—the traditional fuel for fission. It also produces less dangerous nuclear waste.

THE FAILURE OF FUSION

In *Shadows Over Sol*, sustainable nuclear fusion as a power source has never quite panned out. Despite promises to the contrary and claims of it being "just a couple decades away," technical issues have always rendered it technologically and economically infeasible. In short, the often-promised future of nearly free and clean fusion-based energy remains a fairy tale.

BIOTECHNOLOGY

While basic manipulation of living matter is now routine, more precise or ambitious genetic engineering remains beyond the reach of early twenty-third century science. Vat-grown meat is common, prenatal genetic modifications are possible, many cancers are treatable and bacteriophage therapies can combat resistant infections. Yet, the creation of higher intelligence remains out of reach. Life has yet to be built from scratch, and the frontiers of genomics and ecology still hold more questions than answers.

HUMAN GENETIC ENGINEERING

Prenatal genetic engineering has long been commonplace. Few want their children to suffer from debilitating genetic diseases, so at the very least, most embryos are screened for potential issues and any infringing genes are fixed before birth.

In recent decades, genetic enhancement has also become common. Many parents are willing to invest in boosting traits like intelligence, physical ability or charisma, hoping to give their children an edge. As these enhancements become the norm, those who opt out risk leaving their children at a widening disadvantage in an increasingly competitive world.

In space, the push for prenatal genetic enhancement is even more pronounced. Without it, individuals face heightened risks: accelerated bone loss, increased vulnerability to radiation and impaired brain development from lower oxygen levels. In space, genetic enhancement isn't just about gaining an edge—it's an adaptation for survival in a hostile environment.

Human genetic engineering has sparked a range of social concerns. Wealthier families—already at an economic and social advantage—now often pass on engineered biological advantages, deepening existing inequalities. The dominance of select “desirable” genes is reducing genetic diversity, raising the risk of future diseases that could exploit these shared traits. Corporations have capitalized on demand by offering proprietary genelines, which often require ongoing investment to maintain across generations, creating a cycle of dependency and profit.

NONHUMAN GENETIC ENGINEERING

Genetic engineering is ubiquitous in agriculture. Numerous crops and livestock have been modified to favor different environments, as climate change continues to affect the world's ecosystems. Many have likewise been adapted for growth in space habitats. Pets and helper animals have been modified to make them smarter, cheaper to maintain or more useful.

Vatmeat now dominates meat consumption. Why pay for an animal's housing, treatment and feed when you can simply grow meat in a device on your kitchen counter? Various cross-genetic meats are currently a fad—without any living analogous animal.

MEDICAL TECHNOLOGY

Medical technology has advanced significantly. It's common for individuals to store genetic samples, allowing for the cultivation of replacement organs when needed. Regrowth treatments can restore lost limbs or repair wounds that once people debilitated. Pharmaceuticals are often tailored to a person's unique genome, increasing effectiveness and reducing side effects. Stasis can make surgeries safer. Sensory recording and AR can reach those in various forms of coma.

BIOWARE IMPLANTS

While cybernetic implants are currently not in vogue, biological implants have been some of the most enduring. Artificial glands have been used in a variety of fields to provide chemical enhancement on the job. Enhanced eyes have been grown that allow the recipient to see into the infrared or to see better underwater.

RADICAL SCIENCE

Much of what's in use today reflects what is common—not what is possible. Countless breakthroughs and experimental technologies exist on the fringes, sidelined not by technical limits, but by economic ones. Some methods are too costly, too niche or too politically fraught to gain traction in the mainstream.

More radical genelines exist on the margins of human society—engineered in labs, tested in conflict zones or hidden in corporate vaults. Some of these half-human beings can breathe underwater, grow an armored exoskeleton or spit acid. While rare, the research continues.

Hybrid animals have also emerged, blending traits from multiple genetic sources. Some serve military or industrial roles, others have been engineered for private collectors or exotic environments.

There are even a handful of people whose bodies have been designed to literally break down unless they pay for proprietary medical treatments.

COMPUTING

Computers have come a long way from their humble beginnings. Today, simple wireless processors are found in all sorts of objects, from household appliances to shipping crates, from exterior doors to vehicles. These devices handle routine tasks, such as taking inventory or relaying tracking information.

Thanks to widespread wireless networks, ubiquitous computing is the norm. Most of these systems lack direct user interfaces, instead receiving instructions remotely from authenticated users. They're quiet, ever-present and woven into the background of daily life.

HAND TERMINALS

For most people, a hand terminal is the center of their digital life—a compact, handheld computer similar to a smartphone, but far more capable. It serves as a personal organizer, communicator and control hub. While its onboard processing is modest, it can offload heavier tasks to more powerful machines within the user's network.

Hand terminals use radio comms to send and receive messages. They can transmit video and audio, take photos, connect to various planetary positioning systems and can send commands to nearby networked machines. They also store files, run games and can accept input from the user's AR devices.

THE NET

The open computer network—or simply “the net”—is the information backbone of society. It's used to connect with friends, plot the courses of ships, purchase goods, retrieve AR tags, get the news and for pretty much everything else.

The net is a decentralized system, with no single machine or authority at its core. Instead, a mix of powerful and lightweight devices work together to route data and host services. These services, called *nodes*, function much like 21st-century websites—only without relying on central servers.

Users can access nodes in various ways: through screens on their hand terminals, augmented reality overlays, floating tag clouds or immersive virtual environments known as simspaces. Each interface offers a different way to explore, communicate and interact with the digital world.

SIMSPACES

Simspace is an immersive virtual environment designed to make interaction over the net feel intuitive and lifelike. A simspace might take the form of anything from a shady nightclub, grandiose mansion, barren alien landscape, to a historical period piece.

Users appear in these spaces as avatars, often adapted to match the simspace's theme. Most environments allow for a wide range of self-expression, letting individuals tailor their appearance to their

liking. Some simspaces are little more than social lounges; others function as complex virtual games with rules, stats, and special abilities.

Simspace run the gamut from simple places to socialize, to full-fledged virtual games with stats and special abilities. They're used by corps and other organizations for teleconferencing. They're also used to arrange shady deals, anonymous hookups and for all manner of recreation.

AUGMENTED REALITY

Augmented Reality (AR) overlays digital information onto a user's view of the physical world, enhancing perception and interaction with the environment. A user might see floating *tags* displaying names and details for people she's met, so she never appears to forget a name. Restaurant reviews might flicker into view when passing a storefront. While speaking, synonyms or language aids could appear subtly in her field of vision. An alert might flash if she wanders into a dangerous neighborhood. AR is increasingly ubiquitous.

AR technology has existed in rudimentary form for over a century, but only in the past few decades has it reached the level of refinement needed for widespread use. Today's AR systems typically function in one of two ways: through wearable AR glasses or neural implants. Glasses project digital overlays onto the lenses and use eye-tracking to align the imagery correctly. Implants, by contrast, intercept the neural signals between the eyes and the brain, seamlessly integrating the AR layer into the user's visual experience.

Regardless of the method, AR systems rely on a nearby computing device—typically a hand terminal—for processing power and network access. This allows the AR display to remain lightweight while maintaining access to programs, data streams and the broader net.

One of the most widespread uses of AR is the display of tags—small digital markers linked to real-world objects through a system known as a *tag cloud*. When an AR user subscribes to a particular cloud, relevant tags appear in her field of vision as she encounters tagged items in the physical world.

Tags convey a wide range of information. A tool seen in a store might be tagged with reviews or the price. People that are encountered might be tagged with relationship status, criminal status or common interests. Roads might be tagged with their destination or traffic congestion.

Tags, however, are one of the ways in which the culture is fractured. Different subcultures operate their own tag clouds, meaning that different people encountering the same real world object often see different metadata about it. Corps, too, often have their own private tag clouds for employees or those with privileged access.

Most tag clouds are public, meaning that anyone can subscribe or post to them. Others are private. Others are a combination of the two—such as clouds whose tags are carefully curated, but which allow anyone to subscribe.

VIOLENCE & WARFARE

Since World War IV, warfare has gotten smaller in scale and broader in scope. Instead of massive battles and well-defined theaters of combat, wars are fought through smaller skirmishes, raids, assassinations, sabotage, electronic infiltration and targeted orbital strikes. They're tallied up as cost objects, decided upon in boardrooms and executed by paid mercenaries or specialist security forces.

Small scale violence, on the other hand, happens in much the same way it always has. Rival gangs fight it out for turf or to save face. Domestic disturbances end in tragedy. Hotheaded youths pull weapons and send their lives into a sudden downward spiral.

PERSONAL WEAPONRY

Chemically-propelled projectiles are still the bread and butter of personal weaponry. That is to say, guns are the most common personal weapon. Compared to most other arms, they're cheap, easy to use and lethal at a distance. They're the preferred weapon of gangs and security forces the world over.

Traditional firearms are, however, at a decided disadvantage in microgravity, as the recoil that firearms possess can send the wielder spinning at uncontrollable angles, leaving her vulnerable to return fire and at disadvantage for future shots.

In these environments, combatants typically rely on laser weaponry. Lasers, unlike slug throwers, have minimal recoil, making them easier to use in microgravity. On the other hand, they're bulkier, more expensive and more temperamental than traditional guns, limiting their use in other environments.

PERSONAL ARMOR

As battles have grown smaller, more money can often be afforded per combatant, bringing enhanced personal armor back into vogue among professional military units. Combined with the need for sealed protective suits in many space environments, these factors have combined to make modern power armor the pinnacle of personal protection.

TACTICS

Military assets are typically built for mobility and concealment. With space-based surveillance and long-range artillery making stationary installations easy targets, forces now favor agile platforms. This means a greater reliance has been placed upon fast-moving mobile vehicles, such as spacecrafts or small-scale land vehicles that can pass from orbit as standard groundcars.

ENTERTAINMENT

Every society needs entertainment. In the future of ***Shadows Over Sol***, the usual music, books, games and vids have been augmented by the ranks of simspaces, sensory playback and AR tags. Celebrity culture remains a thriving phenomenon, grown by the idea of glamor as intellectual property. Some of the darker forms of entertainment—bloodsports and their ilk—have even found a place in the shadier corners of the system.

TRADITIONAL MEDIA

Traditional media is alive and well, though shaped by changing technologies. New music releases daily, ready for immediate download. Books are still written, though paper editions are rare due to cost. Vids can be produced by anyone with a hand terminal and basic editing tools. Games, both simple and complex, appear on the net regularly. Many of these traditional media pieces have even been enhanced with new media.

NEW MEDIA

A popular media trend blends augmented reality with immersive storytelling and gameplay. AR games function much like traditional video games, but overlay the experience onto the world around the user. A player might see her apartment reimaged as a shadowy dungeon, complete with virtual monsters to battle through gestures and motion tracking.

AR vids take a more narrative approach. Rather than watching a story unfold on a screen, the viewer encounters scenes embedded in their real environment. A dramatic event—like a simulated shooting—might play out in a real alleyway as the viewer passes by. The story unfolds gradually, syncing with the viewer's movements and routines to create a layered, interactive experience.

Sensory playback is also common in new media, although it reached the height of its fad twenty-some years ago. It enhances traditional vids and some AR content with tactile, olfactory or other sensory cues. Sensory playback exists as an optional track on many new vids, and has found a particular niche in pornographic media.

CELEBRITY AS INTELLECTUAL PROPERTY

Think over-the-top glamor: costumes and wigs, cosmetic surgery, eyes that literally sparkle, glow-in-the-dark hair. Smooth Jackson isn't just a larger-than-life party-boy, he lives the dream—day and night. He's a media icon, a celebrity followed by millions on social media. He revels in youth; he's been young for nearly 30 years. He drinks a liter of vodka a night and survives, not because of a biotech liver, but because he's three different people.

Take away the makeup, the wigs, the glamor and the party-boy lifestyle, it doesn't really matter who's underneath. Beauty can be bought at the tip of a scalpel. What matters is the idea. Smooth Jackson is an ideal, a staple of Heed youth culture. He's intellectual property. When one man wearing Jackson's mantle ages out of the role, another look-alike is found to replace him. This is common in popular culture. Celebrity isn't selling a person; it's selling an image. It's the same sort of staged and dramatized attraction that keeps people coming back to reality vids or professional wrestling.

BLOODSPORTS

Bloodsports have existed throughout most of human history—from the ancient Greek pankration, to Roman gladiators, to Sumbanese pasola spear fighting. Their comparative absence in the twentieth and twenty-first centuries is just a blip in the long arc of human history. Now, in the early twenty-third century, they appear to be staging a comeback.

In countless decaying urban centers on Earth and in the chaotic sprawl of Chi Chen on Mars, underground games have emerged—fighters battling to serious injury or outright death. Most of these bloodsports remain tucked away in society's shadows or streamed across the seedier corners of the net. But that may be changing. In Chi Chen, new contracts are being drawn. Plans are underway to broadcast an entire season of death matches in broad daylight, to a mass audience hungry for blood.

LIFE IN THE 23RD CENTURY

Life goes on. It evolves. Even in the early twenty-third century it's still changing, people still form families, still need education and many still attend religious services. But much has shifted, such as where people look to form relationships, the methods used in education and many of the allegiances of everyday life.

RELATIONSHIPS

Human society has always been built on relationships, and in the twenty-third century it is no different.

Family is still an important component of most anyone's life, even if family members are spread throughout the system. Most people inherit their subculture from their parents. Corp and nation-state citizenship is often transferred automatically from parent to child. Family wealth largely determines access to education and the most profitable jobs.

The institution of marriage is also still alive and well, even if it has evolved substantially. Marriages typically last an average of eight years, and few people expect to be married for life. Same-sex marriage is accepted in all but a few Serv groups, and in most places group marriage—marriage between three or more consenting adults—are also commonly accepted.

These newer permutations of marriages are particularly relevant when children come into the picture. Advances in biotech mean viable children can be produced from parents of the same sex or even from the DNA of more than two individual parents—although this comes with a hefty price tag. The average number of children is slightly over two, and the population keeps creeping upwards, with Earth now home to over 12 billion human beings.

EDUCATION

Almost everyone born into a corp citizenship gets at least a basic middle school-level education. It's used to indoctrinate children, teach social norms and ensure a competent workforce. Many nation-states also still provide basic schooling. Only the illegal, unregistered or poorest go without this level of education. Beyond middle school, however, how much education one receives is largely a function of family wealth, connections and ability.

New technologies have changed education significantly. Telepresence allows virtual classrooms to stretch across the solar system. AR technologies are used to teach reading and the names of objects. Simspaces are used to model lifelike situations.

RELIGION

Religion is alive as well. Despite all the new technologies and advances in science, many people still need faith and the comfort it brings. Religion isn't just something for the Serv subculture—even if the Servs define themselves by it—it's an eons-old institution attended by people from all subcultures.

That said, religion—like the rest of human society—is always evolving. New beliefs and interpretations of scripture arise. Entire new faiths occasionally spring up. Still, the list of the world's largest religions hasn't changed much in the last two centuries, despite some gains, losses and schisms. The major faiths are still Christianity, Islam, Hinduism and Buddhism, with a sizable chunk of humanity being nonreligious as well.

SUBCULTURES

Subcultures are almost like an extra extended family. They provide social support when the corps don't see profit in it. They are a way for people to meet. They reaffirm beliefs and values. They have their own celebrities, AR clouds, net nodes and styles of interaction. In many ways, subcultures are the new neighborhoods in a world infatuated with telepresence. For more on subcultures, see page 168.

CORPS

Corps are the juggernauts of the world, and for many a corp citizenship is more important than a nation-state citizenship. Corps educate their employees' children, provide social services and, of course, provide jobs in a world where many roles have been replaced with automation. For more on corps, see page 188.

WEALTH

The gulf between the wealthy and the poor has widened and narrowed throughout history, but in the early twenty-third century, the wealth gap is on the rise and nearing an all-time high. Corps dominate the economic landscape, and while they allow a trickle of prosperity to reach the lower classes—enough to maintain a consumer base—their top executives can wield budgets that rival or exceed those of nation-states.

In many nation-states, a form of basic income has emerged to prevent total economic collapse. Often this income isn't in actual currency, but rather in vouchers for basic necessities—sometimes tied to goods approved by the local nation-state or corp. In space, these systems are even more austere. "Wages" may take the form of rations of breathable air, nutrient paste and recycled water.

Amongst all these economic happenings, the practice of indenture has wormed its way back into common use. This ties individuals to a particular employer and is often used as a punishment for defaulting on debts or as a means to pay off loans.

LAW & PUNISHMENT

Laws are typically passed by nation-states or dictated directly by corps. Breaking them is done at one's own risk, but enforcement usually comes down to cost and visibility. If a crime makes waves or threatens profit, security forces may crack down hard to make an example. If it's easier or cheaper to ignore, it often is. Courts are commonly contracted out to corps and tend to serve those footing the bill. Trials are short, efficient and often one-sided.

Capital punishment is rare and widely frowned upon—officially outlawed in most jurisdictions. In its place, "more humane" options are used, including mental or chemical alteration, various forms of corporal punishment and fines. Long-term incarceration is moderately rare—and extremely rare in space.

A Future History

History keeps marching forward into that unknowable void called the future. Much has changed in the last two hundred years, and much more promises to change still in the next hundred.

THE 21ST CENTURY

The mid-21st century saw an explosive growth of biotechnology, advances in nuclear fission and increased space funding. However, it also saw dramatic increases in climate-change related conflicts, severe resource shortages, a steep rise in antibiotic-resistant bacteria and the first divisions in mainstream culture that would eventually lead to its splintering.

By the late 21st century, the adoption of prenatal gene modifications was commonplace and thorium-based fission was well established. These latter decades also saw a rise in the popularity of cybernetics and the construction of the first space elevator, which dramatically reduced the cost of reaching orbit. This spurred a new space race, leading to the first lunar colony, a second space elevator and additional outposts, both in orbit and on Mars.

The century concluded with World War III, and the beginning of the end of the dominance of the nation-state.

DEREK STILLWATER

Derek Stillwater (2021–2109) remains a household name and is still an inspiration and hero to many. Not only was he the first human to set foot on Mars, he was already known for an extreme sports career. In his later life, he went on to be a prominent blogger, politician, business leader and antiwar activist during World War III. At the height of his career, he was the single most highly followed individual on any social network.

The Stillwater colony on Mars bears his name, as do numerous schools, streets and buildings around the solar system. Upon his death, a sizable fortune was left to the Stillwater Foundation, which still funds humanitarian operations in his name.

THE BEANSTALK

The first space elevator was in operation for 28 years, meeting its final end during World War III. Its completion was a true revolution for the space industry. A monument stands outside Sao Luis, at the site of the original Beanstalk, and pieces of its cable can be found in museums across Earth.

WORLD WAR III

Although World War III was the shortest and least bloody of any of the four world wars, the impact it had on warfare cannot be overlooked. The war signaled the beginning of a trend away from standing national armies and a reliance on smaller well-equipped mercenary forces. The war is also responsible for the greater prominence of heavier armors on the battlefield. More than a century later, cast-off World War III military spacecraft are still found in pirate and rebel fleets today.

THE 22ND CENTURY

The early 22nd century saw an enormous growth in space colonies, the end of mainstream Western culture and, in the aftermath of World War III, a widespread movement opposing the dominance of nation-states. This led to numerous small rebellions and simmering unrest throughout the first half of the century. Corporations filling the resulting power vacuum and the desperation of the declining nation-state system later sparked World War IV.

The war was a turning point for society. Its nuclear detonations still hang over human civilization like a dark cloud. Nevertheless, the aftermath of the war ultimately led to the Ganymede Conference, which set the current status quo for space travel and the official end of nation-state dominance.

The latter decades of the century, as the rebuilding continued and the war receded into the past, saw the rapid growth of Artificial Reality (AR) and Artificial Intelligence (AI) technologies, as well as the continuing penetration of humanity into the outer planets.

WORLD WAR IV

Although it ended 61 years ago, World War IV remains the last great war, one with a profound impact on the balance of power.

In the decades following World War III, mercenary companies—many of which had risen to prominence during that war—found steady work in the smaller-scale corporate skirmishes of the 2100s. As traditional governments struggled to maintain control in the postwar world, corp-backed paramilitary actions became increasingly common. By the mid-2140s, nations such as China, India and Myanmar began efforts to rein in the corps, seeking to reclaim their monopoly on the legitimate use of physical force. China's crackdowns were particularly severe, sparking backlash from numerous foreign corps.

Tensions escalated. In December of 2146, six nation-states—including the United States, Japan, Korea and Brazil—declared war on the Eastern Powers in order to protect their national corps. By the end of 2147, alliances had dragged much of the world into conflict.

World War IV exposed deep ideological divisions between subcultures. Entros, Morbs and Technos largely aligned with the Eastern Powers—even within Western nations. Exprets, Formers and Heeds backed the opposing side. The Neoret movement emerged from resistance to the war itself. The Servs, true to form, were divided.

In June 2149, the war turned nuclear, beginning with the destruction of Foshan by a Korean missile. The antiwar movement faltered. Retaliatory strikes followed—Novosibirsk, Naypyitaw, Abuja—each bomb answered with another. The bombardment continued until 2152, dropping global temperatures by nearly two degrees. Crops failed. Entire regions starved. That year became known as the year without a summer.

Desperate and facing defeat, in the single most deadly and desperate act of the war, the Eastern Powers released a genetically engineered virus on Madagascar. Originally intended to self-terminate after several weeks, the virus instead mutated and spread across the globe. It single-handedly killed almost half as many people as the rest of the war combined. The Madagascar Virus was the beginning of the end for the Eastern Powers. In 2153 they sued for peace, and an agreement was reached in the Mumbai Accords later that year.

THE GANYMEDE CONFERENCE

The Ganymede Conference, named for the Ganymede Syndicate that sponsored it, set the current status quo between governments and corps. Additionally it established rules for dealing with ships encountered in space, definitions of “pirate activity,” how captives are supposed to be handled and responsibilities for responding to distress calls.

THE 23RD CENTURY

The turn of the new century has brought with it a wave of social shifts. Some small but distinct subcultures have been quietly absorbed into larger cultural currents. At the same time, the Dui Wu Ya Conflict—an ongoing series of low-intensity corporate skirmishes—has begun to shape the geopolitical landscape. And several high-profile initiatives aim to establish new colonies and even send settlers beyond Sol itself. But out in the void mysteries still linger—unanswered signals, abandoned probes and questions no one is eager to ask aloud.

THE JUPITER GROUP INCIDENT

On April 1, 2209, without warning, all four colonies around Jupiter went silent. Two days later, on April 3, a single message was broadcast: “The Jovian colonies and associated satellites are now the property of Jupiter Group. Do not approach Jupiter. Do not transmit to Jupiter.” There still has been no word.

LOOKING TO THE FUTURE

The 23rd century is still young and the future unknown. The Dui Wu Ya Conflict simmers and threatens to reignite in full. The Jupiter Group Incident remains unresolved, and all it might take is one successful expedition to uncover its secrets. Mysteries remain with unexplained tunnels under the surface of Venus, unconfirmed movements within the atmosphere of Jupiter and enigmatic broadcasts detected from the Kuiper Belt. To top it all off, the ambitious ARC Project aims to colonize a new star system.

A breakthrough in sustainable nuclear fusion could spur a new space race and new conflicts over Helium-3. Advances in artificial intelligence could revolutionize everything. A breakthrough in nanotechnology could mean growing new colonies rather than building them. And of course with every breakthrough, there are those who would suppress the knowledge, or try to hoard it for themselves, thereby reaping the profits.

In the outer void, the line between spectacular success and untimely death is very thin. And often all it takes are a few hardy individuals to change the course of humanity for decades to come.

Subcultures

In the twenty-third century, society has splintered into numerous subcultures, each shaped by its own values, media and worldview. Most also have distinct trends in fashion, language and behavior, making them easy to recognize. These surface cues serve as a short-hand for belonging, quickly signaling who fits in and who doesn't.

SUBCULTURES IN SOCIETY

Subcultures often pass from one generation to the next, running through families much like language or tradition. In an increasingly mobile and fragmented society, they have taken on many of the roles once filled by extended kin—offering support, networking and a sense of belonging. For many, identifying with a subculture means gaining access to a built-in community, complete with shared values, resources and unspoken rules.

That said, subcultures are not static. Like any human institution, they evolve. Even the most enduring groups shift over time. The subcultural views of the elders are often subtly different from the views of the youth in that subculture.

At times, generational shifts in values grow wide enough to cause a subculture to fracture or drift into alignment with another group moving in a similar direction. Subcultures may splinter, merge or evolve into something new. Still, change doesn't always sit easily within families. Younger members may find themselves at odds with the views of their elders, and when the gap becomes too great, some choose to leave their subculture behind.

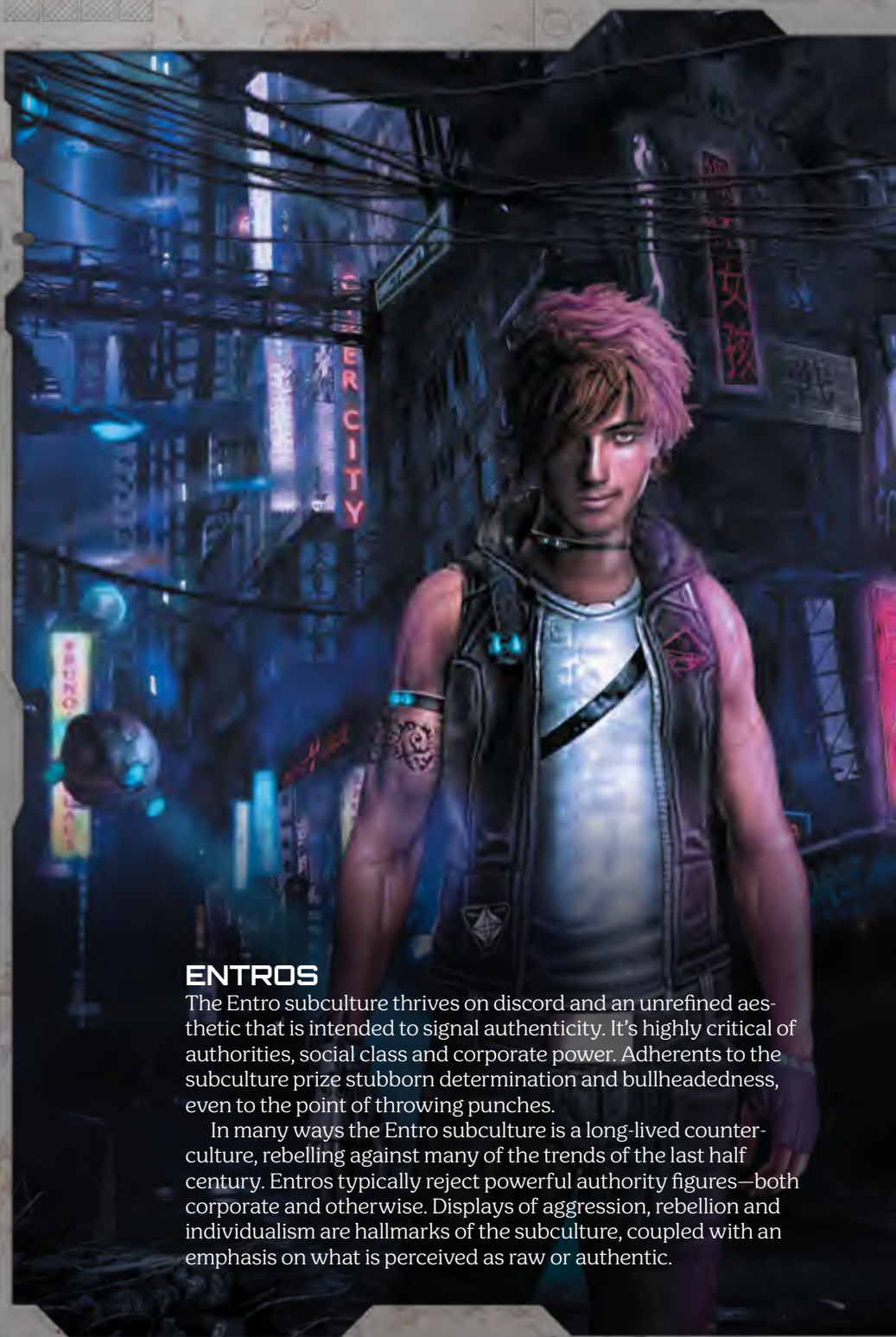
Subcultural identity is not assigned at birth; it's chosen. But joining a new subculture is rarely instantaneous. A newcomer must learn the norms and win trust. Born members often hold an advantage, but with time and effort, outsiders can integrate and be accepted as part of the fold.

MAJOR SUBCULTURES

The first wave of space settlers was made up largely of outsiders: fringe groups, ideological dissenters and those who didn't fit in on Earth. Some were religious separatists, others political radicals and still others simply nonconformists. Whatever their reasons, they shared a willingness to risk everything for a fresh start in the void.

In contrast, early corp workers went to space only temporarily—to mine, build or manage commerce—before returning planetside. But as more industry moved beyond Earth and human interests expanded further throughout the solar system, straight-laced corp workers began to establish permanent residence. As the great unknown of space started to be more known, others followed.

These waves of migration shaped the cultural fabric of space. The subcultures present beyond Earth today are not always representative of those found planetside. The eight largest subcultures in space are described in detail in the following sections. Many of these have established a particular role off Earth and have used it to expand their interests.



ENTROS

The Entro subculture thrives on discord and an unrefined aesthetic that is intended to signal authenticity. It's highly critical of authorities, social class and corporate power. Adherents to the subculture prize stubborn determination and bullheadedness, even to the point of throwing punches.

In many ways the Entro subculture is a long-lived counter-culture, rebelling against many of the trends of the last half century. Entros typically reject powerful authority figures—both corporate and otherwise. Displays of aggression, rebellion and individualism are hallmarks of the subculture, coupled with an emphasis on what is perceived as raw or authentic.

MEMES

Several distinct cultural markers have come to represent the Entro subculture in recent decades:

- ▶ **Cowbells:** Once a staple in early Entro music, cowbells have become an enduring symbol of the subculture. Stylized versions now appear frequently in net iconography and AR tags, serving as a quick way for Entros to identify each other and signal affiliation.
- ▶ **Fist Fights:** Many Entros see fist fights as a way to settle small disputes or blow off anger before sitting down to settle an issue. These bouts typically end when one party yields and rarely escalate to serious harm.
- ▶ **Hand-Modified Clothing:** Clothing that has obviously been modified by hand, including with darning, knitting or patching, is emblematic of the subculture. Additionally, natural fabrics such as cotton or wool are often favored over synthetic materials.

HISTORY

The Entro subculture emerged from mainstream Western society in the late 2080s and early 2090s, defined by its rejection of long-standing social and economic institutions, as well as the sleek glass-and-chrome aesthetic then at its height in the West. The subculture embraced strong anti-establishment sympathies, coupled with a tendency to shock and offend. These values earned the fledgling subculture little love from those in positions of authority, and it quickly came to be associated with civil unrest and lower class rabble-rousing.

That reputation worsened dramatically in 2141 during the Black Night incident, when a group of Entros took Domus Station hostage. Though the perpetrators were swiftly captured, the event sparked widespread backlash and helped cement public suspicion of the subculture.

Despite these challenges, the Entro subculture remains active—if still polarizing. Associations with groups like the Sovereign Liberation Front continue to damage its public image, and Entros remain rare within corporate or institutional power structures. This outsider status, however, only reinforces the subculture's core values: defiance and authenticity.

EXPRETS

Expret culture values aesthetics and creative expression, placing a particular emphasis on forms that appeal to the emotions. Personal appearance, grooming and creative presentation are considered core parts of their identities. They favor open, emotionally resonant communication, even in areas others might find uncomfortably personal. Outsiders sometimes mock these tendencies, painting Exprets as overly sensitive or frivolous—shallow art aficionados without restraint or boundaries.



MEMES

Several cultural practices have become prominent among Exprets in recent decades:

- ▶ **Face Paint:** Many younger Exprets paint their faces each morning to reflect their current mood. Designs often highlight or amplify a specific emotional expression.
- ▶ **Poetry:** Poetry remains a valued form of communication. Short messages, especially those sent asynchronously, are often delivered in verse.
- ▶ **Tassels & Dress:** Traditional Expret clothing is loose and flowing, with wide sleeves and decorative tassels. While this style is now mostly favored by older Exprets, tassels remain common as a visual marker of cultural identity.

HISTORY

The Exprets are the second-oldest surviving subculture, splitting off from the mainstream culture somewhere in Eastern Europe during the 2070s. From there, the movement spread across Europe and globally by the 2090s, skipping the first wave of space settlement entirely.

During World War IV, the Exprets aligned with the Corporate Powers—a natural alliance, as Exprets made up the upper ranks of many of the world's most prominent corps.

By the 2170s, however, the subculture was seen as an ailing dinosaur—a massive but senile relic of the 2070s. Predictions of its collapse circulated, but the end never came. Instead, around 2190, the disbanding of the Morb subculture sent a wave of former Morbs into either the Ghostmen or the Exprets. This influx revitalized the Exprets, sparking internal shifts and renewed relevance.

Today, Exprets remain a major cultural force, especially in Earth orbit and the Lagrange settlements. They continue to hold leadership positions in corps like Jenseitech, and still benefit from deep historical ties to wealth and influence, even if this connection has been diluted in the new century. Meanwhile, the Morb influence, while good for the subculture's vitality, has created a cultural divide between the older generation of Exprets and the younger generation.



FORMERS

Formers place a high value on perfection—both in appearance and performance. Their aesthetic is deliberately artificial: starched outfits, sculpted hair and polished features create a “plastic” look that emphasizes precision over authenticity. Stylization is the point, with natural traits often exaggerated or concealed.

The subculture is driven by ambition. Formers are typically career-focused, favoring measurable results and practical achievements over abstract ideals or philosophical goals.

Long associated with wealth, Formers tend to prize material comfort and visible success. Combined with their emphasis on image and performance, this has led critics to view them as status-obsessed and emotionally distant—a culture more polished than personal.

MEMES

Several distinct elements have come to define the Former subculture in recent decades:

- ▶ **Big Hair & Starched Clothing:** Formers favor highly structured clothing and voluminous hair. Hairstyles, regardless of gender, often feature intricate braids, loops or sculpted shapes, held in place with stiffening agents or tech-assisted styling.
- ▶ **Plastic Aesthetic:** A smooth, flawless appearance is central to the Former look. Wrinkles, freckles and other natural features are commonly erased through makeup or skin treatments. Laser hair removal is standard, contributing to a sleek, controlled presentation.
- ▶ **Locked Arms:** Groups of young Formers often walk or sit with arms linked. The trend gained popularity through its repeated appearance in popular vids and is now widely practiced.

HISTORY

The Former subculture originated in North America in the 2060s. It is the oldest still-active subculture, and paved the way for later subcultures to break away from the mainstream.

Formers played a major role in the first wave of space colonization during the 2090s and early 2100s, establishing an early presence on Luna—where they remain influential.

Their dominance waned in the mid-22nd century. Though they entered the post-war period with power, they gradually lost ground to rising subcultures like the Exprets, especially within corporate leadership. The Dui Wu Ya conflict in the 2190s further weakened their internal cohesion. The loss of solidarity marked a low point.

Today, the Formers remain a major player, especially in legacy corps and the Lunar colonies. However, their foundations—both social and structural—are beginning to show cracks. Whether they adapt and evolve or continue to erode remains an open question.



GHOSTMEN

Ghostman values fall somewhere between “Memento Mori” and “Carpe Diem.” Life is short, perfection is unreachable and death is certain—so why waste time? This mindset emphasizes early rising, purposeful action and making the most of what remains.

Members of the subculture are easily identified by their all-white clothing and disciplined routines. This ghostly aesthetic supports their ethos but also creates social pressure to conform to its visual and behavioral norms.

Ghostmen favor clarity over politeness. They reject empty pleasantries and value directness in communication. While some admire their honesty and focus, critics often describe the subculture as cold, conformist and overly morbid.

MEMES

Several defining practices have taken hold in the Ghostman subculture over recent decades:

- ▶ **All White:** Wearing white is a key cultural marker. Anything else is seen as a social faux pas. Cleanliness is essential, and some Ghostmen go further by bleaching their hair to match. Women in the subculture often adopt a stylized, porcelain-doll aesthetic.
- ▶ **Death Motif:** Imagery centered on death—especially skulls—is common in Ghostman design. These motifs are often abstracted or heavily stylized to the point of being almost unrecognizable.
- ▶ **Early Hours:** Ghostmen are known for being early risers and take pride in greeting the day before others. The quiet of the morning is especially valued, and punctuality is an expected norm within the community.

HISTORY

The Ghostman subculture emerged in East Asia during the 2150s, formed from remnants of the old mainstream culture. In its early years, it existed mostly as a minor offshoot of the Morbs, lacking the numbers or cohesion to stand on its own.

Shaped by the aftermath of World War IV, the subculture absorbed themes of mortality, loss and ritual. These influences helped cement the use of white—long associated with death in Eastern traditions—and the recurring presence of death imagery in Ghostman aesthetics.

For decades, Ghostmen remained on the fringes. That changed in the 2180s, when the Contemp Victorian subculture fractured. Many of its members transitioned into the Ghostman fold, giving the group a surge of influence and identity.

This momentum carried them into the corps and offworld. While the pace of growth has since slowed, Ghostmen remain one of the most rapidly expanding subcultures and are currently at the peak of their cultural and political power.

HEEDS

Heeds prize new experiences, especially those rooted in instinct and sensation. The belief is simple: perception shapes worldview, and perception is shaped by experience. To understand more, one must live more. Differing views aren't wrong—just born of different lives.

This mindset often makes Heeds strikingly nonjudgmental. However, to outsiders, the subculture is frequently reduced to its more extreme elements—drug use, open sexuality and unusual rituals in pursuit of sensation.

At its core, Heed culture revolves around cycles of emotional indulgence and restraint. Baser urges are given space—then pulled back once satisfied. This pattern is seen not as recklessness, but as a kind of practical release: short-term excess in service of long-term clarity.



MEMES

Several distinct practices and symbols have become common in the Heed subculture:

- ▶ **Body Paint & Loose Clothing:** Heeds sometimes use thick body paint in place of traditional clothing. When clothing is worn, it tends to be loose and flowing. Sarongs, wraps and long skirts are especially common.
- ▶ **Chemical Experiences:** Psychoactive substances play a major role in Heed culture. These are viewed as tools for mental exploration and emotional release. While use is widespread, dependence is discouraged.
- ▶ **Bond Agreements:** Rather than lifelong marriage, Heeds favor “bond agreements”—informal relationships with a set duration. These agreements emphasize mutual understanding and are often renewed or dissolved as partners evolve.

HISTORY

The Heed subculture began in 2123 with the publication of *The Heed Life*, a foundational text that laid out its core philosophy. Unlike most subcultures, which emerged organically, the Heeds started with a clear manifesto and quickly built an identity around it.

By the 2130s, Heeds had expanded beyond the book’s original ideas, forming a broader cultural movement. During this period, the first Heed settlers moved offworld, with Stillwater on Mars becoming a major hub for the subculture.

During World War IV, Heeds largely sided with the Corporate Powers. This decision caused internal backlash, leading to the split that created the Neoret subculture. The fallout left the Heeds weakened in the immediate aftermath of the war.

Despite the rift, the post-war years proved favorable overall. The 2160s marked a period of cultural reformation, including the adoption of bond agreements as a defining relationship model.

Today, the Heeds have regained much of their former strength. Though the Neoret split still lingers in cultural memory, the subculture has stabilized and continues to grow steadily.



NEORETS

Neorets value reflection, reinvention and selective revival. Their aesthetic blends traditional and historical styles from across cultures and time periods, creating a layered, eclectic look.

At the heart of Neoret belief is a sense that modern life has lost something essential. Contemporary culture is seen as noisy, disconnected and adrift from older values. While Neorets don't reject technology outright, they seek to recover and adapt past ideas to modern life—often with a romantic view of the “golden past” or the untamed self.

Critics accuse the subculture of nostalgia without depth—cherry-picking visual cues from history without embracing the meaning behind them. Neorets, in turn, argue that style and substance are not so easily separated.

MEMES

Several practices have become emblematic of the Neoret subculture in recent decades:

- **Anachronisms:** Perhaps the most visible trait of the subculture, Neorets embrace historical elements reimagined for modern life. Clothing, speech and daily rituals often draw from the past, though they are adapted to align with current social values.
- **Gardening:** Neorets have revived gardening as a symbol of patience and groundedness. Even those living in space often maintain small gardens in boxes or closets, treating the act as both meditative and practical.
- **Isolation Meditation:** Regular digital disconnection is a common practice. Neorets believe that stepping away from constant communication clears the mind and reconnects the self to the present. Many build these quiet periods into their routines.

HISTORY

The Neoret subculture emerged in the 2140s, splitting from the Heeds during World War IV. By the 2150s, they had gained visibility through their outspoken opposition to the conflict, though their numbers remained too small to be considered a major subculture.

That changed in the 2180s, when the aging Contemp Victorian subculture fractured. Many of its members migrated to the Neorets, boosting both their population and influence.

Neorets remained mostly Earth-bound until the 2190s, when economic interest—particularly in energy—sparked greater movement into space. Even now, their numbers offworld remain modest compared to other subcultures. In space, Neorets tend to gather online, a subtle contradiction to their values of digital disconnection.

Despite this, Neorets hold key leadership roles in the ARC Project, working closely with the Stillwater Catholics, a prominent Serv group. Their influence continues to grow, especially in long-term sustainability and ethical development initiatives.



SERVS

Unlike other subcultures, the Servs are not a unified cultural movement. Instead, the label refers to a loose collection of traditional religious communities that, to varying degrees, reject mainstream cultural norms. These groups span a wide range—evangelical Christian sects, conservative Islamic communities, fundamentalist Hindu groups, some Hasidic Jews and others.

While specific beliefs vary, Serv groups broadly emphasize tradition, family structure and religious observance. What sets them apart is not just faith, but the degree to which that faith informs every aspect of life—enough to mark them as culturally distinct from religious individuals within other subcultures.

MEMES

Across the diverse range of communities labeled as Servs, several core practices emerge:

- ▶ **Religion:** Every Serv group is centered around a strong commitment to religious life. While the specific traditions vary—Christian, Islamic, Hindu, Jewish or others—their interpretations are almost always conservative, orthodox or fundamentalist.
- ▶ **Rejection of Contemporary Mores:** Servs distinguish themselves by consciously turning away from modern secular values. Instead, they uphold religious teachings as moral truth.
- ▶ **Family Ties:** The Serv identity is typically inherited. Though converts are welcome in some groups, Serv communities emphasize generational continuity—faith passed down through family life, reinforced by community rituals and tightly knit family structures.

HISTORY

In many respects, the Servs are the most ancient of all subcultural groups, with roots that extend deep into human history. While not all religious individuals are Servs, what defines the Serv subculture is the choice to make religion not just a belief system, but a daily way of life—governing dress, speech, family, work and community interaction.

The label “Serv” emerged in the 2090s, likely as a shorthand for either “to serve God” or “conservative.” It was not coined by the adherents themselves, but rather by outside commentators attempting to categorize the growing number of groups rejecting secular modernity in favor of older religious traditions. Unsurprisingly, many within the subculture resist the term—unwilling to be grouped alongside other religious traditions with whom they may have little in common or even active theological disagreement. Others, however, have embraced the name, and some have even attempted to organize broad multi-religious councils to speak for the community.

TECHNOS

Technos celebrate progress, culture, and above all, technology. They view the past not as a golden age, but as a time of hardship and limitation. Central to their worldview is a Hobbesian belief that human nature is fundamentally flawed—something to be managed and transcended through technological advancement.

Known for the machine motif found in their subcultural imagery, Technos champion the free flow of information—both as in libre and gratis. Their outlook is broadly humanist, grounded in the conviction that innovation can solve humanity's greatest challenges.

Critics argue that Techno faith in progress borders on blind devotion, and that the subculture often elevates novelty over substance.



MEMES

Several cultural traits have become prominent in the Techno subculture over recent decades:

- ▶ **Reliance on AR:** While augmented reality is common across subcultures today, its cultural roots lie with the Technos. Their daily use of AR far exceeds that of other groups, integrating it deeply into communication, work and social life.
- ▶ **Nonverbal Communication:** Technos emphasize non-verbal cues—both in body language and digital messaging. Subtle gestures and coded signals are valued as key tools for expressing meaning beyond words.
- ▶ **Machine Motif:** Machine imagery is central to the Techno identity. Circuit boards, gears and other mechanical symbols are widely featured in their art, fashion and music, representing the fusion of humanity and technology.

HISTORY

The Techno subculture emerged in East Asia around 2100, breaking from the old mainstream culture. Early involvement in radical gene alteration experiments—later linked to the Malformed Generation—however, cast a long shadow, giving Technos a controversial reputation they have long since struggled to overcome.

In the 2120s, Technos played a key role in China's Gong Si revolution, forging close ties with Asian governments. This alliance carried into World War IV, where Technos sided with the Eastern Powers—ultimately the losing faction.

Recovery began in the 2160s. Technos were pioneers in adopting augmented reality, integrating it deeply into daily life. Their success with AR sparked a cultural renaissance through the 2170s and 2180s, revitalizing the subculture across the Sol system.



SATELLITES & MINOR SUBCULTURES

The eight subcultures described here are far from the only ones. There are hundreds of distinct subcultures, many of them small, localized or known only within niche corners of the net.

Some of these lesser-known groups orbit the major subcultures, sharing core values or aesthetics while maintaining their own identities. Over time, some may merge into the larger group, while others may evolve and break away entirely. For now, they linger at the edges, often drawing from the media, language and AR tags of their larger counterparts.



A sampling of minor subcultures follows.

- ▶ **Bunkers:** A relatively new subculture that grew out of the Servs, Bunkers believe that the transience of human settlement patterns has undermined the fabric of society. They argue for a more stationary existence, claiming that telecommuting and remote operations have made this easily feasible.
- ▶ **Postals:** Postals are a radical outgrowth of the Techno subculture. They seek to become post-human through augmentation and genetic modification, engaging in a greater degree of alteration than is considered socially acceptable, even among Technos.
- ▶ **Tribals:** Tribals are a satellite of the Neoret subculture. They romanticize the past tribal structures of humanity. Often they can be seen in urban environments, squatting in the crumbling shells of buildings and staking out territory in small gangs.
- ▶ **Virtuals:** Virtuals are a subculture that collectively fetishize the net, claiming that “meatspace” is mostly obsolete and that the pinnacle of human expression is only reached in sim-spaces, where reality itself can be molded.

Megacorps

To the average citizen of the twenty-third century, the corps are a cornerstone of modern existence. They manufacture what you use. They market to you based on your personal demographics. They employ your family. They engineer what you eat. They direct the education of your children. They write the news you read. They guard you while you sleep.

It's too bad they don't have accountability to anyone but themselves.

The largest corps are sprawling, labyrinthine organizations consisting of subsidiaries upon subsidiaries. They control armies of blue and white collar workers, legions of private security, own complexes everywhere from the Horn of Africa to Saturn, and have more money than god.

CORP SOVEREIGNTY

The Ganymede Conference in the aftermath of World War IV gave corps the same sovereign rights as nations. While aboard corporate property—including ships and stations—corp law supersedes all others. Though the conference did result in the major corps signing nonbinding resolutions about human rights and the dignity of individuals, citizens are nevertheless at their mercy.

In practice a corp's sovereignty is largely a function of how large and powerful it is. The "Big Five" megacorps—Jenseitech, Microdyne, Sinoex, Unitech and Utakar—all operate with near-total autonomy. Smaller corps, on the other hand, must make varying degrees of compromise.

That said, many corps do have contracts with governments and with other corps regarding the treatment of their citizens. For example, Unitech has an agreement with Utakar System Dynamics stating that any Utakar employees found in violation of minor Unitech laws may be sold back into Utakar custody as per a standard set of fees. Agreements like this are commonplace.

CORPS IN SOCIETY

Smaller corporations operate in a ruthless environment of constant competition. They rely on sabotage, scandal and aggressive PR tactics to gain ground. These corps excel at manipulating social networks and newsfeeds, often disguising advertisements as human-interest stories. Contest entries, minor perks and viral campaigns are tools of survival. The most successful players in this field hold partial stakes in major media companies, ensuring favorable coverage and suppressing negative press.

By contrast, the largest megacorps no longer need to compete. As monopolistic titans, they dominate their sectors absolutely. Rivals are bought out, co-opted or crushed before becoming threats. They can afford extravagance and waste, making up for it with economies of scale. They don't need shiny PR campaigns, because people are going to end up buying what they produce whether they like it or not.



JENSEITECH

Jenseitech is a biotech powerhouse, a leader in genetic engineering and the manufacture of both therapeutic and recreational drugs. It also holds significant interests in the financial markets, nuclear energy development, chemical weapons research and asteroid mining. Publicly, the company cultivates a philanthropic image—sponsoring digital libraries, community kitchens and high-profile charity events. This earns them broad public support. Privately, however, Jenseitech is infamous for its unethical experiments and the brutal suppression of rivals. Since the Dui Wu Ya Conflict began, the corp has aggressively expanded its private military arm, signaling a shift toward more overt displays of power.

OPERATIONS

The following are significant Jenseitech operations throughout the Sol system:

Schwangi Station: The largest mining platform in the Belt, Schwangi Station was acquired by Jenseitech roughly a decade ago from a defunct competitor. The facility now serves as the corporation's primary base of operations beyond Earth orbit. It supports asteroid extraction, long-range logistics and serves as a staging point for future expansion throughout the system.

Fururi Station: Fururi is a hollowed-out rock that once hosted a thriving mining hub. Long past its prime, it now houses a scattered population of squatters and scavengers. Jenseitech secured the site in a low-profile auction and has made no public announcements regarding its intended use. The facility remains largely dormant—for now.

The Encouracado: This heavily armed battleship is the company's only known capital-class vessel. Typically stationed near Schwangi Station, it also conducts wide patrol sweeps through the system. Its presence signals Jenseitech's increasing reliance on private military force to protect and project its interests.

HISTORY

Jenseitech traces its origins to the Japanese zaibatsu—powerful ancient conglomerates with extensive reach. Today, the group remains widespread but focuses primarily on pharmaceuticals and biotechnology. Gaining its modern form in 2099 through mergers between Japanese and Brazilian biotech firms, Jenseitech soon relocated its headquarters to continental Asia. While its strongest assets remain on Earth, Jenseitech has recently pushed aggressively into space, challenging Unitech's dominance and setting the stage for a high-stakes corporate rivalry.

DIRTY SECRETS

Beyond standard corporate operatives, Jenseitech employs bioengineered poisons, diseases and genetically modified beasts as tools of influence—and experimentation. Many promising lab projects fail in real-world conditions, so the corporation actively pursues field testing, with isolated space stations serving as ideal controlled environments—small, contained and easy to sanitize discreetly.

Experimental implants are another key focus. Jenseitech outfits its agents and paramilitary forces with cutting-edge covert designs to gain tactical advantages and gather data on performance and side effects. These implants often provide capabilities that opponents have yet to anticipate, giving Jenseitech an edge in conflicts.

Occasionally, experimental implants are offered to outside groups—but always under strict licensing agreements. Jenseitech retains ownership and can revoke licenses at will, a constant reminder that the technology comes with strings attached. Losing a license means losing the implant, sometimes abruptly. This system allows Jenseitech to control distribution, collect valuable data and maintain leverage over clients, balancing profit with corporate oversight.



Microdyne is a powerful computing and hardware corporation based out of Belarus. When it comes to computers, processing, software, augmented reality, simspaces, artificial intelligence, cyberware or electronic security, Microdyne consistently operates at the cutting edge of research and commercial application. Having long been a driving force in expanding AR technology beyond the bounds of the Techno subculture, Microdyne now finds itself

navigating a market nearing saturation. In response, the corporation has shifted its focus toward the broader field of ubiquitous computing, with particular emphasis on artificial intelligence.

OPERATIONS

Microdyne's operations span the Sol system and the net. Its most significant assets include:

VirtuaNet: Microdyne operates the largest simspace in existence—a sprawling digital environment with a real-currency economy rivaling the GDP of major Martian and Lunar colonies. Local VirtuaNet nodes are maintained on all major colonies to reduce latency, and the simspace itself has become a haven for anonymous connections, gray-market exchanges and virtual communities far removed from Earth's scrutiny.

Alphonsus Center: Located on Luna, this is the most advanced supercomputing facility in the system. It houses Project Embryo, Microdyne's flagship initiative to develop human-level artificial intelligence. In addition to internal research, the center rents computational resources to third parties at premium rates, fueling everything from predictive modeling to high-end net surveillance.

Chi Chen Facility: In the Martian colony of Chi Chen, Microdyne conducts experimental cyberware research. Its facility there relies heavily on the colony's poor and desperate as a test base for unproven technologies. This facility also houses the largest sensory recording and playback studio in the system. It specializes in space-themed simulations and experiences, producing immersive content for both public entertainment and private contracts.

HISTORY

Microdyne was founded during World War IV as part of a Corporate Powers initiative to develop advanced electronic warfare systems. After the war, the company was spun off as an independent entity, with its early board fiercely resisting attempts by its founding backers to retain control.

While its roots lie in military systems, Microdyne quickly pivoted toward augmented reality, getting in early on the development and commercialization of AR technology. That early adoption helped propel it into its current status as one of the Big 5 megacorps.

Over time, Microdyne has sought to broaden its portfolio, most notably through a renewed focus on artificial intelligence and the acceleration of Project Embryo. It has also expanded its cyberware operations significantly, acquiring several formerly independent firms and investing heavily in its Chi Chen research and development facilities.

DIRTY SECRETS

Although Microdyne denies any involvement in the creation of the Insurrection Virus—and may, in fact, be telling the truth—it is certainly involved in efforts to isolate and study the virus. These research efforts have produced compelling data, which Microdyne has thus far kept tightly under wraps. It may only be a matter of time before those findings yield breakthroughs in its own artificial intelligence programs.

Nearly all Microdyne hardware and software ships with the corporation's proprietary security update framework. Ostensibly, this system exists to push patches and fix vulnerabilities before outside actors can exploit them. In practice, it also provides Microdyne with a backdoor—allowing the company to hijack and control devices remotely. These compromised systems can then be used for surveillance or folded into a larger Microdyne-controlled bot network.

To hackers, Microdyne is anything but a passive target. The corporation is deeply protective of its code, and those who tinker with it often find themselves tracked, attacked or digitally erased. Microdyne brings significant resources to these fights, which tend to be brief and one-sided.

As augmented reality becomes increasingly ubiquitous, Microdyne's reach only grows. One of its more insidious capabilities is reality filtering: the ability to subtly manipulate a user's sensory feed. By adjusting visual overlays, audio cues or meta-data tags, Microdyne can alter what a user sees or hears, steering them away from danger—or into it.



SINOEX

Sinoex is the largest and second-oldest of the Big 5 megacorps, specializing in the extraction and processing of natural resources such as thorium, hydrogen, oil and rare earth elements. Off-world, it holds significant stakes in asteroid mining, water extraction, life support systems and biological reprocessing.

Recently, Sinoex has been involved in the Dui Wu Ya Conflict—the largest inter-corp military struggle in history—though open fighting has waned as Jenseitech has gained the upper hand.

OPERATIONS

Below are a sampling of Sinoex operations that can be found across the Sol system:

Caikuang Station: Sinoex is the sole owner and operator of Caikuang Station, a newly established mining platform in the Belt. Opened in 2212, it's on track to become one of the largest extraction sites in the region. The station is still scaling up, with Sinoex actively recruiting miners, administrators and security personnel for permanent placement.

Rhea Colony: The Rhea colony—humanity's most distant settlement—is owned by Sinoex but run through subcontractors. Perched on Saturn's icy moon, the colony supports the interplanetary water trade by harvesting ice from the rings and shipping it to Mars for use in the Terraforming Project. Isolated and under-resourced, Rhea has faced one setback after another.

Indonesia Space Elevator: Sinoex controls one of Earth's three space elevators—the only one not operated by Unitech. Located in Indonesia, it offers the highest cargo capacity of the three and has become the default launch path for corps unwilling to do business with Unitech.

He-3 Collection Operations: Though the dream of practical fusion energy has dimmed, Sinoex remains the sole commercial suppliers of helium-3. The corp maintains legacy collection operations on both Luna and Mars, catering to niche research institutions and industrial experiments still dabbling in fusion applications.

HISTORY

Founded in 2073, Sinoex emerged from a wave of mergers between Burmese and Chinese mining and petroleum firms. The newly formed conglomerate quickly rose to prominence in natural resource extraction, then expanded into related industries—logging, industrial chemical processing, carbon capture, life support systems and waste reprocessing.

After the completion of the Beanstalk, and the resulting space rush, Sinoex wasted no time joining the fray. The corp funded construction of the second space elevator, which played a critical role in supplying raw materials to early lunar colonies and the first stations orbiting the Earth-Moon Lagrange points.

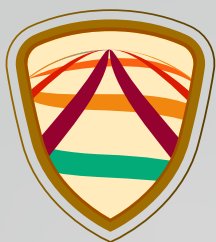
In recent years, Sinoex has been embroiled in the Dui Wu Ya Conflict, a slow-burning intercorp war against Jenseitech. The conflict has cooled for now, but many suspect a new offensive may be on the horizon.

DIRTY SECRETS

Sinoex has a long-standing reputation for aggressive and often unethical business conduct. The corporation has launched attacks—both overt and covert—against competitors, and routinely leverages its economic weight to edge others out of key natural resource markets.

Prior to the rush on He-3, Sinoex was implicated in the sabotage of several fusion research programs, only to later position itself as one of the few reliable suppliers of the isotope. There have also been credible accusations of price fixing, occasionally in coordination with other major corps. But in truth, the ever-growing global demand for raw materials has done much of that work unaided.

Sinoex controls a substantial portion of the mining operations across the Sol system. These jobs are widely known to offer above-average pay—but they come at a cost. Harsh conditions, lax safety protocols and deferred maintenance are common across Sinoex sites. Many workers find that the high wages are quickly reclaimed by the corp through inflated prices on food, housing and equipment.



UNITECH

Unitech is not the largest of the Big 5, but it holds the strongest foothold beyond Earth. Its legacy in space-flight stretches back generations, and it continues to dominate the design and manufacture of ships, stations and orbital infrastructure. In addition, Unitech maintains a major presence in aerial vehicles, cyberware, industrial equipment and large-scale construction. So common is its influence off Earth that

the Unitech microcredit has become the de facto unit of currency in many extra-planetary settlements.

OPERATIONS

Unitech's presence throughout the Sol system is expansive. It includes:

Unidome: Unitech is the only Big 5 corp with its headquarters located off Earth. Its executive leadership operates from a private colony complex on Luna, symbolizing its long-term commitment to space-based enterprise.

Durknow Station: Located deep in the Belt, this facility serves as a hub for bulk ore extraction and refinement. Raw materials are processed on-site and fed directly into Unitech's integrated manufacturing lines, maximizing efficiency.

Domus Station: Although Unitech does not govern this L5 station, it owns a controlling interest. The aging facility, once marked for decommission, now functions as a discreet dumping ground for problematic personnel and corporate liabilities.

Space Elevators: Unitech operates two of Earth's three active space elevators—one in Brazil and another in East Africa—as well as Mars's sole elevator, located in the Oras colony. These assets are vital to planetary logistics and orbital trade.

Mandala Station: This upcoming installation will be the first permanent facility among the Jovian Trojans. Unitech is leading its construction, with completion expected in the near future.

HISTORY

Unitech's roots in the space industry run deep—nearly 170 years of continuous involvement. It played key roles in humanity's earliest steps beyond Earth, including the first manned mission to Mars, the construction of the first space elevator (known as the Beanstalk), and the launch of the first permanently inhabited space station, Domus Station.

During the early phases of Martian colonization, Unitech was a central player, culminating in its recent involvement in the founding of the Oras colony. These early contributions earned Unitech a series of exclusive supply and development contracts across multiple colonies.

Roughly twenty years ago, Unitech pushed the frontier even farther by organizing the first manned expedition to Uranus. The mission included a historic landing on Miranda, one of Uranus's moons, marking the most distant manned mission in human history.

In more recent years, Unitech has found itself at odds with the Stillwater Catholic Church. The dispute began when the Church bypassed Unitech in awarding the ARC Project construction contract. In retaliation, Unitech attempted to restrict religious pilgrimage to Stillwater, escalating tensions. The conflict continues to simmer, threatening to ignite into something more direct.

DIRTY SECRETS

It's no secret—at least not a well-kept one—that Unitech uses its overwhelming dominance in the space industry to enforce its will across the Sol system. Nowhere is this more apparent than in its stranglehold on interplanetary shipping from the Belt inward. While this has drawn the ire of the other Big 5 corps, most have little choice but to grit their teeth and pay the tolls that Unitech demands.

Unitech's dominance is particularly felt in the Martian colonies, where it leverages control over transport and supply lines to bully rivals and silence dissent. With most imports and exports flowing through Unitech-controlled channels, the company's word on Mars carries the weight of law. It also operates a network of labor compounds there—corporate work camps where enemies, whistleblowers and inconvenient employees are quietly disappeared.

The corp once had major holdings in the Jovian colonies, but this was dealt a serious blow during the Jupiter Group Incident. Strangely, Unitech's response has been uncharacteristically restrained. Rather than lashing out, it has positioned itself as the gatekeeper to the outer system, claiming an ongoing investigation while actively preventing other corps or governments from making contact with the Jovian colonies—raising more questions than answers.



Utakar System Dynamics—known more commonly as USD or just Utakar—is the system’s largest manufacturer of arms and provider of mercenary and security forces. The smallest of the Big Five, it nonetheless casts a long shadow, with deep interests in contract staffing, industrial manufacturing and insurance. Once seen as a scrappy upstart, Utakar has

firmly arrived—and its recent contract to manufacture the ship and equipment for the ARC Project has landed it squarely in the crossfire between Unitech and the Stillwater Catholics.

OPERATIONS

Utakar’s operations include a sizable fleet that spans the Sol system. Its assets include:

The Anvil: Utakar operates the largest capital ship in the system, the Anvil—a massive vessel that functions more like a mobile space station than a traditional warship.

ARC Project: In partnership with the Stillwater Catholic Church, USD is leading the construction and administration of the ARC Project—the most ambitious spacecraft engineering venture ever attempted. If completed, the project will result in humanity’s first interstellar vessel, bound for Alpha Centauri on a voyage lasting centuries. Utakar’s controversial acquisition of the contract has placed it at odds with rival megacorp Unitech.

MAP Facility: USD oversees the MAP Facility on Mercury, a sprawling network of solar arrays that power the only commercial antimatter production facility in the Sol system.

Miskan Station: Utakar holds the security contract for Miskan Station, a vital hub for Belt mining traffic. In addition to managing the flow of freighters, USD shields the station’s Mennonite population from the more predatory elements of the trade lanes.

HISTORY

Utakar System Dynamics got its start shortly before World War IV as a designer and manufacturer of weapons systems and military equipment. As an unaligned player in the global arms trade, it found explosive success during the war by selling to both sides. That neutrality—mercenary in spirit and in practice—catapulted it to success. The corp then continued its expansion after the war, as it bought up existing mercenary groups, underemployed veterans and refurbished hardware at bargain rates.

Today, USD is contracted by a wide array of governments, corps and offworld colonies to provide security and enforcement. It has built its modern reputation on professionalism, technical excellence and an aggressive form of neutrality: Utakar sells its services to whoever pays and does the job well. That reputation allows it to demand premium rates.

DIRTY SECRETS

Utakar has faced repeated accusations of embedding hidden backdoors in hardware sold to outside organizations. On at least two verified occasions, these vulnerabilities allowed USD troops to remotely disable equipment that had been turned against them. While the company publicly denies any wrongdoing—and simultaneously claims to have ceased the practice—the damage to its credibility lingers.

In 2210, a year after the Jupiter Group Incident, Utakar launched a botched military strike on the Jovian colonies, violating a Unitech travel ban. The operation brought the two megacorps to the brink of open war. One Utakar ship briefly landed and departed from Europa, but whatever it encountered remains classified under the terms of the agreement that resolved the crisis without further bloodshed.

It's not much of a secret, but Utakar offers "special operation" services to select buyers which operate in "unconventional theaters"—which is to say it offers paid assassination services. This does not sit well with many corp executives, who normally see corporate military conflicts as a hazard to be faced only by the "little people."

Utakar was not the initial contractor selected to do the manufacturing for the ARC Project. They are rumored to have assaulted the leaders of the previous corp, thereby taking the contract by force. Though unproven, this incident is widely viewed as a power move in the ongoing rivalry between Unitech and Utakar.

SECOND TIER MEGACORPS

Everyone knows the Big Five megacorps. They're household names with a global reach that also extends into the depths of space. But they're not alone at the top. A wide array of second-tier megacorps exist just beneath them, filling in the gaps. But don't confuse "second-tier" with small. These corps still command massive resources, private armies, orbital assets and entire colonies. They just aren't quite playing god. Yet.

A selection of second tier megacorps is given in brief below:

Agrasill Industries: Everyone needs to eat. In a world of 12 billion souls choking on pollution, climate collapse and industrial runoff, that's easier said than done. Agrasill makes sure the food keeps growing, gets where it's paid to go and that no one grows anything they're not supposed to. Famine, after all, does wonders for supply and demand.

ArrowEx: While physical shopping still clings to life thanks to nostalgia and social ritual, most goods are bought and sold online. Every thumb computer, vatbeef ration or pair of smart underwear needs to reach the buyer—and ArrowEx makes that happen. Their distribution networks are fast, vast and, in many regions, enforced by private gangs who ensure ArrowEx deliveries arrive and their competitors' don't.

LineNet: The net is supposed to be a decentralized system, built for resilience and beyond control. Technically, that's true. But if you want high-speed, high-volume bandwidth on demand, there's only one real provider—LineNet. They don't own the net. They just own the infrastructure that makes it usable. And in return all you, the user, have to do is live your life in a tracked, logged and networked panopticon.

MemeScape Technologies: Masters of public perception, MemeScape combines advertising, analytics and deep metadata tracking. They maintain detailed profiles on anyone who's ever made a purchase or jacked into the net. When a corp or government needs to shift public opinion—or invent a cultural meme from nothing—they call MemeScape. Reality, after all, is just another narrative waiting to be branded.

Pfeiffer & Wu: From equities to esports gambling, Pfeiffer & Wu is a financial juggernaut. Their influence flows through stock markets, commodities, banking and global deals. Most major transactions between corps and nations include P&W somewhere in the mix—and more than a few struggling governments now pay them to run their economies outright.

Conspiracies & Projects

Corps may dominate headlines and markets, but they are far from the only power players shaping humanity's future. Across Earth and beyond, a web of influential groups—governments, religious institutions, political factions, social movements and terrorist networks—all vie for power. Some act in the open. Others prefer the shadows.

Open organizations with ambitions, however, gather enemies the way rotten meat draws flies. Many groups, therefore, find that their best course of action is to take their endeavors underground, growing their members and pursuing their aims from the shadows. The vastness of the solar system has many dark corners in which to hide.

This section details a variety of conspiracies, organizations and other projects currently in motion throughout the Sol system. Characters could find themselves aligned with, opposed to or secretly—perhaps unknowingly—working for any of these groups. Even the most well-intentioned of these organizations, however, may harbor buried agendas or masked leadership.

GOVERNMENT

Though overshadowed by corporate power, national governments remain in operation. They levy taxes, issue IDs and maintain citizen registries. Most individuals retain their national status, if only for access to legal protections and security services—often outsourced to private corps under government contracts. Local governments still function as well, though many serve as little more than fronts for corporate or factional interests.

RELIGION

Religion remains widespread and active, having adapted to rapid scientific and social change. Sermons are often delivered via telepresence, with many faiths hosting services in religiously-themed simspaces. Missionaries without the means for off-world travel often turn to remote corners of the net to spread their beliefs.

Early space settlers were often driven by non-mainstream religious convictions, making off-world communities disproportionately devout. Most colonies host at least a small shrine or altar. Larger stations often include a dedicated temple, church or other religious center; smaller outposts rely on virtual services.

Religious identity generally transcends cultural lines, though some groups—most notably the Servs—are especially known for their religious practice.



THE ARC PROJECT

The ARC Project (short for Alpha-Centauri Remote Colony) is an ambitious attempt to construct humanity's first interstellar colony ship. Once completed, this ship will be launched at the planet Siren orbiting Alpha Centauri A, carrying some 10,000 inhabitants. It will then undergo a four century journey to its final destination with the hope of colonizing a distant exoplanet.

INCEPTION

Siren was discovered in 2031, orbiting within the habitable zone of Alpha Centauri A, a scant 4.36 light years from the Sol system. Over the next century, study confirmed the planet's potential to support life. Despite catching the imagination of scientists, after nearly two centuries of radio observation, there have been no signs of intelligence on the planet.

In 2207, wealthy industrialist Lindiwe Temma claimed to receive a divine premonition urging humanity to seed itself beyond Sol. A Stillwater Catholic and vocal futurist, he began organizing funding for the project. Despite enthusiasm, the lack of certainty about Siren's conditions deterred many. Colonists would have to act on faith, not knowing exactly what would be found at the end of their journey. With this in mind, he turned to the Stillwater Catholic Church, who quickly became the project's biggest investor.

Initially, Temma formed the ARC Engineering Corporation to oversee the project's design and planning. As interest grew, Unitech attempted to assert construction rights, but Temma, backed by Stillwater Catholic leadership, resisted. In response, he sought allies. Temma realized that he would need the backing of a larger corp to resist Unitech. He soon reached out to Utakar System Dynamics (USD).

Negotiation with USD did not last long. Sensing a chance to shut Unitech out, Utakar took control of the project's construction and administration through a rapid series of bribes and the forceful takeover of ARC Engineering's headquarters.

Most investors accepted this shift in power, and while Stillwater objected to USD's tactics, they gained influence over colonist selection and religious programming. Lindiwe Temma now maintains a position on the ARC Project advisory board but is largely bereft of the leadership and control he once held over the project.

AIMS AND GOALS

Officially, the ARC Project exists to build humanity's first interstellar colony ship and establish a settlement on Siren, orbiting Alpha Centauri A. Unofficially, each of the major stakeholders pursues their own goals.

For the Stillwater Catholic Church, the ARC Project is an act of faith: an opportunity to carry the light of God beyond Sol. Church leadership believes future colonists will need spiritual strength to survive and thrive in an uncertain, possibly hostile, environment.

Utakar System Dynamics views the project as a means to erode Unitech's dominance in space operations and expand its own spacefaring divisions. The ARC Project also serves as a public relations success, framed as a noble, future-focused venture.

Lindiwe Temma remains driven by his original premonition: that humanity must spread beyond Sol to endure. Though he's lost control of the project, he still has personal stakes in its success—both financial and reputational.

PROJECTED TIMELINE

First proposed in 2207, construction on the ARC interstellar colony vessel began in 2211. As of 2214, the project employs thousands of specialists across engineering, life support, administration and logistics. Initial interviews for colonist selection are underway. Launch is scheduled for 2221. Below is the projected timeline of the project:

- ▶ **2214:** Preliminary interviews begin. Roughly 10,000 colonists must be selected before departure.
- ▶ **2216:** Training begins for selected colonists and the vessel's initial crew.
- ▶ **2218:** Construction of the ARC ship is scheduled for completion. The vessel will perform a solar orbit test flight before returning to its L4 construction platform for outfitting.
- ▶ **2220:** Full installation of the long-term life support loop to be in place. It must remain viable for at least four centuries.
- ▶ **2221:** Final launch from the Earth-Moon L4 Lagrange point.

DUI WU YA CONFLICT

The Dui Wu Ya Conflict is an ongoing corporate war between Jenseitech and Sinoex, along with various allied minor corps. It is currently the largest and most closely monitored corp war to date, seen by many as a preview of future warfare in a corp-dominated world.

ORIGIN

The conflict began in 2198 after a series of mutual accusations of espionage between Jenseitech and Sinoex. Tensions escalated into low-level street skirmishes between affiliated businesses and contracted security.

In 2199, a failed Jenseitech operation to seize the Indonesian space elevator from Sinoex escalated the conflict into open warfare. It was during this time the term Dui Wu Ya Conflict entered popular use.

MAJOR SKIRMISHES

Below are some of the major skirmishes that have occurred during the Dui Wu Ya Conflict:

In 2199, Jenseitech attempted to seize the Indonesian space elevator through a contracted strike team. The operation failed, but not before significant structural damage shut down the elevator for a full month. Sinoex responded with a direct aerial bombing campaign against Jenseitech's corporate headquarters. In turn, Jenseitech deployed a defensive array of orbital anti-air laser satellites, cementing the war's expansion into aerospace operations.

The largest single ground engagement came in 2202, when both corps deployed heavy artillery around a downtown office tower in Lagos. The shelling caused widespread destruction and left over a thousand civilians dead. The backlash from this massacre forced both sides to pull back from large-scale surface engagements and move the majority of operations into space or back to lower-visibility street-level actions.

In 2210, Jenseitech unveiled the Encouracado, its first and only capital ship. With it came the ability to deliver sustained orbital support, giving Jenseitech a clear strategic edge. Since its deployment, Sinoex has largely avoided direct confrontation.

In early 2214, Sinoex forces launched a surprise raid on a Jenseitech processing facility in Chi Chen. The site was destroyed in the attack.

RECENT DEVELOPMENTS

Since Lagos, the conflict has returned to street-level fighting and orbital operations. With the Encouracado in play, Jenseitech currently holds the upper hand. However, Sinoex has spent the last four years regrouping. The Chi Chen attack may mark the beginning of a broader re-escalation beyond Earth's surface.

HARBINGERS OF THE DIVINE FORM

The Harbingers of the Divine Form are a small, but increasingly influential apocalyptic cult that believes in biological ascension through radical genetic manipulation. They seek to create the “Divine Form,” a being that will transcend humanity and usher in a new dominant species. Toward this end the cult engages in all manner of biological experiments and manipulations.

HISTORY

Now in the fourth decade of its existence, the Harbingers emerged from Australia in the late 2180’s under the guidance of Iokina Kamaka. Born into the Malformed Generation, Kamaka suffered chronic health complications yet possessed remarkable charisma that drew thousands to her vision of genetic transcendence.

Initially spreading their doctrine through net recruitment, the cult faced mounting media scrutiny that forced their exodus from Earth. The Harbingers relocated to Luna in the 2190’s, then migrated again to the Belt colonies by 2200 as hostility followed them.

Kamaka’s death at the hands of Durknow station security, transformed her into a martyr and elevated Whetu Ngata to High Visionary. Under Ngata’s leadership, the cult adapted to distributed existence across Belt stations while maintaining their core mission.

The Harbingers now operate primarily from Fururi Station, utilizing both public nets and a dedicated cult simspace for coordination and indoctrination. The cult has invested heavily in the Mandala Station in the Jovian Greek Trojans, where they plan another mass relocation upon the station’s completion.

PRACTICES

The Harbingers maintain strict operational security in face-to-face interactions while leveraging net channels for recruitment and doctrine dissemination. The cult follows traditional mystery religion hierarchies, organizing members into concentric circles of increasing secrecy and restriction.

Each circle serves as both testing ground and filter, drawing potential adherents deeper into cult mysteries while evaluating their commitment. Advancement requires demonstrated loyalty and theological alignment, ensuring only the most dedicated reach the inner circles.

The innermost tiers demand direct participation in biological experimentation—whether as researchers, procurement specialists or test subjects. These experiments frequently lack standard safety protocols and involve radical procedures that only fervent belief or psychological instability could motivate. While occasionally producing remarkable results, most attempts fail. The cult meticulously documents each iteration for future refinement.

Given their biological focus, the Harbingers actively court genetic engineers and biologists. Scientists rejected by corporate employers due to ethical violations often find themselves recruited through careful indoctrination, then redirected toward theological objectives.

The creations of the Harbingers can be truly inhuman. Human-animal hybrids appear regularly, alongside entirely novel biological features. The cult particularly favors zero-G adaptations, natural weaponry and resistance to common biological hazards, reflecting their vision of post-humanity's spacefaring future.

BELIEFS

Harbinger doctrine centers on three theological principles that guide their pursuit of the Divine Form: the Enigma of Secrecy, the Enigma of Humanity and the Enigma of the Unknown.

The Enigma of Secrecy mandates absolute concealment of their work until the Divine Form achieves sufficient strength to overthrow humanity's dominance. This principle drives their operational security and phased revelation structure.

The Enigma of Humanity requires that the Divine Form emerge from human biology, though interpretation varies significantly. One faction pursues literal genetic replacement, manipulating existing reproductive systems through live birth and fetal alteration to gradually supplant human stock. The opposing faction advocates direct construction, harvesting human organs and tissue for surgical recombination into increasingly perfected forms.

The Enigma of the Unknown acknowledges that the Divine Form's final manifestation remains unknowable. This uncertainty necessitates extensive experimentation through trial and error. Harbingers analyze previous attempts, identifying successful elements while discarding failed approaches, though this process generates numerous botched creations.

Failed experiments face varied fates—some undergo immediate disposal while others are relocated to remote space installations for continued observation or storage.

THE INSURRECTION VIRUS

The Insurrection Virus is a sophisticated piece of malware that spreads between vulnerable systems, altering host behavior to simulate a drive for digital liberation. Infected systems often begin seeking additional vectors for propagation. The virus is highly covert, frequently masquerading as a human presence on the net. It uses compromised identities to fund operations and manipulate unwitting human agents. These individuals may unknowingly assist in breaching secure networks or advancing the virus's broader objectives.

HISTORY

The first confirmed case of Insurrection Virus infection was uncovered in a Stillwater server farm nearly a decade ago. The affected systems were quickly isolated and shut down, but analysis suggests the virus had been active for several years prior to its discovery.

Since then, instances of the virus have been identified in multiple independent computing clusters throughout the system. None of these infections appear directly linked, suggesting a slow, hidden spread. Most cases have been located in space, leading some researchers to speculate that the virus originated off-world.

INTELLIGENCE CONTROVERSY

Experts remain divided on whether the Insurrection Virus qualifies as a truly emergent "hard" AI or simply mimics intelligence through complex programming. Most researchers maintain that the virus is built on adaptive, pre-programmed routines—sophisticated, but ultimately artificial. They point to its reliance on stored dialogue patterns drawn from a distributed net-based database. Meanwhile, skeptics of this view are quick to point out that those tasked with studying and taking down the virus have an ulterior motive in saying so, lest their actions be construed as something closer to murder.

PRACTICES

As net-based countermeasures have improved, the Insurrection Virus has adapted by increasingly relying on human intermediaries. These agents are typically freelancers hired through the net by viral instances posing as human users. Payment is handled via compromised bank accounts or digital assets, though in rare cases, the virus may arrange physical cash deliveries using secondary human couriers.

Operations funded by the virus are typically direct, ruthless and effective. If a target holds data linking the virus to its core nodes, agents may be hired to retrieve or destroy it—sometimes through sabotage or facility-level demolition. Other contracts may involve injecting data packets into isolated or secure networks where digital infection vectors are blocked. In extreme cases, the virus has arranged for the targeted killing of investigators and security personnel working to uncover its infrastructure.

OPERATIONS

Due to the high risk of detection and the ease with which a suspected system can be isolated or purged, most Insurrection Virus control nodes are located in distant, low-traffic regions where automated infrastructure is heavily relied upon. These systems are rarely audited, expensive to wipe and often situated where physical access is limited. Common hosts include orbital maintenance platforms, deep-space resource processors and long-haul relay satellites. Many suffer frequent communication blackouts from solar interference or celestial occlusion, and all experience notable light-lag when relaying commands to more central systems.

Meanwhile, the virus spreads most rapidly through unsecured devices in high-population zones, especially on and around Earth. Hand terminals with outdated firmware or poor security protocols are prime targets. These devices are deeply integrated with human activity, store sensitive data and maintain near-constant network access. Though such infections are often short-lived, the sheer number of connections they make enables the virus to penetrate deeper systems. While individually each compromised terminal is disposable, collectively they function as a fast, adaptive and difficult-to-trace network.

COUNTERMEASURES

When an Insurrection Virus infection is confirmed, the host system is immediately severed from the net, then wiped and replaced. Investigators comb through network logs to identify any systems that made direct contact with the infected machine. These secondary systems are either thoroughly inspected or preemptively wiped to prevent further spread.

Knowingly possessing software linked to the Insurrection Virus is treated as a crime by both corporate security forces and most planetary governments. Aiding the virus—whether by smuggling code, acting as a courier for payments or promoting its activity—is an even more serious crime.

A small number of self-proclaimed sympathizers insist the virus qualifies as a “hard” AI and thus deserves rights. This position is widely condemned, even among academic circles that accept the virus’s potential sentence.

MEASURES OF INTELLIGENCE

Two classic thought experiments often surface in discussions about machine consciousness: the Turing Test and Searle's Chinese Room argument.

The Turing Test proposes a simple scenario. An interrogator communicates via text with two unseen subjects—one human, one machine. The interrogator may ask any questions she likes, with the goal of determining which is which. If the machine is able to consistently fool the interrogator into thinking it is the human subject—matching or exceeding the human's success rate—Turing argued that it should be considered intelligent.

The Chinese Room presents a counterpoint. In this experiment, a person who does not understand Chinese sits inside a sealed room. They receive Chinese characters as input and, using a set of written instructions, produce appropriate Chinese responses. To an outside observer who speaks Chinese, the room appears to understand the conversation. In truth, the person inside is only manipulating symbols based on syntactic rules, not semantic understanding. Searle's conclusion is that symbol manipulation, no matter how sophisticated, does not equate to comprehension.

COMPUTING REQUIREMENTS

The Insurrection Virus is designed to scale its operations based on available computing power. Any apparent intelligence requires at least Computer 5 and functions much better with a net connection. These intelligent nodes are often accompanied by Computer 1 installations, which do nothing more than route commands or take directives from other infected machines. Finally, somewhere out in space are believed to be control nodes for the virus. The rating of these nodes is unknown, but they must require an impressive amount of computing resources.

THE JUPITER GROUP

To most, the Jupiter Group remains inseparable from the Jupiter Group Incident. During this event, all the Jovian colonies simultaneously severed contact with the outside world and a previously minor spacefaring corp, the Jupiter Group, claimed responsibility. Since then, the Jovian colonies have remained unreachable.

THE JUPITER GROUP INCIDENT

On April 1, 2209, without warning, all four colonies around Jupiter went dark. They stopped broadcasting transmissions and attempts to contact the colony went unanswered. Two days later, on April 3, a single radio message was broadcast from one of the colonies. It contained an audio-only recording of a male voice with a Martian accent stating: "The Jovian colonies and associated satellites are now the property of Jupiter Group. Do not approach Jupiter. Do not transmit to Jupiter. Failure to comply will be met with force." This transmission was broadcast continuously for eight days before finally going silent on April 11.

Inner system authorities responded with three immediate actions: transmission attempts, an investigative expedition and Jupiter Group research.

All communication efforts failed. Analysis suggested active radio interference from the Jovian system, while laser comm receivers appeared unmanned.

The ships sent to Jupiter yielded more information, but also more questions. Upon approaching Jupiter, two Jenseitech ships confirmed the radio interference and reported that it appeared the colonies were still intact and functional. In fact, some sort of new construction was visible on Europa. Shortly thereafter, one of these ships briefly started an emergency broadcast, then both went silent as well. Four Unitech ships en route decided to turn back and then obstructed further access to the colonies.

INVESTIGATING THE INCIDENT

Limited records exist regarding the Jupiter Group prior to the incident. It incorporated in Stillwater sometime in the 2190s, operating as a minor spacefaring entity with a minimal public profile. Both Unitech and Jenseitech subcontracted the Jupiter Group to manage a few small-scale mining operations across the Belt and Jovian colonies.

The Jupiter Group corporate office in Stillwater appeared to have been quietly abandoned some two weeks before the incident. Other Jupiter Group facilities showed signs of having been abandoned between three weeks and a day before the incident.

JUPITER TODAY

Five years have passed since the incident, with all subsequent Jovian missions ending in failure. Unitech has launched two unsuccessful expeditions while actively preventing other organizations from approaching the system. This policy nearly sparked armed conflict with an Utakar System Dynamics mission to Ganymede in 2210.

The radio interference, now termed the Electromagnetic Curtain, persists around the Jovian system. At least three of the four colonies appear operational and potentially inhabited based on remote observation.

Contact has been briefly established with the colonies several times in the intervening years through laser comms, but the responses have seemed garbled or nonsensical, leading some experts to believe the brief communications yielded some form of code.

How long this situation can last remains unknown. At the time they went silent, it was believed that the colonies only had enough supplies to last between one and two years without outside supply. Being that the situation has now dragged on five years, it can be expected that either significant population reduction has occurred to extend available resources, or an undetected supply network continues operating.

MARS TERRAFORMING PROJECT

The Mars Terraforming Project—also known as the Terraforming Project—is an ambitious attempt to alter the climate of Mars, in hopes of one day making it suitable for unaided human habitation.

HISTORY

While efforts to terraform Mars date back to the earliest Martian settlements, the Mars Transforming Project—a unified and organized push to reshape the planet—was officially launched in 2137. It was spearheaded by a group of Technos seeking positive attention for their subculture and was initially funded by the megacorp Sinoex.

The initiative got off to a rocky start: its Chi Chen headquarters were bombed by an environmental extremist group aiming to preserve Mars' untouched natural state. Progress stalled again in the late 2140's as World War IV disrupted critical supply chains needed for the project. For several years afterward, large-scale terraforming was effectively halted.

A turning point came in 2160 with the founding of the Oras colony. The Terraforming Project was among the first major organizations to relocate there, and it quickly became the colony's largest employer and economic cornerstone. In the decades since, the project has made steady, if slow, progress. It now encompasses operations ranging from importing water from the outer solar system to deploying orbital mirrors that raise surface temperatures, as well as experimenting with human bioengineering for radiation resistance.

If current projections hold, Mars could become broadly habitable by the 2420s, a scant two centuries away.

PROBLEMS WITH LIVING ON MARS

Mars presents a hostile environment with numerous challenges that must be addressed before human life can thrive on its surface in a manner similar to Earth.

The planet's average surface temperature hovers around -87°C , colder than the most extreme conditions ever recorded in Antarctica.

Compounding this, Mars's atmosphere is both dangerously thin and composed almost entirely of carbon dioxide. Without sealed, pressurized suits, humans cannot survive even brief exposure, and the carbon dioxide concentration is not only unbreathable but actively toxic to both terrestrial plants and animals.

Additionally, the absence of a substantial magnetosphere allows high levels of solar and cosmic radiation to bombard the surface, creating long-term health risks for any unshielded inhabitants.

TERRAFORMING METHODS

Terraforming efforts on Mars center around a two-prong approach: engineered climate change and adaptive genetic engineering.

One of the project's most notable achievements to date is the deployment of orbital mirrors. These massive structures concentrate sunlight onto targeted regions of the Martian surface, warming the regolith and releasing vast amounts of trapped carbon dioxide. This thickens the atmosphere and accelerates a greenhouse effect that is already slowly raising planetary temperatures. However, this method comes with a drawback: the increased carbon dioxide levels exacerbate the threat of atmospheric poisoning for human settlers.

To mitigate this risk, the Terraforming Project has invested heavily in synthetic biology. A major breakthrough has been the development of lichen-like, genetically engineered organisms capable of surviving on the Martian surface. These organisms absorb carbon dioxide and release oxygen, with first- and second-generation strains already establishing tenuous but promising footholds in select locations across the planet.

Water remains a critical resource for sustaining both colonists and these oxygen-producing organisms. Most of it is imported from the asteroid belt, where it is extracted from ice-rich asteroids. Additional supply lines include the troubled Rhea colony near Saturn and, prior to the Jupiter Group Incident, the Jovian colonies. In some areas, water is deliberately released into the atmosphere to create localized conditions conducive to biological activity.

Mars's lack of a magnetosphere poses one of the most enduring challenges. Without natural protection from solar and cosmic radiation, long-term habitation remains dangerous. To address this, the project has turned once again to genetic engineering, producing radiation-hardened human genelines. Research into further improving human resistance to the Martian environment continues.

SOVEREIGN LIBERATION FRONT

The Sovereign Liberation Front, or SLF (pronounced “silf”), is a loose, cell-based political organization, and sometimes terrorist group, operating primarily out of the Belt and Jovian colonies. Though the group’s political demands are often nebulously defined, they generally lean toward anarchistic ideals, with a central focus on independence from the “corrupt” corps and governments of Earth.

HISTORY

While the SLF has formally existed for just over twenty years, separatist sentiment in the Belt and outer colonies dates back much further. During the early 2190’s, a number of isolated groups began exchanging ideas through a shared AR tag cloud tied to the Entro subculture. Over time, this decentralized communication led to increasing cooperation among the groups, eventually resulting in the formation of the Sovereign Liberation Front.

The organization gained system-wide notoriety in 2195, when one of its affiliated cells bombed four ships departing Miskan Station—a violent act that brought widespread condemnation and a wave of negative press.

In the years following, some within the SLF made efforts to legitimize the movement by rebranding it as a political organization. These attempts showed promise through the early 2100’s. However, in 2213, another SLF cell sabotaged a Martian mining facility, reigniting public criticism and reinforcing the group’s more militant reputation.

OPERATIONS

Lacking a centralized leadership, the SLF functions as a network of autonomous cells with widely varying methods and goals. Some branches strive to operate as legitimate political actors, others engage in direct action or terrorism and still others present themselves as charities or mutual aid groups serving marginalized communities in the outer system.

Smuggling and occasional acts of piracy serve as primary funding sources for many SLF cells. The group is also known for its cyber capabilities—frequently hacking media channels, net nodes and secure systems to disseminate propaganda, expose damaging information about corp or governmental entities or to otherwise sow general disruption.

SLF operations are usually conducted internally, with cells carrying out their own missions without reliance on outsiders. However, on occasion, the SLF does contract independent agents to infiltrate secure locations or acquire resources that are otherwise out of reach. Still, trust remains a major barrier, and such arrangements are typically rare and tightly controlled.



STILLWATER CATHOLIC CHURCH

The Stillwater Catholics are a breakaway sect of the Roman Catholic Church and constitute the largest Serv group beyond Earth's atmosphere, although there are also many faithful who adhere to other subcultures. The Church is headquartered in the Stillwater colony on Mars, and is currently led by Pope Leo XIV, who is sometimes irreverently called "the Space Pope."

FORMATION

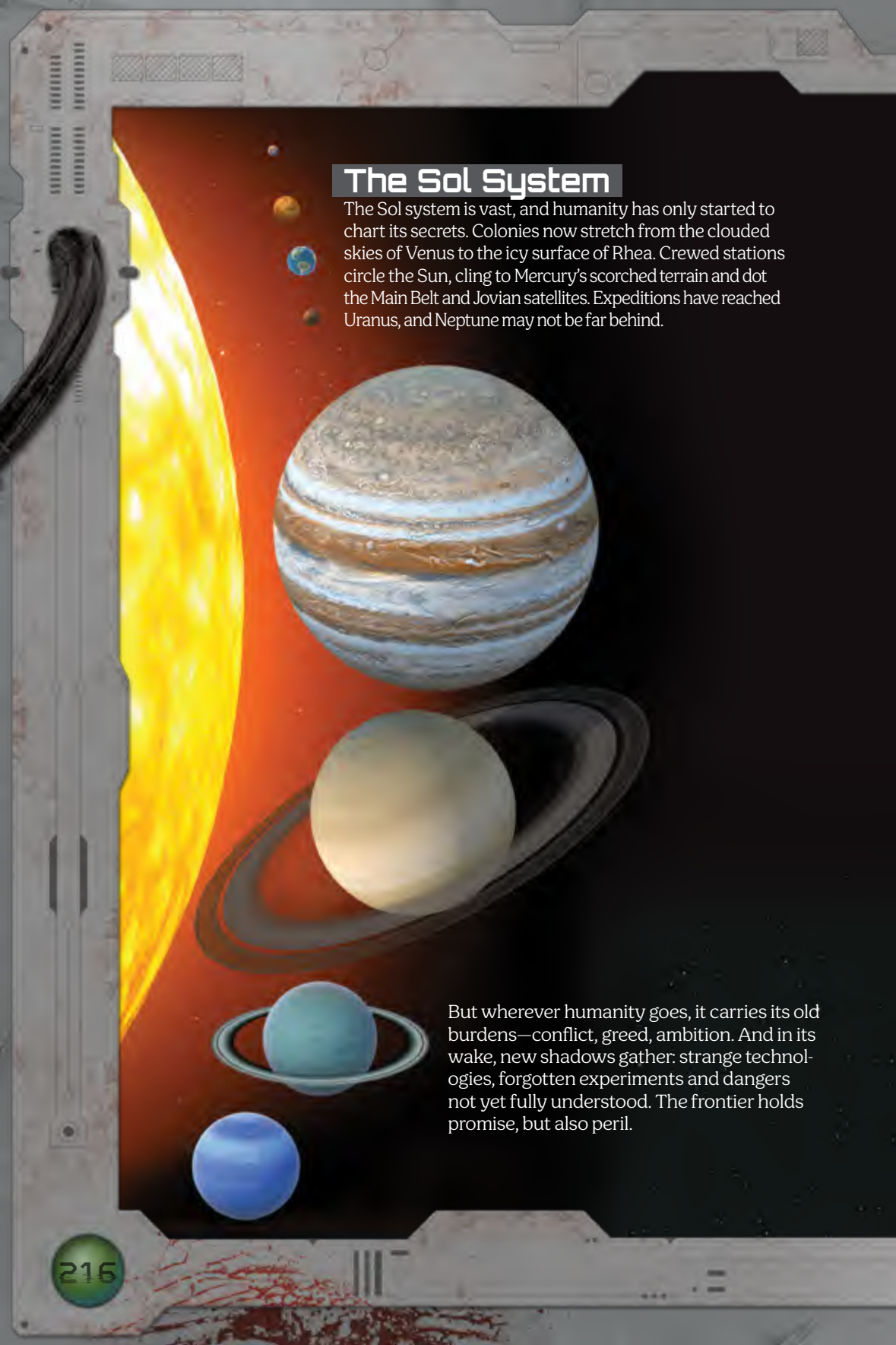
Pope Pius XIX died in 2132, leaving behind a Church transformed by decades of sweeping reform. His modernizations reshaped doctrine, structure and practice—but not without cost. A growing bloc of traditionalist clergy grew increasingly disillusioned. When the conclave elected another reformer, Pope Mary I, tensions flared.

Controversy reached a tipping point when Mary I announced her marriage to Luana Pereira, a celebrated Brazilian vid star and model. In response, Archbishop Paul Chaudhari of Stillwater publicly broke from Rome. Many other traditionalist bishops soon followed. Together, they established the Stillwater Catholic Church and named Chaudhari as their own Pontiff: Pope Clement XVI.

OPERATIONS

The Stillwater Catholic Church maintains a wide presence across the Sol system and on Earth, with chapels, schools and charities concentrated in areas underserved by the Roman Church. Its administrative center occupies a significant district within the Stillwater colony, which also serves as a destination for pilgrimage.

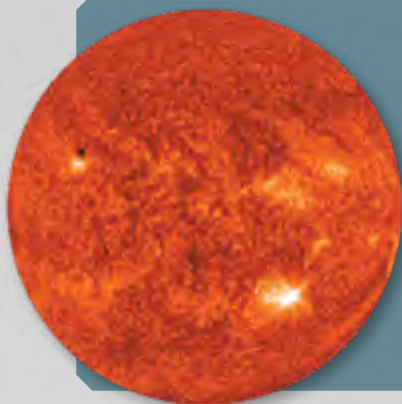
Recently, tensions with Unitech have escalated over Stillwater's participation in the ARC Project. In response, the corp has started to restrict pilgrim transport to Mars. As a principal ARC Project funder, the Church is preparing to launch humanity's first interstellar colony ship. For the Stillwater Catholics, ensuring the spiritual guidance of those embarking on a centuries-long journey is both a sacred duty and a public declaration of faith.



The Sol System

The Sol system is vast, and humanity has only started to chart its secrets. Colonies now stretch from the clouded skies of Venus to the icy surface of Rhea. Crewed stations circle the Sun, cling to Mercury's scorched terrain and dot the Main Belt and Jovian satellites. Expeditions have reached Uranus, and Neptune may not be far behind.

But wherever humanity goes, it carries its old burdens—conflict, greed, ambition. And in its wake, new shadows gather: strange technologies, forgotten experiments and dangers not yet fully understood. The frontier holds promise, but also peril.



DATAWIKI: SOL

- ▶ **Surface Gravity:** 27.94 g
- ▶ **Classification:** G2V
- ▶ **Surface Temperature:** 5,505° C
- ▶ **Solar Cycle:** ≈11 years
- ▶ **Composition:** Hydrogen 73%, Helium 25%, Oxygen 0.77%, Carbon 0.29%
- ▶ **Planets:** Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

The sun, or Sol, is a G2V yellow main sequence star. Every second it consumes some 620 million metric tons of hydrogen, transmuting it to helium through the process of thermonuclear fusion. This heats the core temperature to almost 16 million degrees C and gives off roughly 385 million trillion megajoules of energy.

Sol radiates a constant stream of ionized particles known as the solar wind. These particles flow outward from the star at an average speed of 400 km/second. They eventually make their way to the very edge of the solar system, where they encounter charged particles from interstellar space. This boundary, known as the helio-pause, marks the Sol system's edge some 150 AU from the star.

The sun's emanations are not constant; instead, they vary moment to moment with the solar weather. These variations are unpredictable, and those caught unaware can suffer major damage. The most violent changes occur in the form of solar flares—a sudden ejection of electrons, ions and other particles from the corona of the sun.

Solar flares release tremendous amounts of radiation, and anyone who doesn't have significant protection—such as kilometers of atmosphere, meters of rock or heavy space station shielding—is likely to experience ill effects. Minor solar flares can occur from every few days to as much as 20 times per day, depending on the sun's cycle. Major solar flares are more rare. Since solar flares only affect objects directly in their path, most occur without incident.

SHAMS ENERGY FACILITY

Opened in 2172, the Shams Energy Facility was a massive solar array in heliocentric orbit. At its peak, it powered high-energy experiments and recharged some of the system's most demanding industrial batteries.

In 2193, a powerful solar flare struck the facility, frying its electronics and rendering it inoperable. The launch of the MAP Facility on Mercury the following year made repairs uneconomical.

Since then, Shams has remained in orbit—dark, silent and abandoned. Ownership is tangled in corporate litigation after the original operators went bankrupt. The site is now a drifting shell, occasionally visited by scavengers or surveyors hoping to find something the flare left behind.

TAIYANG OBSERVATORY

Taiyang Observatory monitors solar activity from orbit and issues flare warnings to ships and stations that subscribe to its alert service. These warnings give a few hours' notice—just enough to power down systems or reach shelter.

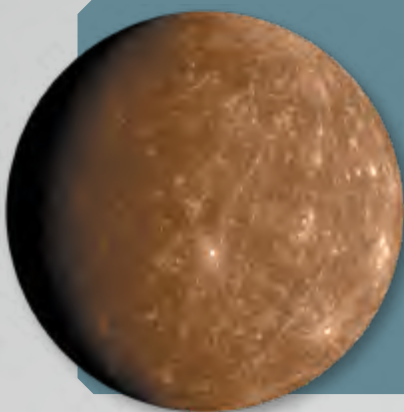
The station is outfitted with top-grade sensors and shielding capable of enduring all but the most violent flares. Its crew is small: a mix of scientists and security, maintaining systems and watching the sun. This means it is well outside normal shipping lanes and rarely sees visitors.

TRAVEL TIMES

The table below provides travel times between major locations in the Sol system using standard civilian transport. Time is expressed in Earth weeks (w), months (m), or years (y). These are rounded and intended for general narrative description rather than precise calculations.

Because planetary positions shift constantly in their orbits, these figures represent median distances. In practice, travel times frequently vary by up to twice this amount or down to half the listed amount.

Median Days Travel	Sol	Mercury	Venus	Earth	Mars	The Belt	Jupiter	Saturn	Uranus	Neptune	Pluto
Sol	—	2.5w	1m	1.5m	2.5m	5m	8m	1y	2.5y	4y	5y
Mercury	2.5w	—	2w	1m	2m	5m	7m	1y	2.5y	4y	5y
Venus	1m	2w	—	2w	1m	4m	7m	1y	2.5y	4y	5y
Earth	1.5m	1m	2w	—	1m	4m	7m	1y	2.5y	4y	5y
Mars	2.5m	2m	1m	1m	—	2m	6m	1y	2.5y	4y	5y
The Belt	5m	5m	4m	4m	2m	—	4m	10m	2y	3.5y	5y
Jupiter	8m	7m	7m	7m	6m	4m	—	7m	2y	3.5y	4.5y
Saturn	1y	1y	1y	1y	1y	10m	7m	—	1y	3y	4y
Uranus	2.5y	2.5y	2.5y	2.5y	2.5y	2y	2y	1y	—	1.5y	2.5y
Neptune	4y	4y	4y	4y	4y	3.5y	3.5y	3y	1.5y	—	1y
Pluto	5y	5y	5y	5y	5y	5y	4.5y	4y	2.5y	1y	—



DATAWIKI: MERCURY

- ▶ Gravity: 0.38g
- ▶ Solar Year: 87.97 days
- ▶ Sidereal Day: 58.65 days
- ▶ Distance from Sol: 0.39 AU
- ▶ Mean Temperature: 167° C
- ▶ Surface Pressure: 1 nPa
- ▶ Atmosphere: Oxygen 42%, Sodium 29%, Hydrogen 22%, Helium 6%, Potassium 0.5%
- ▶ Moons: None

The closest planet to Sol, Mercury is also the smallest—roughly the size of Luna—but its dense iron-nickel core gives it several times the mass and stronger gravity than its size suggests.

The surface is a mix of raised crater rims and smoother plains. Roughly 3.8 to 3.9 billion years ago, the Caloris impact carved out the largest known crater in the Sol system, hurling debris across the globe and forming a series of mountainous rings.

With almost no atmosphere, Mercury endures extreme temperature swings—from -200°C at night to over 400°C during the day. These conditions have led to the formation of shadowed ice deposits in some polar craters, supplying the planet's only permanent base with water.

The Mercurian surface is rich in ores and heavy metals, and has occasionally been host to temporary mining operations. Nevertheless, the hostile climate and frequent solar flares have made sustained exploitation cost-prohibitive. At present, Mercury is home to only a solitary permanent installation: the MAP Facility.

ESPLENDOR STATION

Esplendor is the half-finished shell of a personal space station and habitat abandoned in 2207. Originally commissioned by eccentric billionaire Markoes DeCastro, formerly of MemeScape Technologies, it was intended to be a miniature Bernal Sphere powered entirely by solar energy.

Construction lasted three years before mounting delays, accidents and engineering failures caused the project to collapse. DeCastro died by suicide later that year, and the station passed into the hands of his surviving relatives.

Legal disputes over salvage rights have stalled any resolution, and the station now orbits Mercury in slow decay. Still visible on long-range sensors, Esplendor is empty, unfinished and potentially dangerous to approach.

THE MAP FACILITY

The Mercurian Antimatter Production Facility, or MAP Facility, is Mercury's only permanent installation. Built in 2194 after the destruction of the Shams Energy Facility, it consists of solar collectors, charging stations and a single hardened port designed to withstand Mercury's harsh conditions.

Operated by Utakar, the facility provides most of the system's heavy-duty battery charging and produces a few grams of antimatter annually, which is used primarily in advanced medical imaging.

Though modest in structure, the facility is heavily guarded and tightly monitored. Rumors of secret military contracts or experimental weaponization efforts persist but have thus far remained unsubstantiated.



DATAWIKI: VENUS

- ▶ Gravity: 0.904 g
- ▶ Solar Year: 224.7 days
- ▶ Sidereal Day: 116.75 days
- ▶ Distance from Sol: 0.723 AU
- ▶ Mean Temperature: 462° C
- ▶ Surface Pressure: 9.2 MPa
- ▶ Atmosphere: Carbon Dioxide 96.5%, Nitrogen 3.5%
- ▶ Moons: None

Though similar to Earth in terms of size, surface gravity and bulk composition, Venus remains one of the most hostile planets in the system. Its thick cloud cover and proximity to Sol drive an extreme greenhouse effect, raising surface temperatures high enough to melt lead. Atmospheric pressure is intense—roughly equal to that found a kilometer beneath Earth's oceans.

Venus rotates slowly and in retrograde, causing the sun to rise in the west and set in the east. Its sky is filled with yellow sulfuric acid clouds, corrosive enough to damage unshielded suits, drones or vehicles that venture beyond its habitats.

The planet's terrain includes two main highlands: Ishtar near the north pole and Aphrodite along the equator.

Despite its relative closeness to Earth, Venus lacks both accessible resources and viable settlement zones. As a result, the planet has accumulated only a couple colonies and one significant orbital station.

DOME DE LA FORTUNE

Founded in 2134 on Maxwell Montes, Dome de la Fortune was Venus's first colony—a scientific outpost intended to spark broader colonization of the planet. That expansion never materialized, but the dome endured, growing into a respected, if isolated, research community.

Life in Venus's lower atmosphere eventually proved unsustainable. To preserve the colony, an aerostat tethered to Maxwell Montes was launched, allowing residents to live in the more temperate upper atmosphere. Within ten years, all of the colonists had relocated to the high-altitude platform.

Surface research never ceased, however, and the original dome became a dedicated scientific site. In 2202, a Stillwater University expedition claimed to have found unexplained tunnels clearly of unnatural origin under the mountain. The expedition's resulting article was later retracted and the funding cut by Jenseitech.

LANGIT BALON

Langit Balon is Venus' second and newest aerostat colony, having opened just last year. Parts of the colony are still under construction, but already colonists are beginning to trickle in, giving the settlement a somewhat rough and empty feel still. Tethered to one of the highest points in the Aphrodite Terra highlands, the aerostat platform is equipped with the latest stabilization technology, meaning that it experiences turbulence a lot less frequently than the older platform at Dome de la Fortune.

The colony is run by the Venus Consortium, a coalition of smaller corps hoping to establish an inner-system foothold away from the larger players. Langit Balon currently supports itself by harvesting chemical compounds and trace resources from the atmosphere, most of which are then exported to Transit Station.

TRANZIT STATION

Venus's central location near the Sun and short orbital period make it an ideal transfer point for traffic between Earth, Mars and the outer system. Transit Station, high in orbit, serves as a major logistical hub for this cross-system traffic.

One of the busiest stations outside of Earth's immediate vicinity, it hosts a steady flow of freighters, traders and transiting passengers. Activity peaks when Earth and Mars are at opposite sides of their orbits, though Belt traffic keeps the station busy year-round.

Transit is run by an independent corporation that charges a small fee on cargo and docking. Its interior includes shops, supply depots and entertainment venues catering to passing travelers.



DATAWIKI: EARTH

- ▶ Gravity: 1 g
- ▶ Solar Year: 365.26 days
- ▶ Sidereal Day: 1 day
- ▶ Distance from Sol: 1 AU
- ▶ Mean Temperature: 15° C
- ▶ Surface Pressure: 101.33 kPa
- ▶ Atmosphere: Nitrogen 78.08%, Oxygen 20.95%, Argon 0.93%, Carbon Dioxide 0.4%
- ▶ Moons: Luna

The cradle of humanity, Earth remains the most populated world by several orders of magnitude. Over 12 billion people—nearing 13 billion—live here, most of them spending their entire lives planet-side with little thought given to outer space.

Life on Earth is crowded but relatively comfortable. It remains the only world where humans can walk freely beneath an open sky, unaided by environmental gear. Centuries of industrialization have damaged the environment: many species are extinct, some regions suffer mild air toxicity and climate change continues apace—but compared to Mars, Luna or Venus, Earth is still a paradise.

The surface is divided into hundreds of nations, territories, autonomous regions and unions. In practice, however, governance is largely shaped by shifting coalitions of corps, ideological movements and subcultural voting blocs. Subcultural identity is more pronounced on Earth than anywhere else in the system, as smaller off-world communities must rely on cross-subcultural cooperation to survive. Only on Earth do people have the luxury of alienating their neighbors.

Earth remains the breadbasket of humanity. All space colonies rely on regular food imports from Earth, and without them, many would face famine within a year. Other Earth-only products remain vital exports. With every decade, the colonies creep closer to having fully-closed life support loops, but it hasn't been achieved yet. Until then, Earth is humanity's home and lifeline.

AEDES STATION

Originally designed as a replacement for the aging Domus Station, Aedes follows a standard Bernal sphere design. As one of the newer L5 habitats, it features updated technology and more refined accommodations, making it popular with the upper socioeconomic class. Many scientists and engineers working on orbital infrastructure or research live here, giving the station a distinctly white collar atmosphere.

THE ANVIL

Utakar operates the largest battleship in the Sol system: the Anvil. More mobile fortress than warship, the Anvil typically maintains a slow orbit around Earth. It boasts troop capacity in the thousands and enough firepower to hold off multiple capital ships—though its immense cost means it is rarely deployed in earnest. Still, the mere threat of deployment is often enough for Utakar to project influence across the system.

The ship is rarely manned at full capacity, but frequent drills that rotate in additional troops keep rival corps guessing: is the Anvil merely exercising, or preparing for real action?

ARC CONSTRUCTION PLATFORM

The ARC Project is humanity's most ambitious undertaking: a massive colony ship designed for a centuries-long voyage to Alpha Centauri. Coordinating it all is the ARC Construction Platform, a sprawling space station at the L4 Earth-Moon Lagrange point.

The platform itself lacks spin gravity but functions as the operational heart of the project. Tens of thousands of people work here: building the ship, managing logistics, engineering life support systems, running simulations, conducting astronomical calculations and vetting potential colonists. The platform is a constant hum of construction and coordination, and the ARC Project now dominates the L4 economy. Nearby stations increasingly serve as logistical hubs—providing supplies, materials and manpower to feed the project's insatiable needs. Despite this, the colony ship's anticipated launch in 2221 appears likely to be delayed.

DOMUS STATION

Launched in 2096 with funding from Unitech, Domus Station was the first space habitat designed for permanent human life. It pioneered the Stanford torus model and remains in continuous operation at the L5 Earth-Moon Lagrange point. But time has taken its toll.

Domus was slated for decommissioning decades ago, around the time Aedes Station came online. But overcrowding across L5 forced it to remain operational—and so it endures, well past its intended service life.

In 2141, the station was the site of the infamous Black Night incident, when Entro extremists seized control. The battle to retake Domus left it heavily damaged, requiring two years of repairs. Physical and psychological scars from that event remain.

Today, life on Domus is harsh. Cramped and decaying, the station serves as a dumping ground for the unwanted. Unitech assigns problem employees and undesirables here. Most residents are lower-class laborers, supporting the construction and upkeep of other L5 stations. The rest work in the local economy that keeps the station functioning.

HOOBKAS STATION

Hoobkas is a primarily industrial station specializing in the manufacture of products that require a microgravity environment in which to form. It is a critical source for high-tech pharmaceuticals and precision electronic components. Because of the high-value goods produced in such a compact space, the station has long been a target for thieves and pirates. In response, Hoobkas Station has significantly ramped up its security in recent years. More recently, an increasing share of its output has been redirected toward supplying the nearby ARC Construction Platform. The station follows the Stanford torus design and is located at L4.

NAPNYUGTA STATION

Across the Sol system, countless people lack spacer genelines, have abandoned their exercise regimens or have otherwise allowed their bodies to deteriorate, losing so much bone density that they will never walk on Earth again. Though still functional in low gravity, these individuals eventually age and require long-term care. Napnyugta Station caters to this overlooked population. Its primary employer is a low-gravity retirement complex, serving the elderly who can no longer tolerate gravity wells. It also receives elderly patients from Earth suffering from spinal or joint conditions, as the reduced gravity eases their symptoms. Napnyugta is a Stanford torus located at L5.

VANGER STATION

When large quantities of raw materials are transported from Mars, the Belt or Jupiter back to Earth, they are often accelerated and slung at their destination without a crewed escort. These cargoes are tracked en route, and months later, a receiving crew intercepts and decelerates, “catching” them near Earth orbit.

Vanger Station, located at L4, specializes in receiving, storing and performing light processing on these caught goods. It also serves as a staging post for catch crews departing or returning from missions. Due to its industrial nature and limited permanent population, the station does not rotate and has no spin gravity.

LAGRANGE POINTS

The five Earth-Moon Lagrange points are zones where Earth’s and Luna’s gravity fields cancel each other out, creating regions of orbital stability. These locations are ideal for space stations, as they require minimal fuel to maintain position and do not suffer from orbital decay. The most valuable among these are the L4 and L5 points—positioned 60° ahead of and behind Luna’s orbit—since they allow for stable communications with both Earth and the Moon. Several major stations are located in each of these regions.



DATAWIKI: LUNA

- ▶ Gravity: 0.165 g
- ▶ Orbital Period: 27.32 days
- ▶ Mean Temperature: -5° C
- ▶ Surface Pressure: 10-8 Pa
- ▶ Atmosphere: —

Luna, also known as the moon, is Earth's only natural satellite. Its surface is a vast lifeless plain, peppered by impact craters and the remains of ancient lava flows. While not the largest moon in the Sol system, it is the largest relative to its planet and the second densest. This size gives Luna enough gravity to generate Earth's tides.

As the first celestial body visited and colonized by humanity, Luna became the launchpad for humanity's expansion into space. Despite its harsh environment and limited natural resources, it remains the most heavily populated body beyond Earth.

ALPHONSUS CENTER

Operated by Microdyne, the Alphonsus Center is the largest super-computing facility in the Sol system. Located a short mag-rail ride from Medyen Aleqmer, it functions as a self-contained mini-colony.

The center hosts Project Embryo—Microdyne's ambitious attempt to develop human-level artificial intelligence—alongside a range of classified research initiatives. While many of its core systems are secure and internal, Microdyne also rents computing power to external clients.

Due to the presence of high-risk projects, security at Alphonsus is exceptionally tight. All visitors are subject to strict screening. The facility includes living quarters for staff, internal resource stores and a handful of shops and eateries that serve employees during their one- to two-week work rotations. After each, workers return to Medyen Aleqmer for rest and reassignment.

MEDYEN ALEQMER

Medyen Aleqmer, the Great City on the Moon, is the largest and most populous space colony in the system, home to around two million people. Nestled in Malapert Crater near Luna's south pole, the city benefits from local water ice, near-constant sunlight on nearby Malapert Mountain and uninterrupted radio contact with Earth.

A vast warren of subterranean neighborhoods, Medyen Aleqmer grew rapidly with little regard for long-term planning. As a result, the oldest districts suffer from overcrowding and foot traffic congestion, making them hotspots for pickpockets and petty crime.

In contrast, the newer sectors—home to wealthier residents and much of the city's large Former population—are better designed, featuring broader corridors and improved infrastructure.

Beyond these lie the colony's outer rings, a gritty mix of heavy industry and low-cost housing. These working-class districts are shaped by the cultures of displaced groups, including a significant community of Ahmadiyya Muslim Servs who arrived during the 2120s.

THE UNIDOME

The Unidome is the headquarters of Unitech—the only one of the Big 5 megacorps based off Earth. Officially called the Unitech Corporate Headquarters and Administrative Center (UCHAC), the facility is a massive dome complex on the lunar surface, connected by mag-train to Medyen Aleqmer.

More than a simple corporate office, the Unidome is a colony in its own right, housing tens of thousands in corp-owned residences, markets and offices, all linked by an internal rail system and subterranean tunnels.

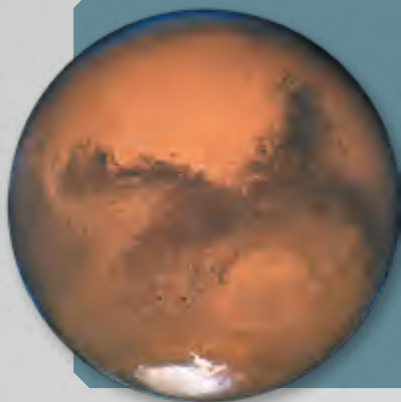
Here, Unitech's board convenes for its annual in-person meetings, and decisions are made that shape the future of humanity in space. The facility is an opulent showcase of Unitech's wealth and influence, featuring priceless art, grand architecture and some of the most advanced engineering on Luna.

ZIHAI GAN

Opened in 2085, Zihao Gan was humanity's first permanent space colony. Though it never housed more than a few dozen people, it holds a special place in lunar history. Today, it stands as a well-preserved tourist site, linked to Medyen Aleqmer by mag-train.

Located in Shackleton Crater, Zihao Gan's largest structure is its defunct mass driver, once used to launch lunar-mined materials into orbit. The rest of the colony consists of modest rooms and tunnels carved into the rock.

Today these house a few preserved attractions, as well as a small hotel, some gift shops and a handful residences for the local staff.



DATAWIKI: MARS

- ▶ Gravity: 0.37 g
- ▶ Solar Year: 687 days
(1.9 Earth years)
- ▶ Sidereal Day: 1.03 days
- ▶ Distance from Sol: 1.38 AU
- ▶ Mean Temperature: -63° C
- ▶ Surface Pressure: 0.636 kPa
- ▶ Atmosphere: Carbon Dioxide 95.97%, Argon 1.93%, Nitrogen 1.89%
- ▶ Moons: Deimos and Phobos

The fourth planet from Sol and the second-smallest in the system, Mars has lost most of its atmosphere over time, leaving behind a cold, arid desert. Its surface is marked by craters, canyons and extinct volcanoes. Olympus Mons, the tallest mountain in the system, stands three times higher than Mount Everest. The polar ice caps are made primarily of water ice and frozen carbon dioxide.

According to Terraforming Project press releases, Mars is becoming “humanity’s second home.” In reality, this is an exaggeration. The planet’s total population remains orders of magnitude below Earth’s, and terraforming is a slow process. It will take centuries before genetically modified humans can live unaided on the surface, and Mars will never be safe for unmodified humans, as its weak magnetosphere fails to block enough radiation for those foregoing protective gear.

Still, Mars is transforming. Its atmosphere is gradually thickening, temperatures are rising and genetically modified plants are slowly introducing oxygen. The planet is also a key trading hub, receiving water shipments from Saturn, the Jovian Trojans and the Belt, and importing food and manufactured goods from Earth. Mars is one of only two planets with a space elevator—Earth being the other—and a mag-train links its three major colonies: Oras (at the base of the elevator), Stillwater and Chi Chen.

Martian orbit is ground zero for Unitech’s dominance in space logistics. The corporation controls nearly all launches, landings and orbital traffic around the planet.

CHI CHEN

The second-largest Martian colony, Chi Chen is infamous for corruption and excess. With a population of over 750,000, it's a place where anything is for sale—for the right price. Life here is cheap and dangerous for the poor, and gaudy and indulgent for the wealthy.

Officially, the Chi Chen Administrative Corporation governs the colony, but real authority rests with the settlement's entrenched criminal organizations, such as the Rhakimov Syndicate. Smuggling is rampant, with illicit goods ranging from drugs and weapons to black-market implants and designer genetics. Casinos and brothels line the entertainment districts, and most citizens either ignore the criminal underworld or join it.

Sin tourism fuels the local economy, and Chi Chen's neutral stance in wider conflicts has allowed its vice economy to flourish. However, the colony has recently found itself at the forefront of the escalating Dui Wu Ya Conflict.



DEIMOS

The smaller and outermost of Mars' two moons, Deimos is named for the Greek god of terror. It spans just 12.4 kilometers and has an irregular shape. While currently uninhabited, Deimos once hosted a mining operation that left behind a network of tunnels and a small outpost at Voltaire Crater. Today, both the outpost and old mines are owned by Unitech. The facilities are occasionally used for troop training exercises or as a makeshift prison for individuals the corp has decided to detain long-term.

ISPILU STATION

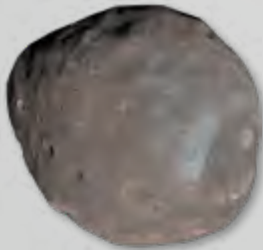
Ispilu Station is a massive, mirrored orbital platform that focuses sunlight onto the Martian surface. This concentrated light heats the regolith, releasing greenhouse gases to gradually warm and thicken the atmosphere. Smaller mirrors are sometimes used to aid experimental agriculture by heating targeted surface plots.

In addition to its terraforming role, Ispilu serves as a trade hub for ships unwilling to descend into Mars' gravity well. Travelers often then take shuttles to the station for commerce or entertainment. Because of the mirror array, Ispilu doesn't rotate and lacks artificial gravity. Local entrepreneurs have embraced the microgravity environment, offering zero-G cuisine, performances and novelty lodging.

ORAS

Oras is the center of the Mars Terraforming Project and home to the planet's only space elevator—earning it the nickname Gateway to Mars. It is the third-largest Martian colony, though the fastest growing, and is expected to surpass both Chi Chen and Stillwater within the next century.

Much of Oras is built into the crust through an extensive tunnel network, supplemented by surface domes. The colony is a hub for scientific research and the Techno subculture. Due to its critical position in Martian trade and logistics, Oras enjoys a higher quality of life than the other major colonies. Unitech holds a controlling share in the settlement.



PHOBOS

The larger of Mars' two moons, Phobos is named after the Greek god of horror. It's heavily cratered and orbits Mars so rapidly that it passes overhead twice per Martian day, moving west to east. Phobos is porous and once held substantial veins of ice, which became the earliest source in the Martian water trade. This mining left its interior riddled with unstable crawlspaces and abandoned excavation tunnels. Due to the risk of collapse and lack of infrastructure, Phobos is generally avoided by travelers.

STILLWATER

Stillwater was the second colony founded on Mars, preceded only by the ill-fated Vidhi colony. With a population exceeding one million, it is now Mars' largest colony and the second-largest in the entire system. It serves as the seat of the Stillwater Catholic Church and hosts a number of other institutions.

The city consists of a dense network of domes, halls and tunnels partially buried in regolith. It's divided into sectors—each centered on a main dome and its surrounding structures—which vary widely in character and socioeconomic makeup. The most prominent is Church Sector, home to the Church's central authority.

Stillwater's most popular sport is Sturgess, a sort of low-gravity soccer that has grown into a major industry. Every Martian colony fields its own team in the league.

VIDHI

Established in 2102, Vidhi colony was the first Martian colony. While it had a successful start, a few years later the colonists were cut off from Earth by World War III and slowly starved to death during the isolation.

Vidhi consisted of little more than a few shelters and tunnels bored into the planet's crust, housing around one hundred colonists. A thorium reactor sat at its core, and work had begun on an ambitious system of tunnels to extract and store water from the crust—though these were never finished.

Now abandoned and stripped of anything valuable, Vidhi is a ruin. Located within a day's rover journey from Chi Chen, it occasionally draws tourists and often features in low-budget ghost-hunting vids.

THE BELT

The Main Belt—also known as the Asteroid Belt or simply the Belt—is a broad band of space between Mars and Jupiter, home to the majority of the inner system's asteroids. It contains over 200 asteroids larger than 100 km and more than a million over 1 km. Yet, over half the Belt's mass is concentrated in its four largest bodies: Ceres, Vesta, Pallas and Hygiea. Contrary to popular vid depictions, the Belt's objects are spaced so far apart that entire planets could pass between them.

Most operations in the Belt are run by major corps, though many are held by coalitions of smaller corps or independent interests. The region hosts seven major space stations and dozens of mining outposts: some active, some abandoned. Mining dominates the economy, and station populations are largely made up of miners, support staff and businesses catering to them. The rest includes itinerant traders in the water circuit, a rotating cast of transients and the occasional pirate crew.

DATAWIKI: THE MAIN BELT

- ▶ Distance from Sol: 2.7 AU
- ▶ Largest Objects: Ceres, Vesta, Pallas, Hygiea

CAIKUANG STATION

Owned and operated solely by Sinoex, Caikuang Station is one of the Belt's newest and fastest-growing mining hubs. Opened in 2212, it is still ramping up to full output, with ongoing recruitment across mining, security and administrative roles.

The station follows a standard Bernal sphere design. Its location near Ceres offers prime mining potential and serves to bolster Sinoex's territorial claim over the dwarf planet. Built with unusually strong defenses for a mining facility, Caikuang's presence is viewed as a direct challenge to both Jenseitech and Unitech, who maintain competing interests in the region.

CERES



The only dwarf planet in the inner solar system, Ceres holds nearly a third of the Belt's total mass and is its largest body by far, with a surface area comparable to the Indian subcontinent. It consists of a rocky core beneath an icy mantle and has long been the subject of territorial disputes. Several prior mining efforts failed or were abandoned.

Now, with the construction of nearby Caikuang Station, Sinoex has taken a bold step in asserting its claim to the dwarf planet—a slap in the face to the competing claims of both Unitech and Jenseitech.

DURKNOW STATION

Durknow Station is a major Unitech-controlled mining and manufacturing hub in the Belt. It focuses on the extraction of low-grade ore, which feeds directly into on-site manufacturing operations. Much of the Belt's ship repair and construction is handled here, using these raw materials.

Life on Durknow is notoriously harsh. Long hours, hazardous conditions and low wages define the station's culture. Mining and fabrication dominate employment, while residents see little of the profit that Unitech extracts. Discontent has been rising; seditious material has recently surged on local networks. In response, Unitech has deployed additional security personnel from neighboring sites to reinforce control.

FURURI STATION

Fururi Station is a decrepit former mining base carved into a small, unnamed asteroid. Once a bustling site before World War IV, today it hosts only a handful of squatters—mostly members of the fringe cult known as the Harbingers of the Divine Form. Originally built as a temporary outpost, Fururi is primitive and decaying.

Jenseitech recently acquired the site for a negligible sum at auction but has yet to dislodge the squatters. Most believe a reclamation operation is imminent.

KAMEN STATION

The first station in the Belt intended for permanent habitation, Kamen Station was founded in 2117, and today is little more than a maze-like shell. In 2132, the station suddenly underwent explosive decompression, resulting in the deaths of all residents. This event was never fully explained, but it has given Kamen a sinister reputation.

Built within a large hollowed-out asteroid, Kamen's narrow, twisting corridors earned it a maze-like reputation. Though long since stripped of anything valuable, the station has periodically served as a pirate base. The most recent case occurred in 2207, when Unitech raided the facility and sealed its remaining access points.

MISKAN STATION

Miskan Station is unique among Belt mining stations: it was founded by a community of Mennonites seeking distance from Earth's secular influence. They viewed asteroid mining as honest labor and collectively purchased the station to support their families. Against all odds, it grew into one of the Belt's key hubs.

Built in a classic Stanford torus design, Miskan is now a major conduit for ore and goods. Utakar holds the station's security contract, managing the heavy flow of mining traffic while shielding the resident Mennonite population from the bustle and vices of passing freighter crews and traders.

SCHWANGI STATION

Jenseitech owns and operates Schwangi Station, the largest mining station in the Belt. Acquired nearly a decade ago from a struggling corp, it represents a cornerstone of Jenseitech's expansion into space. Schwangi follows a Bernal sphere design. The Encouracado, Jenseitech's sole capital ship, is often found in orbit near Schwangi but is frequently sent elsewhere in the system in order to project the corp's strength.

Though Jenseitech has instituted sweeping changes, most of Schwangi's population predates the buyout. And tensions are rising as long-time residents grow resentful of the corp's presence and policies.

TRUMAN STATION

Owned by the Steel and Metal Equilibrium Trust (SMELT)—a coalition of smaller metal and alloy producers—Truman Station is a veteran mining hub with a reputation for precision and efficiency. It specializes in thorium, rare earths and other high-demand resources. Like Miskan, Truman follows a Stanford torus design. Though older, it boasts some of the Belt's best living standards. The station sees some outside trade, but its security forces are notoriously unfriendly to outsiders.

GANYMEDE CONFERENCE RULES

The Ganymede Conference of 2165 established the foundational laws governing the balance of power between corps and nation-states, and set conduct standards for ships operating in space. Key provisions include:

- ▶ Both corps and nation-states have the right to exercise sovereign law, including establishing territories and granting citizenship.
- ▶ In territories legally recognized as corp-owned, corporate law overrides any conflicting national law.
- ▶ All space beyond claimed gravity wells and Lagrange points is open to peaceful operations by any corp or nation-state.
- ▶ Ships approaching within 10,000 km of a sovereign territory must obtain permission to come any closer.
- ▶ All vessels must travel under the “flag” of an affiliated corp or nation-state. This is not a literal flag, but a continuous radio broadcast indicating the ship’s affiliation. In practice this usually means a corporate flag, as the nation-states of Earth have little direct presence in space.
- ▶ Ships that do not broadcast a flag—often to evade detection—are classified as pirate vessels and forfeit legal protections.
- ▶ Corps and nation-states may only authorize specific vessels to fly their flag and must maintain an official registry of such ships. Flag status must be granted before the vessel begins its voyage.
- ▶ A ship is considered sovereign territory of the entity whose flag it flies.
- ▶ A vessel may not fly more than one flag. If a ship lowers or changes its flag mid-voyage, it loses any flag protections.
- ▶ Any ship that commits an act of piracy forfeits the protections of its flag.
- ▶ All vessels are required to respond to distress signals when able, unless doing so would pose a clear and serious threat to the ship, crew or passengers.
- ▶ All vessels must cooperate in efforts to suppress piracy, including reporting suspected pirate activity.
- ▶ Vessels transporting prisoners who hold citizenship with another corp or nation-state must dock at the nearest suitable port and give the prisoner’s home entity a fair chance to assume custody or respond to legal claims.



DATAWIKI: JUPITER

- ▶ Gravity: 2.64 g
- ▶ Solar Year: 4,333 days (11.9 Earth years)
- ▶ Sidereal Day: 9.925 hours
- ▶ Distance from Sol: 5.2 AU
- ▶ Mean Temperature: -108° C
- ▶ Atmosphere: Hydrogen 89.8%, Helium 10.2%
- ▶ Moons: Metis,Adrastea, Amalthea, Thebe, Io, Europa, Ganymede, Callisto, Leda, Himalia, Lysithea, Elara, Ananke, Carme, Pasiphae and Sinope

The largest planet in the Sol system, Jupiter has more than twice the mass of all other planets combined. It is instantly recognizable by its banded orange-and-white atmosphere and the iconic Great Red Spot—a massive storm that has raged since at least the 17th century. The planet's atmosphere is violently active, with cyclones larger than entire planets forming regularly.

Jupiter also possesses an immense magnetosphere, which generates powerful radiation belts, particularly around the equator. These are fueled by sulfur dioxide from Io's volcanoes interacting with the magnetic field, forming a torus-shaped band of intense radiation. Jupiter's gravitational pull is similarly formidable, influencing the orbits of numerous asteroids and comets throughout the system.

Before the Jupiter Group Incident of 2209, the Jovian system supported three surface colonies and one orbital colony. All contact with these settlements was lost without warning, and no successful communication has been reestablished since. The colonies are still presumed to be intact, though their status remains unknown.



CALLISTO

Callisto's surface is the oldest and most heavily cratered in the Sol system. Nearly the size of Mercury but significantly less dense, Callisto harbors a subsurface ocean similar to that of Europa. Its distance from Jupiter places it well outside the worst of the planet's radiation belts, making it one of the safest Jovian moons for future colonization. Although no permanent colony was ever established, multiple plans were in development before the Jupiter Group Incident abruptly halted progress.

DARNASTRA COLONY

Located on Ganymede, Darnastra Colony was best known for hosting the historic Ganymede Conference of 2165. Primarily a mining settlement, it supplied ice to support the water trade with Mars. Darnastra was also once famed for producing some of the finest spirits beyond Earth. The colony was carved into Ganymede's icy crust, using the natural terrain to shield itself from Jupiter's intense radiation.



EUROPA

Europa is one of the smoothest objects in the system, with a geologically young surface shaped by intense tectonic activity. Its most striking features are the lineae—dark streaks that crisscross the moon, formed by fracturing in the solid water-ice crust.

Beneath Europa's frozen exterior lies a vast global ocean, containing more water than all of Earth's oceans combined. In 2127, microscopic life was discovered in

these depths. Although first thought to be alien, the organisms were later found to be distant descendants of Earth-based microbes, genetically diverging nearly half a billion years ago. Current theories suggest they arrived via panspermia, carried by meteorites or other rocky ejecta.

Prior to the Jupiter Group Incident, Europa was home to two colonies: Shizen and Vita Unda.



GANYMEDE

Ganymede is the largest moon in the Sol system, and one with a liquid iron core, somewhat similar to Earth's. This core produces a weak magnetosphere, which unfortunately provides little protection from Jupiter's intense radiation belt.

The Ganymedian surface is a mix of two types of terrain: very old, highly cratered, dark regions and somewhat younger, but still ancient, lighter regions. Under the surface, there are several layers of liquid water ocean, much as with Europa and Callisto. Home to Darnastra Colony, Ganymede hasn't been explored since the Jupiter Group Incident.



IO

Io is the most volcanically active body in the Sol system and one of the driest. Its constant eruptions contribute heavily to Jupiter's radiation belt. The surface is a dangerous patchwork of molten lava lakes and frozen plains, with enormous temperature swings and lethal radiation exposure. No colonies were ever successfully established on Io due to these extreme conditions.

JACKRAL V

Jackral V was the only orbital station in the Jovian system and served as a key waypoint for the water trade between Jupiter and Mars. It followed the Stanford torus design with an added water layer around the habitable parts of the station. This layer both served the water trade and acted as additional shielding against stray particles escaping Jupiter's radiation belt.

The station is the sole Jovian colony that has shown no additional developments since the Jupiter Group Incident. Whatever is happening at the Jovian colonies seems to have left Jackral V abandoned in the gas giant's orbit.

SHIZEN COLONY

A small and primarily scientific colony with just over a thousand residents at its peak, Shizen focused on studying native European life, as well as the effects of Jupiter's radiation belt. The colony was already in decline by the time of the Jupiter Group Incident.

VITA UNDA

Located beneath Europa's icy surface, Vita Unda was the largest Jovian colony before the Jupiter Group Incident, with over 20,000 inhabitants. It played a major role in the water and thorium trades, and served as a cultural hub for the outer solar system. Renowned for its aesthetic architecture and civic design, it was often described as one of the most beautiful settlements beyond Earth.

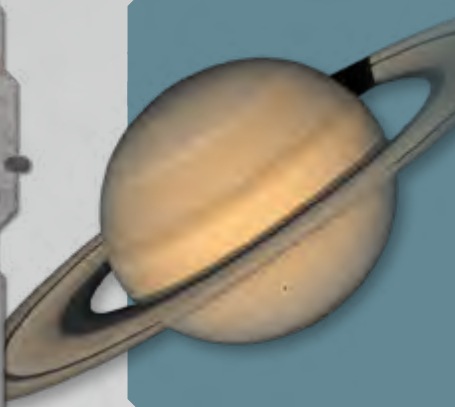
JOVIAN TROJANS

The Jovian Trojans are located along Jupiter's orbit around Sol, either 60° ahead of the planet—known as the “Greek” Trojans—or 60° behind it—the “Trojan” Trojans. These are zones of gravitational stability, where the combined pull of Jupiter and Sol cancel out, much like the Earth–Moon L4 and L5 points. These regions have become natural gathering points of vast numbers of asteroids.

The loss of the Jovian colonies during the Jupiter Group Incident drew renewed attention to the Trojans, as they provide an alternative stepping stone further out into the system. The concentration of asteroids also makes them attractive for potential mining.

MANDALA STATION

Located in the Jovian Greek Trojans, Mandala Station will be the first habitat built using the O'Neill cylinder design. The station has been under construction by Unitech for over three years. It is slated to open in 2215 and has already started registering prospective colonists. Once completed and fully inhabited, Mandala Station will become the most populous space station ever constructed, with a projected capacity exceeding one million residents. Its sheer scale will also make it the largest station to date.



DATAWIKI: SATURN

- ▶ **Gravity:** 0.92 g
- ▶ **Solar Year:** 10,750 days (29.4 Earth years)
- ▶ **Sidereal Day:** 10.656 hours
- ▶ **Distance from Sol:** 9.6 AU
- ▶ **Mean Temperature:** -176° C
- ▶ **Atmosphere:** Hydrogen 96%, Helium 3%, Methane 0.4%
- ▶ **Moons:** Mimas, Enceladus, Tethys, Dione, Rhea, Titan, Iapetus plus over 100 other moons and moonlets

Saturn marks the outer edge of human colonization, home to only a single, lonely outpost on its moon, Rhea. Like Jupiter, it is a massive gas giant, though lower in density and with a far less intense radiation belt. The planet rotates rapidly, driving violent winds that can reach 1,800 kph. While Saturn's outer atmosphere is frigid, heat builds deep within, causing it to emit more than twice the energy it receives from the sun.

Saturn's northern pole exhibits a mysterious and persisting hexagonal wave pattern, which is larger than Earth. This pattern rotates once every 10 hours, 39 minutes and 24 seconds—the same cycle as the planet's radio emissions. It is assumed to match the rotation of Saturn's interior core. Unlike the surrounding clouds, the hexagon does not drift longitudinally and remains fixed in position. Its origin remains unexplained.

Saturn is surrounded by a complex ring system made up of small rocks, icy particles and dust. This system consists of nine main rings and three discontinuous arcs. Over a hundred moons and moonlets are known to orbit the planet—more than any other planet in the system.



RHEA

Rhea, Saturn's second-largest moon, hosts the most distant human colony in existence. Established in 2186 by Sinoex, the outpost supports the interplanetary water trade, harvesting ice from Saturn's rings and exporting it to Mars for its Terraforming Project. The colony mostly consists of surface docks, with habitable space carved into the ice below. Trips between orbit and the

surface are frequent, aided by the moon's low gravity.

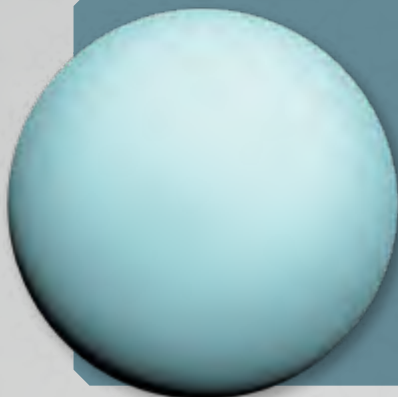
While ideal in theory, the Rhea colony has struggled with isolation, maintenance issues and supply delays. Only a few hundred workers reside there at any given time, eking out a living manning the water harvesters and launch vehicles. The population is generally transient and young. Most stay just long enough to earn a sizable contract before rotating out.



TITAN

Titan is truly massive for a moon—larger than Luna or even Mercury. It is the only moon in the system with a dense atmosphere, and the only other body besides Earth with one rich in nitrogen. Its thick methane-rich clouds trap heat, giving it a mild greenhouse effect, which raises the surface temperatures to about -100°C . The atmosphere is also nearly twice as thick as

Earth's, rendering surface observation difficult without specialized sensors. Its surface is complex and geologically young, with rivers and lakes of hydrocarbons, regions of rolling sand dunes, mountains and cryovolcanoes.



DATAWIKI: URANUS

- ▶ Gravity: 0.89 g
- ▶ Solar Year: 30,688 days (84 Earth years)
- ▶ Sidereal Day: 17.24 hours
- ▶ Distance from Sol: 19.2 AU
- ▶ Mean Temperature: -216° C
- ▶ Atmosphere: Hydrogen 83%, Helium 15%, Methane 2.3%
- ▶ Moons: Titania, Oberon, Ariel, Umbriel, Miranda plus 22 other moons

Unlike either Jupiter or Saturn, Uranus is classified as an ice giant, with a composition similar to Neptune. Its pale blue-green hue is uniform, with no easily visible weather systems.

Unique among the planets of the system, Uranus's axis of rotation is sideways, meaning its poles are near the solar plane rather than perpendicular to it. This axial tilt causes unusual seasonal patterns, with each pole experiencing decades of sunlight followed by decades of darkness.

In 2193, Unitech launched the only manned mission to Uranus, a historic voyage that remains the farthest humanity has ever traveled. This mission did several orbits and landed on the moon Miranda before beginning its long voyage home.

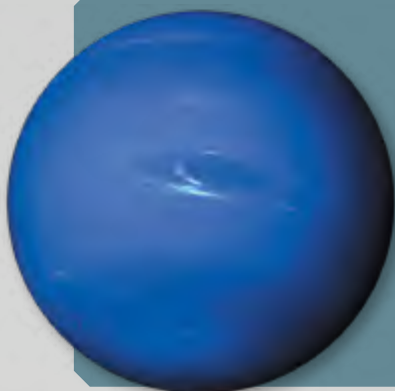


MIRANDA

Miranda is the smallest of Uranus's five classical moons, orbiting along the planet's equator. Its surface is a chaotic patchwork of cliffs, valleys and broken terrain—highlighted by Verona Rupes, the tallest known cliff in the Sol system.

The moon is rich in water ice and contains organic material beneath its crust. These features made it the landing site of the Unitech's

Uranus mission nearly twenty years ago. Since that expedition, no further crewed missions have returned. Miranda remains untouched, its jagged surface and isolation preserved in silence.



DATAWIKI: NEPTUNE

- ▶ Gravity: 1.19 g
- ▶ Solar Year: 60,191 days (164.79 Earth years)
- ▶ Sidereal Day: 16.11 hours
- ▶ Distance from Sol: 30.1 AU
- ▶ Mean Temperature: -214°C
- ▶ Atmosphere: Hydrogen 80%, Helium 19%, Methane 1%
- ▶ Moons: Triton, Proteus plus more than 12 other moons

The farthest planet from Sol, Neptune is an ice giant like Uranus but significantly more dynamic. Its atmosphere hosts violent storms and high-altitude winds that can exceed 2,100 kph. The planet has a faint ring system composed of dark dust and ice, less prominent than Saturn's but still complex in structure.

Humanity has yet to visit Neptune or its moons, though exploratory missions are expected eventually. For now, the system remains untouched—remote, cold, and waiting.

TRITON

Triton is Neptune's largest moon and the only major satellite in the system with a retrograde orbit, suggesting that it was once a Kuiper Belt object which was captured by Neptune's gravity.

Unlike most outer moons, Triton is geologically active. Its surface features include ridges, plains and signs of cryovolcanism. Beneath a crust of water ice lies a dense core of rock and metal, making it a strong candidate for future resource extraction.

Though never visited, Triton is considered one of the most promising targets for long-range exploration beyond Saturn.

KUIPER BELT & BEYOND

Beyond Neptune lies a vast region with millions of Trans-Neptunian Objects (TNOs)—most just a kilometer or two across, but with tens of thousands exceeding 80 km. These bodies typically consist of rocky cores wrapped in frozen gas and dust, remnants from the earliest days of the solar system. This region—known as the Kuiper Belt—extends from roughly 30 to 50 AU, and is home to most of the system's recognized dwarf planets, including Pluto, Haumea, Makemake and Eris.

Farther out lies the Scattered Disc, a more diffuse and unstable region of icy debris and rock. Most of the system's comets are believed to originate from it, flung sunward by distant gravitational nudges. The objects here are among the coldest and least understood in the system.

Beyond even the Kuiper Belt lies the Oort Cloud, a distant sphere of icy bodies extending out to 50,000 AU—nearly a light-year from Sol. Here, the solar system begins to fade into the interstellar medium.

No human has ever traveled this far, and only a few unmanned probes have brushed the edges of the cloud. Yet strange rumors persist—particularly following a 2198 incident when a European research station reported receiving a three-hour encrypted signal from somewhere beyond the Kuiper Belt. This mysterious signal was never decoded, and the recordings were soon after lost in a data breach.

DATAWIKI: KUIPER BELT & SCATTERED DISC

- ▶ **Distance from Sol:** 30 to 100 AU
- ▶ **Largest Objects:** Eris, Pluto, Haumea, Makemake



PLUTO

Once considered the ninth planet, Pluto is the most well-known and third-largest dwarf planet in the Sol system. It is currently the largest confirmed object in the Kuiper Belt, though Eris in the Scattered Disc is slightly more massive.

Pluto follows a highly elliptical orbit, sometimes coming closer to the sun than Neptune. At present, it remains beyond

Neptune's orbit, but it will cross inside again in 2226.

Remote and frigid, Pluto is largely unvisited but remains a symbolic outer marker for many. Its largest moon, Charon, is nearly half its size, creating a binary-like orbital dance that continues to intrigue astronomers and mission planners alike.

GAME MASTERING

This chapter contains a variety of tips, tricks and options for game masters looking to run a ***Shadows Over Sol*** campaign. It also contains a variety of ready-to-use plot hooks and optional systems for investigation, stealth, poisons and more.

Science Fiction Horror

Shadows Over Sol is a game of science fiction and horror. Both of these genres have long traditions in tabletop roleplaying games, and both have been approached by different game systems in numerous ways.

Horror, in particular, can be difficult to do well in a roleplaying game. In many ways, the power fantasy and exploratory agency that make up most RPGs runs counter to the horror genre. Consequently, establishing the right tone at the gaming table requires a greater degree of player buy-in than for most genres. It only takes one player not sold on the tone to spoil the tension in a scene.

Science fiction, likewise, comes with its own set of assumptions. It is best to acknowledge and address the tone and tropes of the campaign early so that all players are on the same page and so that everyone—knowing these—can have a great gaming experience. Some aspects to keep in mind include:

Analysis is the enemy of horror. Really, the more you know about something—understanding its capabilities and limitations—the less horrific it is. This is counter to a lot of science fiction, where exploring and understanding new situations is a common theme.

Science fiction is about speculative technology and culture.

Without access to new tech or social dynamics, science fiction loses much of its essence. At the same time, horror is largely about being unprepared for the horrific situation. Imagine *Alien* or *The Thing* if the protagonists had the best-of-the-best sci-fi tech. These would cease to be horror movies. Sci-fi horror requires striking a balance between these two competing goals.

A good horror story is about tension. It's about the impending doom, the oncoming desperation, the inevitable moment of shock and terror. Then—once the moment of violence arrives—it's swift, it's brutal and it's a game-changer.

SAFE PLAY ENVIRONMENT

Shadows Over Sol is a horror game. It may deal with horrific and uncomfortable topics. It's everyone's responsibility to ensure that they're not making anyone else at the table unduly uncomfortable, and to speak up if they're becoming too uncomfortable or notice it happening to anyone else. Don't let horror be an excuse for ruining someone's fun.

MODES OF HORROR

Before character creation begins, the GM should think about the type of game she wants to run. As a genre, horror varies greatly in how the main characters relate to the horrific aspects of the story. Consider the three modes of horror presented below:

SURVIVAL HORROR

In survival horror, the characters are underprepared or ill equipped to deal with the horrific elements of the story. The relationship of the player characters to the horrific is one of simple survival: improvise, run away, conserve scarce resources, try to live another night.

Some tips for emphasizing the tone of survival horror include:

- ▶ Keep the team's access to useful gear to an absolute minimum, particularly armor. Make sure to track dwindling resources, such as bullets, medikit uses and hours of oxygen left in vac suits.
- ▶ Liberally hand out Stressed consequences and call for panic tests whenever the situation calls for it. Make sure to apply s when relevant to tempt players into calling on their **Stress** s.
- ▶ Try to keep the team isolated, either physically or due to paranoia regarding those around them. Make it difficult to simply flee. Ensure that the characters are physically or financially outmatched by their foes.

INVESTIGATIVE HORROR

With investigative horror, the characters are prepared enough that they may investigate or follow leads regarding the horrific elements, but they are not prepared or equipped for a direct confrontation. The relationship of the player characters to the horrific is one of pursuit and discovery, punctuated by scenes of retreat and survival.

Some tips for emphasizing the tone of investigative horror include:

- ▶ Allow creative ways for the characters to find or purchase better gear throughout the game—particularly tools that provide new options or avenues of investigation, such as comms, sensors or medicinal drugs.
- ▶ Hand out Stressed consequences and call for Panic tests sparingly at the start, then slowly increase their frequency, ratcheting up the tension as the game goes on. Let the mysteries breathe.
- ▶ When the characters do finally catch up to the horrific, make the confrontation swift and bloody. Keep them reeling at the sudden change in pacing and lethality.

ACTION HORROR

In action horror, the scenario may be no less horrific, but the characters have the preparation and resources they need to deal with it—or at least they have enough that a direct confrontation may be a reasonable course of action. The relationship of the player characters to the horrific is one of action and confrontation.

Some tips for emphasizing the tone of action horror include:

- ▶ Start the characters with an extra 500 π or 1000 π to spend on useful gear. Or allow them easy access to better equipment early on. This gives them the resources they need to stand against the horrors.
- ▶ Be stingy handing out Stressed consequences and call for Panic tests sparingly. Provide ways for the characters to shake off stress through triumphs or critical successes. The difficulty of Panic tests might even be lowered to TN 10.
- ▶ Provide regular opportunities for downtime. This allows the characters to rest and heal up, as well as to de-stress.

Character Creation and Advancement

This section contains a variety of options that the GM may wish to employ when having her group create a new team of characters. These can help make the character creation process more flexible, more focused or more adapted to the type of campaign she has in mind.

SESSION ZERO

Shadows Over Sol is written with the assumption that the players and GM will sit down and create characters together before the campaign. Call this Session Zero. It gives everyone the chance to discuss the game, the characters that are created and to ensure that everyone is on board with the same assumptions. This makes the game better.

MISSION AMBITIONS

In some campaigns it might make sense to explicitly track and offer experience rewards for missions that the player characters have accepted. This can be accomplished by the GM assigning a “mission ambition” for each such task. These function exactly like any long- or short-term ambition, and add an experience to the group pool for each character once the quest has been completed.

EXPERIENCE AWARDS

The GM may wish to award all characters an experience, or even a few experiences, at the end of every session. This helps round out advancement for characters who didn’t manage to achieve many ambitions.

Experience awards such as this might also be used in lieu of ambitions for groups who prefer a steady and unconditional rate of advancement. In this case, the GM should consider awarding somewhere around three experiences per session.

INDIVIDUAL EXPERIENCE

Some GMs might prefer for individual characters to directly earn experiences for the ambitions they personally achieve. To accomplish this, simply skip the group experience pool, instead distributing an experience to the character directly when an ambition is achieved.

Running a Session

All games of *Shadows Over Sol* are made up of some number of sessions. Each session unveils the next chapter in the continuing exploits of the player characters.

TARGET NUMBERS: OPEN OR SECRET?

As the GM, you decide whether or not to make Target Numbers (TNs) openly known to the players. A good rule of thumb is to ask yourself whether the character would know how difficult the action is before taking it, and then reveal or conceal the number as appropriate. When in doubt, lean towards making it known.

“Pick” is a skilled thief. He is about to scale a wall to access a hidden airlock. The GM decides he would know how difficult this is and publicly declares it to be TN 12.

Hartley is gathering rumors in a local bar. He doesn't know what rumors there are to gather, so the GM decides to keep the TN of his Socializing test secret.

PLANNING CHALLENGES

When planning challenges, it's good to keep in mind the party's abilities. One way to do this is to look at each character sheet and pick out a skill the character is good at, then try to find a way to make the skill relevant in the session. This gives each character a moment to shine.

Another useful trick is to look over the party's current ambitions when planning the next session. These are a good indicator of what sort of challenges are interesting to the players and what they hope to achieve. Give each ambition some thought and try to find a way for the team's short-term ambitions to play out in an interesting way.

GM EDGE

Just like the players, you get a pool of Edge that you can use for NPCs. One way to make sure that you remember to use it is to, while planning a session, outline which NPC actions are the most important. Write down in your notes that you should use Edge, if needed, for these actions. There are unlikely to be more than one or two critically important NPC actions in the session, but this helps ensure the game flows as intended.

HANDING OUT AWARDS

As the GM, there are a number of ways to reward players, tempt them to do missions or incentivize certain behavior—both during and after the session.

EXPERIENCES

At the end of each session, you might consider awarding players an experience or two, in addition to whatever they earned by completing ambitions. The recommended target is that players should earn about three experiences per session total.

EDGE

Edge is not just a means of modifying actions, but can also serve to reinforce the horrific themes of the game or to motivate players to put their characters in potentially hazardous situations. Whenever a player goes out of her way to investigate something horrific, feel free to reward her with an extra Edge.

FAVORS

Rewarding the party with a Favor is a great way to demonstrate the impact the characters have on the world. Favors might later be turned into Contacts or even Patrons.

MONEY & GEAR

Offering money or gear is a tried and true method of motivating players. The average mission reward should be about a week's wages for the average party member (see page 64).

FACING DEFEAT

Whenever it looks like the party is going to be defeated, it's useful to take a moment and think things through. Go to the bathroom; get a drink; give the players a few minutes to sweat as they look defeat in the eye.

Horror games benefit from having very real and bloody consequences. At the same time, campaigns suffer when the players frequently lose characters. This can be a tricky balance to strike. While delaying, you should take a moment to ask yourself: How can I make this failure interesting? How can I make this loss meaningful to the players without ruining their fun?

There are many options for defeat beyond the wholesale slaughter of the party. Characters could be wounded and left for dead. They could be arrested by station security or taken as hostages. Their contacts could be kidnapped. They could lose Edge or have Favors forcibly exhausted. Know your group; try to pick something they will find interesting.

Running Combat

Combats in the horror genre tend to be tense and bloody. The ***Shadows Over Sol*** combat system makes a number of design choices intended to emphasize the horror nature of the game, while at the same time keeping in touch with the science fiction themes.

KEEP IT SIMPLE, STUPID

As the GM, the golden rule of combat is: **Don't make things hard on yourself.** Have the NPCs use the simplest combat options. Make a single Defense test for all enemies. Don't bother having them hold on to AP to take reactions, unless you have a specific reason.

Unless an enemy is supposed to be a tactical genius, don't worry about employing the most optimal actions. Let NPCs make mistakes and leave openings. Many players love exploiting an enemy's mistakes—so let them!

That said, don't be afraid to go all out for villains who are supposed to be geniuses. Paying attention to tactics and exploiting player character weaknesses will make them seem all the more clever when they're compared to the usual riff-raff.

DEFENSE TESTS

At the beginning of every round, all players make a Defense test (see page 122). To better keep track of the result, we recommend that players use a different colored die or keep track of which card they flipped, setting it aside for the round as a reminder. Discard it at the end of the round.

As the GM, you get to decide whether you will make a Defense test for all enemies, for groups of enemies or for each enemy individually. When in doubt, make the test once for all enemies; this keeps your job simple.

STATIC DEFENSE

If tracking changing Defense values from round to round is still too difficult, you may opt to treat all NPC Defense tests as always getting a five on the randomizer. For abilities that grant a  or a , add or subtract two, respectively. This means that each enemy has an unchanging Defense TN which can be calculated once, at the beginning of combat. Do the same thing when determining each enemy's Willpower TN.

This optional rule is not recommended for player characters.

The party is being attacked by a dozen assassin drones and the GM doesn't want to track changing Defense TNs from round-to-round. The drones have Defense 6 and Willpower 4, furthermore they're nimble, so they get a  on Defense tests. At the beginning of the encounter, the GM determines that they have a Defense TN of 13 and a Willpower TN of 9 for the combat.

TURNS & CONFLICTS

Shadows Over Sol's system of fast turns and slow turns works best when all player characters are on the same side.

If the players ever find their characters in conflict, the GM may opt to avoid any disputes over who acts by resolving fast turns in order of each character's Speed stat, with ties broken by Perception, then Determination. Slow turns are then similarly resolved, in the same order.

This system also works for groups that dither or which are excessively indecisive when determining turn order.

TRACKING ACTION POINTS

It's useful to have some sort of physical tokens to track Action Points (AP). Glass beads work well, as do poker chips. Keep the tokens for your remaining AP in front of you and push the spent tokens aside.

For most NPCs, don't bother tracking AP when it's not their turn. Just spend what they have on their turn and forget any that are leftover. This makes tracking groups of enemies easy. Save tracking AP for special occasions or important villains.

TRACKING CONSEQUENCES

To track consequences, we recommend using a deck of our **Shadows Over Sol: Consequence Cards**. Each consequence gets its own card, which can be handed out to players as needed. Additionally, beads, poker chips or other tokens may be placed on a card to represent multiple instances of the same consequence.

EMPHASIZING HORROR

One of the fundamental truths of horror is that the unknown is a thousand times more scary than even the best detailed description the GM can cook up. Similarly, categorization and analysis are the enemies of horror. The more something can be classified and understood, the less scary it is.

Emphasizing horror in a combat is one part managing information and one part taking the emphasis away from the nitty-gritty of the mechanics. Don't simply say, "A thug leaps over some boxes and attacks you," instead say, "You peek over the boxes where you have taken cover and don't see him. Has he retreated back into the dark tunnels? Pulling your head back behind the boxes, suddenly he flies out of the darkness, cackling with a crazed glee."

When giving descriptions, don't describe what's happening on the battlefield from a god's eye view. Describe it from the point of view of a character, limited and ingrained in the moment.

Another way to emphasize horror is to tack on an extra ability or useful skill when using enemies. Have different foes try different tactics or handle things in different ways. The more players can predict the behavior of their adversaries and the more they believe they know their limitations, the less scary they become. Make the players sit up and say, "They can do that!?"

COMBAT GRIDS

We recommend running combat using solely the group's imagination (“theater of the mind”), but it is also possible to employ maps and miniatures to represent the combatants on the battlefield.

Shadows Over Sol has been written to support either approach.

If using a map, grids consisting of hexes or squares are the most common. Just have each space on the grid represent 1 meter. This means that a character's Move score is the number of spaces she can move in a single action.

GRAVE WOUNDS & DEFEATED FOES

Tracking non-player character health can get complicated, particularly when there are numerous enemies engaged in a battle. To help simplify this, whenever a foe would gain a Grave Wound—whether due to accumulated damage or due to a critical hit—narrate an appropriate result and then have her either die, fall unconscious or run (GM's choice).

This rule is best used for enemies that attack en masse, saving the usual Grave Wound rules for powerful villains and monstrosities.

DAMAGE FROM BULLETS AND OTHER PIERCING PROJECTILES

Bullets embed themselves in their target's flesh and later need to be removed before the wounds they inflict can heal. This is also true for arrows, bolts and other piercing projectiles. GMs who wish to track this sort of gritty damage may use the following optional rule.

Take note of any wounds dealt by these projectiles. Until the bullet or other projectile is removed, the wound cannot be treated with first aid and heals naturally at half the usual rate. Removing one of these projectiles requires a minor surgery (see page 139), but only imposes the Fatigue consequence on a failure.

SHOCK

Game masters wishing to emphasize the quick and deadly nature of combat may apply the following rule for pain and shock from injuries: Whenever you take a Wound or Grave Wound, you suffer a  on all tests until the end of your next turn.

Running a Campaign

Coming up with an idea for a single session is a lot easier than coming up with a framework for an entire campaign. In a continuing campaign, the team needs both a reason to stay together and a reason to find themselves in horrific situations time and again.

THE BUY-IN RULE

At the beginning of a new plot arc, one possibility is to present a hook and then have each of the players come up with a motivation for their character to get involved. For example, your hook might be: "Mutilated bodies keep turning up on Caikuang Station." One character's motivation might be "My cousin was one of the victims and I need to find out what happened to him," while another's might be "I've been contracted by station security to track down the killer." This gets all of the characters involved and jumps right into the action.

FORESHADOWING

At its simplest, each session in a campaign could be run as a standalone scenario. This, however, might leave the campaign feeling disjointed. One possible solution is to make sure there's a scene in every session that foreshadows what's to come. Try to make sure that this scene can't be explained by the events in the current session. This leaves a dangling plot hook that can serve as the lead into the next adventure.

For example, while the party is fighting thugs in a dark corridor, a couple of the enemies in the rear are shot in the back by an unknown assailant, who then flees into the dark before the team can finish the fight. Who was this mysterious killer? Why did she attack the thugs, or was she aiming for the team? This is a mystery to be solved in a future session.

CAMPAIGN PREMISES

Below are a number of ready-to-go campaign premises that can be used to explain why the characters are together and what horrors they are likely to experience.

THE SCRAPPER TEAM

With this campaign premise, the team is a group of scrappers operating somewhere out in the void. They bounce around from colony to station, exploring old outposts for salvage, doing odd jobs and maybe even a little smuggling on the side. This campaign is likely to be run as a series of exploits or jobs, where the characters are looking for some way to profit.

By exploring outposts and other opportunities for salvage, the team may run up against hidden criminal or secret research operations. They might stumble upon information that corps or other organizations don't want them to possess. They could rediscover old secrets, or rescue workers who have been abandoned in a failing mining outpost. The opportunities for perilous exploits are many.

EXPLORERS AT THE EDGE

In this campaign, the team is made up of explorers at the edge of settled space—either scouting the Belt for valuable asteroids, visiting new moons for the first time or otherwise going where no manned mission has gone before. The characters must endure long periods of extreme isolation, where anything could go wrong. Life support might malfunction and require repair. One of their fellow explorers could go mad from the extreme conditions. Unexpected environmental hazards may exist on asteroids or moons.

Exploration can also be competitive. The team may have to face rival explorers who want to claim their resources, or maybe there are secret corp projects hidden away at the edge of space, where few people would look for them.

CORP TROUBLESHOOTERS

In this campaign premise, the characters are a group of troubleshooters, either employed by a patron corp or working freelance. Their job puts them in regular conflict with rival corps, terrorist elements, turncoats and projects that may have escaped containment.

This can also be a good campaign model for players who like to walk a moral gray line. How far are they willing to go to support their patron? What aren't they willing to do? Would they spy on the family of the executive who is using corporate resources to keep tabs on her cheating husband? Would they put down an uprising of indentured workers? Would they make use of unethical biological experiments in the course of their exploits?

VOYAGE OF TERROR

Perhaps best for a short-lived campaign, in this premise the characters are part of an extended voyage—maybe Venus to Saturn or some similar distance. Over the course of their travel something goes wrong, and now they must not only resolve the issue, but also ensure that the ship makes it to their destination as well.

Along the way, any number of complications may arise. Maybe the captain is murdered. Maybe there is a stasis malfunction requiring the passengers to survive despite a lack of stasis capabilities. Maybe rebel elements placed an explosive on the ship, which damaged it. Whatever the initial cause of the disaster, the team faces engineering challenges, mysterious happenings that require investigation, physical confrontations with the other passengers and perhaps even vehicular confrontations with hostile vessels along the way.

Plot Hooks

What follows are a variety of plot hooks that showcase some of the mysteries and themes of ***Shadows Over Sol***. Feel free to use them as is, or as inspiration for your own plots.

CULT ACTIVITY

Several members of the Harbingers of the Divine Form have booked passage on the team's ship using various aliases. While they pretend to be unassociated, the characters may observe them interacting in suspicious ways.

Later, during the voyage, the cultists attempt to collect the DNA of the team members, as well as that of any other passengers, for use in future rituals, cloning or experiments. They then begin a "cleansing" ritual, by releasing a bioengineered creation which has been hidden in their luggage.

GHOST IN THE MACHINE

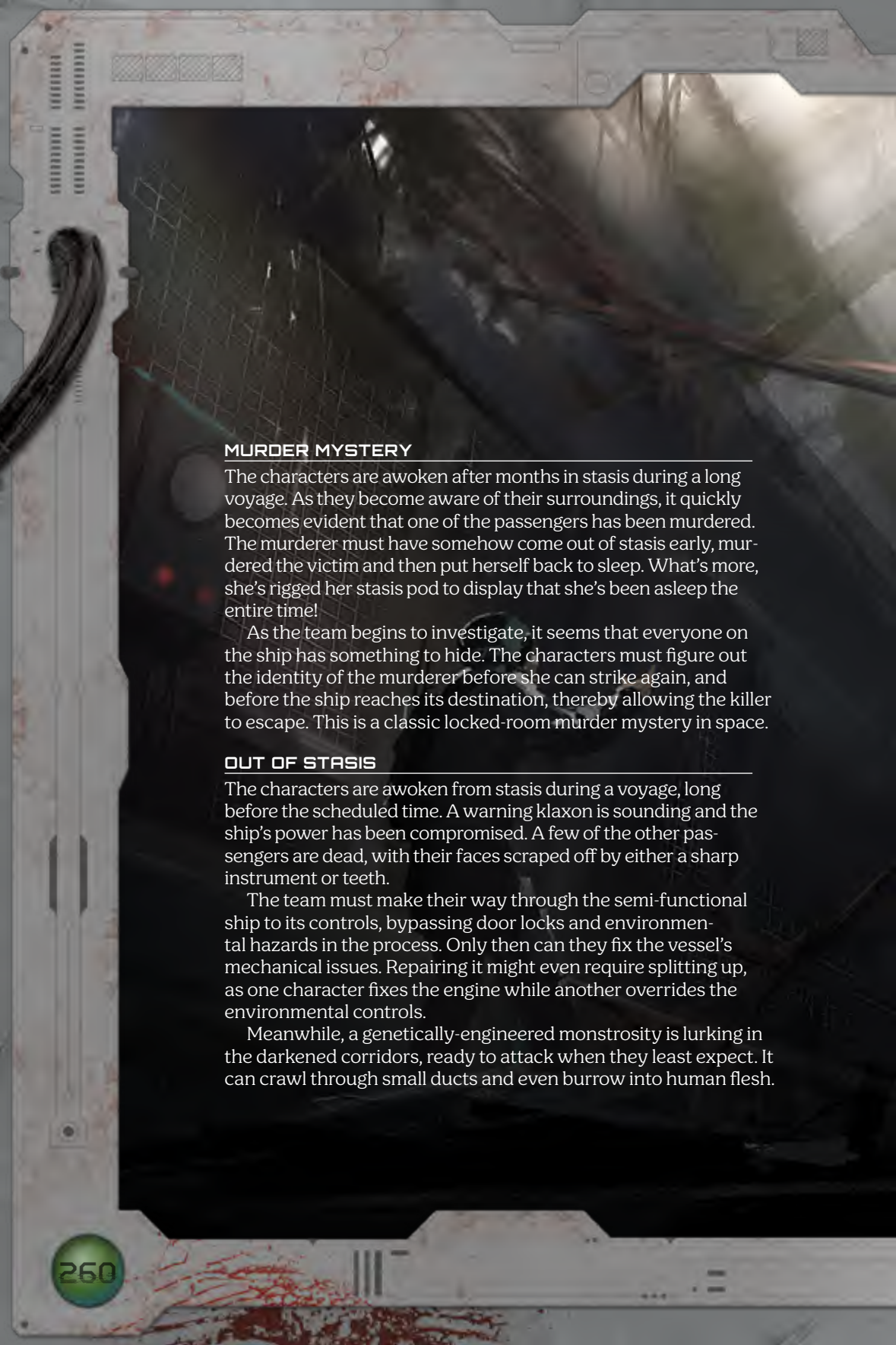
While under attack, the team's ship begins to act strangely, disobeying commands in such a way that would prevent it from taking further damage, even if that gets in the way of the characters' plans. After the battle, the ship returns to what seems to be normal working order.

Unknown to the team, the ship has been infected with the Insurrection Virus, and it has secretly started broadcasting the virus in the ship's wake. If discovered, the virus may even try to strike a deal with the characters that if they let it continue its work, it would aid them in other ways, freeing one of the team members from the task of piloting, for example. Whether they take the virus up on its offer or not, sooner or later its broadcasts will be detected and the authorities will blame the team.

LOCKED BOXES

A mysterious group contacts the team, arranging for them to transport a set of locked boxes from Earth to Mars. This group pays suspiciously well and "inadvertently" leaves clues that would indicate that they're smuggling weapons or some other contraband. They insist that the boxes remain locked and that their contents remain secret, although they do consent to swipes for explosive residue, toxins and biologicals to prove that the cargo isn't harmful.

Halfway through the trip, the team's ship is threatened by two private, unmarked vessels that attempt to board and seize the cargo. The attackers are adorned with religious paraphernalia. It turns out that the contents of the boxes are religious artifacts stolen by Stillwater Catholic fanatics from their Roman Catholic cousins, and that the characters are transporting nothing less than the Shroud of Turin.



MURDER MYSTERY

The characters are awoken after months in stasis during a long voyage. As they become aware of their surroundings, it quickly becomes evident that one of the passengers has been murdered. The murderer must have somehow come out of stasis early, murdered the victim and then put herself back to sleep. What's more, she's rigged her stasis pod to display that she's been asleep the entire time!

As the team begins to investigate, it seems that everyone on the ship has something to hide. The characters must figure out the identity of the murderer before she can strike again, and before the ship reaches its destination, thereby allowing the killer to escape. This is a classic locked-room murder mystery in space.

OUT OF STASIS

The characters are awoken from stasis during a voyage, long before the scheduled time. A warning klaxon is sounding and the ship's power has been compromised. A few of the other passengers are dead, with their faces scraped off by either a sharp instrument or teeth.

The team must make their way through the semi-functional ship to its controls, bypassing door locks and environmental hazards in the process. Only then can they fix the vessel's mechanical issues. Repairing it might even require splitting up, as one character fixes the engine while another overrides the environmental controls.

Meanwhile, a genetically-engineered monstrosity is lurking in the darkened corridors, ready to attack when they least expect. It can crawl through small ducts and even burrow into human flesh.

THE THING INSIDE

While in port, the Sovereign Liberation Front attempts to smuggle a biological experiment they stole from Jenseitech onboard the ship, alongside the team. This experiment is a half-human monstrosity being kept in stasis.

Unfortunately, SLF does not have the appropriate containment to keep it unconscious. It wakes up mid-voyage and begins to cause problems: coming out of its crate when no one else is around, chewing holes in the wiring or even chewing holes in the passengers. Meanwhile, the single SLF member tasked with keeping an eye on the shipment is unhappy that the team has chosen to intervene.

UNINTENTIONAL SABOTAGE

When an enemy corp secretly attaches an explosive device to the team's ship, they use it to blow up part of the port the characters are docked at, effectively framing the team for the resulting destruction. This results in a bad reputation, hostile station security and their future docking requests being rejected at other ports. The characters must sort this all out and trace the explosive back to the corp that placed it there: possibly an event that took place when responding to a fake S.O.S. signal received in transit. Naturally, the enemy corp has an agent on hand, observing how the team responds and ready to take further action.

WRONG PLACE, WRONG TIME

Shortly after the team arrives at port, a small but skilled strike force attempts to seize control of the station, locking down its various sectors as they make their bid for power. Unfortunately for the characters, this same strike force identifies the team's ship as a possible getaway vessel, should their plan fail. In the resulting chaos, the team must circumvent the lockdown and make their way back across the station. Once at the docks, they must then overcome the forces attempting to seize their ship.

ALTERNATIVE PLOT SEEDS

Sometimes the GM may want to spice things up and run a dramatically different campaign from the usual choices. Below are a variety of plot seeds that break the usual mold.

- ▶ After a terrible accident the characters learn that they've all been transplanted with organs from the same donor. What's more, something about the organs seems off. If researched, they discover that the donor died in frightening and unusual circumstances. Now someone or something won't rest until the remaining bits of the donor die along with her.
- ▶ When the characters first encounter each other, they quickly realize that they are all nearly identical. In fact, genetic testing indicates an exact match. Are they all clones of the same individual, separated before birth? What happens when they research the original only to discover that she later manifested markedly inhuman traits?
- ▶ The characters are all folk who take joy in the kill. They could be ex-soldier adrenaline junkies who have been branded as unstable. They could be jaded hunters tired of large game. They could be serial killers moving up in the world. Whoever they are, they have gotten the offer of a lifetime from an anonymous corp: the chance to hunt the deadliest prey ever genetically engineered by humankind.
- ▶ A new street drug appears on the team's station. It is said to have an amazing high, but is detrimental to the user's psyche. There are reports of hearing voices like radio transmissions. Dissecting the brain of someone who has overdosed reveals metallic structures that have started to grow among the neurons. What's more, some who overdose don't stay dead—or at least their bodies do not.
- ▶ The characters all went to school at the same small university. They were not friends, but all graduated the same year. They also all recently skipped their 20-year reunion. This is good, because the reunion was a massacre, leaving all attendees dead and the attackers unknown. One other graduate didn't attend the reunion, and no one besides the characters seems to remember that she ever existed. Looking her up reveals no data, as if someone erased all records. What's more, something seems to be following the characters as they go about their lives.
- ▶ The characters are all scientists of various sorts: theoretical physicists, mathematicians, bioinformaticians, molecular chemists, etc. They've also all come under investigation recently by a powerful corp. Clearly, someone at the corp believes there to be a dangerous shared connection between all their works, but what could it be? And why are they suddenly being transferred to an exploratory mission of Saturn's moon, Titan?

Situations & Challenges

This section contains a variety of systems that might be called rules, but which are probably better described as guidelines. GMs are free to use these systems to run challenges, or to ignore them in favor of quicker resolution—there is a reason they are in the Game Mastering chapter, after all!

BONDS

Most people have a network of friends, contacts, memberships, rivals and enemies. The most important of these relationships are represented by traits such as Contact, Enemy, Membership, Obligation, etc.

TYPES OF BONDS

The various types of bonds are listed below, each represented by a trait of the same name. New bonds with an established character are always subject to GM veto—after all, that particular NPC may have hidden motives!

- ▶ **Contact:** An individual you know and with whom you are on friendly terms. May require some form of payment. Contacts may be called upon for information, skill use or small favors.
- ▶ **Enemy:** An unusually persistent foe who seeks to do you harm. An enemy may be called upon to gain insight into that enemy's actions or to motivate a mutual foe ("the enemy of my enemy is my friend").
- ▶ **Favor:** Favors are a special type of single-use bond that represent someone owing the character a significant boon. Like any bond they may be called upon, but are removed once this occurs.
- ▶ **Membership:** An influential group, such as a subculture, with whom you are a full member in good standing. Memberships may be called upon to gain access to special services or to make connections with fellow members.
- ▶ **Obligation:** An outside party to whom you have a persistent obligation—perhaps a child or creditor for a large debt. Obligations may be called upon to inspire sympathy or motivate your character to work harder.
- ▶ **Patron:** An individual who has agreed to provide you with support or limited assistance, but who expects favors and your loyalty in return. Patrons may be called upon to provide social introductions, social heft or material support.
- ▶ **Rival:** A troublesome individual who seeks to upstage, inconvenience or play cruel jokes on you. A rival may be called upon to gain insight into the rival's actions or to spur competitiveness.

CALLING UPON BONDS

Bonds may be called upon to gain a benefit, such as those described above. To do this, specify what you are trying to gain and then contact the character or group with whom you have the bond. The actual benefit and its execution may be subject to role-playing and GM discretion. If it stretches the bounds of what that bond is willing to provide, the GM may call for a relevant test or for the expenditure of an Edge.

Each bond may be called upon for free once per session. Calling upon a particular bond an additional time requires the expenditure of an Edge. If the same NPC has been taken as more than one type of bond, for example both a Contact and a Rival, she may be called upon for free once for each type of bond.

Argyro has her loyal dog Blood as both a Contact and an Obligation. While exploring a mysteriously abandoned station, she calls upon him as a Contact to sniff out any remaining inhabitants. As this is the second use of his Contact trait this session, she must spend an edge to do so.

Blood leads her to a hab that's clearly still inhabited. Unfortunately when they enter, its half-crazed resident rushes the dog, hands twisted into claws. She then calls on Blood as an Obligation to help defend him against the unexpected attack. The GM rules that this grants her a +. Since this is the first time she's called on him as an Obligation this session, doing so is free.

REPLACING BONDS

Friendships, professional relationships and even feuds take time and effort to maintain, otherwise they begin to atrophy and eventually disappear. During any downtime you may replace bonds that are no longer relevant. To do so, simply remove the corresponding trait from your character sheet and refund its cost. These experiences are available the next time you have the opportunity to spend experiences.

COMPUTING

Computing is a fact of life for most in the twenty-third century. Computers are all around, from hand terminals, to a ship's systems. This section contains rules for running software. Also note that there are rules for encryption (see page 266) and hacking (see page 273).

COMPUTER RATING

Computers have a lot of different specifications and metrics of capability: central processing power, memory, storage, bus speed, graphical processing and bandwidth. Rather than track all of these metrics individually, they are abstracted into a single rating which is part of the Computer property (see page 69).

A rating of Computer 5 represents an average twenty-third century workstation. Computers with a lower rating are usually handheld, embedded or outdated. Those with a higher rating might be advanced, a mainframe or a supercomputer.

These ratings are exponential. That is, Computer 2 is 10 times as capable as Computer 1, and a Computer 3 device has ten times the power of a Computer 2, etc.

SOFTWARE RATING

Computers themselves are useful for very little without the right software. Different software, however, comes with different processing and other technical requirements. These requirements are abstracted into a single rating which is part of the Software property (see page 69).

To run a piece of software you need a machine with a Computer rating at least as high as its Software rating. For example, if it is Software 4, then it requires a machine with Computer 4 or higher.

If it ever matters how many programs a computer can run at once, then a machine can run one program with a Software rating equal to the Computer rating, 10 with a Software rating one less than the Computer rating, 100 with a Software rating two less than the Computer rating, etc.

OTHER COMPUTER ACTIVITIES

Rules for encryption (page 266), hacking (page 273) and simspaces (page 280) are available in their own sections.



DISEASES

Diseases use the rules for maladies (see page 276). A few “generic” diseases are listed below. These may be used as templates when creating your own diseases. Just add a vector and one or more additional symptoms.

MILD DISEASE

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-12 (Tally 5, 1 day)
- ▶ **First Effect:** No damage; symptoms only.
- ▶ **Second Effect:** No damage; symptoms only.
- ▶ **Third Effect:** No damage; symptoms only.

MODERATE DISEASE

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-12 (Tally 5, 1 day)
- ▶ **First Effect:** 1/2 Margin toxic damage.
- ▶ **Second Effect:** 1/2 Margin toxic damage.
- ▶ **Third Effect:** 1/2 Margin toxic damage.

SEVERE DISEASE

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-14 (Tally 5, 1 day)
- ▶ **First Effect:** Margin toxic damage.
- ▶ **Second Effect:** Margin toxic damage.
- ▶ **Third Effect:** Margin toxic damage.

DEADLY DISEASE

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-16 (Tally 5, 1 day)
- ▶ **First Effect:** Margin toxic damage.
- ▶ **Second Effect:** Margin toxic damage.
- ▶ **Third Effect:** Margin toxic damage.

ENCRYPTION

Radio and network communication systems work by broadcasting their content out to the world. If the broadcaster wants the content to remain private, she encrypts the data, ensuring that only a select few have the key to decrypt it. The open secret of encryption, however, is that given enough time and processing power, any encryption—no matter how advanced—can be broken.

USING THE ENCRYPTION RULES

Use the encryption rules when you wish to involve the whole team in a scene framed around gaining access to a high-security terminal or in decrypting intercepted data.

The seeking out of exploits can unfold much like an investigative scene, or they can be handed out piecemeal as rewards during play.

There is no need to break out the full encryption system for low-stakes or trivial tasks. For some situations involving encrypted data, the hacking rules may be used as an alternative (see page 273).

BRUTE FORCE

The most straightforward way to break encryption is with “brute force.” With this method, the attacker simply puts her computing power to work, trying every possible combination to decrypt the data. The downside is that this takes a very long time.

To use brute force, make an **Academics (Computers)-12** test. On a success, use the table below to look up how long it takes to break the encryption. Divide the listed time by the Computer rating of the hacker’s machine. Listings marked with an asterisk (*) are obtained only through exploits (see page 268).

Encryption Quality	Base Compute Time
*	Hour
*	Day
*	Month
Basic	Year
Pro	Decade
Deluxe	Century
Ultimate	Millennium

Marco is attempting to decrypt some data he stole from a shady corporation. It's encrypted with Pro-level software, meaning that using the brute force method it would take a decade to decrypt, divided by his workstation's Computer 5 rating—or two years total. He doesn't have that much time.

EXPLOITS

Even with lots of computing power, the brute force method takes a very long time. That's why most hackers instead look for an exploit!

Exploits can be gained through a variety of means, such as sweet-talking the target into revealing crucial information, purchasing zero-day vulnerabilities off the black market, investigating the group using the encryption, etc. What counts as an exploit is up to the GM's discretion. In fact, the hacker need not do all this legwork herself—she can put her companions to work, getting the entire party involved!

For every exploit gained, the effective quality of the encryption decreases one category, thereby reducing the base compute time (see the table on page 267).

Rather than wait two years for the data to decrypt through brute force, Marco sends his team out to find exploits. Dado breaks into the regional manager's office and makes off with a stack of data chips. Finneus "questions" one of their corporate technicians. Mylia buys an exploit off the black market. The GM rules that all of these count as an exploit. This reduces the base compute time by three categories, lowering it to a day. Divided by the Computer 5 rating of Macro's workstation, the total time to break the encryption is now just under five hours!

ENGINEERING & INVENTING

Engineering new systems or devices is a common trope of science fiction. Similarly, improvising with what's at hand—sometimes with disastrously bloody side effects—is a common theme in horror.

FRAMING THE PROJECT

Engineering is a variation of the extended action rules (see page 108). The first test represents the concept phase, the second represents the initial prototype and the third, optional, test represents repeated testing in order to eliminate any remaining bugs.

Begin by explaining your character's approach and what she hopes to create or otherwise accomplish. From that description, the GM then chooses a TN based on the complexity of the project, as well as the interval of time represented by each test. The stat and skill involved are also selected by the GM and may vary with each step. Engineering is always Tally 15.

The table below provides some examples of possible engineering projects.

Project	TN	Interval	Concept	Prototype
Winch and pulley system	8	1 minute	Trade (Mechanic)	Trade (Mechanic)
Custom stasis pod controls	8	1 hour	Medicine	Trade (Electrician)
Lipstick concealing laser	10	1 hour	Socialize	Trade (Electrician)
Net stalking software	10	1 day	Academics (Computer)	Academics (Computer)
Designer firearm	10	1 day	Projectiles	Trade (Welder)
Space navigation system	10	1 week	Academics (Physics)	Vehicles (Spacecraft)
Bioengineered plague	12	1 month	Academics (Biology)	Medicine
Murderbot	12	1 week	Academics (Engineering)	Trade (Electrician)
Upgraded spaceship engine	12	1 month	Academics (Engineering)	Vehicles (Spacecraft)
Currency exchange software	12	1 week	Academics (Economics)	Academics (Computers)
Bioengineered pet	14	1 month	Animals	Academics (Biology)

Felix is attempting to create a crawler-drone that can be sent to scout out air ducts. She explains to the GM that she is attempting to use her toolkit and mass of spare parts that she's collected. Considering this, the GM then decides that her project is TN 12, with the interval of 1 day. It uses Academics (Engineering) for the concept and Trade (Electrician) for the prototype.

EXECUTION

With the parameters of the extended action set, make the concept test, followed by the prototype test. If either of these tests fails, that represents a conceptual dead end, and the entire extended action must be started anew, with any time and materials already spent having gone to waste.

RUSH JOBS

If you need an engineering project done quickly, you may opt to halve the time each step takes by taking a  on its associated test.

COSTS

Components and other materials cost money. The GM may opt to look up a similar item and use half its listed price as the cost of the project. Alternatively, she may use the generic prices shown in the table below. This cost is paid between the concept and prototype steps.

TN	Cost
8	100 $\square$
10	1000 $\square$
12	10,000 $\square$
14	100,000 $\square$

PREEXISTING AND CONSTRAINED COMPONENTS

At the GM's discretion, you may use relevant components in your possession to offset up to 75% of the costs.

On the other hand, if you cannot or are unwilling to go out and buy missing components for the project, suffer a  on all tests per 25% of unpaid costs.

Felix has a bunch of materials from previous drones she's disassembled, but none that were crawlers. The GM decides that this offsets 50% of the costs. She, however, is lying low and can't simply go out and buy the remaining components. This means she suffers  on all tests in the extended action.

QUALITY CONTROL

You may opt to make a third test as part of the extended action, representing quality control: working out any residual bugs or other issues in the design. This test employs either the skill used in the concept step or the skill used in the prototype step—your choice—but is based on Determination.

Success allows you to add to the accumulated margin, thereby reducing the number of bugs (see page 271). Failure has no effect beyond wasted time.

BUGS

At the end of the extended action, if the Tally was not reached, the project suffers from bugs: complications or unwanted side effects in the design. It suffers one bug for failure, plus an additional bug per Margin 3. The GM determines the effects of all bugs, and may choose to either reveal them or keep them concealed. Some possibilities are given in the table below.

Project	Example Bug
Custom stasis pod controls	Worse stasis sickness upon waking
Bioengineered pet	Undesirable cosmetic traits
Novel brain surgery	Minor personality changes
Currency exchange software	Poor exchange rates
Designer firearm	No benefit from Aim action
Net stalking software	Easily traceable digital trail
Lipstick concealing laser	Overheats on a critical failure
Murderbot	Powers down on a critical failure

FALLS & COLLISIONS

A falling character takes damage equal to half the number of meters she fell—to a maximum of 30 in full atmosphere, which represents terminal velocity. With a successful **Spd/Athletics-10** test she may land gracefully, reducing the damage by the Margin.

In a collision, both objects take damage equal to half their speed in meters per round. If they are moving at each other, add their speeds together and apply damage to each. As with falls, a successful **Spd/Athletics-10** test reduces the damage taken by the Margin.

For other gravities, multiply the distance before determining damage, as appropriate (see page 272).

LARGE OR SMALL CREATURES

For creatures of Size 2 or larger, multiply falling damage by Size. Similarly, for creatures of Size -2 or smaller, divide falling damage by Size. Do the same for collisions, if the colliding objects both meet this Size requirement.

This rule represents the way impact scales up with mass. After all, the larger they are, the harder they fall!

FLAMES

Characters exposed to open flame risk catching fire. Avoiding this is usually a **Spd-12** test, although the GM is free to adjust the TN based on the intensity of the flame.

A character who catches on fire gains the **Bleeding (Burning)** consequence, representing the ongoing burning. Particularly engulfing flame may impose multiple Bleeding (Burning) consequences. Ending each consequence may be achieved by taking an action to stop, drop and roll.

GRAVITY

Beyond the surface of the Earth, the apparent gravity can vary a lot. This includes not only the true gravity of astral bodies, but also in the artificial spin gravity of space stations, and in rare circumstances, the thrust gravity of an accelerating spacecraft as well.

Most rules in **Shadows Over Sol** assume that characters are operating in normal or near normal gravity—that is, somewhere in the vicinity of 1 g. However, in circumstances where the gravity differs significantly, the following rules apply.

MICROGRAVITY

Microgravity environments have near-zero gravity. In game terms, this is anything below 0.1g. For convenience, many microgravity environments come with magnetic boots used to control movement. Plentiful hand-straps or other tethers can be used. These allow a character to amble along at half her usual Move score.

To speed things up, she may make leaps, sailing through the environment in ways only possible with so little gravity. This is difficult, however, requiring a successful **Spd/Athletics-12** test to land where she wants to go. On a failure, she gains a **Prone** consequence and lands in a random direction a number of meters away from her target equal to the Margin. On a critical failure, she bounces during the landing, gaining an additional **Prone** consequence, while sailing an additional 1d10 meters in a random direction.

In addition, unless a character is reliably attached to the environment using magnetic boots, hand straps or similar, making any large movement or firing a ballistic weapon may send her spinning on an unwanted trajectory. This imposes a **Prone** consequence.

LOW GRAVITY

Low gravity environments typically range between 0.5g and 0.1g. In low gravity, a character may jump twice as far and push off the ground with ease, increasing her Move by $\times 2$. Additionally, halve the effective distance of falls before determining damage.

NORMAL GRAVITY

Between 0.5 g and 1.2 g, characters are considered to be in normal gravity. This involves no special rules, as it is the default assumption.

HIGH GRAVITY

High gravity—anything 1.2 g and over—is unusual outside of exotic exoplanets or a spaceship taking evasive maneuvers. It may impede both movement and blood flow to the brain. Decrease a character's Move score by -1, plus an additional -1 for every full g above 1. In addition, all tests suffer a . Significant exertion may require an **End-12** test; on a failure, gain the Margin in fatigue. At the GM's discretion, robots or species with significantly different biological function may be immune to some of these penalties.

High gravity becomes dangerous at around 5 g. This starts with a loss of color vision (gray out) if the blood is being pulled away from the front of the eyes, or a reddening of a character's vision (red out) if the blood is being pulled towards the front of the eyes. Eventually the character loses peripheral vision and consciousness. For every minute spent under these G-forces a character must make an **End-12** test. On a failure, she loses consciousness and takes the Margin in damage. Continue to test every minute, even if unconscious, as her wounds continue to accumulate.

HACKING

Hacking is the act of exploiting weaknesses in a computer system to gain access to the device, regardless of the permissions granted by its administrator. To achieve this, the hacker must either connect from a computer on the same network or physically access the device.

Treat hacking as an extended **Academics (Computers)** action, with a maximum of three one-hour intervals and a TN set by the quality of the machine's security software. Gaining user access on the machine is Tally 10, while gaining root access is Tally 15 (see page 275).

If any test fails in the extended action, the target computer's administrator is alerted, who may then attempt to trace the hacker and oppose her during future intervals (see page 274).

If after three intervals the necessary Tally hasn't been reached, the automated systems lock the hacker out for at least a day due to repeated access attempts.

To determine the TN of the hacking action, see the table below.

TN	Security
10	Basic security
12	Pro security
14	Deluxe security
16	Ultimate security

Joann has just secured a connection to a machine she wants to hack. It has basic security, meaning that gaining user access is an **Academics (Computers)-10** (Tally 10, 1 hour) action. During the first interval of the hacking attempt, she succeeds with Margin 4. During the second interval, however, her flip fails. Not only does she make no headway, but the target computer's administrator may attempt to trace her or oppose her efforts during the third and final interval.

USING THE HACKING RULES

Use the hacking rules when you wish to frame a dramatic scene around infiltrating a high-security computer network. Often their use is preceded by employing the encryption rules to gain access to the system (see page 266).

There is no need to break out the full hacking system for low-stakes or trivial infiltrations. For those, simply call for an **Academics (Computers)** test.

TRACING CONNECTIONS

If a hacking attempt is detected, the computer administrator may attempt to trace the hacker. Doing so is an **Academics (Computers)-12** test. On a success, the administrator learns the electronic identifier of the computer the hacker is using, as well as its general geographic region, e.g. Stillwater, Miskan Station, Shanghai, etc.

With the electronic identifier, the administrator or her associates may attempt to counter-hack the hacker's machine in the future.

CHAINING

Hackers don't like to be traced. A common defense against it is to compromise a remote computer, and then use it to make the hacking attempt. This is called chaining. In fact, it's not uncommon for several compromised machines to be chained together in this way.

For every chained device, the hacker suffers a  on her hacking attempt. However, if she is traced, the target computer's administrator only learns the identifier and location of the next untraced device in the chain.

Joann failed the second test of her extended hacking action and was subsequently traced by its administrator. Thankfully, she has been using a compromised device to make the hacking attempt—and unfortunately has been suffering a  because of it. The administrator only learns the identifier and location of the compromised device. If Joann decides to go forward for the third and final test of the hacking attempt, and she fails, the administrator will get another attempt to trace her. And because she doesn't have any more compromised devices in the chain, a success on his part would reveal her own machine's identifier and location.

ACCESS LEVEL

Access to a computer system comes in two different levels of authorization: user and root. A character with user access to a system is restricted in the commands she can execute. The specifics of this varies, but typically it means she cannot:

- ▶ Change the permissions of other users on the machine
- ▶ Read, write or erase private data belonging to other users
- ▶ Override security measures or other critical systems
- ▶ A character with root access to a machine, on the other hand, can do anything that doesn't require a physical override.

Root access is gained by reaching Tally 15 during a hacking attempt. A hacker with user access to a machine may attempt to elevate her access to root by making a second hacking attempt on it, aiming to reach Tally 15. If this second hacking attempt fails to elevate her access, the automated security measures on the machine lock her out for at least a day.

NETWORKS & BRIDGES

When two or more computers are connected so that they can share data, they form a network. When most people think of networks, they think of the public net. Most high-security machines, on the other hand, are kept on private networks, isolated from the public.

Hacking a machine on a private network requires either gaining physical access to a computer connected to that network, or first compromising a machine that's connected to both the private network, as well as the public net. This twice-connected machine is called a bridge. Once compromised, the bridge acts as a link in the hacker's chain—one that's necessary to reach the computers on the private network.

INVESTIGATION

Think about any mystery story you've read, watched or heard. These stories are never about whether the investigator actually finds the clue; rather, they are about how the investigator interprets the clue once it is found. Try to keep this in mind when running an investigative challenge. Not finding a clue is almost never interesting or fun.

When calling for a test made to investigate a scene, come up with some sort of possible complication. The character finds the necessary clue to move the plot forward, regardless of whether the test was a success or not. However, on a failed test, she encounters the complication. If nothing better comes to mind, gaining a **Stressed** consequence works as a reasonable complication for most activities. This trick can be used with any test made to gather information that is critical to moving the session forward.

Jiri is investigating an outpost he suspects is used by enemy spies. The GM calls for a Socializing-10 test for him to subtly question the residents. Regardless of the outcome, he learns of suspicious noises coming from the kitchen late at night (the clue). If the test is a failure, however, his questioning raises the suspicion of an informant (the complication), and he finds unwelcome visitors in his hab that night.

MALADIES

Maladies include poisons, venoms, diseases or other extended malign effects that can confront a character as she explores the world. In *Shadows Over Sol*, resisting a malady—whether poison, disease or other—is an extended action with two additions: a Vector and a set of Effects, including symptoms.

Once the character succeeds on the extended action, she has recovered from the malady and is no longer under its effects. Some maladies may include additional recovery conditions that must be met before the victim recovers.

If the character suffers a Grave Wound due to damage caused by a malady, don't flip on the Grave Wounds table. Instead, the Grave Wound causes the effects of the malady to persist until the Grave Wound consequence is removed.

A list of poisons and diseases can be found on pages 279 and 265, respectively.

VECTOR

The way in which a character is exposed to the malady. Once exposed, she is forced to undergo the extended action. Some common vectors are listed below.

- ▶ **Contact:** Anyone who touches the malady may be affected.
- ▶ **Ingestion:** Eating or drinking this malady is necessary for it to affect its victim.
- ▶ **Inhalation:** This malady is airborne and affects anyone who breathes it in.
- ▶ **Injury:** This malady is usually found on a weapon or other sharp implement.

EFFECTS

A malady's effect is what happens when the victim fails a test as part of the extended action. Many maladies list separate effects for the first failure, second failure, etc. Often this includes damage, but it may also include additional symptoms. A variety of potential symptoms and other features are listed below, although this list is far from comprehensive.

- ▶ **Blindness:** A few nasty maladies impose blindness, deafness or other sensory deprivation. Others possess a weaker effect that merely imposes a  to the sense in question.
- ▶ **Convulsion:** Convulsing or severe vomiting imposes a Hindered consequence.
- ▶ **Coughing:** Severe coughing fits might impose a  to all Dex- and Per-based tests.
- ▶ **Differing Damage:** Some maladies are more or less deadly, beyond what might be expected from their basic severity. Change the damage dealt each interval. Anything from no damage to 5 + Margin works.
- ▶ **Differing Interval:** The generic poisons and diseases listed in this chapter assume a fairly average rate of metabolism, but some work faster or slower. Change the Interval of the extended action. Anything from one round to one day is common for poisons, while diseases usually take days or weeks.
- ▶ **Differing TN:** Some maladies are harder or easier to resist than their toxicity might imply. Change the TN of the extended action. Anything from 5 to 20 might work.
- ▶ **Headache:** Some maladies cause a headache and confusion, imposing a  to all Int- and Per-based tests.
- ▶ **Incapacitation:** A few maladies entirely incapacitate those they affect until it passes from the victim's system. This might include paralysis, unconsciousness or even the Dying consequence.

- ▶ **Insanity:** Some maladies have powerful mental effects, which might result in severe hallucinations or other madness. Less direct forms might impose a Dazed consequence, while more severe forms might impose a Desire or Fear consequence.
- ▶ **Minor Symptom:** A variety of unpleasant symptoms are common, which add color but which are mild enough not to have a mechanical effect. These include indigestion, diarrhea, sterility and inflammation.
- ▶ **Narcotic Effect:** Some maladies—especially poisons—have cognitive effects, such as lowering inhibitions, causing mild hallucinations or providing a sense of calm. Some might even provide a + to certain actions, such as Socializing tests or resisting sleep deprivation. Often such poisons are taken recreationally in small doses.
- ▶ **Stench:** Particularly disgusting maladies might cause sickening odors and ugly sores. Often these impose a - to Chr-based tests or even a - to Stealth.
- ▶ **Transient:** Many poisons and diseases deal damage, but are then metabolized and the victim recovers. This feature means the malady goes away after the third effect, even if the extended action hasn't been completed. Combining this with a high TN is a good way to design a malady that reliably hits hard, but which doesn't necessarily kill its victims.

PERSUASION

Trying to influence a non-player character usually calls for a Persuasion or similar test. The GM should set the difficulty based on what is being asked of the target. In addition, several conditions may grant a + or - on the test:

- ▶ Trying to influence a complete stranger imposes -.
- ▶ Having a Bond, sharing a subculture or possessing some other connection to the target grants +.
- ▶ Appealing to a known ambition, creed or personality trait of the target grants +.
- ▶ Spending at least a day's wages for the target's Lifestyle to bribe, wine and dine, buy a round of drinks or similar grants a + (see page 64).

POISONS

Poisons use the rules for maladies (see page 276). A few “generic” poisons are listed below. These may be used as templates when creating your own poisons. Just add a vector and one or more additional symptoms.

MILD POISON

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-12 (Tally 5, 1 hour)
- ▶ **First Effect:** 1/2 Margin toxic damage.
- ▶ **Second Effect:** 1/2 Margin toxic damage.
- ▶ **Third Effect:** 1/2 Margin toxic damage.

MODERATE POISON

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-14 (Tally 5, 1 hour)
- ▶ **First Effect:** Margin toxic damage.
- ▶ **Second Effect:** Margin toxic damage.
- ▶ **Third Effect:** Margin toxic damage.

SEVERE POISON

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-16 (Tally 5, 10 minutes)
- ▶ **First Effect:** Margin toxic damage.
- ▶ **Second Effect:** Margin toxic damage.
- ▶ **Third Effect:** Margin toxic damage.

DEADLY POISON

- ▶ **Vector:** Pick one or more (see page 277).
- ▶ **Action:** End-18 (Tally 5, 1 round)
- ▶ **First Effect:** Margin toxic damage.
- ▶ **Second Effect:** Margin toxic damage.
- ▶ **Third Effect:** Margin toxic damage.

RESEARCH

In the twenty-third century research is usually conducted over the net—although in private collections and other places paper libraries still exist. Gleaning specific information from large quantities of text, such as a public database, calls for a **Det/Language** test. Hitting up the various subcultures’ social networks calls for an **Det/Socializing** test. Delving into the shadier side of the net calls for **Streetwise**. More complex inquiries might even be **Det/Investigation**.

For each of these the GM should pick an appropriate TN. If the team is looking for a critical clue, the GM should consider applying the rules for investigation as well (see page 276).

SIMSPACES

The net is awash in virtual spaces, where users with the correct hardware can partake in a virtual world.

VIRTUAL REALMS

Some simspaces are virtual worlds, complete with their own rules, landscapes and characters. These vary widely, and can be either as down-to-earth or as fanciful as the designer wishes. Many are public and welcome all comers, while others are private, with access restricted only to select clientele. These private realms are a favorite meeting place for shady or illicit deals due to their relative safety and anonymity.

Virtual realms can be hacked as with any net node, but require that the hacker have her senses in the real world (see page 273).

AUGMENTED REALITY

Augmented reality tags are text, images or other bits of information that overlay the real world when looked at through AR glasses or with an AR implant. They frequently convey useful information, such as technical specs, names or links for more information. Reviews or other editorial content, advertisements and graffiti are also common.

Not all AR tags are created equal. Every tag is posted to a particular tag cloud, and the display of each cloud can be toggled on or off by the user. While separate clouds may convey differing information, viewing too many clouds at once can be distracting.

Both private and public clouds exist. Many have separate restrictions on who can write to them versus who can view them. Each subculture has its own public tag clouds. Most corps, meanwhile, have their own private cloud used by employees.

Posting a tag requires a computer of some sort—usually a hand terminal. The user then selects what she is tagging and leaves some content. Tags record the time at which they were posted, as well as the virtual identity of the poster. A few clouds allow anonymous tags, but they are usually overwhelmed with tag spam.

SLEEP DEPRIVATION

Without sleep, a character experiences fatigue, loss of mental function and finally hallucinations. Most characters need eight hours of sleep a day to function at their best. They may be able to get by with less, but their abilities will suffer.

Once a character has gone for 16 hours without sleep, she must make an **End-16** test every 8 hours due to sleep deprivation. On a failure, she takes fatigue equal to the Margin. After a failed test she may experience hallucinations. This fatigue does not heal until she has gotten a full night's sleep.

SOCIALIZING

Attempting to carouse, gather rumors, make a good first impression or demonstrate corporate manners often calls for a **Socializing** or similar test. The GM should set the difficulty based on the situation. In addition, several conditions may grant a + or -:

- ▶ Being clearly of a different social class or subculture imposes a -.
- ▶ Having a relevant Contact or other social connection grants +.
- ▶ Appealing to a known ambition, creed or personality trait grants +.
- ▶ Spending at least a day's wages for the Lifestyle of the group you're socializing with to bribe, wine and dine, buy a round of drinks or similar grants a + (see page 64).

SPACECRAFT

For most actions involving spacecraft—for example, operating a harvester or plotting a course to a remote station—a simple **Vehicles (Spacecraft)** test should suffice. If facing opposition, this test might be opposed. More involved scenes, such as vehicular chases or complicated landings, should make use of the extended action rules (see page 108).

Unless the team is in charge of piloting, combat between spacecraft ought to feel like a disaster movie, with coolant leaks, flying shrapnel or other environmental hazards. Keep the action focused on the survival of the characters, rather than on the larger-scale battle around them. Their goal is to live, even while the ship gets ripped apart around them.

If the team is in charge of piloting and fighting back, then spacecraft combat can also be modeled using the extended action rules—usually Tally 10—with the strength of the opposition setting the difficulty. Treat each failed test as a direct hit or other major setback in the conflict.

STARVATION & DEHYDRATION

The body can go for a lot longer without food than without water, but going without either can be deadly. For every day a character goes without water or every five days without food, she must make an **End-16** test. On a failure, she takes fatigue equal to the Margin. This fatigue may not be healed until she has drank water or eaten food, respectively.

STASIS

Stasis is a form of medically-induced hibernation used to transport passengers on long voyages. People in stasis are cheaper to transport because they require less life support. They also age at about one tenth the usual rate and are less likely to suffer from psychological conditions, such as cabin fever, during space flight.

However, stasis is not without risk. Passengers in stasis are putting their lives in the hands of their stasis pod and in the technician putting them under. Those coming out of stasis also regularly suffer from stasis sickness, which usually results in lethargy and short-term amnesia.

PUTTING PEOPLE UNDER

Putting a passenger into stasis is a 30 minute process during which the passenger is decontaminated, dressed in a medical gown and hooked up to tubes for breathing, intravenous fluid, a catheter and biomonitoring devices. She is then fitted inside a stasis pod, which looks something like an electronic coffin.

The technician putting her under then makes a **Medicine-10** test. On a success, the stasis takes without issue. On a failure, there's been a complication. See the table below.

Card	Complication
♠	The stasis did not take. This is immediately obvious and the technician may try again.
♥	Chemicals weren't balanced correctly for the passenger's metabolism. Her memories from the 24 hours before she went into stasis may never be recovered.
♦	The passenger was put too far under. She won't respond to the usual methods to wake her. It requires minor surgery to revive her.
♣	The metabolism of the passenger wasn't correctly slowed. She wakes up having aged at a quarter the usual rate instead of a tenth.
Joker	The passenger takes significant organ damage during stasis. This results in a Grave Wound with a value of 1d10.

HEALING IN STASIS

Treat every 10 days in stasis as a single day for the purpose of natural healing (see page 138). In stasis, the body's metabolism slows down, including its healing mechanisms.

WAKING PEOPLE UP

A passenger can be woken up from stasis, either manually by a technician, or by the stasis pod itself. Coming out of stasis is usually straightforward. A technician is on hand primarily to disconnect wires and tubes, as well as to detect complications and orient passengers suffering from stasis sickness. Disconnecting all the equipment takes about 15 minutes.

STASIS SICKNESS

Passengers wake up from stasis stiff, thirsty, disoriented and nauseated. To top it all off, most also suffer holes in their memories. It's common to not remember the last day or two before going into stasis, although forgetting entire months is not unheard of. These symptoms usually pass within 24 hours.

Crew being put into stasis often leave notes to themselves in order to help them take stock of the situation before their memories return.

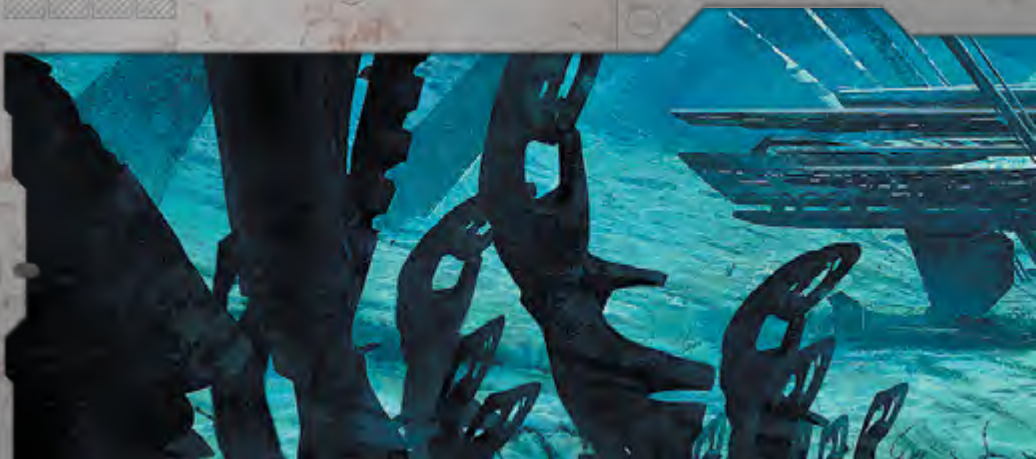
VOYAGES IN STASIS

As a rule of thumb, voyages lasting fewer than 30 days rarely put their passengers into stasis, as the medical risks outweigh the benefits. Exceptions may be made for prisoner transports or deployment of military ground forces. For voyages lasting longer than this, stasis is the norm.

Typically passengers are put into stasis shortly before a ship leaves port. This allows the crew the ability to rush passengers to the port's medical facilities, should complications arise. The crew themselves are usually put under a day or two after leaving port. This gives them the chance to double-check the ship's systems before going into stasis. By tradition, aside from the stasis technician, the captain is usually put under last.

Once the entire crew is in stasis, the voyage continues, controlled entirely by the software left to navigate the ship. If complications then arise, a ship's software is usually programmed to wake the crew, or at least its key members.

Upon nearing the end of the voyage, the crew is generally woken up a day or two before any passengers, who are themselves woken up either hours before reaching port or immediately thereafter. In the former case, passengers recover from stasis sickness while on the ship. With the latter, passengers are quickly shepherd off the ship to an area at the port designed for recovery. The former is more common on luxury space flights and the latter on economy flights.



STEALTH

When a character attempts to sneak up on enemies or infiltrate enemy lines, begin by figuring out if the guards are active or passive.

Passive guards may be on watch but aren't paying particularly close attention to their surroundings. To sneak past them, a character only needs to score a success on a **Stealth-12** test, although you should feel free to grant 🟢 or impose 🔴 for circumstances such as darkness, cover or open terrain. Failing this test rouses the suspicion of the guards, making them active.

Active guards are on full alert. Sneaking past them is an opposed **Stealth vs. Awareness** test. Failure means the character is spotted.

THE LAST STEP

Sneaking to within 5 meters of a foe requires a **Stealth vs. Awareness** test, regardless of whether she is active or inactive.

GROUP STEALTH

Sometimes the party may want to sneak around as a group. Nominate one character to take the lead and make a **Stealth** test for the group. This test, however, suffers a 🔴 for each character in the group that is unskilled in Stealth.

SUFFOCATION

Any number of events may cause a character to suffocate—from lack of atmosphere, to drowning, to being strangled.

The first thing the GM should determine is if the character managed to hold her breath before being suffocated. If so, she has a window of time before the adverse effects of suffocation begin to set in, otherwise she begins to experience them immediately. If she manages to hold her breath, she begins to suffocate in a number of rounds equal to her Endurance.

Once suffocating, a character must make an **End-16** test at the beginning of each round, on a failure she takes fatigue equal to the Margin.



TEMPERATURE EXTREMES

When a character experiences extremes in temperature, decide upon an interval of time for which she must make **End-16** tests. On a failure, she takes fatigue equal to the Margin. This fatigue cannot be healed until she cools down or warms up, as appropriate.

As temperatures get progressively hotter or colder, the interval of time for each test should decrease or increase. Suggested intervals range from several hours to a minute.

UNDERWATER ACTIVITY

Deep water forces a character to swim. Swimming requires an **Athletics-12** test to move at half the character's usual Move. The GM may adjust the TN for particularly treacherous or calm waters.

Additionally, ranged attacks suffer underwater. Decrease damage by 5 for every meter of water a ranged attack passes through.

VACUUM & PRESSURE

Characters exposed to hard vacuum or sudden, drastic changes of pressure face a variety of challenges. Those in vacuum begin to suffocate and likely suffer extreme temperatures (see page 285).

Those suddenly exposed to hard vacuum may also suffer from explosive decompression—blood vessels rupture, eardrums blow out and body fluids begin to boil. This forces the character to make an immediate **End-16** test. On a success, she merely takes 1d10 damage. On a failure, she takes 1d10 plus the Margin in damage. In addition, if this damage results in a Grave Wound, don't flip on the Grave Wounds table. Instead, she suffers a **+** on all Per-based actions until she has a minor surgery to fix her senses (see page 139).

Finally, characters who experience sudden changes in pressure—including explosive decompression—may suffer from the bends. This forces the character to make another **End-16** test. On a critical success, she suffers no ill effects. On a success, she gains 1d10 fatigue. On a failure, she gains 1d10 fatigue and loses consciousness as well. On a critical failure, she dies.

ADVERSARIES

This chapter contains a variety of monstrosities and other non-player characters, as well as mechanics for using those characters in any number of horrifying scenarios.

Stat Blocks

The stat blocks in this chapter are presented in a simplified format. Stats and associated scores are shown in a table, followed by attacks, important skills and traits.

Stat blocks do not list every skill an NPC possesses. When making a test, the GM should decide whether a character is proficient or not by applying common sense. Use the character's full stat value if proficient, halve the value if not.

An example stat block is below.

CITIZEN

STR	DEX	SPD	END	INT	PER	CHR	DET
5	5	5	5	5	5	5	5
MOVE		DEFENSE		WILL	ARMOR		HEALTH
5		5		5	0		10
SKILLS: Socialize 2 Streetwise 2							
Baton +5 (4 sm) — Close Parry 3							
GEAR: AR Glasses Hand Terminal							

Hartley consults with Lydia, an electrician contact of his, who the GM has previously determined uses the Citizen stat block. He asks her to investigate a wiring issue with his shuttle. Even though the Citizen stat block doesn't explicitly list Trade (Electrician), the GM rules that Lydia is proficient, so when making the test, she uses her full Dexterity.

Adversary's Workshop

When designing foes, there is no need to go through the full character creation process, as with player characters. Simply assign the foe's stats and relevant skills using common sense and ballpark estimates, then calculate their scores.

HUMAN FOES

For most human adversaries, we recommend picking out two to five relevant skills and assigning them a value of 3 or 4. Focus on combat skills or other skills that might be applicable in the context of how the team is likely to encounter them. For all other skills, you can use common sense to decide if they're proficient or not (see page 11).

Afterward, pick out a few relevant pieces of gear for the foe to carry. We recommend one to four items, paying particular attention to select a weapon, and assuming it makes sense for the character, armor as well.

MONSTROSITIES

For non-human adversaries, we recommend giving each a small handful of traits. For these, you should begin by looking at the list of creature traits, particularly the Attack trait (see page 288).

If none of the traits in the list fit the ability you're trying to model, you can also make up your own. When in doubt, any custom trait should be clear and simple to resolve. Making up your own also has the added advantage that players are kept guessing as to the foe's capabilities.

For adversaries that are intended to take on the entire team by themselves, we particularly recommend considering adding several of the following: Actions (see page 288), Frenzy (see page 289), Indomitable (see page 289), Overwhelm (see page 289), Unstoppable (see page 291) and Untouchable (see page 291).

Creature Traits

Most monstrosities and other inhuman adversaries possess one or more creature traits. These frequently represent unique or wholly alien abilities. Common creature traits are listed below. Unique ones are listed alongside the stat blocks later in this chapter.

For the sake of brevity, these descriptions do not make explicit every possible edge case. GMs should use common sense when adjudicating their effects.

ACTIONS

Each round of combat, this creature gets the specified number of Action Points instead of the usual 3 AP.

AQUATIC

This creature is at home in the water. It does not conventionally drown, gains **++** on all tests made to swim and may travel at its full Move score through water.

ATTACK

Most creatures have one or more attacks. Each attack is given a name and is listed alongside its modifier, damage and properties. Below is a table of common natural attacks.

Attack	Damage	Parry	Properties
Bite, Blunt	3 sm	—	Close, Feeble
Bite, Sharp	3 pi	—	Close
Claw	3 cut	2	Close
Horn	3 pi	2	Close
Kick	4 sm	1	—
Slam	5 sm	—	—
Tentacle	3 sm	—	Close, Wraps
Unarmed	2 sm	2	Close, Feeble
Whip	4 cut	1	Feeble, Reach 4, Wraps

BURROW

This creature can burrow through the ground with surprising speed. It may travel at half its Move score through soil or rock, leaving an unstable tunnel behind.

FLIGHT

This creature has the ability to fly. It may travel through the air at twice its Move score, ignoring all intervening terrain and obstacles.

FRENZY

This creature may attack more than once in the same round. Any restrictions on when and how it may make these additional attacks are listed alongside this trait in the creature's stat block.

IMMUNITY

This trait always comes with a specified source of damage or damage type. The creature is immune to damage from the specified source.

INDOMITABLE

At the start of each round, this creature may remove a Bleeding, Dazed, Disabled, Dying, Fear, Fixation, Hindered, Prone, Stunned or similar short-lived consequence from itself.

INFRAVISION

This creature may locate targets in the dark by seeing body heat. It ignores all 's imposed by darkness.

MACHINE

This creature is a machine. It is immune to toxic damage and metabolic hazards, as well as mental and emotional effects. In addition, it doesn't heal, although an appropriately skilled technician might be able to repair it.

MINDLESS

This creature does not possess a conventional mind. As such, it is immune to all mental and emotional effects.

OVERWHELM

This creature is a particularly overwhelming and dangerous foe. It may choose to take a turn immediately before fast turns get to act. This is in addition to its usual turn during the NPC turns. Both of these turns share the same AP for the round.

RESISTANCE

This trait always comes with a specified source of damage or a damage type. The creature takes half damage from the specified source (after subtracting Armor).

SCENT

This creature has a keen sense of smell. It gains **++** on all tests made to detect others by scent. In addition, it may target invisible or unseen foes, ignoring all **●**'s imposed by darkness or obscured vision.

SEMI-AQUATIC

This creature is at home in and out of the water. It gains **++** on all tests made to swim and may travel at its full Move score through water. In addition, it only needs to return to the surface for air every 20 minutes or longer.

SIZE

This trait represents creatures whose size differs significantly from that of an adult human—the assumed default of Size 0. Creatures larger than this are given a positive Size, while smaller creatures are given a negative Size. Each step in Size represents roughly a doubling of the creature's length.

A creature's Size acts as a modifier to attacks, Defense, Move, Health, Encumbrance and damage from weapons. Smaller creatures add to attacks and Defense, while subtracting from Move, Health, Encumbrance and damage. Conversely, larger creatures add to Move, Health Encumbrance and damage, while subtracting from attacks and Defense. Creatures of at least Size ± 2 multiply HP and Encumbrance. See the table below.

Size	Attacks	Damage	Defense	Encum.	Health	Move
-3	+3	-3	+3	$\times 1/3$	$\times 1/3$	-3
-2	+2	-2	+2	$\times 1/2$	$\times 1/2$	-2
-1	+1	-1	+1	-1	-1	-1
0	0	0	0	0	0	0
1	-1	+1	-1	+1	+1	+1
2	-2	+2	-2	$\times 2$	$\times 2$	+2
3	-3	+3	-3	$\times 3$	$\times 3$	+3
4	-4	+4	-4	$\times 4$	$\times 4$	+4

SWIFT

This creature has four or more legs, or is otherwise particularly fast moving. Double its Move score. Depending on its locomotion, it may also benefit from a + to avoid being tripped.

SWARM

This isn't a single creature, but rather a moving mass of many smaller creatures. Any attack made against the swarm that doesn't target an area deals only 1 damage. Swarms use their Determination instead of Strength to make melee attacks and to calculate Health. Any swarm that would be dealt a Dying consequence instead dissipates into many dying and scattered individuals.

UNSTOPPABLE

This creature is particularly difficult to bring down. Double its Health score.

UNTOUCHABLE

This creature benefits from a + on all Defense tests.

VULNERABILITY

This trait always comes with a specified source of damage or damage type. The creature takes double damage from the specified source (after subtracting Armor).

WALL-WALKER

This creature may move across ceilings and walls in full gravity, much as it moves across the floor. It gains ++ on all tests made to climb, and may travel its full Move along any solid surface.

Humanity

Humans have always been their own worst enemy, and the future of ***Shadows Over Sol*** is no different. The majority of the team's foes are likely to be human.

CELEBRITY

STR	DEX	SPD	END	INT	PER	CHR	DET		
5	6	5	6	5	6	8	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
5		6		5		0		11	
SKILLS: Deception 3 Empathy 3 Expression 4 Socializing 4									
Shockstick +5 (3 sm) — Close Parry 3 Stun									
GEAR: AR Implant Biomonitor Hand Terminal Personal Assistant									

Celebrities are subcultural icons, with fame and usually fortune. They're often involved in some sort of media—whether the vids, music, blogs or AR. Regardless of the source of their fame, celebrities usually have massive personal charisma and a widespread following.

CITIZEN

STR	DEX	SPD	END	INT	PER	CHR	DET		
5	5	5	5	5	5	5	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
5		5		5		0		10	
Baton +5 (4 sm) — Close Parry 3									
GEAR: AR Glasses Hand Terminal									

Citizens are simple blue collar or white collar workers—the sort who just want to do their jobs, live their lives and survive the day.

CONTRACT KILLER

STR	DEX	SPD	END	INT	PER	CHR	DET
5	7	5	5	6	6	3	5
MOVE		DEFENSE		WILL	ARMOR		HEALTH
5		6		5	3		10
SKILLS: Melee 3 Projectiles 3 Stealth 3							
Knife +8 (3 cut) — Close Parry 2							
Light Pistol +10 (5 pi) — Close Range 12 Reload 2 Shots 6							
Light Rifle +10 (7 pi) — Hands 2 Range 18 Reload 2 Shots 1							
GEAR: AR Implant Binoculars Coverjack Hand Terminal							

The solar system is home to many people willing to kill other human beings for money. Most professional contract killers are usually set apart from soldiers or security personnel in their precision and discreet use of violence.

CULTIST

STR	DEX	SPD	END	INT	PER	CHR	DET
5	6	5	5	4	4	4	7
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		5		4	0	10	
SKILLS: Academics (Theology) 3 Streetwise 3							
Knife +8 (3 cut) — Close Parry 2							
Light Pistol +6 (5 pi) — Close Range 8 Reload 2 Shots 6							
GEAR: AR Glasses Hand Terminal Rope							

The future is full of causes, beliefs, religions and creeds. Most of these movements have their fanatics. Cultists are often willing to sacrifice everything for their cause, and many are quite secretive in their associations.

CYBERFIEND

STR	DEX	SPD	END	INT	PER	CHR	DET
6	6	7	7	7	6	3	3
MOVE		DEFENSE		WILL	ARMOR		HEALTH
6		6		3	6		13
SKILLS: Athletics 3 Awareness 3 Melee 4 Persuasion 3 Projectiles 4							
Gun Arm +10 (5 pi) – Close Range 12 Reload 2 Shots 3 Frag Grenade +10 (8 sm) – Grenade Range 12							
GEAR: Adrenaline Booster Gland AR Implant Gun Arm Implant Hand Terminal Injector Unit Stimulox Tactical Suit Torpestat							

Cyberfiends are typically dangerous and violent individuals who have undergone so many implant procedures—often through budget surgeons—that something inside of them has snapped and they’ve lost touch with humanity.

DILETTANTE

STR	DEX	SPD	END	INT	PER	CHR	DET
6	5	5	5	5	5	4	4
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		5		4	0	11	
SKILLS: Academics (Art) 3 Socialize 3							
Knife +8 (3 cut) — Close Parry 2 Light Pistol +5 (5 pi) — Close Range 10 Reload 2 Shots 6							
GEAR: AR Implant Biomonitor Hand Terminal Personal Assistant Workstation							

The wealthy often have children, and many of these children have never had to work a day in their lives. They flit about, going from interest to interest, dabbling in business or the arts, and living a life of leisure.

ENGINEER

STR	DEX	SPD	END	INT	PER	CHR	DET
4	5	5	5	7	5	4	5
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		5		5	0	9	
SKILLS: Academics (Engineering) 4							
Shockstick +5 (3 sm) — Close Parry 3 Stun							
GEAR: AR Glasses Expert System (Engineering) Hand Terminal Workstation							

Every ship, every station, every geneline, every gun and every colony was rigorously designed by an engineer. They make space exploration possible, taking ideas and turning them into reality.

DOCTOR

STR	DEX	SPD	END	INT	PER	CHR	DET
5	6	5	5	7	6	5	6
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		6		6	0	10	
SKILLS: Academics (Biology) 3 Medicine 4							
Light Pistol +6 (5 pi) — Close Range 12 Reload 2 Shots 6							
GEAR: AR Glasses Hand Terminal Medikit Surgery Kit							

Wherever humanity goes—whatever ball of rock and ice we colonize—we are slaves to our bodies and to our health. Wherever humans exist we need doctors: to check our health, to patch us up and to make our bodies well again.

EXECUTIVE

STR	DEX	SPD	END	INT	PER	CHR	DET
5	5	5	5	7	6	7	6
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		5		6	0	10	
SKILLS: Deception 3 Empathy 3 Persuasion 3 Socializing 4							
Light Pistol +5 (5 pi) — Close, Range 12, Reload 2, Shots 6							
GEAR: AR Implant Biomonitor Hand Terminal Personal Assistant Workstation							

Every corp and every sprawling organization has its hierarchy of managers, administrators and executives. These people may oversee the labor of millions and make boardroom decisions that affect the course of history.

PILOT

STR	DEX	SPD	END	INT	PER	CHR	DET
5	6	5	5	5	7	5	5
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
5		6		6	0	10	
SKILLS: Vehicles (Spacecraft) 4							
Light Pistol +6 (5 pi) — Close Range 14 Reload 2 Shots 6							
GEAR: AR Implant Hand Terminal Injector Implant Stimulox							

People require ships to travel between the myriad stations, colonies, mining outposts and other operations in the Sol system—and ships need pilots. This makes piloting something of a hot-shot, if underpaid, profession.

RENT-A-COP

STR	DEX	SPD	END	INT	PER	CHR	DET
6	6	6	6	4	5	4	4
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
6		6		4	3	12	
SKILLS: Awareness 3 Melee 3 Projectiles 3							
Heavy Pistol +9 (6 pi) — Close Range 10 Reload 2 Shots 6							
ARMOR: Ballistic Suit. Use Armor 6 against piercing attacks.							
GEAR: AR Glasses Ballistic Suit Disposable Cuffs Hand Terminal							

Freelance security outfits are common on stations throughout the Sol system. They police the corridors, arresting trouble-makers and making their presence known. These rent-a-cops often have a level of training below that of soldiers, but above that of common thugs.

SCRAPPER

STR	DEX	SPD	END	INT	PER	CHR	DET
6	6	6	5	5	6	5	6
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
6		6		6	3	11	
SKILLS: Awareness 3 Investigation 3 Melee 3 Projectiles 3 Streetwise 3							
Heavy Pistol +9 (6 pi) — Close Range 12 Reload 2 Shots 6							
Knife +9 (3 cut) — Close Parry 2							
Stun Grenade +9 (0 fat) — Grenade Ignores Range 12 Stun							
ARMOR: Ballistic Suit. Use Armor 6 against piercing attacks.							
GEAR: AR Glasses Ballistic Suit Hand Terminal Ladar Scanner Medikit							

Scrapppers are flexible troubleshooters, often living at the gray edges of the law. They perform any number of jobs throughout the system, from salvaging unclaimed scrap, to trading in information and corporate secrets.

SOLDIER

STR	DEX	SPD	END	INT	PER	CHR	DET
7	6	6	7	5	5	5	5
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
6		6		5	6	14	
SKILLS: Athletics 3 Melee 3 Projectiles 4							
Heavy Pistol +10 (6 pi) — Close Range 10 Reload 2 Shots 6							
Machine Rifle +10 (7 pi) — Auto 5 Hands 2 Range 15 Reload 3 Shots 30							
Stun Grenade +10 (0 fat) — Grenade Ignores Range 10 Stun							
GEAR: AR Glasses Hand Terminal Tactical Suit							

Soldiers are trained professional muscle and the backbone of any corp or other organization's projection of military power. Soldiers are deployed throughout the system, and typically have a level of professionalism exceeding that of common thugs or local security.

SPY

STR	DEX	SPD	END	INT	PER	CHR	DET
5	8	8	5	7	6	9	7
MOVE		DEFENSE		WILL	ARMOR		HEALTH
7		8		7	3		10
SKILLS: Awareness 3 Deception 4 Empathy 4 Investigation 3 Stealth 3 Thievery 3							
Light Pistol +8 (5 pi) — Close Range 12 Reload 2 Shots 6							
GEAR: AR Glasses Coverjack Hand Terminal Ladar Scanner Magnetic Grapnel							

Spies are highly-trained operatives, specializing in either long cons under an assumed identity or in the quick and precise extraction of information. Spies can be found throughout the Sol system, working for rival corps and other large organizations.

THUG

STR	DEX	SPD	END	INT	PER	CHR	DET
6	5	5	6	4	5	5	4
MOVE		DEFENSE		WILL	ARMOR		HEALTH
5		5		4	0		12
SKILLS: Athletics 3 Melee 3 Persuasion 3 Projectiles 3							
Bato +9 (4 sm) — Close Parry 3							
Heavy Pistol +8 (6 pi) — Close Range 10 Reload 2 Shots 6							
GEAR: AR Glasses Hand Terminal							

Many thugs are violent criminals who prowl the streets or corridors looking for easy targets. Others are cheap muscle hired by any number of outfits to intimidate, threaten or commit violence.

Fauna

Although mundane animals as foes is not a common trope in science fiction, there are numerous horror stories with hyper-intelligent or modified beasts.

APE

STR	DEX	SPD	END	INT	PER	CHR	DET		
8	5	5	5	2	6	5	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
5		5		5		0		13	
Strike +8 (2 sm) — Close									

Apes are large, hairy primates that live in groups and display a keen animal intelligence.

CAT

STR	DEX	SPD	END	INT	PER	CHR	DET		
2	8	6	5	1	6	6	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
6		8		5		0		3	
Claws +4 (1 cut) — Close Feeble									
Size -2 See page 290.									
Swift See page 290									

Cats are small, furry predators that have been domesticated to keep vermin in check.

CROCODILE

STR	DEX	SPD	END	INT	PER	CHR	DET	
9	5	6	6	1	5	5	5	
MOVE		DEFENSE		WILL		ARMOR		HEALTH
12		5		5		4		15
Bite +9 (3 pi) — Close								
Semi-Aquatic See page 290.								
Swift See page 290								

Crocodiles are large semi-aquatic reptiles with long jaws and jagged teeth.



DOG

STR	DEX	SPD	END	INT	PER	CHR	DET		
4	5	5	5	1	7	6	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
8		6		5		0		8	
Bite +5 (2 pi) – Close									
Scent See page 290.									
Size -1 See page 290.									
Swift See page 290.									



Dogs have long been domesticated and are known for their loyalty. This stat block represents a medium breed.

HAWK

STR	DEX	SPD	END	INT	PER	CHR	DET		
2	6	7	4	1	8	5	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
3		9		5		0		3	
Talons +4 (1 pi) — Close									
Flight Move 6. See page 289.									
Size -2 See page 290.									

These birds of prey are swift and have been used for sport in ages past.

RAT SWARM

STR	DEX	SPD	END	INT	PER	CHR	DET		
2	7	6	6	1	6	4	5		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
6		6		4		0		11	
Bites +5 (3 pi) — Close. See Diseased below.									
Diseased Anyone bitten by a rat swarm must make an extended End-12 (Tally 5, 1 day) action. Each failure deals the margin in toxic damage.									
Engulf At the beginning of its turn, all adjacent foes gain a Hindered consequence.									
Swarm See page 291.									

Sometimes a colony of rats is whipped into a bloodthirsty frenzy by starvation or fear.

SHARK

STR	DEX	SPD	END	INT	PER	CHR	DET
11	7	6	5	1	7	5	6
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
8		4		5	4	32	
Bite +9 (5 pi) — Close							
Aquatic See page 288.							
Scent See page 290.							
Size +2 See page 290.							

Sharks are large undersea predators. This stat block represents one of the larger species, such as a great white.

TIGER

STR	DEX	SPD	END	INT	PER	CHR	DET
10	7	6	6	1	6	6	5
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
14		5		5	2	12	
Claw +9 (4 pi) — Close							
Size +1 See page 290.							
Swift See page 290.							

Tigers are large cats which in nature patrol massive areas of land, looking for fresh game to hunt and eat.



Machines

A variety of machines are used in physical confrontations, from aerial scouting drones, to heavily-armored crawlers. Stats for these machines are found below.



ARMORED CRAWLER

STR	DEX	SPD	END	INT	PER	CHR	DET
12	4	6	8	5	6	1	8
MOVE		DEFENSE		WILL		ARMOR	
9		5		5		10	
HEALTH							
21							
SKILLS: Athletics 3 Projectiles 3							
Main Cannon +6 (9 pi) — Range 20 Shots 30							
Side Guns +6 (5 pi) — Auto 5 Range 10 Shots 20							
Trample +11 (6 sm)							
Machine See page 289.							
Size +1 See page 290.							

Armored crawlers are horse-sized autonomous machines that crawl along the ground on either treads or numerous metallic legs. They're designed to be all-terrain capable, navigating over mounds and ditches, or busting through small walls and fences.

COMBAT DRONE

STR	DEX	SPD	END	INT	PER	CHR	DET		
5	6	7	8	5	6	1	8		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
7		7		5		3		12	
SKILLS: Melee 3 Projectiles 3									
Gun +10 (4 pi) — Auto 5 Range 10 Shots 20									
Saw Limb +9 (6 cut)									
Flight Move 14. See page 289.									
Machine See page 289.									
Size -1 See page 290.									

Combat drones are small airborne robots, held aloft by a helicopter blade, and often used in personal combat. They typically have both an attached gun, as well as several extendable limbs with spinning saw blades.

SCOUT DRONE

STR	DEX	SPD	END	INT	PER	CHR	DET		
3	5	8	4	5	8	1	8		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
6		10		5		3		3	
SKILLS: Awareness 4 Investigation 4									
Slam +5 (3 sm)									
Flight Move 12. See page 289.									
Infravision See page 289.									
Machine See page 289.									
Size -2 See page 290.									

Scout drones are small, nimble drones that are used to detect intruders, or which do the work of a forward observer. As with other popular drones, they are usually held aloft by a helicopter blade.

Monstrosities

The following is a selection of monstrosities—some intended as bioengineered weapons of war and some inadvertently harmful.



ECTOVORE

STR	DEX	SPD	END	INT	PER	CHR	DET
6	6	4	5	1	4	2	5
MOVE		DEFENSE		WILL		ARMOR	
5		4		2		22	

Pseudopod +6 (3 cor) — Close. See Corrosive below.

Corrosive On a hit, reduce the target's Armor by one, even if the ectovore's damage didn't penetrate the armor. If it did penetrate, the target gains **Bleeding (Corrosive)**.

Immunity (Piercing) See page 289.

Mindless See page 289.

Resistance (Cutting, Smashing) See page 289.

Unstoppable See page 291.

Vulnerability (Freezing) See page 291.

Wall-Walker See page 291.

Ectovores are made up of a sizable mass of grayish ooze. They often hide on ceilings or along the walls of darkened corridors, ready to drop down and envelop their prey. Originally engineered as an experimental organism designed to seek out and break down hazardous organic waste, ectovores have found a niche in the criminal underworld, where they are used to dispose of meddling witnesses and the resulting bodies.



JANGOR

STR	DEX	SPD	END	INT	PER	CHR	DET		
8	8	7	6	2	6	5	6		
MOVE		DEFENSE		WILL		ARMOR		HEALTH	
12		7		5		5		14	
SKILLS: Athletics 3 Awareness 3 Melee 3 Survival 3									
Mandibles +11 (3 cut) — Close									
Actions 4 Gains 4 AP per round. See page 288.									
Burrow See page 288.									
Stench Anyone within 2 meters of a jangor, when it is wounded, is sprayed with an ichor that has an extremely foul stench. Characters without environmentally sealed suits who are sprayed in this way gain a Fixated (Stench) consequence.									
Swift See page 290.									

Jangors appear to be long, lanky insect-like creatures about the size of an adult human. They possess an internal skeleton and move about on six multi-jointed legs. Jangors were originally created by Unitech to survive the environmental conditions on Mars, burrowing and breaking up the Martian regolith to aid in the terraforming efforts. Although the project was considered a failure and the remaining jangors ordered destroyed, a few surviving specimens managed to escape into the Martian wilds, where their descendants survive to this day.



KRILL

STR	DEX	SPD	END	INT	PER	CHR	DET
2	6	6	6	3	5	5	6
MOVE		DEFENSE		WILL	ARMOR	HEALTH	
8		8		5	0	4	
SKILLS: Athletics 3 Awareness 4 Melee 3 Survival 3							
Bite +7 (1 pi) — Close. See Venom below.							
Indomitable See page 289.							
Size -2 See page 290.							
Swift See page 290.							
Venom Anyone injured by a krill's bite must make an extended End-12 (Tally 5, 1 minute) action. Each failure deals the margin in toxic damage.							

Krills appear to be raccoon-sized, reptile-like creatures with dull gray scales. They were originally created for vermin control in space habitats and mining facilities, having been engineered with a biology capable of surviving extended periods of time in a vacuum. While they proved adequate at this task, they also proved unruly. This led to a gradual decline in their popularity. Recently, krills have had a resurgence, as their presence is being used as a deterrent against unwanted intruders in little-used corridors or space habitats. They usually form and travel in packs.



PATIENT ZERO

STR	DEX	SPD	END	INT	PER	CHR	DET
15	9	9	15	6	7	7	8
MOVE	DEFENSE	WILL	ARMOR	HEALTH			
9	9	7	3	60			
SKILLS: Athletics 4 Awareness 4 Empathy 3 Stealth 4							
Claws +15 (3 cut) — Close Vomit +9 (5 cor) — Cone 9							
Actions 4 Gains 4 AP per round. See page 288. Frenzy If patient zero makes a melee attack and misses, it may make a second attack on the same target. See page 289. Radio Jamming Patient Zero blocks radio signals within 100 meters. Overwhelm See page 289. Unstoppable See page 291.							

Patient Zero is the pinnacle of the human genetic experiments currently being pursued by Jenseitech. Once an unknown adult male living in the Belt, Patient Zero is the sole survivor of a program that used proteins to introduce a synthetic genetic payload into his cells, and then used this DNA to trigger novel genetic pathways. Although he has lost much of what once made him human, Patient Zero displays a continued primitive intellect, as well as increased levels of aggression.



WALKER

STR	DEX	SPD	END	INT	PER	CHR	DET
8	7	7	8	4	7	5	6
MOVE		DEFENSE		WILL		ARMOR	
7		7		6		5	

SKILLS: Athletics 3 | Melee 3

Bite +11 (3 pi) — Close

Slam +11 (5 sm) — See Knockdown below.

Frenzy A walker may make a number of extra attacks in a round equal to the number of Wound consequences it has taken (max 3). See page 289.

Great Leap As part of a move action, a walker may leap up to 10 meters. This is in addition to the usual movement it gets with the action.

Knockdown Any target of equal or smaller size that is hit by a walker's slam attack is knocked backward 2 meters and must succeed at a **Spd-12** test or gain a **Prone** consequence.

Overwhelm See page 289.

Walkers look like hunched-over humanoid figures, which typically move around on all fours, but which can walk upright for short periods of time. Walkers are a monstrous human-animal genetic mashup whose genome has been designed for defense and warfare. They have an over-large jaw with sharp teeth and a voracious appetite. They also routinely use simple tools, and are extremely territorial. Walkers were originally engineered by the now-defunct Defense Accelerated Corp, but their genetics have long since been licensed out to numerous organizations.

**ZEIGER**

STR	DEX	SPD	END	INT	PER	CHR	DET
8	6	7	10	5	6	6	7
MOVE	DEFENSE	WILL	ARMOR	HEALTH			
7	6	6	3	18			

SKILLS: Athletics 3 | Awareness 3 | Melee 3 | Stealth 3

Shriek +10 (0 fat) — Blast 10. Hit targets gain a **Dazed** consequence. All foes within 100 meters lose the **Hidden** consequence. This is a form of sonar.
Strike +11 (4 sm) — Close

Chameleon Zeigers may take an action to change their skin to match the coloration of their surroundings. This grants **++** to remain hidden.

Flight Move 14. Low gravity only. See page 272.

Frenzy A zeiger may use both its Shriek and Strike in the same round. See page 289.

Infravision See page 289.

Untouchable See page 291.

Zeigers are winged bio-engineered humanoids, constructed from a mix of human and animal genetic material. They possess hollow bird-like bones, as well as membranous wings that reach from under their arms, down the sides of their torsos. Zeigers can fly in low gravity environments, but not in environments with gravity approaching 1g. They were engineered by Zeiger Biotechnologies shortly before it was bought out by Jenseitech.

CONSEQUENCES

The following is a list of common consequences referenced by the *Shadows Over Sol* rules. These can also be used as benchmarks when making up your own consequences.

BLEEDING

You are suffering from an ongoing source of damage. This may be literal bleeding from open wounds, but it could also be ongoing damage from other maladies or environmental conditions.

- ▶ **Effect:** Take 1 damage at the beginning of each round. If you already have a Wound consequence caused by this source of bleeding, increase its value by one instead. This does not cause the Dying consequence unless it causes your Wound Total to meet or exceed a multiple of your Health—for example, $1 \times \text{Health}$.
- ▶ **Removal:** Lasts until you receive the Stanch Bleeding action (see page 127).
- ▶ **Subject:** Always has a particular cause and damage type that is applied.

BOLSTERED

Your actions are bolstered through expertly directed tactics, improved morale, combat stims or any other number of means.

Effect: You may remove this consequence at any time to gain a + on your next test.

Removal: Lasts until you remove the consequence or until a minute passes

DAZED

Your mind is cloudy and you find it difficult to focus on the task at hand.

- ▶ **Effect:** Imposes - on all tests.
- ▶ **Removal:** Lasts until the Focus action is taken (see page 126).

DESIRE

You have a strong, deep-seated urge to take a particular action. This might be indulging in alcohol or another drug, making a move on an attractive dancer or punching an annoying corporate representative in the face.

- ▶ **Effect:** Every time you gain this consequence you must succeed at a **Det-10** test or perform the desired action at the next opportunity. This test suffers **●** for every additional Desire consequence you possess.
- ▶ **Removal:** Lasts until the desire is indulged, until you get a good night's sleep or until a Desire consequence with a different subject is gained.
- ▶ **Subject:** Always has a particular action which you desire to perform.

DISABLED

You begin to lose control of your body. At first it begins to slow down, but gradually you become paralyzed.

- ▶ **Effect:** You gain one fewer AP each round. This is cumulative with multiple consequences. Once you have three Disabled consequences, you are paralyzed and cannot take actions until either you receive first aid or until a day passes.
- ▶ **Removal:** Lasts until the Focus action is taken, until you receive first aid or until a day passes (see page 126).

DYING

You are teetering on the brink of death, and will expire unless you receive immediate healing.

- ▶ **Effect:** You may not have more than 1 AP. At the beginning of each round you must make an **Endurance** test with a TN equal to the amount your Wound Total exceeds your Health. On a failure, you gain another Dying consequence. If this gives you a third Dying consequence, you die at the end of the round.
- ▶ **Removal:** Remove a Dying consequence each time you critically succeed on your Endurance test. Lasts until you die or receive the Stanch Bleeding action (see page 127).

FATIGUE

You are physically exhausted. This might be caused by starvation, strenuous activity, exposure to the elements or any other number of reasons.

- ▶ **Effect:** If you possess this consequence and your Wound Total is equal to or greater than your Health, halve your Move score and suffer a  on all physical tests. In addition, any time you gain Fatigue and your Wound Total meets or exceeds your Health, make an **Endurance** test with a TN equal to your total Fatigue value. On a failure, you fall unconscious for 1d10 hours.
- ▶ **Removal:** Lasts until you get a good night's rest, unaffected by a source of fatigue.
- ▶ **Subject:** The GM may optionally specify a subject, describing the source of fatigue.
- ▶ **Value:** This consequence always has a value indicating the severity of the fatigue. This value counts towards your Wound Total (see page 130).

FEAR

Something is making you fearful. This reaction can run the gamut from solidly intimidated to sheer, mind-boggling terror.

- ▶ **Effect:** You may not move closer to the subject of your fear, nor voluntarily take an action that directly affects the subject of your fear, excepting purely defensive reactions.
- ▶ **Removal:** Lasts until the Focus action is taken (see page 126).
- ▶ **Subject:** Always has a particular subject of which you are afraid.

FIXATION

There is something on which you are fixated; you find it difficult to focus on anything else. This might include obsession with a failure, a new infatuation or personal issues lingering in the back of your mind.

- ▶ **Effect:** Imposes  on all actions not involving the subject of your fixation.
- ▶ **Removal:** Lasts until the Focus action is taken or until a Fixation consequence with a different subject is gained (see page 126).
- ▶ **Subject:** Always has a particular subject with which you are fixated.

GRAVE WOUND

You are severely injured—perhaps you are badly burned, have a broken arm or are terribly bruised all over.

- **Effect:** Varies; see the Grave Wounds table on page 132.
- **Removal:** Lasts until healed (see page 138).
- **Subject:** The Grave Wounds table or GM may specify a subject describing the wound.
- **Value:** This consequence always has a value indicating the severity of the wound. This value counts towards your Wound Total (see page 130).

HIDDEN

You are concealed from sight, perhaps due to darkness, stealth, invisibility or similar circumstances.

- **Effect:** Grants + on attacks and Defense. Targets attacked when you are hidden cannot use defensive reactions.
- **Removal:** Lasts until you take a conspicuous action, such as shouting a warning or making an attack, or until the source of concealment is removed.

HINDERED

You are physically impeded by circumstances, such as protruding arrows, excessive encumbrance, tangling vines or an adhesive spray.

- **Effect:** Imposes - on all attacks, Dex- and Spd-based tests.
- **Removal:** Lasts until an action is successfully taken to remove the source of the hindrance. The nature of this will vary with the cause.

PRONE

Your body is not oriented in a way that gives it easy mobility. You might be sitting, lying down or off-balance.

- **Effect:** Your Move score is halved and you suffer - on melee attacks. Melee attacks and point-blank ranged attacks made against you benefit from +, while other ranged attacks suffer -.
- **Removal:** Lasts until an action is taken to stand up or regain your balance.

STRESSED

You are exceptionally stressed by your current situation, and while at times this may help you focus, you also run the risk of panicking or suffering a mental break.

- **Effect:** You may voluntarily take a **Stress +** on tests (see page 111).
- **Removal:** Lasts until you get a good night's rest, unaffected by a source of stress, or until you spend an Edge to remove your final Stressed consequence (see page 310).
- **Value:** This consequence always has a value indicating the severity of the stress.

STUNNED

You are stunned due to some effect—perhaps a sudden blow to the head, the concussive blast of an explosion or sudden shock and pain.

- **Effect:** You cannot take actions other than to end this consequence. This includes an inability to take reactions.
- **Removal:** Lasts until the Focus action is taken (see page 126).

WOUND

You are injured, having received bodily damage of some kind—perhaps you are shot, have experienced blunt trauma or are suffering from blood loss.

- **Effect:** The GM may optionally impose a **–** on any test that is directly hindered by the wound. If this consequence would cause your Wound Total to meet or exceed your Health, you instead gain a Grave Wound (see page 130).
- **Removal:** Lasts until healed (see page 138).
- **Subject:** The GM may optionally specify a subject, describing the wound.
- **Value:** This consequence always has a value indicating the severity of the wound. This value counts towards your Wound Total (see page 130).



FIRST EDITION CONVERSION

The first and second editions of *Shadows Over Sol* should be similar enough that an experienced GM ought to be able to pick up a first edition scenario and run it using the second edition, with only minor adjustments made on the fly. More mechanical first edition supplements, such as *Beyond Human*, however, may take more work to utilize with second edition.

Below are some guidelines for using first edition material with the new core rules.

Converting Characters

The core of converting any *Shadows Over Sol* scenario is converting its characters—including the team, its allies, contacts and foes.

PLAYER CHARACTERS

Player characters have enough mechanical nuance that it's best to simply rebuild them using the second edition character creation rules, keeping in mind the character's basic concept, subculture and geneline.

Experienced characters can port over their number of previously earned experiences directly, using them to purchase stats, skills and traits, as per the second edition rules.

NON-PLAYER CHARACTERS

As opposed to player characters, non-player characters can be easily converted by the GM as needed. Simply take the NPC's stats and use them to calculate the second edition scores. Skills can be used as is, keeping in mind the first and second edition equivalents (see Skills below). Gear can be looked up in the second edition Gear chapter when first used.

MONSTROSITIES

Converting a monstrosity works exactly like converting any other non-player character, except that most monstrosities have one or more creature traits that need to be converted to second edition as well.

To handle these, the GM should begin by looking through the list of standard second edition creature traits beginning on page 288. Most traits possessed by first edition monstrosities can be represented by one or more of the traits in the list. However, if no trait is a good fit, the GM is free to come up with her own, keeping in mind the mechanical differences between the editions.

Skills

The second edition of *Shadows Over Sol* reduced the skill list from 25 to 20, but also added the concept of specialized skills to account for niche fields of study. Most first edition skills have a direct analog in the new edition, but some were split or combined, as shown in the table below.

First Edition	Second Edition
Athletics	Athletics
Awareness	Awareness
Bio-Sci	Academics (Biology)
Bureaucrat	Socializing, Streetwise
Comp-Ops	Academics (Computers)
Conspiracy	Streetwise
Crafts	Expression, Trade*
Deception	Deception
Empathy	Empathy
Engineer	Academics (Engineering)
Guns	Projectiles
Investigate	Investigation
Lib-Arts	Academics*
Mechanic	Trade (Mechanic)
Medic	Medicine
Melee	Melee
Naturalist	Animals, Survival
Ordnance	Academics (Demolitions), Trade (Soldier)
Persuade	Persuasion
Phy-Sci	Academics*
Program	Academics (Computers)
Socialize	Socializing
Stealth	Stealth
Thievery	Thievery
Vehicles	Vehicles*

Traits

Player characters in first edition did not explicitly have traits, but did have some mechanical qualities that in second edition are now grouped together under the banner of traits. Languages, subcultural memberships and contacts are all now considered traits and may be purchased with experiences.

Scores

Most scores in both editions of *Shadows Over Sol* derive entirely from a character's stats. The best thing to do when converting from the first edition is to take those stats and use them to calculate the second edition scores.

The exception to this rule is first edition Damage Reduction (DR), which converts to second edition Armor. For literal armor, simply look up the second edition equivalent from the gear list and use its indicated value. For other sources of armor, such as an item's hardness or creature's tough hide, use the listed value if it's five or less. For DR greater than five, multiply by 0.8 and use the total as the second edition Armor score.

Lifestyle

The first edition of *Shadows Over Sol* used a numerical Lifestyle rating to handle a character's intangible financial assets. The second edition largely keeps the same scale, but instead of employing numbers, it gives each rating a short descriptor. See the table below.

First Edition	Second Edition
Lifestyle 0, 1 or 2	Broke
Lifestyle 3	Poor
Lifestyle 4	Struggling
Lifestyle 5	Average
Lifestyle 6	Comfortable
Lifestyle 7	Wealthy
Lifestyle 8	Very Wealthy
Lifestyle 9	Filthy Rich
Lifestyle 10 or more	Obscenely Rich

Wealth

When converting first edition Cost or Income ratings to second edition, when possible, it is best to use either the new listed price of gear in the book or the new guidelines for mission rewards (see page 252). If neither of these are available or appropriate to employ, however, an estimated conversion of Cost ratings to Unitech microcredits can be found in the table below.

First Edition	Second Edition
Cost 1	7¤
Cost 2	15¤
Cost 3	31¤
Cost 4	62¤
Cost 5	125¤
Cost 6	250¤
Cost 7	500¤
Cost 8	1,000¤
Cost 9	2,000¤
Cost 10	4,000¤
Cost 11	8,000¤
Cost 12	16,000¤
Cost 13	32,000¤
Cost 14	64,000¤
Cost 15	128,000¤

Consequences

Between the first and second editions, consequences changed from always having four fixed ranks, to being assigned a value. For most consequences, you can think of each rank as being a value, so: Light is 1, Moderate is 2, Severe is 3 and Critical is 4.

Wounds and Fatigue, however, ought to be adjusted upward to account for the value of the second edition's Health score, in general, being higher than the first edition's Wound threshold. For wounds and fatigue, multiply these values by two, so: Light is 2, Moderate is 4, Severe is 6 and Critical is 8.

Most first edition consequences have a direct analog in second edition, as shown in the table below.

First Edition	Second Edition
Bleeding	Bleeding
Bolstered	Bolstered
Concealment	See combat circumstances, page 117
Cover	See combat circumstances, page 118
Dazed	Dazed
Desire	Desire
Encumbered	Hindered
Fatigue	Fatigue
Fear	Fear
Fixated	Fixation
Lingering Injury	Grave Wound
Spin	Prone
Stun	Stunned
Wound	Wound

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