SPACEMADNESS

An OSR game of Swords, Sorcery, & Starships

Table of Contents

The easiest way to navigate this alpha document is to search for Book 1, Book 2, etc.

Book 1: Introduction

The Setting

The galaxy is a vast and mostly unexplored place. The dominion of humans covers hundreds of worlds in a shallow wedge reaching towards the center of the galaxy. Each one strives for its own niche in the galactic ecology, whether independent or bound up in one of the Empires. Alien menaces, otherworldly horrors, and simple internal strife are everywhere.

***

Humanity ascended into new heights of power when a certain set of technologies were combined: Cybernetic amplification systems, quantum neurology, faster-than-light starships,

speed cloning, and ansible communications. These things in combination allowed the creation of the Immortals.

An Immortal is a cloned human with Cybernetic Implant (CI) jack in the back of their skull and a lace of superconducting neural assistance hardware woven through their brain. Their CI allows them to control a starship as quickly and precisely as if it were their own body. And, in the event of its destruction, to transfer their consciousness to a waiting clone. Ansible hardware allows the instantaneous and absolutely secure transmission of information to anywhere in the galaxy, so long as it is tuned to an ansible capable of receiving it.

The use of Immortal starship pilots gave humanity a powerful edge in space warfare. Their ability to download skills and learn them at a vastly increased speed, plus to deploy them without any of the inefficiency or imprecision of normal starship controls, made an experienced Immortal the equal of dozens of mortal crew. Humanity may have had smaller fleets of ships than their rivals, but they could field thousands of ace pilots without ever risking the loss of their skills and experience. A slain Immortal could be fighting again within a week, so long as there was a ship ready for her.

As time went on, they grew even beyond that. The whole wealth of space and the entire field of human achievement was open to them. By transferring to younger clones on a regular basis, Immortals did not age. Over the decades, they could use their ability to amass vast skill to become masters of every field of human endeavor. Unstoppable generals, brilliant scientists and inventors, experts on every kind of intrigue, captains of industry, lords of finance, and a match for a score of soldiers in personal combat, all of these things rolled into one. There was no stopping them. The greatest of the Immortals, the most ambitious, could not be prevented from taking over whole clusters of star systems, and declaring themselves God-Emperors. As many as a dozen have ascended to heights of power unimaginable to a mundane human. They lurk in their palace-complexes deep within planetary cores, with post-singularity minds and hangars full of nanofabrication equipment, plotting unthinkable plots and pursuing incomprehensible goals. The God-Emperors move entire civilizations about like pieces on a game board.

***

Your campaign begins twenty-four hours after an ansible signal from a lone deep space exploration frigate began transmitting to every major newsfeed in human space. Alyssa Marceaux, Immortal pilot of the *Corbeau,* had found something unprecedented.

A Dyson sphere, something far beyond the ability of any known civilization to construct, hanging like a black jewel in the infinite reach of space. The sphere was approximately 1 AU in radius and spun to have an apparent internal gravity of 1.05g. There was a second inner "sphere," a complex of gaps and solar collecting shades that produced a day-night cycle on the inner surface. Megastructure cables connected the shades to larger gaps at the north and south poles of the sphere, and transmitted power to whatever technology kept the whole thing running.

The base material of the sphere's outer shell was impervious to any attempt to analyze it or scrape off a sample, so Captain Marceaux gave up on it quickly. A dotting of several thousand "vanes" penetrated from the outside of the sphere to the interior. Each one was a tunnel around a hundred kilometers across the interior and close to a thousand high. That was enough to keep the atmosphere settled around the habitable areas, rather than pouring out into space. Confident in her Immortality so long as she was inside her spaceship, Marceaux emerged from the inner portal of the vane to find an earthlike habitat that covered the entire inner surface of the sphere. Medieval civilizations of human (and inhuman…) peoples dotted a landscape that covered *one hundred and seventy nine million times* the surface area of old lost Terra. There was more earthlike habitable area than the entirety of humanity's sphere of influence; maybe more than would be found in the entire galaxy combined. (There are five thousand vanes, not counting the larger gaps at the poles, evenly distributed about the surface of the sphere. Each vane therefore serves an area equivalent to about thirty-five thousand earths.)

She seeded micro-probes over the landscape and continued surveying. Every hour, a new update of photographs and scans came in. The locals had strange powers unexplainable by science. There was genetic diversity here beyond anything imaginable. There were nonhuman sapient species found nowhere else in the galaxy so far. There was untapped wealth here beyond measure, both in living space, resources, and information. Marceaux refused to sell the coordinates to any private party or even a government. A crowdfunded request met her ransom of one *million* credits in a matter of only hours, deposited into her personal secure credit accounts. She gave the coordinates, officially registered the megastructure with the name Nonpareil, said goodbye, and disappeared from the information webs. It has been four hours since transmissions ceased, and it seems that every freebooter, treasure hunter, and ambitious Immortal in the entirety of human civilization is strapped and setting course for those coordinates.

This is where your campaign begins. The very ending of Day 1, 24 hours after the revelation of Nonpareil's existence. The Servitors of the God-Emperors have already begun posting bounties

across the information webs: Fortunes beyond imagining await the Immortal who can bring back the secrets of Nonpareil.

Game Concepts

This is an OSR game. You will be doing most of the same things you are familiar with doing from other OSR and classic games, but sometimes on a larger scale. This game uses concepts like armor class, saving throws, hit points, attributes with ratings from 3-18, and so forth. Armor class is flipped to an ascending model and we use to-hit bonuses instead of THAC0 or to-hit charts, but that should be easy to adjust to! There are also some entirely new ideas.

Attacks, saving throws, and some other tests are made by rolling a D20. Skill checks are rolled on 3d6 (excepting thief skills which preserve the classic method.) The difficulty of a roll is the number you must roll equal to or higher than in order to succeed. Rolls may involve adding your attack bonus, an ability score modifier, your ranks in a skill, or other bonuses or penalties. For example, a Wisdom check would mean that you would roll 1d20 and add your wisdom modifier to the result.

Your character will inhabit at least two different bodies in the course of the game. The first is a normal flesh-and-blood body, with the same attributes and capabilities as a normal OSR character. However, they can also plug themselves into their own personal starship, so that they can engage in space combat in much the same way they might get in a swordfight in the dungeon. During these times, the starship *is* your character's body, and you will use the physical attributes of the starship instead of those from his clone. Unlike other sci-fi games you may be familiar with, the party will not have to pool their resources to obtain a vessel. Every PC is a competent starship pilot, and they will all begin with their own vessel for exploration and combat.

In the course of this game your character will, if you are successful, accumulate treasure, experience points, skills, and levels. While magic is not available to PCs at the beginning of the game, they can eventually learn it if they prosper, and choose to do so.

In general, technology more advanced than the medieval is not available on Nonpareil. Magic is not known anywhere *other than* Nonpareil. The most obvious course of action is for the PCs to take whatever gear they feel will advantage them, and go there in search of enchanted treasures, lore, and anything else of value they can find.

Book 2: Character Creation

Determine Attributes

Attributes are perhaps even faster to determine than they are in other OSR games. You will select them rather than rolling dice. We are using the standard OSR attributes, using the classic attribute scales if for any reason you should happen to want to generate characters randomly. All Player Characters are members of the same class, Immortals. NPCs can have classes from whatever OSR-compatible game you like, appropriately converted, and we won't belabor the point too much. If you're an OSR regular, you're used to house-ruling things to make them work the way you want.

Unnamed NPCs should not have good stats; assume 9s across. Named NPCs may or may not have especially good or bad stats. The normal method of generation for non-Immortal NPCs that you care enough to have stats for is 3d6 down the line in order.

The way that you determine a new PC's attributes is by distributing three points of positive modifier among their physical ability scores, and another three points among their mental ability scores. They will have the minimum attribute necessary to have that modifier. The physical ability scores are Strength, Dexterity, and Constitution. The mental ability scores are Intelligence, Wisdom, and Charisma. No one who is not mentally gifted is ever selected for the process of becoming Immortal. On the other hand, even someone who was born as an invalid will receive a clone that is in very good if not Olympian physical condition. The modifiers from your attribute scores do the following:

Strength adds to your character's attack and damage rolls with Melee and Unarmed attacks.

Dexterity modifies your Armor Class, and also adds to attack (but not damage) rolls for Ranged attacks.

Constitution modifies your Base Hit Points.

Intelligence applies to more skills than any other attribute.

Wisdom applies to saving throws versus Spells, and affects your attempts to lock targets in starshp combat.

Charisma can modify reaction rolls, and affects your ability to manage henchmen or hirelings.

Immortals cannot ever begin play with negative modifiers, or attribute scores below 9. The process of cloning, death, and resurrection allows plenty of opportunities for the correction of major defects.

The following is the scale of attributes and their bonuses:

Attribute Score	Modifier
3	-3
4-5	-2
6-8	-1
9-12	0
13-15	+1
16-17	+2
18	+3

Example: *Captain Alyssa Marceaux is a new Immortal PC. Her player wants her to be resilient enough to survive out past the edges of explored space, and quick with a laser. However, her physical strength isn't as important. Alyssa is assigned +2 to Dexterity and +1 to Constitution. That gives her physical attribute scores of Strength 9, Dexterity 16, and Constitution 13.*

Her player wants her to be all-around mentally talented, without any great specialties but also without any areas where she isn't superior to the average human. She is assigned +1 to every mental attribute, giving her scores of 13 in Intelligence, Wisdom, and Charisma.

Class

Fortunately, this choice is much easier. All PCs are members of the same class: Immortals. Immortals may not appear to be anything special when you look at their stats. They have no magic, no thief abilities, and look a bit like an underpowered fighter. However, Immortals have a number of advantages. They have starships, they can survive death in space battles, and they have access to equipment superior to any non-magical equipment on Nonpareil.

Level	HD	XP Required	Attack Bonus	SP per week	Saving Throws
1	1	0	+1	2	15
2	2	2,000	+2	4	14
3	3	4,000	+2	6	13
4	4	8,000	+3	8	12
5	5	16,000	+3	10	12

6	6	32,000	+4	11	11
7	7	64,000	+4	12	11
8	8	128,000	+5	13	10
9	9	250,000	+5	14	10
10	10	400,000	+6	15	9
11	10+2	500,000	+6	16	9
12	10+4	600,000	+7	17	8

Level, hit dice, and experience points are all concepts you should be familiar with. Attack Bonus is used to resolve attack rolls. Immortals have the same base value for saving throws regardless of type, although they can receive modifiers to individual types. For example, all Immortals receive +2 to all saving throws versus poisons or diseases. SP Per Week tells how many skill points a given Immortal gains; this figure is the same regardless of whether they are out adventuring or laying on the couch eating cheese puffs from the fabricator. Skill Points will be explained in a later chapter.

HD & Levels

Immortals use D8s for Hit Dice. They begin at first level with the maximum die result of 8HP. At each new level, all of their HD are rerolled. The new result is taken if it is better. Otherwise, the character gains 1 HP. Keep a record of the character's Base HP *without* constitution modifiers. Current HP will be modified based on the Constitution score of the Clone or Starship that the character is currently occupying, and may not always be the same.

Example: *Captain Marceaux has a constitution of 13, with a +1 modifier. At first level, her base HP is 8. Her clone's Constitution score of 13 applies when she is out walking around on the surface of Nonpareil, so if she gets into a fistfight with a mountebank she will have 9HP. Her ship the Corbeau, however, has a Constitution of 9. In space combat, she has only 8HP.*

When she reaches second level, she rolls 2d8 for her new HP total. If she rolled a 6 and a 7, for example, her new Base HP would be 13. Her clone's HP would be 15, and her starship would still have only the 13. If she rolled a 1 and a 2, however, her Base HP would still increase to 9, because one always gains at least 1 HP on gaining a new level. In that case, her clone would have 11 HP and the Corbeau would have only 9.

After level 10, characters still reroll their entire pool of hit dice each level. However, instead of adding more dice to the roll, after tenth level they add two hit points per additional level to the final result. They still gain a minimum of 1 HP at each level.

Proficiencies

Immortals are considered proficient in all weapons and armor. Additional bonuses beyond mere proficiency can be obtained by learning the appropriate Skills.

Finishing Touches

Your character should have a name, a description, and a brief history of 150 words or less. You will receive 100GC to purchase starting equipment with. See the equipment chapter for details. You will also receive two basic frigates with one Role apiece. See the section on starships for details. Further, you will receive a number of free skills and 30SP to spend immediately. See the section on skills for details.

Book 3: Equipment & Encumbrance

Coins & Money

A starting Immortal receives 100 Galactic Credits (GC) to purchase necessities and get their start as an adventurer. GC is universally accepted throughout spacefaring culture, and may or may not be accepted on the surfaces of planets, alien civilizations, or other total backwaters. They are completely unknown and worthless on Nonpareil, which is where you probably want to go.

A Galactic Credit is a very *large* piece of currency, somewhat awkward for casual use. They can be divided up into 10 Space Credits (SC), and each Space Credit can in turn be divided up into 10 Cosmic Credits (CC.) This is somewhat irrelevant when dealing with electronic transfers (which are almost universal for above-board transactions, since ships, stations, space-ports, and anywhere else that matters have access to secure ansible communications), but if you want to carry around actual physical credit chips, you may want to stick to the larger denominations. Rarely seen are the Prime Credits (PC) which are worth 10 GC. A physical credit chip is an extraordinarily durable item about the size and weight of a US quarter, semi-transparent, with holographic inlays that show up when it is held up to the light. They cannot be effectively counterfeited.

Planetary currencies vary wildly and are largely up to the referee. You should assume that a single GC is worth the equivalent of $1000 US Dollars in planetary currency, or some similar measure of buying power. The amount of attention paid to these issues should vary based on the players' and referee's interest in them. In general, because PCs are throwing around so much money, the referee should gloss over expenditures on normal consumer goods or hotel stays or similar. It can either be assumed to be part of the character's lifestyle cost, or else the referee can declare that the PCs spend one or two GC and call it a day.

Currency on Nonpareil

The natives of Nonpareil use solid chunks of more or less precious metals for their currency. The PCs will just have to hunt some down when they get there, probably. Use the rules and costs from your favorite OSR clone or original version of the first roleplaying game. If they bring these goods back to galactic civilization, you can assume they sell at a rate of 1GC per 100GP of value.

Equipment

Equipment is stuff that the character carries around outside of their starship. The goal in the design of this game is to place tight limits on how much PCs can carry, but to make each item mechanically relevant. See the Encumbrance rules at the end of this chapter.

The common element here is that the items are *mechanically relevant.* The weapon and armor are used to fight, the computer is used to hack or program. A character is also allowed to have a small number, maybe up to six things, of very small items that are basically only there for flavor or are so universal as to not require an inventory slot (such as a commlink, which everyone should carry at all times.) They can also carry a reasonable amount (maybe up to 20 chips) of pocket money. Large amounts of money, gems, jewelry, whatever, will require a Utility slot. More than one spare magazine for a weapon will require a utility slot. Assume that up to five extra magazines can be fit into a utility slot.

Assume that weapons and armor available on Nonpareil (or other primitive human planets) is as per your favorite OSR game. Primitive Armor grants Armor Class only, and does not give Armor Points to the wearer. Also, please note that the damage for normal medieval weapons may be somewhat lower than you are used to.

Armor Options:

Slimline Armor Vest: 1GC, 1 Encumbrance, AC 13. Not detectable without a search.

Ablative Vest: 1GC, 1 Encumbrance, 3 armor. Suit loses 1 Armor point permanently each time it absorbs damage.

Skintight Armored Bodysuit: 3GC, 2 Encumbrance, AC 15, 1 Armor. Not detectable without a search, so long as the character is wearing pants and a long-sleeve shirt, or the equivalent. Can get uncomfortable in hot or humid environments.

Armored Longcoat: 3GC, 2 Encumbrance, AC 15, 1 Armor. Looks awesome, temperature-controlled to be comfortable in almost any weather conditions, water-resistant, with spacious pockets. The character suffers no discomfort in temperatures from 0 to 44 degree Celsius, and it is pretty helpful even outside that range.

Light Combat Armor: 5GC, 3 Encumbrance. AC 18, 2 Armor. Used by elite soldiers. Includes a helmet with breathing apparatus. It's not especially suitable for vacuum, but it will protect against biological and chemical weapons, and reduces the effects of radiation by half. The internal air supply is only good for one-half hour, so it is wise to clear the area. Wearing this reduces the wearer's Speed by 1.

Heavy Combat Armor: 10GC, 3 Encumbrance. AC 18, 3 Armor. Used by elite soldiers in heavy assault situations. As the Light Combat Armor above, but internal air lasts for one hour and it reduces the effects of radiation by 75%. Suitable for vacuum operations, it includes minor maneuver jets (useless in planetary gravity) and magnetic boots. This armor is equipped with a full suite of battlefield electronics, rangefinders, etc. Someone with access to the command software could set waypoints and other tactical information onto the helmet's HUD. It will negate the effects of flashbangs or similar nonlethal countermeasures. Wearing this armor will reduce the wearer's Speed by 2.

Personal Pulse Shield: 1GC, 1 Encumbrance, 5 shield points. Any damaging hit will disable it and polarize it, with a number of polarization tokens equal to how much damage the attack actually dealt. It removes one polarization token per round, and begins charging at a rate of one per round once they are all gone.

Force Shield Amulet: 3GC, 2 encumbrance, 5 shield points, recharge 2. Normal Shield rules apply.

Deflector Shield: 5GC, 1 encumbrance. +4 to AC against ranged attacks. Unarmed and melee attacks are unaffected.

Primitive Armor: Primitive armor and weapons are as per the rules of your favorite OSR game. Assume that light armor (leather or padded) is one encumbrance, a primitive shield is one encumbrance, medium armors are two encumbrance, and half plate, heavy plate, field plate, etc. are all three encumbrance. Primitive armor only grants Armor Class, not Armor points. A primitive shield can be used to stop a single melee attack that originates in the character's front arc from hitting. The defender may make this choice at any time, so long as they are conscious and able to move. This splinters the shield and destroys it.

Weapon Options

Melee

Unarmed: 0 Encumbrance, 1d2 damage. On the plus side, you've always got one. You do not need to Draw an unarmed attack, but you must have one hand free to use one. You can choose to drop an object from your hands as part of an Unarmed Attack action, but you'll need to recover it later.

Conventional Melee Weapon: 1 Encumbrance, 1d6 damage. This is any kind of sword or mace or whatever that you can buy on a medieval planet and wield with one hand.

Concealable Melee Weapon: 1 Encumbrance, 1d4 damage. This is a dagger, cosh, or garrote that you can hide easily on your person.

Two-Handed Melee Weapon: 2 Encumbrance, 1d8 damage. A two-handed sword, longspear, battle-axe, etc.

Power Glove: 2GC, 1 Encumbrance, +1d4 damage. This looks like a normal leather glove, but it's capable of delivering a nasty electric shock. If someone willingly shakes your hand or lets you pat them on the back, you can damage them automatically with a surprise attack. If you engage in unarmed combat, you can deal an extra 1d3 damage on any successful hit. This weapon uses Unarmed rather than Melee skills. The character's strength bonus does not inherently apply to attacks using the Power Glove; however it will apply to unarmed attacks to which the Power Glove is adding damage.

Molecular Sword: 2GC, 1 Encumbrance, 1d8 damage. This is a personal weapon made of interstellar-age materials. It's harder than diamond, has better tensile strength than the best modern metal alloys, and is sharper than a razor. If used to attack someone wearing medieval armor or no armor, and they do not have a Shield (an energy shield, not a piece of wood used to block attacks), it scores a critical on 19 or 20. This means that it will literally carve pieces off of a medieval knight's plate mail.

Shock Mace: 2GC, 1 Encumbrance, 1d8 damage. This is a personal weapon that uses kinetic accumulators to power an electrical capacitor. On a critical hit, the target must save against Paralyzation or lose their next-highest Action Card. If they have already acted as many times in a round as they can act, they lose their highest Action Card next round.

Smart Spear: 2GC, 1 Encumbrance, 1d8 damage. This looks like a walking stick of three to four feet long. At the user's command, it extends into a six-foot-long spear (this is the equivalent of "drawing" the weapon.) It can be used to attack an enemy that is two hexes away instead of adjacent, so long as they are in the clone's front arc.

Handguns

Projectile Pistol: 1GC, 1 Encumbrance, 1d8 damage. Ammo 12, Range 5. This weapon is loud, people are going to notice when you start shooting.

Laser pistol: 3GC, 1 Encumbrance, 1d6 damage. Ammo 20, Range 7. The pistol and its "magazines" can be recharged on any starship, given an hour or so.

Rail Pistol: 5GC, 1 Encumbrance, 1d10 damage. Ammo 6, Range 9. This weapon depends on an internal energy reserve that slowly recharges from the magazine, and cannot be fired more than once per round.

Longarms

Assault Rifle: 3GC, 2 Encumbrance, 1d10 damage. Ammo 30, Range 20. As above for the handgun, assault rifles make quite a bit of noise. +2 to hit against targets with primitive or natural armor.

Laser Rifle: 5GC, 2 Encumbrance, 1d8 damage. Ammo 40, Range 30. Ignores deflector shields. If a shield is polarized by a hit from a laser rifle, then add two more polarization tokens than usual.

Gauss Rifle: 10GC, 2 Encumbrance, 2d6 damage. Ammo 15, Range 40. If a natural 19 would hit the target normally, then this weapon critical hits on a 19 or 20.

Neutron Blaster: 10GC, 2 Encumbrance, 2d4 damage. Ammo 10, Range 15. Ignores primitive or natural armor. This weapon targets a single hex; if there are other creatures in any adjacent hex, apply the same to-hit roll against their AC. If hit, they take half the damage (round down) that the original target takes.

Magazines

Ammunition: An extra magazine of ammunition for any of the above weapons costs 5 Space Credits.

Utility Slot Items

Portable Computer: 1GC, 1 Encumbrance. Good for hacking, programming, keeping notes, recording sound and taking selfies. Many Immortals learn to do this stuff using only the hardware in their head. The power cells on these last for days.

Survival kit: 3GC, 1 Encumbrance. A few pounds of miniaturized, high-tech survival supplies. Nanotech sleeping bag, self-filtering water bottle, etc. This should let you go camping for a few days in easy terrain without dying.

Food Pak: 1GC, 1 Encumbrance. 1 week worth of food, packed into convenient forms and preserved. These are like fancy MREs, and include the same kinds of extra items such as matches, toilet paper, resilient packaging, etc.

Extensive Survival Kit: 5GC, 3 Encumbrance. Microgenerator, high-tech outdoor clothes, wrist-mounted cartographic technology, self-inflating tent, the works. It's not as good as staying home, but it's pretty good. Includes gear for two.

Briefcase: 2GC, 1 Encumbrance. Genuine leather of some exotic animal. Full of documents and so forth. Gives +2 to any business or legal type skill check.

Fancy Clothes: 3GC, 1 Encumbrance. Normal clothes are mechanically ignored, but if you want to spend the money and attention that an encumbrance slot in part represents, you can wear really impressive duds. These will give +2 to any one social ability, chosen at the time the clothes are designed and purchased, select from Charm, Intimidate, Seduce, Persuade, or Deceive. Clothes are usually culture-dependent, you may need to buy different clothes depending on the location. There's nothing keeping you from having a closet full of them, obviously, except your wallet and the size of your closet. Engaging in combat or excessive wear of your fancy clothes will ruin them if the referee notices.

Shades: 1GC, 1 Encumbrance. These sunglasses mark you as someone who is all out of fucks to give. +2 to your saving throws against any mind-affecting or mind-reading power, or any type of gaze attack. Aviators, mirror shades, your choice.

Expensive Watch: 5GC, 1 Encumbrance. This watch is really fucking expensive. If you wear it along with Fancy Clothes of some kind, people will assume you have lots of money. That's +2 to any business dealings where your credibility or solvency is in question. If you are not wearing it along with Fancy Clothes or their equivalent, then people will probably assume that you are a

bum who stole this fine timepiece. It may also have *at least* all of the functions that could be crammed into any modern-day wristwatch.

Grav Boots: 5GC, 1 Encumbrance. They won't actually let you fly, but they will negate falling damage so long as you're conscious and able to move. Can be used for drops from up to a few kilometers up. Wear something warm.

Sensor Ring: 5GC, 1 Encumbrance. This ring looks like an item of jewelry, but it has a variety of short-range sensors built into it. It's good for detecting poison, radiation, reading fingerprints, etc. This combines well with the Touch Interface cybernetic implant, since its more advanced functions are far more helpful with a computer to assist in processing the data. It will automatically warn you if you're about to touch anything poisonous, though. Use the hand with the ring to pick up your food and drink, and you can't be gotten rid of that way.

Light Jewelry: 1GC, 1 Encumbrance. This looks like a normal jeweled ring, bracelet, torc, tiara, etc. It actually has an internal power source and is able to light up a wide area. It has multiple settings, the strongest one radiates about a thousand candlepower. The batteries last for days at even the highest setting.

Portable Music Player: 1GC, 1 Encumbrance. The size of a lunchbox, but has nice fold-out speakers. This can be tuned to mess with bards, sirenes, etc.

Hoverboard: 2GC, 1 Encumbrance. Just like the movies. Gives the user +2 max speed (or +1 Hex per day overland), so long as they have at least the Athletics IV needed to operate it safely. Doesn't work over water, and an athletics specialty in Flight is highly advisable if you intend to use it in combat.

Security Tools: 2GC, 1 Encumbrance. Used to pick locks, disarm traps, short circuits, and hack keypads. +10% to any skill checks to do the above. Supersedes the primitive "thieves tools" used on medieval planets.

Ninja Suit: 2GC, 1 Encumbrance. Urban camo, or other kinds of camo chosen at the time of purchase. +10% to move silently in any environment, +10% to hide in the appropriate environment.

Vacuum Suit: 3GC, 1 Encumbrance. Allows the wearer to survive extremes of pressure, temperature, and radiation. It won't let you stand in a sun's corona, but it will let you survive most other things. Good for 24 hours before recharging the power supply. It can't recycle

organic waste into food, but it will turn your sweat, et cetera, into drinkable water, and your exhalations back into breathable air. Not compatible with armor.

Commlink: 1GC, 0 Encumbrance. This has all the functions of a modern-day smartphone, plus more. It can connect to planetary data webs, and communicate peer-to-peer with other commlinks or a starship's communication system from a distance of 20 kilometers. They use only normal electromagnetic signals, and cannot send or receive subspace or ansible communications directly. However, the data webs of most planets contain ansible receivers, such that you can usually send text messages between worlds (so long as you know what world the recipient is on…) The fees to send voice, video, or computer files is usually rather high and the queue is long, and a PC is better off using their own ansible on their ship. PCs are assumed to have each other's Commlink IDs, which are equivalent to a phone number but much, much longer and more unique.

Satchel: 1GC, 0 Encumbrance. This is used to carry things securely. The satchel is waterproof, impact resistant, lockable to prevent easy pickpocketing, and resists civilian scanning technology. It is often used to carry treasure. Up to 1,000 coins worth of treasure can be carried in a Satchel, although carrying more than 20 (the "pocket money" allowance) will take up 1 Encumbrance. Gems and Jewels count as 1 coin, coins or credit chips count as 1 coin, items of jewelry generally count as 10 coins unless the GM states otherwise.

Bug Pak: 10GC, 1 Encumbrance. A collection of a few dozen camouflaged, self-adhesive spy devices. Motion detectors, video cameras, listening devices, etc. They are about half a centimeter across, and can communicate with any portable computer attached to their control unit. The control unit is a fist-sized package of electronics which includes sockets for storing, recharging, and downloading or receiving signals from the bugs. The bugs can be set to either transmit or record. In the former case, the control unit can receive the signals from within 5 kilometers, unless they are in an area of heavy interference or substantial shielding. If they record, the bugs must be returned to the control unit to download the recorded data. The bugs have enough power and storage to record for one month before they require retrieval and/or recharging. A bug that loses all its charge does not lose any data it has already recorded. The motion sensing devices can be used to set an alarm on the control unit or its attached computer, or a properly programmed commlink so long as it is within 5 kilometers of the control unit.

Skill Package: Cost varies, 1 Encumbrance. An object the rough size and shape of a soda can, with a data spike at one end that can be plugged into a Cybernetic Interface. This contains one

single Skill that can be downloaded into an Immortal's brain. The physical package's cost is trivial, and is included with purchase of the skill.

Cryogenic Cylinder: 5GC, 1 Encumbrance. A metal cylinder large enough to stuff in a humanoid head. If someone's head can be severed and placed in the cylinder within five minutes of their death, they can be resurrected later using highly advanced medical technology. The cylinder does not activate until the head is placed within it; once it starts running the internal power supply is good for three months. If attached to external power, it can work indefinitely. A character whose head is still preserved somewhere cannot be the subject of resurrection magic.

Encumbrance

A new Immortal has 3 Encumbrance slots. One for a weapon, one for a defensive item, and one for a utility item. They gain a number of additional slots equal to their Strength modifier, which can be spent on anything. This is very limited, and is intended to get play started quickly and to help differentiate characters. PCs must cooperate to cover the necessary bases. It also represents the fact that at this point, Immortals are not used to carrying around large amounts of gear like other OSR adventurers. Certain Skills will allow PCs to carry more gear.

NPCs with classes from other OSR games should be given Encumbrance capacities more in-line with the games they come from. Immortals will likely be shocked by seeing how laden down the competition is.

If a character carries items that exceed her capacity for encumbrance slots, then her Speed is reduced by two for each additional point of encumbrance.

Example: *Alyssa Marceaux is a new immortal ready to start adventuring. Her Dexterity modifier is better than her Strength, so she chooses a ranged weapon. She thinks she'll need the superior ammunition capacity of the Laser Pistol where she's going, so she purchases one of those, and one extra magazine, even though she's worried about the low damage. Those two take up her weapon slot, and cost 3GC + 5SC, leaving her with 96.5GC. She wishes she had the skills or the strength score to take additional defensive items, but she is forced to accept the lesser ones that cost only one slot. She purchases an Ablative vest and an Armored vest. She thinks she'll keep the latter on her ship for backup, and use the former to protect herself from the first hit or two of a fight. Her Armor Class is 12 with the former, or 14 with the later, due to her high Dexterity modifier. This costs her 2GC, leaving her with 94.5.*

Last are her utility slot items. She purchases a Commlink for one GC, because it takes up no encumbrance. She also purchases a Satchel for one GC and zero encumbrance, and stashes a Survival Kit inside it. She thinks that once she finds any treasure, she'll discard the survival kit, stuff the satchel full of loot, and head back to her vessel. This costs her a total of five GC, leaving her with 89.5 Galactic Credits, and it takes up her single utility slot. She feels underprepared and should probably gather some companions to cover her weaknesses, like low damage.

Cybernetic Equipment

Cybernetics can be installed surgically, but that involves long hospital stays, and trusting people to cut on you while you're unconscious and vulnerable to death. Therefore, the normal method for Immortals is to grow their new clone around the cybernetic implants they want to have available the next time they die, or transfer into the new body.

A character cannot have cybernetics installed into their clones unless they have the Cybernetic Tolerance skill. The following are sample cybernetics. Cybernetics are usually not apparent to the casual observer, but can be detected by normal security scans.

Melee Weapon Implants: You have some kind of implant that extends to function as a melee weapon of your choice. Cost is as per the melee weapon you choose, plus 15GC. Popular models include a trio of claws that extend from the back of your hands, and function as a molecular sword. Used with the Melee skill.

Iron Fists: Your unarmed damage is increased by two steps, and you are able to safely do things with your bare hands that would be otherwise inadvisable, such as touching biocontaminants (like some kinds of oozes…), picking up handfuls of broken glass or objects up to 1000 degrees centigrade, etc. 10GC.

Bone Lacing: Decrease the die type of falling damage by two steps. 15GC.

Reinforced Physiology: Gain one inherent point of Armor. This stacks with any armor you wear. 30GC.

Light Emitters: Some part of your anatomy can emit light up to 1000 candlepower. Choose the body part at the time your clone is constructed. 10GC.

Wireless Adaptation: Your Cybernetic Interface has wireless capabilities, allowing it to do all kinds of exciting things. If you have advanced skills in operating your cybernetic interface, this

will allow you to forgo the use of a commlink. This does not count as an item of cybernetics for Tolerance purposes, but it does still cost 10GC.

Touch Interface: You have pads on your fingers, calves, and/or other body parts which are able to transmit signals from your brain to computer devices that you can touch. This does not allow you to do anything you would not normally have the access to do, but it can let you forgo the use of keyboards or mice, pilot hoverboards with more sophistication, and (if you have the skills to do so) generate and store extremely secure passwords with your CI and provide them with a touch, so that they cannot be intercepted. 10GC.

Night Vision: Your eyes are modified to see in the dark, both with light amplification and with perception of other wavelengths. This is equivalent to the darkvision or infravision available to nonhuman characters in your OSR game of choice. By default, it has a range of 40 meters. 20GC.

Sonar: You have a sonar adaptation. This works with a 20 meter range on the surface, or 40 meters underwater. Closing your eyes and operating via sonar is a really excellent thing to do if you think there might be creatures with gaze attacks around. 30GC.

Gills: You are able to breathe normally underwater, whether fresh water or salt water. Your gill slits are sealable, and very difficult to spot when not in use. However, the use of gills is not compatible with the use of the more all-covering types of combat armor, as water must be able to flow freely over your torso. 15GC.

Underwater Adaptation: This does not include gills or sonar, but it does include nictating membranes over your eyes to protect them from underwater conditions. More importantly, it includes expandable webbing. If you dispose of any gloves and boots you are wearing, you can use your normal movement rate underwater. 20GC.

Stealth Installation: Your cybernetic implants cannot be detected by normal security scans. This doubles the cost of all your other cybernetics, and costs 20GC by itself.

Grav Implants: This counts as two items of cybernetics. You are immune to falling damage, and can jump triple the normal distance. 50GC.

Laser Implant: You have a built-in laser attack equivalent to a laser pistol. This includes a built-in self-regenerating power supply. While you cannot change or add magazines, the “magazine”

will automatically recharge every hour. Cybernetics aficionados debate the relative utility of installing this in the hand versus the inherent cool factor of having laser eyes. 30GC.

Anti-Venin: Whenever you save against poison, roll twice and take the better result. 20GC.

Immune System Regulator: Whenever you save against disease, roll twice and take the better result. 20GC.

Book 4: Starships

The piece of equipment most vital to this game is the Starship. In this introductory document, we will cover only the most basic starships: Frigates and Shuttles. The central thing to understand about Starships is that there is a difference between the vessels operated by Immortals and those operated by mundane crew. A mundane vessel has common areas, crew quarters, and other things necessary for its operation. They require crew ranging from a single pilot for a shuttle, up to a handful of professional naval crew for a combat frigate.

Immortal-modified vessels often have very little habitable space. They tend to have fewer Amenities, because they have no crew complement. An Immortal's ship is modified so that all functions are automated, controlled by their brain and its vast array of cybernetic augmentations. The total living space is less than ten square meters. In return for this, an Immortal pilot can get performance from their vessel beyond anything that a mundane crew can dream of. Every component works in perfect unison, guided by the Immortal like a master conductor guiding an orchestra.

The experience of operating a ship through a Cybernetic Interface would be too harrowing for a normal, unmodified human. A battery of psychological tests and extensive special training is required before an individual can undergo the process to become an Immortal. The simple fact is that the human brain is insufficient to operate every part of a starship simultaneously. So, the Immortal's ship is full of cybernetic computer hardware that runs multiple artificial "instances" of their conscious mind, or at least shards of it. It's like being in a funhouse mirror maze, except that every reflection or part of a reflection is an independent shard of your own mind. All are under central control and ramifying outward from the pilot, but each performing their own tasks. While jacked in, the character has direct control over several mainframes and

data clusters worth of computer power, and they can command it all as quickly as they can think – or even faster.

How to Build a Starship

Mechanically, this process is simple. Select a starship. If you like, then select a basic role. Add any necessary active modules, and write the ship's stats (modified by your character's skills!) on a piece of paper. To have this ship built at a shipyard, pay the cost of the vessel. A normal shipyard will take a period of one month to build your new ship. If your character is present at a shipyard and has certain advanced skills, they may be able to manage construction themselves much faster. All Immortal ships are custom-built, in order to allow the Immortal's skills to apply. You can't buy them "off the rack." For this reason, you should have a few stashed in hangars here or there, so that your next clone can pick them up if they are destroyed. A new Immortal PC begins with two Frigates, each with one Role.

Immortals cannot trade starships. Each Immortal has unique aspects to their psychology, style, and personalizations to their infomorphic profile. It requires several days of reprogramming to make a starship able to accept a new Immortal pilot, and the conversion will still result in the starship having a permanent -1 to one physical attribute chosen by the Referee.

Cost

First, add up all flat costs. Then apply every cost modifier. If a starship costs 100GC, and you give it a role that costs +100GC, and then apply two modules that have x2 cost modifiers, then the total is (100GC+100GC)x2x2= 800GC. If there were three modules with x2 cost modifiers it would be 1600GC, and if there were four it would be 3200GC. Heavily customized starships with additional integrated technology can become *extremely* expensive very quickly. That's the price you pay for superhuman performance.

Modules

Most starships will need to have a few modules, at least if you want to do anything interesting with them. Modules can be Active, Passive, or Inherent. Active modules are strictly limited, and require a weapon mount or utility mount. A given starship can only have a few active modules at most. A passive module means enhancements to the starships internal systems. Ships do not come with Passive modifiers automatically, and these will have a cost modifier. Inherent modules are those things that a starship must always have, such as a power core. The following are the types of Inherent modules that starships will usually possess.

1. **Amenities**

Amenities are features of the internal living space of a starship. Mundane Starships will usually have a few more than an equivalent Immortal-modified starship, but the precise numbers are up to the Referee. Immortal ships are less comfortable than mundane ones; they're full of automation hardware and the Immortal spends much of their waking time connected to the ship's systems. Amenities do not usually have their own extra cost; they are part of the cost of the starship.

2. Weapon Mounts

Weapons, and weapon mounts come in different sizes. Frigates have Small weapon mounts, which are the least powerful grade of starship weaponry. The weapon and mount size categories are: Small, Medium, Large, Capital, and Doomsday.

If a mount is used to install a weapon of the same size, the weapon may fire in one of six arcs. Front, Rear, Front Right Quarter, Front Left Quarter, Rear Right Quarter, or Rear Left Quarter (see illustrations.) If a mount is used to install a weapon of a smaller size than the mount, it will be fitted in a Turret and may fire in any arc. Also, two weapon mounts of a given size may be traded in for a Turret of the same size.

Additionally, a starship may use a weapon mount to fit a weapon of one size category *larger* in a Spinal Mount. This has a highly restricted arc and may only fire directly forward.

3. Utility Mounts

Utility mounts are used for active equipment such as probes, mining lasers, tractor beams, and other things that a starship uses to *do* things outside of combat.

4. Ansible Communications

An Ansible is a device which is used for instantaneous communication across any distance. The bandwidth available is not fantastic; a normal ansible can safely move about as much data as a modern-day broadband connection. If the pilot attempts to push more data through than that, it begins to risk waveform collapse, which will destroy the ansible irreparably. An ansible can always finish transmitting a single Quantum Information Packet, no matter how large, before being destroyed. For this reason, a ship's ansible is able to send an Immortal pilot's brain-state in the instants before it, and the ship, are blown into atoms.

An ansible cannot broadcast or send blind. It ignores normal space and cannot be jammed, intercepted, or interfered with in any way. However, you have to know the Identification Code of the ansible you are sending to. Generally, you are assumed to have available to you the ansible ID of your friends, allies, contacts, etc. Also, most ships broadcast their Ansible ID as

part of their transponder signal. An ansible cannot be forced to take so much data that it collapses; the pilot must choose to accept the packet.

5. Transponders & EM Communications, Basic Sensors

Ships are supposed to transmit a transponder signal via normal radio or some other part of the EM spectrum at all times. If they do not, navies and others are allowed to assume that they are pirates and respond accordingly. Ships have a full suite of communications and sensor gear across the EM spectrum.

6. Subspace Communications & Sensors

Subspace is an application of dimensional technologies, much like warp drives. A subspace communicator can broadcast omnidirectional signals that travel at 100 times the speed of light. These signals can be tracked, and cannot be hidden by using a tight-beam transmission like normal radio, laser, or other EM communications. They are difficult to jam, even with military hardware. However, they can only be picked up by subspace equipment, which is bulky and not man-portable. Civilizations that have technology only equivalent to real-world earth would have no way to detect them. A ship's Subspace broadcast can usually cover its own star system and any adjacent hexes. Subspace signals are not blocked by normal matter or energy, and thus travel normally through nebulae, stars, really anything but a Black Hole, specialized shielding, magic, etc.

Subspace sensors will allow a ship to detect any active vessels in its own or any adjacent system-scale hex. The signals are sufficiently faster than light that they cannot be avoided or outrun in normal circumstances.

All ships have an emergency subspace transponder. This is a box a bit smaller than a footlocker somewhere behind a bulkhead or under the floor. They are armored, colored bright orange, waterproof, float rather than sink, and are generally moderately indestructible. They have enough power for a year once activated. When activated, they send out an emergency beacon through subspace that will spread through their own Warp-scale hex and every adjacent hex.

7. Shields

The default rule for shields is that if the ship loses all Shield Points, the module gain five polarization tokens. Absent any special skills, actions, or modules, that means it will take five Cooldown phases for them all to be removed. Once the last Polarization token is removed, the shield can take its normal recharge instantly. The number before the slash indicates the number of points regained during cooldown, the number after the slash indicates the maximum shield.

8. Power Core

A ship's Power Core is the engines and energy storage hardware at the heart of the vessel. It's the module that produces Power tokens, which are necessary for many starship operations. Power is expressed as two numbers separated by a slash. The first number tells you how many Power tokens the ship regains during Cooldown. The second number tells you the maximum number of Power tokens the ship can have.

9. Cargo Capacity

Cargo Capacity can be confusing, because it means both weight and volume. A normal cargo hold has a number of cubic meters of space equal to its capacity in tons. The starship can safely move with at most a number of thousands of kilograms of weight (in normal gravity; no you cannot carry more things by turning the ship's gravity off.) What this means is that with extremely heavy things, you will not be able to entirely fill your cargo hold. With extremely light things, on the other hand, you are limited by the available space rather than by the weight.

10. Grav Drives

This is the type of propulsion that lets a ship move around in normal space. It controls the ship's maximum speed and acceleration. If a ship's grav drives are destroyed, it will be cast adrift and unable to maneuver, accelerate, or decelerate. It will continue moving in a straight line according to its current facing at a rate determined by its speed tokens. During your move, if you add or remove any speed tokens this requires one Power and adds one Heat. If you use any Maneuvers, this also costs one Power and adds one Heat. The amount of maneuvers you use and the amount of Acceleration you use do not affect the cost..

In combination with the Warp Drives, a ship's Grav Drive is capable of using Cruising Speed. This can be done while the Warp Drives are polarized, but they must not be destroyed. So long as the ship is not within 500 kilometers (50 hexes in starship combat) of another active ship or other intense source of multidimensional activity, it can initiate a Cruise and travel at a speed measured in a number system-scale hexes every ten minutes. System-scale hexes are a light-minute across, and so on a large enough table one could represent a fairly large chunk of a solar system. No ship's cruising speed can ever exceed 9 under any circumstances.

11. Warp Drives

Warp Drives are what is used to travel faster-than-light, and are needed to move through interstellar distances. A normal starship can move one Interstellar Hex on a single Warp jaunt. That is typically enough to move from one star system to an adjacent one. They are high-powered, finicky pieces of equipment, and require special rules.

Warp Drives use a pool of energy that works differently from other types of energy pools. Its default state is zero tokens of warp energy. It does not naturally gain any or lose any during the Cooldown phase. Charging the warp drives, or maintaining a charge, will normally take everything a ship has got. In fact, so long as the warp drive has any tokens on it, the ship does not remove heat tokens normally, nor does the Power Core regain any Power tokens. If a ship has warp tokens during cooldown, then it must *add* one heat token.

In order to use the warp drive, first the crew must spend a number of actions to charge the warp drive. Each time they take the Charge Warp Drive action, they may remove one Power token in order to add one Warp token to the Warp Drive. When the Warp Drive is charged up to the Warp Threshold of the ship, then the pilot can make sure the ship is pointed in the right facing to reach their destination, and use the Warp Out action. The ship is instantly thrown forward at hyperlight velocities. This will remove a ship from combat immediately and move them one hex in whatever direction at Warp Scale. They can pick the location at their arrival system with limited precision. The GM should put them down within 1d6 system-scale hexes or so of their target location, off-course in a random direction. This will NOT cause the ship to crash into anything or cause them to appear inside a planet or otherwise directly in harm's way. Warp travel isn't a precision process, but starships can always come out of warp before they get themselves into real trouble.

The Warp Threshold entry on a ship's description tells you how many warp tokens must be on a vessel before the Warp Out action can be taken. A ship cannot use the Charge Warp Drive or Warp Out actions once they are already in warp, nor can they "save" Warp tokens once they are in warp. All warp tokens are removed as soon as the Warp Out action is used.

After coming out of Warp, a ship's warp drives are polarized and cannot be charged or used until they depolarize. Instead of using the normal rules for polarization/depolarization, the drives take ten minutes to depolarize for each Warp token the ship had prior to warping out. During this time, the ship can make normal maneuvers and use Cruising Speed, but cannot charge the warp drive or warp out.

If the pilot wishes to warp multiple warp-scale hexes, then she must charge the warp engines up with warp tokens equal to the number of hexes desired times the ship's warp threshold. It may be dangerous to do this if the pilot is not highly skilled. Warp travel in a shuttle or frigate requires 1d20 hours, plus four for each warp-scale hex.

Once the ship is actually in warp, it can autopilot. Typically, the pilot gets some rest, with an automated ship's alarm set for the computer's best estimation of half an hour before the ship drops out of warp (there is a countdown, but it can run much faster or slower than real time as the ship struggles and surges through subspace.) The end of a warp jaunt can't usually be predicted with any more accuracy than that, and in fact the alarm might go off anywhere from 45-15 minutes before the ship actually drops out of warp.

12. Tractor Beams

The big tractor beams are reserved for ships that spend a utility slot on them. But every ship has enough field emitters to grab and drag into their cargo hold or airlock things within a few hundred yards. A pilot who is on the ball can rescue someone who gets knocked off into space, or somehow loses pressure in their vacuum suit.

13. Survey Sensors

This is a collection of sensors that can, with the application of appropriate Science skills, tell you all kinds of useful information about a solar system and the planets with in it. From orbit, you can complete topographical scans, find major mineral deposits, whether the atmosphere and local lifeforms are compatible with humanity, the locations of any civilizations and their approximate level of technological achievement, weird energy signatures or dimensional anomalies, etc. The Referee should not be afraid to give the character a great deal of useful information, so long as it doesn't step on the toes of the spy array below. These sensors are sufficient to perform stellar cartography, and a starship will know the type, size, and age of any sun and the location, size, and mass of any planets shortly after warping into the system. It's very good about warning the pilot of solar flares, gravity wells, incoming ships, and other hazards.

SAMPLE SHIPS

Normal Shuttle

Shuttles are boring vessels designed to get people from one place to another. They tend to have amenities, but not much else. Adding additional modules to a shuttle is probably pointless. These are actually larger than the more powerful frigates, and typically come in at about thirty meters long. Shuttles are capable of atmospheric flight, and can set down on land or water.

Cost: 50GC

Armor Class: 12 (includes modification from Dexterity penalty)

Active Modules: None

Crew: 1 Pilot or 1 Immortal
Amenities: The shuttle includes Basic quarters for ten passengers and the one crew, +1 other Amenity chosen at construction.
Shields: 1/2
Armor: 0
Power: 1/7
Warp Threshold: 5
Max Speed: 5
Acceleration: 1
Cargo: 11 tons. This is usually assigned as one cubic meter for each of the passengers and one for the pilot.
Physical Attributes: All at -1.
Signature: 15
Heat Threshold: 5

Normal Frigate
This is where PCs should start out. A Frigate is a vessel that has an actual job and is useful for something more than flying from place to place. They are usually about fifteen meters long, larger for transport or industrial vessels. Frigates are capable of atmospheric flight, and can set down on land or water.
Cost: 100GC
Armor Class: 14
Active Modules: 1 mount, weapon or utility, chosen at construction.
Crew: 3 Mundane (1 pilot, 1 engineer, 1 other) or 1 Immortal.
Amenities: Basic quarters for crew if a mundane vessel, Cramped quarters for one if it's Immortal-modified.
Shields: 1/5
Armor: 1
Power: 1/10
Warp Threshold: 5
Max Speed: 8
Acceleration: 2
Cargo: 20 tons
Physical Attributes: +1 to one attribute chosen at construction, others at +0.
Signature: 14
Heat Threshold: 7

ROLES

A starship may have one, and only one, Role. This is a central design philosophy that informs every choice in the construction plan. A Role cannot be changed or re-engineered once the starship is constructed. A ship can never have more than one role, or have the same role applied twice. Each of the roles listed below is a basic role that can be applied to any Frigate, for a cost of +100GC.

Heavy Fighter:
+1 Weapon Mount
+1/2 Shields
+1 Armor
+1 Con

Interceptor
+1 Weapon Mount
+2 Max Speed
+1 Acceleration
Cruising Speed 2
+1 Dex

Strike Fighter
+1 Weapon Mount, which is automatically a Torpedo Launcher in a spinal mount.
+1 ammunition capacity for the Torpedo Launcher.

Yacht
Amenities: Comfortable quarters for 1 pilot + 10 people. +5 additional Amenities.
+10 tons cargo.

Industrial Vessel
+1 Utility Mount
+1 Armor
+30 tons cargo
+1 Str

Courier
+4 Max Speed
+2 Acceleration
Warp Threshold 3

Cruising Speed 3
+1 Dex

Transport
+180 tons cargo
+1 Str

SHIP MODULES & AMENITIES

Weapons
Basic weapons do not have a cost listed, as their cost is part of the ship including a weapon mount of the appropriate size.

Beam Laser: Range 10, 1 Heat, 1 Power, 1d4 damage. If the target is within short range and has fewer than five speed tokens, the weapon hits on any attack roll other than a natural 1.

Laser Cannon: Range 12, 1 Heat, 1 Power, 1d6 damage. Deals 1 extra damage if the target still has shield points after the damage is applied.

Guided Missiles: Range 8, Ammo 5, 2d4 damage. Gains +1 to hit for every Heat token on the target.

Torpedo: Range 15 Special, Ammo 1, 3d8 damage. This is a small weapon using only a single weapon mount, but still has only the firing arc of a spinal mount. When it is fired, the attacker chooses any hex in the spinal mount firing arc, out to the full range of 15 hexes away, in which the torpedo explodes. Torpedoes do not have medium or long range bands. The firer rolls an attack against any vessel in that hex. On a hit they take the full damage, on a miss they take half damage. The firer also makes an attack roll against every vessel in a hex adjacent to the hex where the torpedo explodes. On a hit, they also take half the damage of the initial explosion. On a miss, they take no damage. Torpedoes are -2 to hit any target that still has Shield Points.

Gatling Cannons**:** Range 4, 1 Heat, Ammo 15, 1d10 damage.

Microwave Beam: Range 6, 2 Heat, 2 Power, 1d6 damage. On a successful hit, regardless of if any damage is dealt, the target gains two heat tokens.

Plasma Cannons: Range 8, 2 Heat, 2 Power, 1d10 damage.

Artillery Cannons: Range 10, 1 Heat, Ammo 15, 2d4+1 damage. -1 damage against any target that has Shield Points remaining when the attack hits.

Rail Cannons: Range 12, 2 Heat, 2 Power, Ammo 10, 2d6 damage.

Ion Cannon: Range 6, 1 Heat, 2 Power, 1d8 damage. If any damage penetrates shields, whether or not it penetrates armor, and if the defending ship has any Warp tokens, then they must remove one warp token.

Utility Modules

Tractor Beams: These allow the ship to seize and pull in smaller, unpowered objects in their own or any adjacent hex in starship combat scale. This is definitely sufficient to kidnap people on a planetary surface from ten kilometers up, and pull them into your cargo hold. Make an attack roll against them, unmodified by any AC due to armor (although it does count as a ranged attack, so a Deflector Shield or similar would help) to see if they can get out of the way before you have them thoroughly seized. The target also may attempt a saving throw against Rod, Staff, or Wand. If the attack hits and the save fails, then you can tow the character up at a rate of 100 meters per second, plus an additional 100 meters per second for each point of Strength bonus your ship has.

The tractor beams of larger ships, like Capital vessels and Doom Stars, could potentially pull in even frigates under power.

Laser Mining Array: Needed to engage in space mining, where many valuable and exotic elements can be found in asteroids. Asteroid mining allows you to obtain 1 ton of refined minerals, +1 ton for every point of your ship's Strength bonus, with the sum multiplied by the rank you have in the Mine Engineering Skill. This amount is gained every eight hours spent mining (please note the limitation on how long an Immortal can spend jacked in.) Different minerals have different prices. This is not usually a worthwhile activity for Immortals, but it is possible for treasure maps to lead to extremely rare and valuable minerals.

Salvage Array: This is an array of robotic manipulator arms, laser cutting torches, analyzers, and other hardware that makes it easy and profitable to cut the expensive parts out of a wrecked ship. This module requires at least Starship Engineering I to use effectively. When salvaging a wrecked vessel, roll 1d6 for every 50GC of the vessel's purchase price. This will give you a

number of tons of available salvage. Each ton is worth 2GC. A character can extract one ton of salvage per hour for every rank they have in Starship Engineering.

Spy Drone Bay: This is a collection of remote robotic entities that collect information. They range from fist-sized to 2 centimeters, and can fly, crawl, or swim under their own power. They have a communication range with the ship of ten kilometers (although they usually collect data and then return to the ship to upload it), and can navigate in and through buildings, pick up sound and video, etc. The larger ones can take samples and return to the ship with them. Use of the Waldoes skill will allow an Immortal to personally control the robots. Otherwise, they navigate and investigate according to a combination of basic commands and their own rather limited AI.

Amenities & Quarters

"Amenities" is the general term for the quality of accommodations on board a starship, and for any special extras the passengers might enjoy. A ship will normally have quarters for every member of the crew and the passengers, and for simplicity they are assumed to be of the same quality (The Captain of a large naval vessel might get a few more square meters of personal living space than the crew, but this isn't worth having mechanics for.) All ships have life support and recycling gear sufficient to provide food, water, air, and waste removal for the entire complement of passengers and crew. They might not be *nice.* The types of simple fabricators that are standard on spacefaring vessels are only able to produce relatively simple organic substances. They can't produce weapons, tools, etc. like a full-blown fabricator would. More serious fabrication equipment is available as an amenity.

Additional amenities are listed by their costs. For example, if a ship has three amenities, two might be spent improving the quality of the quarters, and a third to add a hot tub. The precise meaning of a ship's amenities depends on the size of the ship. A swimming pool added to an Immortal's frigate probably means something a meter deep and three meters long, with water jets to allow them to "swim" while staying stationary in the pool. A swimming pool added to a battleship might well be Olympic-sized. Exercise facilities on an Immortal's frigate probably mean a few extra square meters of living space with a bench and freeweights, plus a pull-up bar hanging from the ceiling. An exercise facility on a Yacht means something more like a weight room with cardio machines.

Bare: Bare quarters mean something like the inside of a modern-day passenger jet in Coach. There are toilets, but no showers. Passengers get an uncomfortable bench or seat, there may be an in-flight movie. The food fabricators produce various kinds of gruel and flavored drinks. At the crew's option, the food and drinks can contain alcohol or mild sedatives.

Cramped: This is the typical level of quarters on an Immortal-modified starship. There is a tiny living area of about ten square meters, containing a cot, a one square meter closet, a one square meter shower, a small mirror and sink with built-in food fabricator/dispenser, and a foot locker or drawers beneath the cot for personal possessions. There is enough room to turn around and change clothes, but not much else. The standard food fabricator (it's set into the wall with a rack of cups and bowls, there isn't anything like a kitchen) can only make something like frozen yogurt (your choice of five flavors) and protein chunks in curry sauce (also five flavors, but different ones.) It can also make some generic soap, toothpaste, deodorant, etc. Better fabricators are available as amenities. In the standard Immortal-modified frigate, this room will have two doors (which can be sealed against vacuum) and one airlock. One door leads forward to the pilot chamber, which is tiny and contains nothing but the command chair with CI jack and a great deal of computer hardware. The other door goes aft to the cargo bay. The back of the cargo bay will typically have its own airlock as well. It is possible in emergencies for the Immortal to take on a single passenger, who can occupy the quarters while the Immortal flies the vessel. This is not advised for extended trips, however, as it may strain the life support systems eventually.

Basic: At this level, the closet can contain more than a few of clothes, there are twin-sized beds rather than cots, the hygiene facilities are less ludicrously tiny, although they will probably be common if there are multiple passengers, and there may actually be something like carpet instead of bare metal or ceraplast floors. The food fabricators have as many as a dozen distinct menu items, with a few flavor options for each, and can also produce slightly fancier hygiene products and a few basic medicines. There will be a table to eat at (in the common area if there are multiple passengers and crew) and a small desk in the individual rooms. For that matter, there is a common area, and it has some basic entertainment gear such as video games or a holoscreen, and software/movies/etc. This is comparable to a modern-day hostel.

Comfortable: The accommodations resemble a middle-class modern day hotel. The rooms have actual closets, dressers, sinks, individual bathrooms, individual entertainment hardware in the rooms, and perhaps a mix of double and queen-sized beds. The common areas have comfortable couches and seating, the food is comparable to a mid-tier chain restaurant (although still cranked out of a fabricator, of course.) A group of people who are friendly and have some work to do could spend a fair amount of time in quarters like these before succumbing to Space Madness. There are basic laundry facilities.

Luxurious: The quarters resemble a modern-day five star hotel. The food is indistinguishable from what would be served in a high-class restaurant, and will usually have options from a wide

variety of cultures (although gourmets claim they can tell the difference.) Common areas are elegant and comfortable. Laundry facilities are capable of dry-cleaning and otherwise dealing with delicate or expensive clothes. Please note that the major distinguishing factor between this and a real hotel is that there are no servants. If the passengers don't want to have to do everything themselves, they can spend additional amenities on waldoes, or use some of the quarters to bring along actual servants.

Optional Amenities:

Increase quarters from Bare to Cramped: 2.

Increase quarters from Cramped to Basic: 1

Increase quarters from Basic to Comfortable: 1

Increase quarters from Comfortable to Luxurious: 1

Waldoes: 1. Robotic servants and cleaners, non-humanoid. If the pilot is an Immortal with Waldoes II, they can be directly controlled by the pilot. Otherwise they are automated and rather dumb.

Avatoid Bay: 1. The ship has the hardware and software to allow an Immortal pilot to use an Avatoid, if they have the skills to do so.

Hot Tub: 1. The ship has hot tub facilities for the passengers. Alternately, a sauna.

Exercise Room: 1. The ship has exercise facilities.

Swimming Facilities: 2. The ship has a swimming facilities.

Kennel: 2. The ship can carry a few smaller animals (or one larger one) in comfort, at minimum. It may include stables or a small zoo for much larger ships. This is useful for Immortals with one or more pets.

Medical Facilities: 1. The ship has a medical bay.

Library: 1. The ship has extensive archives of information on a wide variety of topics, and tools for digging through it. In larger ships, this may actually include shelves of many leather-bound tomes. In smaller ships, the library is probably purely computerized.

Science Lab: 2. The ship has analysis equipment and other necessary supplies.

Repair Locker: 2. The ship has the bare minimum equipment needed to perform field repairs.

Fabricators: 4. The ship has on-board fabrication equipment. Given base elements and the skills, the operator can make almost anything they might need within the size limits of the fabricator. Larger vessels have larger fabricators, but ships like frigates and shuttles are limited to objects that can fit within a 30cm cube. Fabricators include a small supply of base elements, but if the user wants to produce large quantities of goods they should fill their cargo hold with more material for the hopper. The hopper on a fabricator can slowly break down pretty much anything put into it to resupply its stock of base elements. On smaller vessels, the hopper is in the toilet. Just dump anything in there you want broken down.

Additional Quarters: 2. Increase the number of quarters and life support capacity by 25% of the original crew/passenger complement, minimum 1 per time this is selected.

PASSIVE MODULES

Passive modules modify or enhance the function of a vessel. They are also known as "bling" because they make a ship better at the cost of a greatly increased price. It takes special skill to be able to construct starships with extra Bling. Each one gives a cost modifier, which are *sequentially* applied to the base cost of the vessel.

Pilot Tank: x1.25 cost. A 2.5 x 1 meter cylinder filled with strange glowing and bubbling goop, in which the pilot floats peacefully while flying the ship. This tank manages all of the character's biological needs, and counts as hospital care for purposes of Clone HP Recovery. This is considered ideal for all pilots that intend to stay plugged into their CI for long periods of time. It also negates critical hits that would damage the pilot.

High Capacity CI: x1.25 cost. This ship is capable of being flown by an Uploaded pilot. You probably want to combine this with an Ansible Array.

Quality of Life Enhancement: x1.5 cost, +3 amenities.

Reinforced Armor: x2 cost, +1 armor.

Afterburner: x2 cost. At a cost of one power and one heat, the ship can add an additional two speed tokens during a move action. This can increase the number of speed tokens above the ship's normal maximum. Speed tokens above the ship's maximum are removed at the end of the round.

Shield Booster: x2 cost. At a cost of one power and one heat, the ship can regenerate an additional shield token during Cooldown.

Warp Acceleration System: x2 cost. Permanently reduce ship's maximum power by 2, but also reduce its warp factor by 1.

Shield Backup Coils: x2 cost. Remove one extra polarization token from the shields during each cooldown.

Polarity Reverser: x3 cost. At the beginning of a round, before any action cards have been called, you may remove polarization tokens from modules other than the power core. For each polarization token that you wish to remove from your ship, you must spend two power tokens and add one heat.

Tracking Sensors: x2 cost. +3 Range to all of your ship's weapons.

Predator Sensors: x2 cost. +3 to all Lock Target checks.

Stealth Modifications: x2 cost. +3 to Signature. Ship is not detectable to modern-day or near-future military detection systems, only interstellar levels of technology can detect the vessel beyond direct LOS within ten kilometers. If landed on a planet, the ship is capable of active camouflage which makes it difficult for low-technology cultures to detect unless they are standing right next to it.

Coolant: x2 cost, Ammo 5. You may activate this module at the end of any Action, and remove two heat tokens from your starship.

Overdrive: x2 cost. +1 Cruising Speed. This module may not be applied more than once.

Hyperdrive: x2 cost. +1 Cruising Speed. This module may not be applied more than once.

Ansible Array: x1.5 cost. The ship has space and computing power for an array of 5 extra ansibles, in addition to the one that each ship comes with. This does not include the ansibles

themselves; they must be purchased separately. This allows the ship to transmit a quantum information packet that would destroy an ansible and still have spares, or alternately to use all of them at once to allow greater transmission bandwidth. For example, a ship using spy drones could transmit all of the data it is receiving in real time, instead of having to pick and choose which bugs to transmit the data from.

Example: *Alyssa Marceaux is a new Immortal PC. She receives two ships as part of her starting equipment, so she needs to set up a pair of frigates. She isn't able to apply any modules to these ships, so she's going to have to do the best she can with baseline vessels. She names her first ship the Corbeau, and decides to make it an exploration vessel. She chooses to make its first mount a Utility mount, and installs a spy drone array. She assigns its single +1 to Dexterity, choosing to make it a fast, agile vessel. She very much wants to make the vessel a Courier, but she intends to fly solo. Going out into unknown space alone with no weaponry sounds like a profoundly bad idea. So, she grits her teeth and makes it an Interceptor, giving it a Laser Cannon in the forward arc for its single weapon mount, and increasing its Cruising Speed to 2. Her choice of role also adds two to its maximum Speed, and one to its Acceleration. The dexterity bonus raises its AC to a respectable 16. It has her own base HP, modified by the ship's Constitution.*

It has the following stats after assigning that role:

The Corbeau
Cost: 100GC
Armor Class: 16
Active Modules:

1. Spy Drone Bay
2. Forward Arc Laser Cannon: Range 12, 1 Heat, 1 Power, 1d6 damage. Deals 1 extra damage if the target still has shield points after the damage is applied.

Crew: 1 Immortal.
Amenities: Cramped quarters for one.
Shields: 1/5
Armor: 1
Power: 1/10
Warp Threshold: 5
Max Speed: 10
Acceleration: 3
Cargo: 20 tons
Physical Attributes: Str 9, Dex 16, Con 9
Signature: 14

Heat Threshold: 7
Special: Cruising Speed 2
HP: 8

She also has a second ship, and chooses to make this one more of a war vessel. This, she names the Faucon. She chooses its initial mount to be a weapon mount, sets its first attribute bonus to Dexterity, and makes it a Heavy Fighter. She combines the two weapon mounts to put an Artillery Cannon in a turret. She hopes to take this vessel out when she's teamed up with a group, so that another PC can compensate for her weapon's weakness against shields. The vessel uses her Base HP, modified by its own Constitution.

The Faucon
Cost: 100GC
Armor Class: 15
Active Modules:

1. Turrent-Mounted Artillery Cannon: Range 10, 1 Heat, Ammo 15, 2d4+1 damage. -1 damage against any target that has Shield Points remaining when the attack hits.

Crew: 1 Immortal.
Amenities: Cramped quarters for one
Shields: 2/7
Armor: 2
Power: 1/10
Warp Threshold: 5
Max Speed: 8
Acceleration: 2
Cargo: 20 tons
Physical Attributes: Str 9, Dex 13, Con 13
Signature: 14
Heat Threshold: 7
HP: 9

Alyssa leaves the Faucon docked at the station orbiting Skrillex 7, where her backup clone is stored. She purchases another set of armor and weapons from the Equipment chapter and stores them in the vessel's foot locker. Then, she sets off for adventure with the Corbeau. If anything kills her out in space, she'll board the Faucon and seek revenge.

Book 5: Combat

Combat begins when one party initiates hostilities toward another. For the rules on surprise, reaction rolls, and morale, you should consult the Encounters section. The following will give you a step by step guide to combat.

Initiative

Combat is divided into rounds. First, every participant in the combat round receives their Action Cards. Remove the jokers from a standard poker deck, and shuffle it. Each participant receives two cards by default. The referee may assign enemies into groups and give each group the appropriate number of action cards, then each enemy in the group will take the same type of action when one of their cards is played.

Players and the Referee should look at their own cards, but do not need to reveal them to anyone else. In large, complex combats, however, the Referee may decide that managing initiative makes it necessary for everyone to play with their cards face up.

Once all participants have their action cards, the Referee begins counting down from Aces to Deuces, and then Aces again. Each character involved must reveal their card and take their action when its type is called. If they do not, the action is lost. The exception to this rule is that Aces are called at both the beginning and end of the round. If multiple characters play action cards of the same type, their actions are resolved in the order of precedence of the suits: spades, hearts, diamonds, clubs.

When a character plays an action card, they may take a single Action of a type that it is legal for them to take. Characters are limited in how many actions cards they can spend on a single type of action. A combat round represents about one or two seconds of action.

Actions

When a character spends an action card, they may take a single action. The actions they have available will differ depending on whether they are using a clone or a starship. The default rule is that no matter how many action cards a character may receive, they can only spend two: One to take a Move action, and another to take an action of any other type (usually an attack of some kind.) It is still advantageous to receive extra cards, because it gives the player more choices about when they may take their actions.

The Hex Map

Action in this game takes place on a hexmap, using markers or miniatures to keep track of clones and starships. This is used to determine range, movement, cover, and facing. The scale of the hexmap differs depending on the context. For clones, each hex represents about a meter of space. For Starships, each hex represents ten kilometers. Clones cannot occupy the same hex unless for some reason they are very small (such as goblins, possibly.) Several starships can occupy the same hex unless they are particularly large specimens. The players and referee might agree to avoid this if at all possible due to the difficulty of tracking miniatures in such a situation.

Clone Movement

Movement for clones is extremely simple. The character can move a number of hexes equal to their Speed in any direction. They can change their facing to any face of their hex at any point or points during this movement. Entering the hexes immediately in the front facing of an enemy clone armed with a melee weapon, or a monster armed with natural weapons, may result in Interference, explained below.

Sidestep
This allows the clone to use their entire move action to move only one single hex. If the clone uses this option, Interference does not apply.

Starship Movement

Starship Movement is more complicated. Starships cannot usually start or stop on a dime. Their current velocity is tracked by Speed Tokens, which stay on the starship from round to round unless they are changed by Acceleration. Starships begin combat with an amount of speed tokens determined by what they were doing when combat began. If they were simply floating in space, they have zero. If they were trying to reach a destination, they may have their full maximum Speed. Special Rule: If a starship has any speed tokens, it *must* use one of its actions to Move if it is able to do so. If the starship is for some reason unable to take any actions at all, it moves in a straight line forward for a number of hexes equal to its current speed tokens during the cooldown phase of each round.

Acceleration
At the beginning of their Movement action, the starship may add or subtract a number of speed tokens equal to its Acceleration. Using their Acceleration costs one Power and adds one Heat.

Movement Points and Maneuvers

After Acceleration is applied, the ship has a number of Movement Points equal to the number of Speed Tokens on it. It must spend ALL movement points before its move is completed. The careful starship pilot will try not to crash into any asteroids due to unmanageable excess movement.

The following moves are possible for mundane characters, but skilled Immortals may gain access to additional Maneuvers:

1. Change Facing. This allows the starship to turn its facing from one hex face to an adjacent face. Essentially, they turn 60 degrees. A ship cannot Change Facing twice in a row; they must alternate Change Facing and Advance. This costs one Movement Point, and counts as a Maneuver.
2. Flip. The starship does a half-roll. This maneuver may only be performed once per Move action. It reverses the firing arcs of all left- or right-mounted weapons on the ship. For example, a laser cannon that previously fired in the right front quarter would now fire into the left front quarter. It costs one movement point, and counts as a maneuver.
3. Advance. The starship advances into the hex immediately in front of it. An uncontrolled ship will spend all of its movement points on Advance. This costs one Movement Point. It is the only expenditure of movement points that does not count as a Maneuver.

If a ship takes any maneuvers during its movement (that is, does anything with its Movement Points other than Advance), then it must spend one power and add one heat. The heat and power cost is the same regardless of how many maneuvers are used. This is in addition to the heat and power cost of using Acceleration.

Drawing Weapons & Target Locks

Clones and Starships each have a certain amount of preparation necessary before they can begin firing at their enemies. Clones may need to draw weapons, Starships will need to lock their targets.

Clones

If a clone does not begin the combat with a weapon drawn, they must use an Action to draw it before use. Obviously, the clone does not need to “draw” anything if they intend to make an unarmed attack. Putting a weapon away properly also requires an action. Dropping a weapon to the ground can be done for free as part of any other action the clone takes.

Starships

Starships cannot fire on an enemy until they gain a "lock" using their computer guidance systems. Starships are equipped with substantial ECM/ECCM capabilities, and sometimes this can be a difficult process. Starships can lock a target in any facing, at almost any reasonable range (assume at least 500 kilometers, if it matters.) Attempting to lock a target requires an action. The aggressor rolls a D20 and adds their Wisdom modifier for the Lock Target test. The difficulty of the test is the Signature of the enemy. A starship knows any time an opponent attempts to lock them, whether they succeed or fail. If you attempt to lock a target that has already locked you, you gain +2 to the attempt.

Attacking

Attacking will usually involve making a D20 roll, applying various bonuses and penalties, and attempting to equal or exceed the target's Armor Class. A natural 1 always misses, a natural 20 always hits and will apply a critical hit result.

Arcs

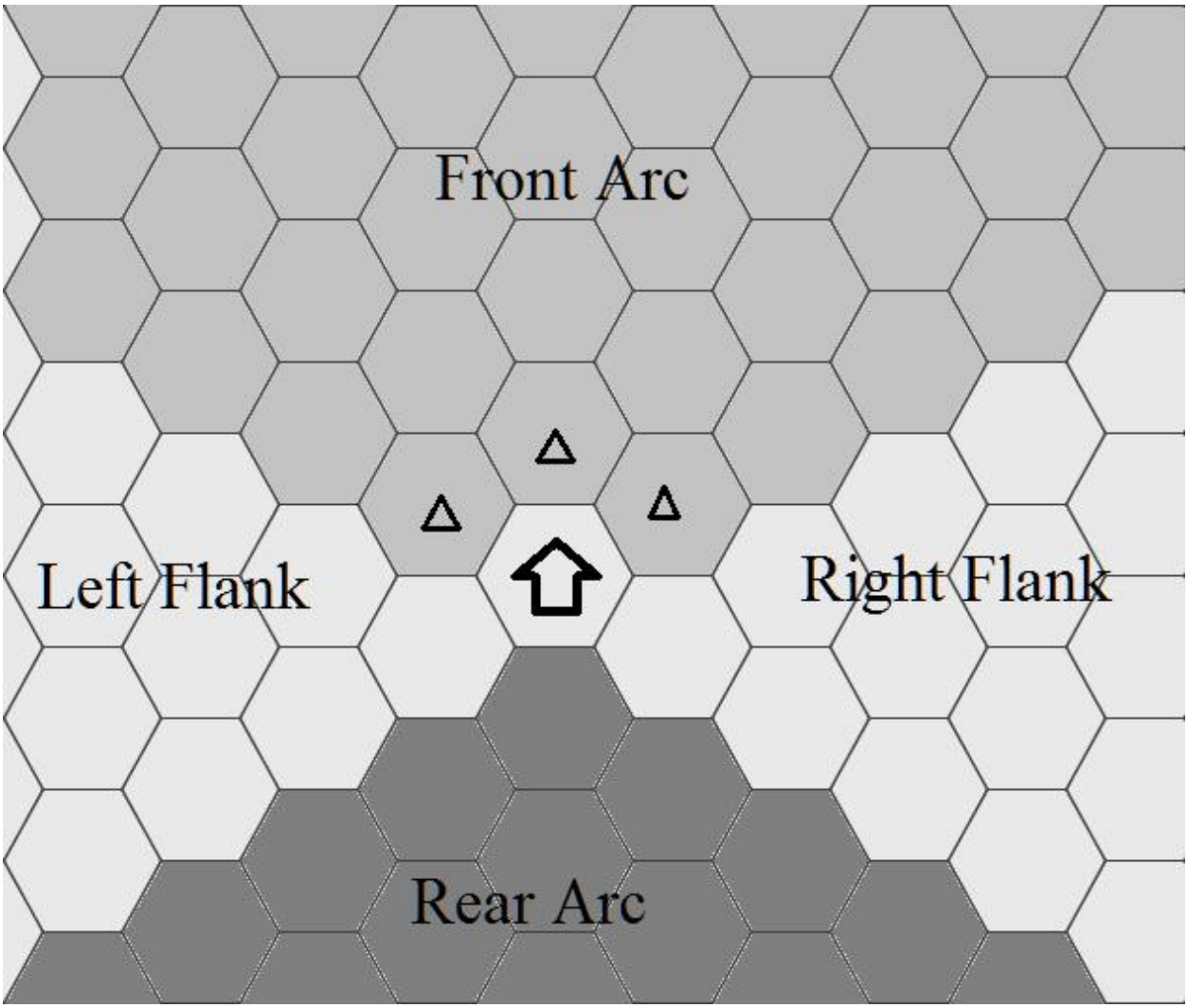
A character can only attack an opponent that is in the correct arc. The Arcs for starships and clones are very different. A starship needs the opponent to be within the arc that their weapon mount covers, or in any direction if the weapon is mounted on a turret. A clone needs the opponent to be in their front arc.

Starships are adequately defended in all directions. Attacking a clone from the flank area gives a +2 to hit, from the rear gives +4.

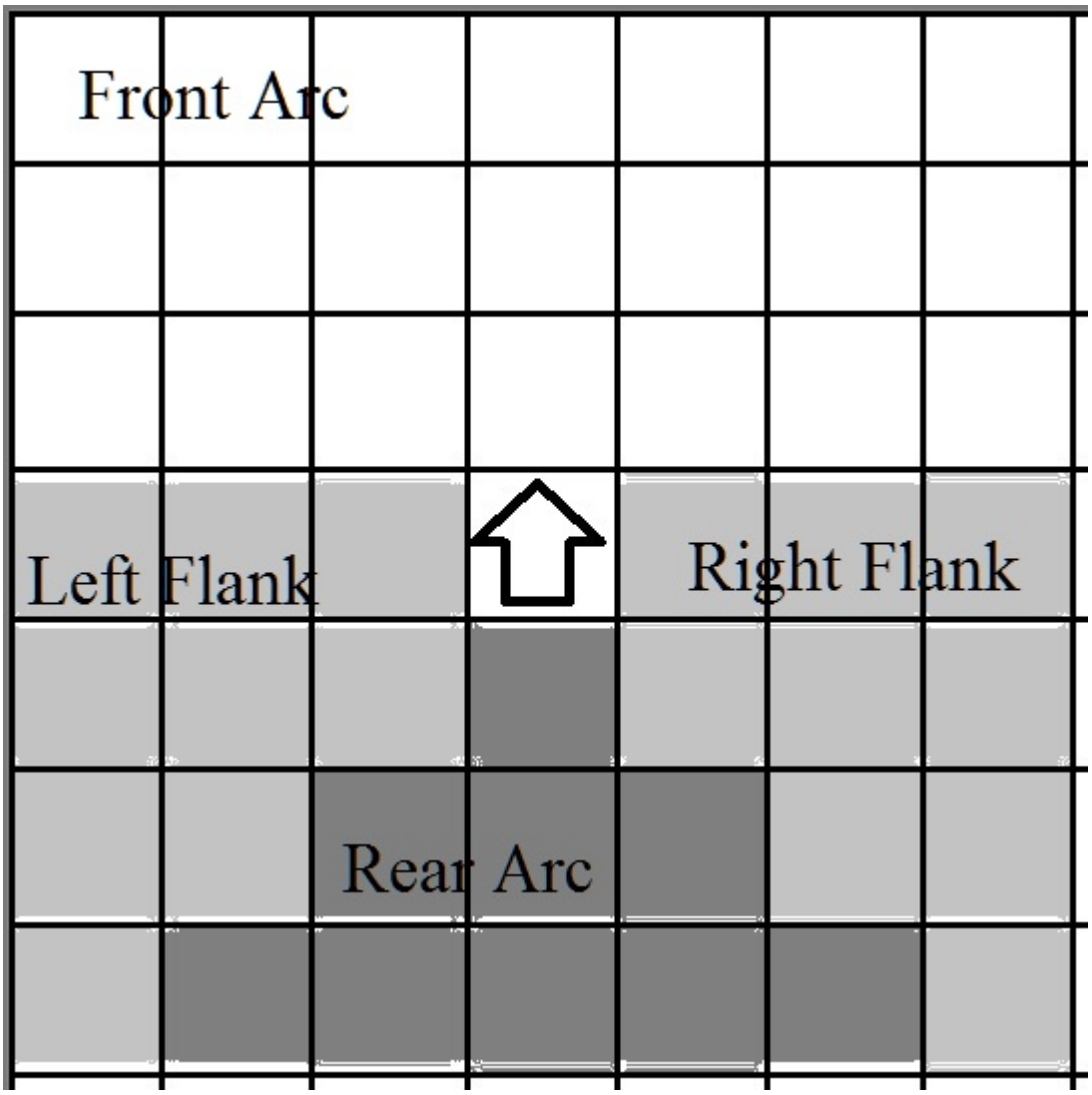
Turning

A clone can change their facing to any direction at the beginning of an attack action (whether melee or ranged), so they can always face their preferred opponent. A starship does not get this free facing change.

Arcs for Clones


Front Arc
Left Flank
Right Flank
Rear Arc

Alternate Arcs for Clones, if you prefer a square grid for dungeons or something

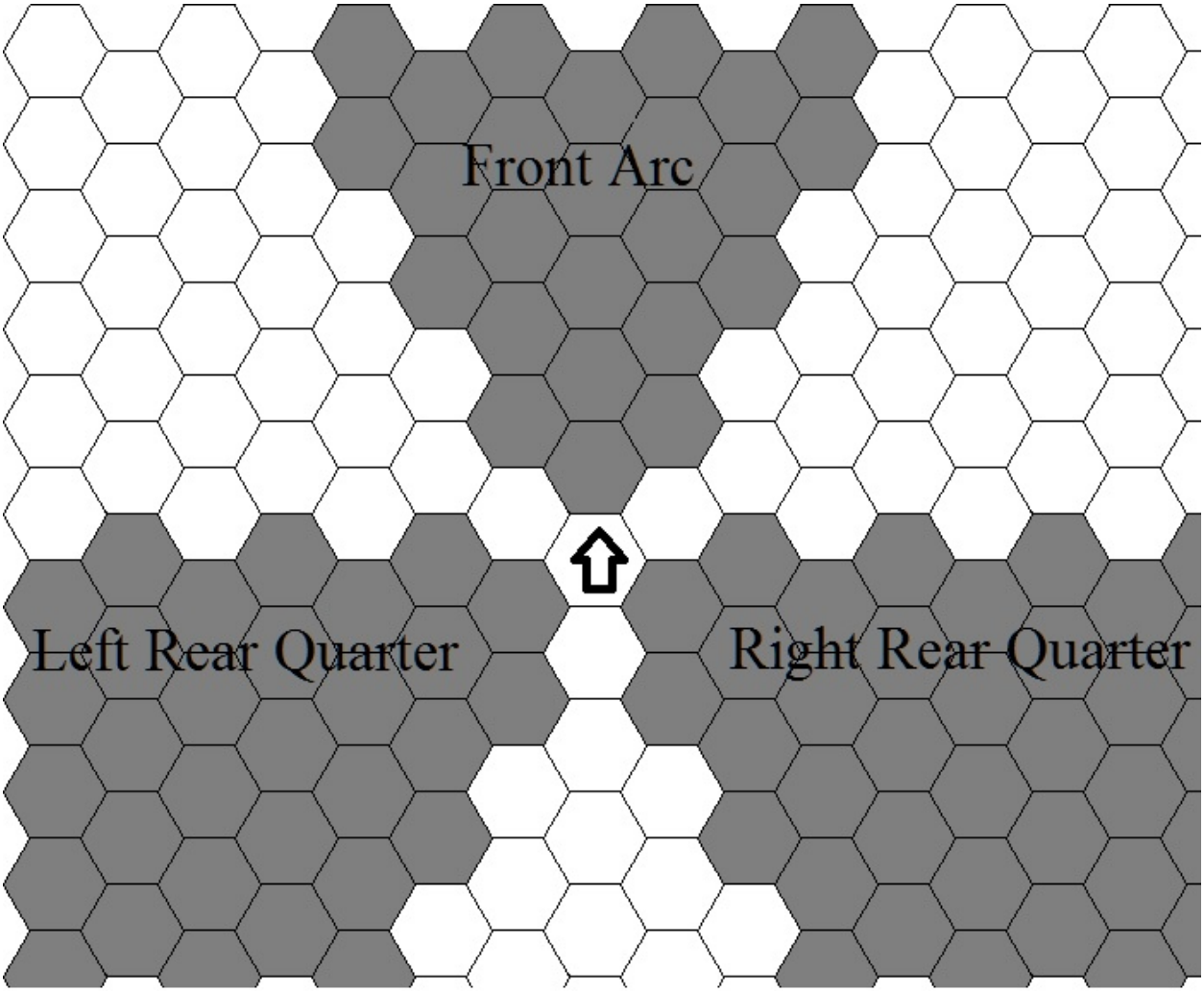


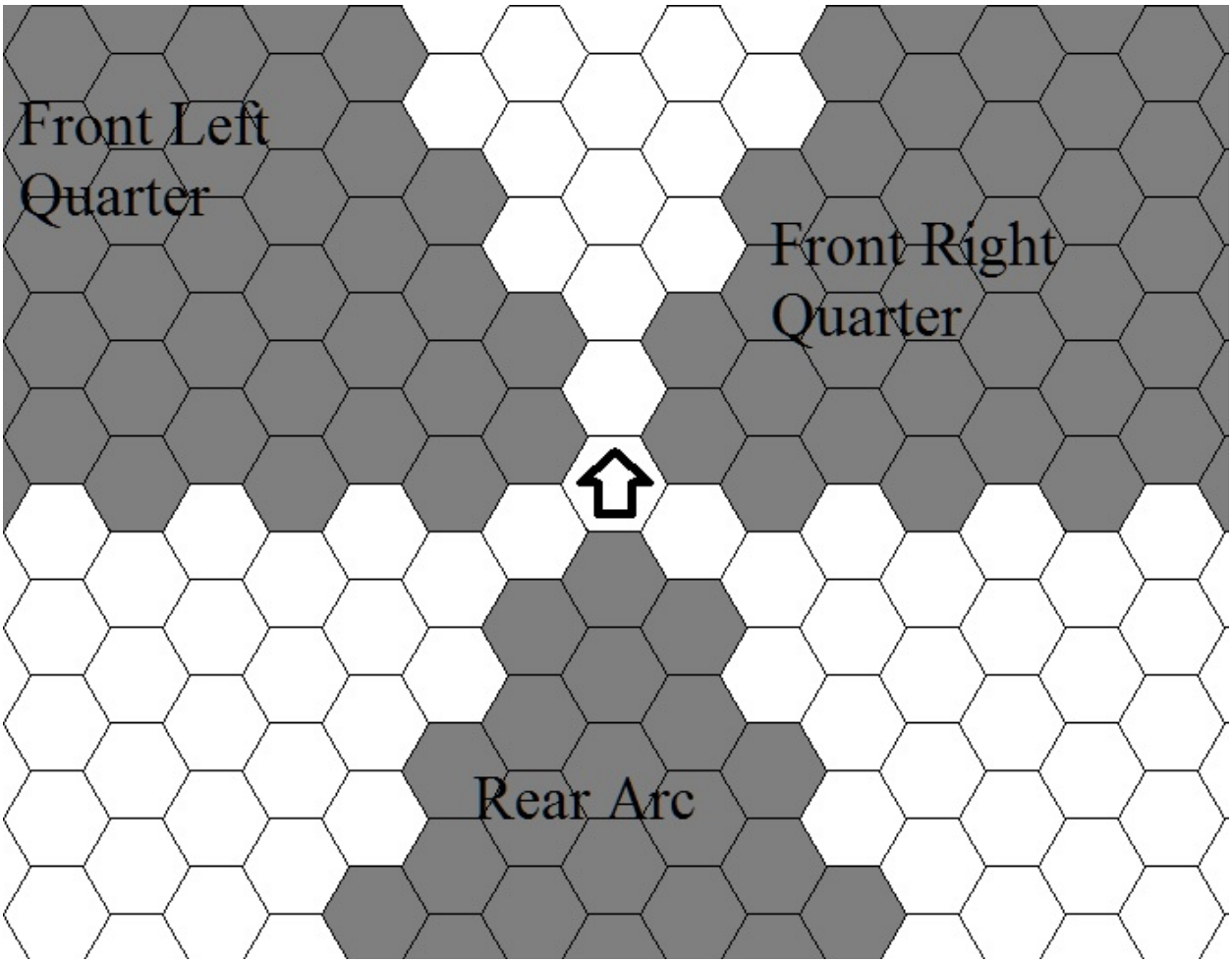
Skipping It

Clone arcs and movement are really simple enough that you could probably skip using a grid or hex map altogether, if your group prefers. Ships, however, are complicated enough that you should really use a hex map.

Ship Arcs

Ships have six arcs. Special bonuses to hit do not accrue regardless of the direction of an attack, because ships have sensors and so forth in all directions. However, lining up a shot can be more difficult for a ship, because they cannot turn as part of an attack action by default. Please note that there is some overlap between adjacent arcs of fire for starships.





Ranged Attacks

When a character announces a ranged attack against a target, you must first check the range to the target. Count hexes in the most direct route possible to the enemy and check it against the weapon's range. If the target is within a number of hexes equal to the weapon's range, then the enemy is within Short range and there is no penalty. Medium range extends out to a number of hexes beyond Short equal to half the Short range, rounding down. Against an opponent in Medium range, the attacker has a -2 penalty to hit. Long range extends out to a number of hexes beyond Medium equal to half the Short range, rounding down. Attacking a target in Long range applies a -5 penalty. Targets beyond long range cannot be attacked with

that weapon. Spell effects and special attacks by monsters do not have medium or long ranges; they only work out to the range specified.

A ranged attack roll is 1d20 + the attacker's Dexterity modifier + Attack Bonus + any other modifiers. On a hit, apply damage as below. Starships & Clones use the same general rules for ranged attacks.

Note regarding Starship Weapons
When a starship weapon is fired, whether missile, cannon, or whatever, it becomes polarized with a single polarization token. Starship weapons cannot usually be fired twice in the same round.

Example: *Alyssa Marceaux is armed with a laser pistol. It has a normal range of 7, and she has no special skills which extend this. If an enemy is from 1-7 hexes away from her, she attacks without penalty. The weapon's range of 7 divided by 2 and rounding down is 3, so that is the length of the medium and long range bands. If an opponent is 8-10 hexes away, she is at -2 to hit. If the opponent is 11-13 hexes away, she is at -5 to hit. She cannot attack an enemy further than 13 hexes away.*

Melee Attacks
Starships do not generally have melee attacks. Clones can usually deliver a melee attack into any of the three hexes directly adjacent to them, in their front arc. If there is an enemy present in one of those hexes, the character makes an attack roll using 1d20 + the attacker's dexterity modifier + attack bonus + any other modifiers. On a hit, apply damage as below. The clone's Strength modifier will usually apply to damage as well as the to-hit roll. Very strong clones can be extremely dangerous in Melee combat.

Unarmed Attacks
Unarmed attacks are essentially a special case of melee attacks. They imply a character is making the attack with their fists, feet, etc. A normal clone deals 1d2 damage with an unarmed attack. Monsters with claws or teeth such as a panther or wolf may deal more damage unarmed.

The major distinction is that humans use different skills for melee and unarmed combat, and also that a character who is not armed with a melee weapon does not produce Interference. If the referee prefers, they can rule that all monsters with natural weapons count as being armed due to their natural weapons. Alternately, they could rule that some natural animals are unarmed (and thus do not interfere, although their unarmed attacks may do more than 1d2

damage) and that some unnatural creatures such as dragons, dinosaurs, giant octopi, or alien horrors count as being armed with melee weapons due to their highly lethal natural weapons.

Unarmed attacks use 1d20 + attack bonus + any other modifiers. Damage is dealt as below.

Cover

When a character launches an attack, they can select any corner or vertex of their hex or square. Try to draw lines from that corner or vertex to every corner or vertex of the target's hex or square. If none of those lines are blocked by an obstacle of some kind (other than the creature you are shooting at, of course), then the enemy has no cover. If you find that some but not all of the lines are blocked, then the enemy has partial cover and the attacker is at -2 to hit. If all of the lines are blocked, then the enemy has full cover and cannot by default be targeted by the attack. If the Referee is convinced that the character can adequately guess the enemy's location, and that their attack can penetrate the cover and still deal damage, then the referee may allow the attack at -4. The cover may also grant Armor to the defender.

Invisible opponents are always considered to have total cover. Even if you know where they are, you are at -4 to hit them. Of course, if you have cybernetic Sonar, you can always close your eyes and fight that way.

Interference

A clone armed with a melee weapon may Interfere with the ability of other characters to move past their front Arc**.** If a character is in one of the three hexes in a melee-armed clone's front arc, they may not move from it freely unless they have a special ability that allows it. If they choose to leave their hex anyway, the clone whose arc they are moving out of may take a melee attack action against them.

The attacking clone need not spend a Turn to make this attack, but they must still have unused melee attack actions remaining. So, for example, even if the attacking clone had spent all of their Turns that round, so long as none of those Turns had been spent on Melee Attacks, they would be able to attack immediately and for free.

After that, unless they had the ability to take multiple Melee Attack actions per round, they would not be able to Interfere with anyone else's movement. A given character may only Interfere with the movement of a specific other character once per round, but they can interfere with multiple characters if they have enough melee attack actions to do so.

Charging & Ramming

Charging & Ramming are special actions available to Clones and Starships, respectively. They are not identical, but they do have similar elements, in that they involve making a Move and an Attack in the same action. In both cases, the character must have two cards of matching suit to execute the Charge or Ram attack.

Charge

When the character's Action card comes up, they must have a Move action available, and a Melee or Unarmed Attack action available. For a normal character, this would mean that they must not have taken any Actions yet this round. They must also have a lower-ranked card of the same suit as the card they intend to use to execute the Charge. Charging uses up both cards; this is one of the rare times when a character can play an Action card of a suit that has not been called yet.

The character uses their normal move, which must be sufficient to bring them adjacent to the target enemy. They then immediately execute a Melee or Unarmed attack with +2 to hit.

Ramming

When the character's Action card comes up, they must have a Move action available, and a non-Move action available. There are no skills that specifically give additional Ram actions per round. For a normal character, this would mean that they must not have taken any Actions yet this round. They must also have a lower-rankes card of the same suit as the card they intend to use to execute the Ram. Ramming uses up both cards; this is one of the rare times when a character can play an Aaction card of a suit that has not been called yet.

The character uses their normal move, which must be sufficient to bring them into the same hex as the target starship. They then execute a Strength-based attack (1d20+Strength modifier + 1 attack bonus + any other modifiers.) On a success, add their ship's Strength modifier to a number based on its size:

Frigates & Shuttles: 1
Gunboats: 1.5
Cruisers: 2
Heavy Cruisers: 3
Battleships: 4
Capital Ships: 5

Doom Stars: 6

Multiply that times the number of Speed Tokens on the attacking ship, rounding the result down. Both vessels take up to that much damage, but no more than the Shields + Armor + HP of the opposing ship. Armor & Shields apply normally.

Movement does not automatically stop in the hex where the Ramming attack is resolved. If the ramming vessel has not used up all their Movement Points, they must continue to move.

Damage

When a character successfully attacks another character, they deal their weapon or other attack's damage to the target. When a character takes damage, it is always applied in the same order:

1. Damage is first applied to the Shields. Every point of damage reduces the value of the Shield by one point. If this reduces the value of the Shield to 0 or below, the Shield becomes Polarized. Five polarization tokens are placed on the shield. So long as there are any polarization tokens, the shield cannot regenerate and protect the character from further damage. Starships are almost universally equipped with shields; characters only have shields if they have special equipment or magic. If the shields are already polarized, skip this step. Repeatedly striking a ship with its shields down does not keep them from depolarizing.
2. If any damage is left after the shields, it is reduced by the amount of any Armor that the character has. Note that Armor is different from Armor Class! The former absorbs HP damage, the latter determines the difficulty of striking a damaging blow. Armor is not normally reduced by being struck (although see the Ablative Vest…) Armor continues to apply to every damaging hit.
3. If any damage gets past the shields and is not absorbed by armor, then it is applied to the character's Hit Points.

Damage Die Steps

Some game effects will tell you to step up or down a damage die type. The following is a list of the die types in play, in order. If you step up, move to the right. If you step down, move to the left.

1 – 1d2 – 1d3 – 1d4 – 1d6 – 1d8 – 2d4 – 1d10 – 1d12 – 2d6 – 2d8 – 1d20 OR 3d6 – 2d10 – 3d8 – 4d6 – 3d10 – 5d6 - 4d8 – 2d20

Death & Dying

If a starship is reduced to zero HP or less, it is disabled. It will usually explode instantly, killing everyone aboard (Immortal ships automatically self-destruct at 0HP.) If a clone is reduced to zero damage, they die. If an Immortal is outside of their ship when they die, then they die permanently unless they have special, advanced skills and equipment. If an Immortal is inside their starship and jacked into the CI when it is destroyed, and they have a properly prepared clone somewhere, then their consciousness will be transferred to the waiting clone in the instants before their ship is totally destroyed. If by some strange means the dead clone of an immortal that has transferred to a new body is recovered, it cannot be raised or resurrected. The soul attaches to the new body.

Healing, System Damage, and Repair

Clones

Characters such as the PCs heal naturally over time. Healing occurs at the stroke of midnight. If the PC has done nothing substantial other than rest and recuperate since the prior midnight, they recover 1d3 HP. Immortals who fly from a pilot tank may recover in this fashion even if they have engaged in space combat or used their warp drive, so long as they've spent the entire time in the tank. Most means of travel available in medieval environments will not allow the character to heal while using them. If the Referee is uncertain, then they may allow the character to heal a flat 1HP rather than rolling the D3.

Characters who are receiving hospital care in an advanced civilization may be able to recover HP more quickly than that.

Starships

Optional Rule: Damage Bands & System Damage.

A character's pool of HP is an undifferentiated mass, and for game purposes they operate at full efficiency until they keel over. For starships, however, the degree to which they are beaten up is more relevant. A starship can be Undamaged, Lightly Damaged, Moderately Damaged, Severely Damaged, or Critically Damaged before it is destroyed. To determine how many HP are in each band of damage, subtract 1HP (for the undamaged level), divide the rest by four,

and leave aside any remainder. Remainder HP should be divided among the lower damage bands, so that no band has fractional HP

Example: *Captain Marceaux's ship, the* Faucon*, has 9HP. If it has all nine, it is undamaged. If it has 1-2 it is critically damaged, 3-4 it is Severely Damaged, 5-6 it is moderately damaged, and 7-8 it is lightly damaged.*

Let's assume that the Captain makes it to second level, and rolls a new base HP of 14. That's pretty good! The Faucon's *HP is now 16. So, the Undamaged level is 16HP, and we divide the remaining HP up among the four damage bands. We end up with three, and a remainder of 3 to divide up among the lower three damage bands. Therefore, the Faucon is critically damaged at 1-4 HP, Severely Damaged at 5-8 HP, Moderately Damaged at 9-12 HP, and Lightly Damaged at 13-15 HP.*

Each time that a ship's HP is reduced to a new range band, check for system damage just as though the ship had failed a Heat check, below. If a single hit reduces the ship below multiple damage bands, make multiple system damage checks. The Referee may choose to ignore this rule, or perhaps institute it only for vessels with enough HP that it's worth keeping track of.

Repair

Even if you choose not to use damage bands for system damage, they're still how you calculate repair costs. At a shipyard, space station, space port, or other facility, repairing a frigate or shuttle up to the minimum HP value of the next damage band costs 5% of the ship's value in GC and takes 1 day. This includes repairing damaged systems.

If a character is attempting to repair a ship using only hand tools and elbow grease, they can repair any systems damaged due to heat or combat (at the referee's discretion – a completely cooked warp drive might be restorable to basic working order, but not completely fixed, for example), but can restore no more than 1HP to the ship.

Example: *Captain Marceaux limps into port with her beloved* Corbeau *reduced to 1HP. It has a base 8HP, so this puts it in the Critically Damaged band. The ship has a value of 200GC, so 5% of its value is 10GC. She pays 10GC to have it repaired to the minimum value for Severe damage, or 3HP. Another day and another 10GC pays the shipyard's repair bots to improve it to Moderate damage, at 5HP. She's still not comfortable taking off in a ship that beaten up, so she pays 10GC to have it repaired to the minimum value of Light damage, or 7HP. Her pockets are starting to get pretty light, and she decides to set back out for adventure rather than pay 10GC for that last HP.*

Heat & Cooldown

Cooldown

After all actions have been taken, the Referee initiates the Cooldown phase. All leftover cards are discarded and shuffled back into the deck. All modules that are currently polarized remove one polarization token. Every ship recharges power, shields, etc. according to its statistics and the skills of its pilot. Every ship removes, by default, one heat token. That amount may be greater or lesser depending on the skills of the pilot or any modules installed.

Heat

Heat is a complicated topic. All starships should pay close attention to their accumulation of Heat, because excessive heat can wreck a ship even if you're winning the battle. Due to module usage or other factors, Heat tokens stack up on a vessel. They don't have much in the way of negative effects (other than making you a sweet target for guided missiles) until they surpass your ship's Heat Threshold.

Once the number of heat tokens on your ship exceeds the heat threshold, your ship is in the Danger Zone. Every time a ship in the Danger Zone adds a heat token, roll a D20 with no modifiers. If the result is equal to or less than the number of heat tokens in excess of the threshold, then your ship takes Heat Damage. Roll 1d8. If the result is a module or component that your ship does not have, then you should reroll until you get a result that is applicable.

1. Active Module (select randomly from those equipped.)
2. Shields
3. Power Core
4. Warp Drive
5. Passengers
6. Passive Module
7. Grav Drive
8. Sensors & Communications

If an **active module** is damaged, choose randomly among any currently equipped. If it's a utility module, it's efficacy is halved the first time it is damaged, and on any subsequent times it is destroyed and can no longer be used. If it is a weapon, then it is -2 to hit and damage the first time, and destroyed on any subsequent heat damage.

Shields lose a point of either maximum rating (75% chance) or recharge rating (25% chance) each time they are damaged, until either is reduced to zero. If either is reduced to zero, then the ship's shields are totally destroyed and both are reduced to zero.

Power Core loses points of maximum rating or recharge rating exactly like shields. If the power core is destroyed, the ship explodes in a beautiful fireball.

Warp Drives have their Warp Threshold increased by 1 each time they take damage. If the warp threshold reaches double its original value, then it is destroyed.

If **Passengers** take heat damage, then one randomly-selected member of the crew or passengers takes 1d10 points of damage. A Pilot Tank will negate this damage if it is applied to an Immortal pilot, with no reroll being necessary.

If a **Passive Module** is damaged, it is simply destroyed and crossed off. If the passive module happens to be additional quarters or the like, the Referee is encouraged to allow the occupants of any such areas to escape to some relatively safe area of the ship; even if they're reduced to crouching in a corridor somewhere.

Grav Drives lose a point of Speed or Acceleration in the same way that Shields or Power Cores lose maximum rating or recharge. If a ship's grav drives are destroyed, the ship explodes.

Sensors & Communicators. In this rare instance, the pilot of the ship may choose to lose the subspace sensors, the subspace broadcast equipment, the EM sensors, the EM broadcast equipment, the ability to make and maintain target locks, or the ansible. Immortal ships are equipped with a fail-safe; if this would destroy the last remaining ansible, the pilot is killed and resurrected in their waiting clone, and the ship self-destructs. It will not leave an Immortal trapped in a ship with no ansible to save their brain-state.

Ships & Scale

Combat between ships and clones does not work terribly well, and should be avoided where possible. However, if you must engage in it, the following guidelines are appropriate.

1. The ship's movement and weapon ranges should work in kilometers rather than tens of kilometers, due to atmospheric interference. This includes the area of effect for weapons like torpedoes.

2. Around fifty points of clone-scale damage are required to add up to a single point of ship-scale damage. This means that even penetrating a ship's shields would present a serious challenge. If somehow a group of clones, NPCs, or Monsters attempt to destroy or gain access to a powered-down ship that someone has left somewhere, then the efforts necessary will depend on the amount of Armor the ship has and how much time they have. A small group of characters with explosives, plasma cutters, and engineering knowledge could certainly disable a ship given the appropriate amount of time. Primitives who are throwing rocks or using medieval weapons would have a difficult time against a ship with only a single point of Armor. Certainly, a group of ogres could beat their way into an unarmored shuttle given time and huge rocks, but an armored frigate could require siege weaponry to penetrate. They're much more likely to have to do something clever, like tip it over a cliff.
3. Ships cannot obtain target locks on clones, NPCs, or Monsters under normal circumstances. They have to fire their weapons blind, and cannot track individual targets in chaotic circumstances or when there is a great deal of cover. They simply aren't designed to keep track of things that are small and aren't putting off large energy signatures. (Their weapons are pretty great at causing collateral damage, though. Firing a few missiles at an enemy castle will seriously cramp their style.) Therefore, on the rare occasions where it's appropriate for this to happen, the ship can attack at -5. If they hit, then the GM may assume that the strike was close enough that some of the blast strikes the target. Step up the damage die by five steps and apply that to the character, or possibly every character within a small area of effect.

Book 6: Campaigns

XP & Treasure

One of the largest concerns in the life of any adventurer is how to gain levels. Fortunately, the way to gain XP, and thus levels, is easy: Gain loot, and fight monsters. The following are the various specific means of doing these things:

1. Gain magical items (potions, scrolls, enchanted swords, wondrous items, or even simply spellbooks with spells written down in them) and return to galactic civilization to sell them. These will command a price in GC equal to their normal GP value. Please note that this is MUCH better than the usual exchange rate, and is because of the voracious demand for magic in the galaxy at large. Magical items kept for the PCs' own use do not grant XP, even if they are later sold.

2. Gain other treasure, such as gold, gems, or jewelry. The PCs gain the normal GP value of the treasure so obtained, so long as they can get the treasure back to safety, whether somewhere in galactic civilization or a city in Nonpareil.
3. Defeating monsters gives XP as per the Referee's preferred OSR game.
4. Defeating starships gives XP equal to the base GC value of the destroyed ship.

Carrying treasure out of Nonpareil

The ships available to the PCs should be able to contain almost any amount of gold, gems, or jewelry that the PCs wish to carry away. Unfortunately, the amount of money paid for these goods in galactic civilization is not very high. Assume that 100GP worth of coins and treasure is worth 1GC.

Carrying treasure to Nonpareil

Purchasing gold and gems is not a common activity or one well-served. Assume that 1GC can buy 50GP worth of coins (unstamped slugs of metal, actually) gems, or jewelry that would be counted as treasure by the people of Nonpareil.

Movement & Scale

This game takes place at a variety of scales, depending on where they are and what the characters are doing.

Clone scale means one meter per hex. This is used for personal combat between PCs, NPCs, and Monsters. Outside of combat, it is enough for the GM to describe what is happening and the PCs to describe what they are attempting to do.

Terrain scale is used to for maps of geographic areas and for overland movement. It means ten kilometers per hex. Any normal human can probably march two terrain hexes in a day, if the terrain type is not difficult. A trained human in good condition could cover three per day. Just adapt the overland movement rules from your favorite OSR game, if you prefer. Otherwise, use the following movement rate modifiers:

Travel on a roadway: x1.5 movement rate.
Plains, desert, light hills or light forests: x1 movement rate.
Medium forests or hills: x.75 movement rate.
Heavy forest, Jungle, Bog or Swamp: x.5 movement rate.
Mountains, Horrible trackless wilderness: x.25 movement rate.

Starship Scale is used for starship combat. It also means ten kilometers per hex. Starship combat takes place at one round per second, so starships are moving very, very fast.

System Scale is used for navigation within a star system. A hex is one light-minute across. If there are no other active starships within 500 kilometers of them, a ship may use their Cruising Speed, and cross one system-scale hex per point of cruising speed every ten minutes. No ship may ever have a cruising speed higher than 9, for any reason.

Warp Scale is used for tracking travel between star systems. Precise distances are less important, but can be assumed to be up to ten light years per hex. A warp trip is a discrete journey from one star system to another, rather than allowing the ship to wander around as they would at Starship or System scale. The time spent in transit is 1d20 hours, plus four for each hex traveled.

You may have noted that Starships are extremely fast, and the frigates available to starting characters are useful for moving around rather more cargo than normal OSR adventurers are able to carry. So, the following things should be kept in mind when the characters are attempting to use their ships as ways to ferry themselves around for ground exploration.

1. There is no substitute for getting out of your ship and walking around. Ships' sensors just aren't able to detect the interior structure of buildings, nor will they give you the ability to actually find treasure. If you want the prize, you're going to have to take the risk.
2. Ships are not as fast in atmosphere as they are outside of atmosphere. Vessels of classes larger than Frigates or Shuttles usually cannot enter the atmosphere, land, or take off from land. Frigates and shuttles cannot typically go faster than one terrain hex per second in atmosphere.
3. Traveling in atmosphere, landing, and taking off are noisy processes. A ship's engines and grav drives produce massive amounts of light, noise, and ionization in planetary atmospheres, like a localized lightning storm. Excessive use of atmospheric travel can damage a ship's shield generators. The usual strategy when contacting primitive worlds is to set down somewhere isolated during a pre-existing storm, conceal the vessels, and go exploring.

Lifestyles, Logistics & Resurrection

An important component of the game is keeping the characters on the lookout for more treasure. They'll get plenty of XP for mundane treasures found on Nonpareil, which will encourage them to play around there, and possibly engage in activities of local importance. However, only magical treasures sold on the markets outside of nonpareil will really allow the PCs to get rich. That's what they need to do if they want to buy blinged-out new starships, advanced skills, and bioengineered, cybernetically enhanced new clones.

Part of keeping them hungry, of course, is making sure that they have expenses. All lifestyle costs and other expenses are assumed to be pre-paid for the first game-month, along with the character's other starting goods. Therefore, the following monthly expenses should be calculated at the beginning of each game month. Most characters will set up a secure credit account from which these expenditures are automatically deducted, in case they are unavailable to manage their affairs personally. The hiring of a factor or solicitor to manage their affairs is appropriate for higher-level PCs.

1. Lifestyle: If the character is living in the galaxy at large, they spend 1GC per level per month on living expenses. The referee should take these expenditures into account whenever the character's lifestyle is at issue. A tenth level Immortal can arrange for the occasional private dinner at a fine restaurant without spending anything extra. A low-level Immortal might have trouble even getting the reservation, unless they spend extra, have appropriate skills or contacts, etc. Low-level Immortals are assumed to live mostly on their ships even if they're docked with a station, and so forth.
2. Nonpareil Lifestyle: If the character is living on Nonpareil, they are assumed to spend 100GP per level per month on living expenses. The effects are similar to the above. Since characters will not likely have any GP when they first land, and so they may have to live by their wits for a while.
3. Clone Storage Fee: Clones cost 5GC per month to keep stored in a tank somewhere, attached to an ansible.
4. Clones & Ansibles: A new clone costs 20GC to grow, and takes 1 week. A fresh new ansible costs 20GC. When a character is killed and resurrected in a cloned body and wishes to replace it, they must pay for both a new clone *and* a new ansible. If for any reason a character is hauling an Ansible around, they are about 1x1x.5 meters in size, and weigh five hundred kilograms. They have their own microgenerator and do not require external power. They go rather beyond the normal encumbrance system, but they count as a half-ton for purposes of starship cargo holds.
5. An Immortal who dies and is resurrected takes one week to recover from resurrection shock, and must convalesce for that time. If the character does not have a ship handy

where they can hide out and take care of themselves, they will probably be on the hook for 1GC per day in hospital bills.

6. Starship storage fee: A starship that is simply left in a dock or spaceport somewhere has a monthly storage fee of 5GC. This includes low-grade maintenance if necessary, security, etc.
7. Starship Construction Time: A frigate or shuttle requires 1 month to construct at a normal shipyard, plus one week for each passive module added.

As you can see, a character should keep not only a fresh clone handy, but a ship at the same rough location as that clone. This way, they don't have long delays in the process of getting back to the adventure. Any planet with starbases and space ports will have facilities for storing ships and clones. Depending on their activities, the characters may wish to consider carefully the political alignments of those places where they choose to stash their clones.

Book 7: Skills

Skills are the abilities that let Immortals outclass the competition. An Immortal with no skills is much like a subpar Fighter who happens to be a good starship pilot. An Immortal with a few levels and years of skill training can be a match for almost any mortal.

Immortal skills are very expensive, in terms of Galactic Credits. The Quantum Information Packets that make them up cannot be copied like normal software; each one must be individually constructed. Transmitting them via ansible will destroy the sending and receiving ansible. For that reason they are usually purchased as physical packages, about the size of a soda can with a cybernetic interface spike at one end. The Immortal plugs the data spike into their Cybernetic Interface (or into their ship's control console and up through the ship's CI Jack, if they're concerned the package might be booby-trapped.) Once they upload the data, the physical package is useless and can be discarded. An Immortal who has merely uploaded a skill still doesn't know it. They gain no benefits until they have trained it to at least rank 1 using Skill Points.

Some skills are more difficult to learn than others. At the end of each week, when the PC receives skill points, they must immediately spend them on the various skills they have downloaded, or they are lost. It is okay to spend SP on a skill that cannot yet be advanced all the way to the next level, so long as they are spent. Expenditures are irrevocable, and cannot be changed around once play resumes. If a character should be in the unfortunate position of

having all of their downloaded skills at the maximum rating, and has no new skills available to download, then they will lose the SP they gain at the end of the week.

The following table indicates how many Skill Points are required to gain each Rank of a skill. The numbers are not cumulative! A character attempting to train a Factor 2 skill, for example, must first purchase and download it to gain access to the skill. Then, they must spend 2 skill points to gain Rank I in the skill. Thereafter, to gain Rank II, they must spend an additional 4, and Rank III requires an additional 7. The cost in Galactic Credits is only paid once, to purchase the quantum information package. After that, it costs no additional money to train a skill all the way up to Rank V.

Skills are divided up into Factors. Higher-factor skills are more complex, rare, and expensive than low-factor skills. The factor determines both the purchase price in GC and the number of skill points required to learn each rank of the skill.

A character must have learned all prerequisites to a skill before it can be successfully downloaded.

Skill Cost Table

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Purchase Price	25GC	50GC	100GC	200GC	400GC
Rank I	1 SP	2 SP	4 SP	7 SP	11 SP
Rank II	2 SP	4 SP	7 SP	11 SP	16 SP
Rank III	4 SP	7 SP	11 SP	16 SP	22 SP
Rank IV	7 SP	11 SP	16 SP	22 SP	29 SP
Rank V	11 SP	16 SP	22 SP	29 SP	37 SP

Starting Skills

The following skills are listed as FREE. That means that all Immortals begin the game with those skills purchased and trained to Rank I. They can freely train them to higher levels whenever they have the SP to do so. Recall from the character creation chapter that starting Immortals also have 30 Skill Points to spend in order to customize their abilities.

<u>Free Skills:</u>
Athletics
Computers
Electronics
Gunnery

Infomorph
Languages
Math
Missile Launchers
Multitasking
Pilot
Social
Starship Engineering
Starship Operations
Warp Drive Operation

Interpreting & Using Skills

The bonuses to hit, damage, etc. given by skills are non-cumulative within the skill, but are cumulative between skills. For example, a character with Boxing V has +3 to hit in total from that skill, not +6. If they want a larger bonus to hit, they should learn Kung Fu!

Many skills simply give a flat bonus to some activity, or make an activity possible. However, sometimes the Referee may require a skill check of some kind. For example, climbing a tree might well require an Athletics check. In these cases, the Referee should announce a difficulty for the check, and what the stakes are for success or failure. It is recommended that the result of failure should *not* be: You don't accomplish this thing. For example: If a player is attempting to break into an enemy office building by hacking the security system, then a failed roll should not mean they don't get the doors open. They should get the doors open, but set off alarms in the process. The referee should also make copious use of automatic success, or conditional success. For example, a character with substantial skills in Law and the social skills to sway a jury should not have to roll to take a case to trial and win. They are completely capable of winning a case, and leaving something that important up to a single die roll is a bit boring. Instead, the referee could say something along the lines of "You know that you can win this case if you can do the following three things: 1. Serve this missing witness with a subpoena, 2. Protect your expert from corporate assassins, and 3. Find evidence of illegally weaponized organisms coming out of the factory that was destroyed." Then, the PCs have a laundry list of adventure items. If they do those things, the character can win! Or, if it's less important, you might just have them roll.

The Referee might consider mentally dividing tasks up into Basic, Intermediate, Professional, Expert, and Master, which match the five skill ranks. If the character has the requisite level of skill, they can succeed automatically. Tasks should be assigned the level of Master only rarely.

Any character with the right Engineering skills can design a castle that won't fall down with no roll required. A character with Engineering IV, Civil Engineering IV, Mine Engineering IV, and Architecture IV can design a huge, comfortable, beautiful, efficient castle, that is naturally climate-controlled and sits on top of an extensive megadungeon. The character has the skills, so no roll is required. A character with Rank V in those skills could do something absolutely legendary.

Skill checks, unlike rolls in combat, are rolled on 3d6. You add the most appropriate modifier from the character's attributes, and the ranks of any appropriate skills. Generally, the list of appropriate skills will be from the same chain of pre-requisites. The Referee should assign everyday tasks (if they're even worth rolling for, due to time pressure or people shooting at you) a difficulty of 10. More advanced tasks, that a skilled person could actually mess up, might require a difficulty of 15. Extremely difficult tasks, that only experienced professionals should even attempt, might require a difficulty of 20. Highly dubious and dangerous work might require a 25, but at this point it is more usual for a normal person to call in additional resources, assistants, consultants, and take extra time. Legendary tasks, the like of which are rarely seen in the galaxy, might require a difficulty of 30.

Skills & Scales

Some skills work in the clone scale, some skills work in the starship scale, and some work in both. This should be obvious in context. A character's Electronics skill works the same whether they are managing their ship's electronics while jacked in or using a soldering iron at a workbench. On the other hand, Kung Fu and Handgun skills don't help while piloting a ship, and Starship Gunnery abilities aren't useful when firing a laser pistol at a bugbear.

Athletics Skills

Athletics

Factor: 1, FREE

Unskilled: Human Characters with no Athletics skill can make at most one move action per round, and have Speed 4.

I: Character's rank in this skill is added to any attempt to swim, jump, climb, play sports, etc.

II: Speed 5.

III: +1 Encumbrance Slot.

IV: Speed 6.

V: The character can make an additional Move action per round.

Parkour

Factor: 3
Prerequisites: Athletics V
I: This skill is added to all rolls to run, jump, or climb. The character may leap directly across gaps of up to three meters without any additional check.
II: Character's movement ignores obstacles of less than two meters height.
III: +1 Speed. The character may leap directly across gaps of up to five meters without any additional check. Reduce falling damage by 1 die so long as the character is conscious and able to move. . The absolute minimum effect of this level of skill should be that the character should be able to escape from any mundane pursuit in urban environments, and the character should be able to perform any stunt they can find youtube videos of a freerunner performing in real life.
IV: The character may make a saving throw versus Dragon Breath to avoid pit traps or other hazards that do not normally allow a saving throw, if an exercise of sudden athletic prowess could conceivably save the character.
V: The character may make an additional Move action per round. The character may, if they use their entire Move to do so, leap directly across gaps of up to nine meters without any additional check. Reduce falling damage by 2 dice so long as the character is conscious and able to move

Lightning Reflexes
Factor: 4
Prerequisites: None
Unskilled: A character can make one move action and one action of any other type available to them per round. Skills that allow additional actions of a given type have no effect.
I: The character receives two action cards per round, but may spend them on any action types available. For example, a character with Melee Specialization V could spend both action cards on melee attacks.
II: The character receives three action cards per round.
III: Once per round, immediately after action cards are dealt and before any are called, the character may choose to discard one of their action cards and draw a new one.
IV: Once per round, you can use an unused initiative card to interrupt another character's action, and resolve one of your own first. This still counts as an action of the type that you take. If multiple characters use this ability, then the actions form a "stack," with the last interrupting action being resolved first, on down through the stack until you reach and resolve the action of the character that prompted the interrupt.
V: The character receives four action cards per round.

Athletic Specialty

Factor: 2
Prerequisites: Athletics III.
I: There are any number of athletic specialties, like tennis, lacrosse, football (American or European), swimming, etc. A character can choose or invent one, download it, and train this skill. It adds to all attempts to use that skill, and stacks with Athletics. The Referee should not allow this to stack with other athletic activities that have their own pre-existing skills, such as those activities covered by Parkour. The Flight Specialization is used to operate personal flight gear, such as grav boots, hoverboards, etc. Attempting to use them *without* the flight specialty invites the sadistic imagination of the referee to determine the results.

Burden Management
Factor: 2
Prerequisites: Athletics IV
Untrained: A character without any Burden Management has only three encumbrance slots: 1 weapon, 1 defensive, 1 utility, plus a number equal to their strength modifier.
I: The character gains one additional encumbrance slot.
III: Two additional encumbrance slots.
V: Three additional encumbrance slots.

Marathon
Factor: 3
Prerequisite: Athletics IV.
Description: An untrained character can usually march about 20 kilometers per day, or two terrain-scale hexes, if the going is not difficult. But, they will probably be worn out the next day.
I: The character can march for days on end without difficulty, so long as the terrain is easy and they have the ability to camp and get some rest each night. The character's rank in this skill applies to any skill checks they make that involve extreme endurance trials, traveling long distances under muscle power, etc.
II: The character can march 25 kilometers per day.
III: The character can march 30 kilometers per day, or three hexes, in clear terrain.
IV: The character can march for days on end even in difficult terrain.
V: The character can march 40 kilometers per day, in clear terrain.

Computer Skills

Electronics

Factor: I, FREE
Description: This is typically used to manage the sensors of a starship. It can also be used to design, build, modify, or understand most conventional types of electronic equipment.
I: Add the skill rating rating to Lock Target checks.
V: Once per day, you may reroll a failed Lock Target check and take the new result.

Computers
Factor: I, FREE
Description: This is used to manage the software that runs a starship, or anything else. It can be used to program or use a computer at a professional level of expertise. Clones who are attached to a computer via Cybernetic Interface can perform any operation that they would normally be capable *much* faster than the normal speed, and with a highly unusual degree of control. For example, a character who was linked via their Interface to a computer running an art program would be able to make a sophisticated representation of anything they could mentally picture in less than a minute, regardless of whether they had any artistic skills.
Untrained: The character can only lock a single target at a time.
I: The character is able to add their rating in this skill to any checks to operate or program a computer. The character can keep two targets locked.
II: Three targets locked.
III: Four targets locked.
IV: Five targets locked .
V: When you spend an action to Lock Targets, you may make two Lock Target attempts. You do not need to announce the target of the second until the first succeeds or fails, and you can attempt to lock the same target twice.

Cybernetics Skills

Cybernetics
Factor: 3
Prerequisites: Engineering IV, Medicine IV
I: This is the ability to design, build, and install cybernetic devices. A character may install 1 cybernetic device for each rank of this skill when growing a new clone, which does not necessarily need to be their own clone. This requires personal attention. Cybernetic devices have their own cost, which is added to the price after any multiplier for bioengineering an Enhanced clone.

Cybernetic Tolerance
Factor: 3
I: For each rank of this skill, the character can tolerate one cybernetic device in their clone. Characters without this skill are unable to benefit from cybernetics.

Cybernetic Interface Operation
Factor: 1
Prerequisites: None
I: The character is able to make *very basic* use of the internal computing power of their Cybernetic Interface. This allows them to do math as though they had a calculator, set notes for themselves, calendar appointments, set internal mental alarms for specific times, and always know the time and date.
II: The character can perform more advanced computing tasks, such as working with spreadsheets and composing documents during otherwise idle times. They still do not have access to a great deal of storage space.
III: The character can take "pictures" of what they see with their eyes, and audio recordings of what they hear. They have storage space equivalent to a modern personal computer, and may upload or download information when connected via CI. They are able to make limited use of "augmented reality" and heads-up displays.
IV: The character can do anything with their internal computing power that they could with a futuristic personal computer, including the storage and processing of vast amounts of data.
V: The character is capable of adding wireless computing capability to his CI during the clone creation process, without taking up a Cybernetics slot in the new clone. It still requires personal attention. This will allow the character to connect to planetary data networks, and do essentially anything that could be done with a futuristic computer, commlink, or cellular phone, so long as it doesn't require specialized external peripherals. For example, the character could scan in a document simply by looking at it and email it to a colleague without any visible sign they were doing so (and in fact, they could do this *extremely* quickly.) However, they cannot print out that document unless there is a printer nearby that they can wirelessly connect to.

Engineering Skills

Engineering:
Factor: 1
Prerequisite: None

I: This is the ability to work with and understand complex machines. Characters who do not have this skill will not be able to build, repair, or modify technology to any substantial degree. This skill's rank is added to attempts to design or construct items of advanced technology. The Referee is allows to rule that some activities require an appropriate science specialization; designing a bioengineering lab, for example, could reasonably be construed to require knowledge of bioengineering.

Mine Engineering
Factor: 2
Prerequisite: Engineering I
I: You can operate mining equipment. This is most immediately relevant to starships, which are often used for asteroid mining. However, some characters may wish to visit planets and create their own dungeons. That will use substantially different equipment, but this same skill may be used for it. Your rank in this skill is added to any skill check to mine, dig out dungeons, or perform similar activities.

Civil Engineering
Factor: 2
Prerequisite: Engineering II
I: You can design and construct large-scale structures, such as castles or space stations. Truly vast structures require Megascale Engineering. Making those structures particularly comfortable or pleasing to the eye (as opposed to merely efficient) requires Architecture. Your rank in this skill is added to any necessary skill checks.

Complex Fabrication
Factor: 3
Prerequisite: Engineering IV
I: You can use fabrication machinery to rapidly construct complex devices using advanced materials. Given sufficient time to program the fabricator (which doesn't necessarily take very long if you can jack directly into the design software…) you can make custom gear pop out in the time it takes to bake a cake. If you are attempting to build anything using the Industrial Applications skill, and your factory is equipped with fabricators, you can divide the construction time by 1 + Your Rank in this skill.
II: You can use a fabricator to make Tier 2 personal utility items for you and your allies' clones, if you have the skills to design that equipment or can obtain a software template.
III: You can make Tier 2 personal weapons for you and your allies' clones, if you have the skills to design that equipment or can obtain a software template.

IV: You can make Tier 2 armor for you and your allies' clones, if you have the skills to design that equipment or can obtain a software template.
V: You can make Tier 2 cybernetics to install in you and your allies' clones, if you have at least Cybernetics V, and can either design that equipment or can obtain a software template.

Industrial Applications
Factor: 3
Prerequisite: Waldoes IV
I: If your equipment has been modified to be controlled remotely rather than operated by human crew members, you can use your CI to do the work of a five-person crew. For example, you could operate up to five bulldozers at once, if they were all fully roboticized, had their own sensors, and were linked to your starship's control systems. Sophisticated operations will still require Engineering or other applicable skill.
II: Ten people at once.
III: Twenty people at once.
IV: You can personally operate an entire robotic factory. This may require additional computing hardware linked to your CI.
V: You can personally operate an entire industrial complex made up of multiple factories. This will almost certainly require additional computing hardware.

Gunnery Skills

Gunnery
Factor: 1, FREE
I: The character is capable of firing Small starship guns.
II: The character is capable of firing Medium starship guns.
III: The character is capable of firing Large starship guns.
IV: The character is capable of firing Capital starship guns.
V: The character is capable of firing Doomsday Guns. The character may spend an additional action card per round on starship gun attacks.

Accuracy
Factor 2
Prerequisite: Gunnery II
I: +1 to hit with Starship Guns.
III: +2.
V: +3.

Precision
Factor 3
Prerequisite: Gunnery IV
I: +1 to damage with Starship Guns.
III: +2.
V: +3.

Range
Factor: 2
Prerequisite: Gunnery III
I: Add one to each range band of starship guns.
III: Add two to each range band of starship guns.
V: Add three to each range band of starship guns.

Infomorph Skills

Infomorph
Factor: 1, FREE
I: The character is an Immortal! She is equipped with a Cybernetic Interface and is able to survive the process of being killed and having her brain-state transmitted through an Ansible and into a fresh clone. However, the transmission is quite a shock. The recovery process takes a week, during which the character has "resurrection shock" and cannot usefully take any other actions or engage in substantial activity. Typically, nothing more strenuous than shuffling around in a hospital gown, eating soft food, and watching daytime television is allowed. They do gain SP as normal. The character can only have one clone prepared and attached to an Ansible at a time.
II: The recovery process takes five days.
III: The recovery process takes three days.
IV: The recovery process takes 24 hours.
V: The character can recover from brain-state transfer instantly.

Alternates
Factor: 2
Prerequisites: Infomorph IV

I: The character can a number of alternate clones (prepared and attached to Ansibles) equal to their rank in this skill plus one, in different locations. They may choose which one they are transferred to at the instant that they die.
V: If any of their clones or Ansibles have been sabotaged, the character learns this at the instant of their death, and can automatically choose to transfer to an unsabotaged clone. This does not, however, protect against booby-traps or ambushes.

Transfer
Factor: 3
Prerequisites: Alternates IV.
Untrained: A character may normally only transfer to a new clone if their current clone is destructively read. That is, their brains are cooked as part of the transmission process.
I: If the character is attached to the correct ansible equipment to transfer their consciousness, they can do so without the death of their current clone. This can result in permanent death by moving into a sabotaged clone, if they do not have Alternates V. It still destroys the sending and receiving ansible. The character may only make a transfer like this once per week.
III: The character understands ansibles and brain-state transmissions well enough to set up the equipment themselves, without the assistance of any outside technicians. The character may make a transfer like this once every three days.
V: The character may make a voluntary transfer once per 24 hours.

Upload
Factor: 4
Prerequisites: Transfer V
Untrained: An Immortal must usually be operating from a Clone at all times, and they control a starship by plugging their clone directly into it via Cybernetic Interface.

I: The character can Transfer their mind directly into a starship with the appropriate equipment, which at a minimum includes a customized, high-capacity cybernetic interface. If they perform this transfer by ansible, then both the sending and receiving ansibles are destroyed as normal.

They can then pilot the ship, but without having a physical body present. If the ship is destroyed, the character's next clone can be activated normally (given that the ship and clone both still have working ansibles, etc.), although they will have Dump Shock for a minimum of 1d6 hours regardless of any other skills. The character can spend a maximum of 24 hours uploaded and outside of a biological body, or their personality matrix degrades and they die. After a period of being uploaded, the character must spend an equal amount of time in a biological body to recover before uploading again (although that biological body might still be

plugged into a starship via CI.) Starships prepared to receive the characters' consciousness count against their limit of Alternates. A character cannot transfer to a starship when killed, they must transfer to a clone.

Multiple sets of ansible equipment should be prepared in advance, otherwise the character's mind could become trapped in their starship and die at the expiration time.
II: Three days uploaded
III: A week uploaded
IV: A month uploaded
V: The character can stay uploaded permanently. They could theoretically spend eternity never returning to a biological form. They may have backup starships prepared instead of clones, to which their consciousness will transfer if they are killed.

Waldoes
Factor: 3
Prerequisite: Multitasking III
I: You can equip the inside of your starship with cameras, and monitor them simultaneously with whatever else you are doing while connected via CI. All of your new starships come with this automatically if you have this skill, at no additional cost.
II: You can equip the inside of your starship with various simple Waldoes. This costs an Amenity. Waldoes are simple robots that can do things like prepare meals, clean the place up, or speak to passengers. You can't use any skills through these Waldoes and they are basically hopeless in combat.
III: At the cost of an Amenity, your starship may be equipped with the equipment to manage an Avatoid (different models of Avatoid have their own separate cost.) This is a humanoid robot indistinguishable from a human without medical examination. You can see through their eyes, hear through their ears, etc. Avatoids are much more flexible than Waldoes, and can do whatever a human is physically capable of doing. You may attempt to use skills through an avatoid, but if a roll is required then your total bonuses to the roll cannot exceed +5. Avatoids cannot use any magical or psychic abilities.
IV: Your starship can be equipped with Repair Bots, if you have Starship Engineering IV. Furthermore, almost any robotic equipment may be modified to be controlled through a CI. If you do so, you can operate that equipment from the comfort of your cockpit. You cannot use the repair bots during combat without Starship Engineering IV, but you can use them out of combat if you have at least Starship Engineering II. Repair Bots will not let you do anything you couldn't do with your own skills and tools, but they are substantially more efficient and can squeeze into tighter spaces.
V: You can use Advanced Avatoids. See the equipment chapter for examples.

Knowledge Skills

Architecture
Factor: 1
Prerequisite: none
I: You understand the general principles of architecture, both in terms of design and pure aesthetics. You can spot cultural influences and differences, and predict with some accuracy the internal layout of a structure. This has applications in both high culture and criminal contexts. Additionally, if you design and build structures, their comfort and attractiveness is dependent on your Architecture skill rank.

Bioengineering:
Factor: 3.
Prerequisite: Science IV, Biology Specialization IV, Medicine IV.
I: The character can engage in bioengineering for fun and profit. This skill is used (stacking with Science and Biology Specialization) to make horrible monsters, clone people or replacement organs, and generally do awesome things involving biology and tanks full of bubbling fluid. Provided that the character is willing to spend the time and money, the Referee should give them reasonable latitude in designing new monsters. This does not automatically give any special degree of control over the new monsters.

The GM may require skill checks for monsters with especially rare or potent abilities; all abilities should be within the realm of the "natural" (which definitely does not mean the same thing that it does in the real world.) Sapient tyrannosaurs are okay, creatures with innate magical abilities are not.
I: New monsters should range from 1-2HD.
II: 3-5HD
III: 6-9HD
IV: 10-14HD
V: 15-20HD.

Clone Enhancement:
Factor: 4
Prerequisite: Bioengineering V

I: The character is capable of improving their clones. For each rank in this skill, the character may increase the attribute bonuses of their future clones by +1. These bonuses must be chosen at the time the skill is gained and may not be changed.

A character with Clone Enhancement V can have clones with a total of +8 in their physical attributes. Growing Enhanced clones always requires the personal attention of the character throughout the entire growth process. Each level of Enhancement also requires the one-time expenditure of one month doing research and design work.

Each additional level of Enhancement doubles the cost of Enhanced clones, so that a character with Clone Enhancement V, using her full ability, is paying the base cost for a new clone (20GC) times 32, or 640GC.

Example: *Alyssa Marceaux's clones have physical attributes of Str 9, Dex 16, Con 13. She has recently discovered a really fantastic magical sword, though, and is regretting her lack of Strength. After doing as much as she can with Melee skills, she learns Clone Enhancement I. This allows her to design a genome and growth profile for a new clone with Str 13, Dex 16, Con 13. The Referee allows her to do the design work during "downtime" consisting of long warp trips that add up to one month. Unlike her normal clone, which can be safely left to the technicians and which costs 20GC to grow, this one requires her to babysit the 1 week growth process and spend 40GC on facility rental and materials.*

When she learns Clone Enhancement II, she decides that being fast and accurate really has helped her more in the long run. She designs a third clone model with Str 13, Dex 18, Con 13. This model costs 80GC to grow. She cannot now grow a clone with Str 9, Dex 18, and Con 13, because this skill doesn't allow you to mix and match! She could still grow either of her previous models, if she wanted a cheap clone for some reason.

At Clone Enhancement V, a character should have two 18s and one 16. This is to preserve some character differentiation; every clone will have one weak spot.

Languages

Factor: 2, FREE

Description: This is a special skill, in that it allows you to learn new things quickly instead of coming pre-packaged with all the relevant information. A character begins knowing their native tongue. Additional levels of this skill give them language slots. Filling a language slot requires one week of full immersion into the language. At that point, the character will know the new language at native proficiency and will be literate in it. This is a vastly accelerated learning

process that is facilitated by the linguistic aptitude of this skill and the hardware of their cybernetic interface.

Once a language slot is filled, it cannot be changed or forgotten.
I: You are fluent in your native language.
II: You have two additional language slots.
III: You have four additional language slots.
IV: You have eight additional language slots.
V: You have sixteen additional language slots.

Example: *Captain Marceaux is a native francophone. However, those damnable anglophones seem to have taken over everything in the galaxy, so at character creation she spends four of her starting thirty SP to learn Languages II. She spends one of her new slots on English, and saves the other. So, she begins adventuring bilingual. On Nonpareil, though, her mastery of galactic languages becomes useless. The locals speak a tongue they call Common, which she does not know. So, she shuts down all the external communication on her ship, and spends a week doing nothing but immersing herself in Nonpareil culture through the various video and audio feeds provided by the Corbeau's spy drones. After one week of this, she adds Common to her empty language slot.*

After some time spent adventuring on Nonpareil, Alyssa finds that there are many languages spoken here, and she needs to learn more of them. She spends 7 SP to gain Languages III, and now has a total of four language slots beyond French. Two are already filled with Common & English. She spends a week with some new Elven friends and picks up their language, although they insist that no human can ever REALLY learn it. She now wants to learn Draconic, but a week of full immersion in the language of dragons is a daunting prospect…

Math
Factor: 1, FREE
I: The character has a general understanding of math, including arithmetic, algebra, calculus, the more mundane types of geometry, and statistics. Add his skill level to attempts to do complicated math under pressure, or to any attempts to do scientific research. Simple math or math done without time pressure should be automatically successful. A character who is plugged into a starship through their CI can use the ship's computers to perform mathematical operations with superhuman speed. Higher levels of this skill give access to more complicated fields of mathematics.

Quantum Neurology
Factor: 3.
Prerequisite: Quantum Mechanics IV, Medicine IV.
I: This skill is used to deal with brain-states and quantum information packets. A character without this skill cannot use the equipment needed to create new quantum information packets, or build, design, or modify the cybernetic interfaces used to link Immortals to their Starships.

Quantum Neuroengineering
Factor: 4.
Prerequisites: Quantum Neurology V
I: Much like Clone Enhancement, this skill can be used to enhance the attributes of future clones. Each time a character gains a rank in this skill, they can spend one month re-engineering the neural networks of their future clones, which will allow them to allocate an additional +1 attribute modifier.

Unlike Clone Enhancement, this does not add any cost to future clones. The mental enhancements will apply only to those clones created *after* this skill is obtained and the requisite time is spent performing research. Assume one month of research is required, as a one-time expenditure, for each additional +1 added to future clones' attribute modifiers.

Science
Factor: 1
Prerequisite: Math III
I: The character has a general, non-specialist understanding of the sciences. Add his skill level to any skill checks to know basic science-ey stuff. Advanced knowledge or technical tasks require more specialized skills.

Science Specialization
Factor: 2
Prerequisite: Science III
Description: This represents a wide number of fields of science in which one can specialize. Select specific specializations at the time the skill is purchased from a vendor. Available specialties include but are not limited to: Astronomy, Biology, Chemistry, Planetary Science, Physics, Quantum Mechanics, and Social Science. Specific specialties are usually the prerequisite for highly advanced skills.

I: Your rank in this skill acts as a bonus to appropriate skill checks. The Referee should provide you with substantial information about the fields you are specialized in on your request. For example, a character with a Chemistry Specialization should know where a given chemical could be purchased in bulk without any check, a character with an Astronomy Specialization should be able to gain the contact information of leading astronomers, etc.

Dimensional Mechanics
Factor: 3
Prerequisite: Physics Specialization IV
I: The character has an understanding of dimensional mechanics, and can apply their rating in this skill as a bonus to any appropriate skill checks. This skill is used to design, build, or modify warp or subspace technology.

Medicine:
Factor: 2
Prerequisite: Biology Specialization III
I: The character is equivalent to a medical doctor, and may have a medical license if they choose to jump through the appropriate hoops. They can perform first aid, use medicine and medical equipment to help people, perform surgery, and so forth. The character gains this skill's ranks as a bonus if they need to roll for any reason. Science skills do not usually stack with Medicine when used to attempt to treat a patient. If they have access to advanced medical technology, then any patient under their treatment regains additional HP per day equal to their rank in this skill.

Meditation
Factor: 1
Prerequisite: NONE
Untrained: The typical Immortal can only operate through their CI for around four hours without taking a break to rest and clear their mind. Characters who are skilled in meditation can learn to better manage the flood of experience and multiple awarenesses that come with being interfaced directly into a CI-equipped ship. Meditation can also be used for its normal real-world purposes of centering oneself emotionally or religious practice.
I: The character can handle their CI for up to six hours.
II: The character can handle their CI for up to eight hours, although this will require the use of certain medical or waste management devices that mean it will take the character a round or two to disentangle themselves.
III: Twelve hours.

IV: Sixteen Hours
V: The character can use a fluid-filled tank to float in while piloting (if the Pilot Tank amenity is equipped on the ship, at least.) If so ensconced, they can enter a sort of trance-state and actually sleep while connected, and any unusual or threatening information picked up by their starship's sensors will automatically awaken them.

Melee Combat Skills

Melee
Factor: 1
Prerequisite: None
I: +1 to-hit with Melee weapons.
III: +2.
V: +3. The character may spend one additional action per round on Melee attacks.

Parry
Factor: 2
Prerequisite: Melee III
I: +1 to character's Armor Class against melee weapon or unarmed attacks, so long as they have a melee weapon drawn.
III: +2.
V: +3.

Kenjutsu:
Factor: 3
Prerequisites: Melee IV:
I: +1 to damage with Melee weapon. This never counts for Unarmed attacks, even if the character has skills which make their Unarmed attacks count as armed or melee attacks.
III: +2.
V: +3.

Melee Specialization
Factor: 4
Prerequisite: Melee V
This is actually a category of skills, one for each type of weapon. For example, a character could purchase a Sword Specialization, Mace Specialization, Spear Specialization, etc.
I: +1 to hit with the specialized weapon.
III: +2 to hit with the specialized weapon.

IV: +3 to hit with the specialized weapon.
V: The character may spend one additional action per round on Melee attacks with the specialized weapon.

Missile Skills

Missile Launchers
Cost: Factor 2, FREE
I: The character is capable of firing Small missile launchers.
II: The character is capable of firing Medium missile launchers.
III: The character is capable of firing Large missile launchers.
IV: The character is capable of firing Capital missile launchers.
V: The character is capable of firing Doomsday missile launchers. The character may spend an additional action card per round on missile attacks.

Missile Accuracy
Factor 2
Prerequisite: Missile Launchers II
I: +1 to hit with Missiles.
III: +2.
V: +3.

Missile Precision
Factor 3
Prerequisite: Missile Launchers IV
I: +1 to damage with missiles.
III: +2.
V: +3.

Missile Range
Factor: 2
Prerequisite: Missile Launchers III
I: Add one to each range band of missiles.
III: Add two to each range band of missiles.
V: Add three to each range band of missiles.

Organizational & Professional Skills

Ranged Combat Skills

Handguns:
Factor: 1
Prerequisites: None
I: +1 to hit with handguns.
III: +2.
V: +3

Longarms:
Factor: 1
Prerequisites: None
I: +1 to hit with longarms.
III: +2.
V: +3.

Longshot:
Factor: 2
Prerequisites: Longarms IV
I: When using Handguns or Longarms, add 1 hex to each range band for each rank they have in this skill.

Example: *Alyssa Marceaux has her Laser Pistol. It normally has range bands of 1-7 normal, 8-10 medium, and 11-13 long, or 7/3/3. See the Combat chapter's section on Range for an explanation of this. If she gains one rank of Longshot, her range bands will instead be 8/4/4. So, she would have no penalty to hit for an enemy 1-8 meters away, -2 to hit one 9-12 meters away, and -5 to hit one 13-16 meters away.*

If Alyssa later trains Longshot all the way up to V, her range bands will be 12/8/8. She will be able to fire at enemies 1-12 meters away with no penalty, at 13-20 meters away with a -2 penalty, and at 21-28 meters away with a -5 penalty.

Deadeye:
Factor: 3
Prerequisites: Handguns IV, Longarms IV.
I: The character deals +1 damage with Handguns or Longarms.
III: +2.
V: +3

Serpentine
Factor: 2
Prerequisite: Athletics V
I: +1 to Armor Class when targeted with a Ranged attack.
III: +2.
V: +3.

Quickdraw
Factor: 2
Description: Untrained persons must usually use an action card to draw a weapon, or to put one properly away.
Prerequisite: None
I: The character may draw or put away a weapon when they complete a move action.
III: The character may put a weapon away properly any time they are allowed to draw a weapon, and may do both at the same time.
V: The character may draw an appropriate weapon as part of taking an attack action with that weapon.

Saving Throw Skills

These skills add a bonus to your saving throws.

Paralysis, Poison, or Death Magic defense
Factor: 2
Prerequisite: None
I: +1 to these saving throws.
III: +2.
V: +3.

Rod, Staff, or Wand
Factor: 2
Prerequisite: None
I: +1 to these saving throws.
III: +2.
V: +3.

Petrification or Polymorph Defense
Factor: 2
Prerequisite: None
I: +1 to these saving throws.
III: +2.
V: +3.

Breath Weapon Defense
Factor: 2
Prerequisite: None
I: +1 to these saving throws.
III: +2.
V: +3.

Spell Defense
Factor: 2
Prerequisite: None
I: +1 to these saving throws.
III: +2.
V: +3.

Social Skills

Social
Factor: 1, FREE
I: The character adds his skill rank to attempts to charm, intimidate, seduce, persuade, or deceive other characters.

Social Specialization
Factor: 2
Prerequisite: Social III
Description: This is actually a category of skills, one for each type of interaction. For example, a character could purchase or download Charm, Intimidate, Seduce, Persuade, or Deceive Specializations. This skill only applies to the type of social interaction that is being specialized in. A character may specialize in multiple different types of social interaction, but specializations never stack.
I: The character may add their rank to skill checks for the appropriate type of social interaction.
V: Some Specializations have additional effects at this level. Charm gives +1 to Reaction Rolls (no more than one character per group can add this bonus), Intimidate gives a -1 to enemy Morale rolls (again, no more than one character per group can apply this penalty.)

Bullshit Detector
Factor: 2
Prerequisite: Social III
I: This skill's rating adds to the opponent's Difficulty, or the character's roll to resist, when someone attempts to deceive the character.
V: The character cannot be deceived by anyone who does not have Deceive Specialization.

Hairy Eyeball
Factor: 3
Prerequisite: Social III, Boxing IV.
I: The character may make a skill check (using their Hairy Eyeball skill rank, modified by Wisdom), to determine the relative level and combat ability of any clone that they can observe for a time or interact with in person. The difficulty of the check is 20 minus the level or HD of the target creature. The check is rolled openly, so if the player rolls very high and doesn't get a read on the target clone, they can safely assume that the target is low level at least. The information given by this check is not very precise, but includes at a minimum whether the target is higher or lower level, and what degree of threat they would likely present to the character if someone initiated combat.

Retainers
Factor: 2
Prerequisites: Charm Specialization III
Description: Without this skill, the character can at most hire a single unskilled, desperate hireling.

I: Your character may have a number of Henchmen (NPCs with classes, who are able to gain levels) equal to their rank in this skill at any given time. Immortals are not available as henchmen, but members of other classes from other OSR games are certainly likely to be. You may also hire a number of Hirelings (Level 0 NPCs who cannot gain class levels) dependent on your rank in this skill. At Rank one, you can have 2 hirelings. Hirelings may be experts, mercenaries, or simple porters and dumb muscle.
II: 4 Hirelings.
III: 8 Hirelings.
IV: 16 Hirelings.
V: 32 Hirelings.

Animal Companion
Factor: 3
Prerequisites: Henchmen III.
Description: Your character may train as a pet and companion a "natural" animal. You may have one animal companion active at any given time, and they should ideally be trained from birth or shortly afterward. They should be normal animals (tigers are popular) monstrous versions of normal animals (dire wolves are great) or simply prehistoric or unusual animals (dinosaurs or owlbears.) They should not be intelligent or have supernatural or extranormal abilities. Animal companions often make excellent mounts.

If you or one of your allies has sufficient skills to design and construct cybernetic implants that will work with your animal companion's biology, then you could theoretically have cybernetic enhancements installed into your animal companion. Because animals react so badly to the installation of cybernetics, at that point it would be better to bioengineer a custom creature and grow them around the cybernetic implants.

I: Your animal companion should have no more than 1-2HD.
II: 3-5HD
III: 6-9HD
IV: 10-14HD
V: 15-20HD.

Starship Pilot Skills

Multitasking

Factor: 3, FREE
Unskilled: When piloting a starship, the character receives two action cards per round. They can make one move action and one action of any other type available to them per round. Mundane starship crews normally have this level of skill.
I: Two action cards per round, which may be spent on actions of any type available.
II: Three action cards per round.
III: Once per round, immediately after action cards are dealt and before any are called, the character may choose to discard one of their action cards and draw a new one.
IV: Once per round, you can use an unused, lower-ranked action card of the same suit to interrupt another character's action, and resolve one of your own first. This still counts as an action of the type that you take. If multiple characters use this ability, then the actions form a "stack," with the last interrupting action being resolved first, on down through the stack until you reach and resolve the action of the character that prompted the interrupt. You receive four action cards per round.
V: You receive five action cards per round.

Pilot
Factor: 1, FREE
Description: Trained starship crews are able to pilot a starship around with its normal abilities, but may or may not have any of the benefits of this skill. Of course, someone with no training whatsoever probably could not pilot a starship at all, or at most they could instruct an Expert System autopilot to take them somewhere and land safely. That would not be spectacularly helpful in combat.
I: Your rank in this skill adds to any skill checks made for complicated or delicate maneuvers when flying a starship.
III: Add one to your starship's Speed.
V: You may make one additional Move action per round.

Delta Management
Factor: 2
Prerequisite: Pilot II
I: Add one to the Acceleration of your starship.
III: Add one to your starship's Speed.
V: Sideslip: As a Maneuver, instead of changing facing, you may instead move your ship into the left-hand or right-hand hex of your front arc. This also counts as advancing one hex, both for purposes of using a Maneuver afterward and for purposes of how many hexes you may move per round. Sideslip costs two movement points.

Hotshot
Factor: 3
Prerequisite: Pilot III
Description: All of the following special maneuvers are used only as part of a Move action.
I: You may add this skill's rank to any attempts to make complicated or delicate maneuvers, stacking with the bonus from Pilot or other skills.
II: Spin: If you begin your turn with zero speed tokens, you may turn your ship to any facing before Accelerating.
III: Crash Stop: Instead of using Acceleration normally, you may at the beginning of your turn remove Speed Tokens equal to half of your maximum speed (round up.) If you do this, you may not use any other maneuvers. This type of Move is considered both an acceleration and a maneuver, so it costs two power and adds two heat.
IV: Burnout: If you begin your turn with zero speed tokens, you may add speed tokens equal to half of your maximum speed, instead of using Acceleration. If you do this, you may not make any further maneuvers once you begin to advance. Like Crash Stop, it counts as both acceleration and a maneuver, and so costs two power and adds two heat.
V: Bootlegger Reverse: If the last hex you move forward during your Move action is a Sideslip, you may reverse the facing (turn it 180 degrees, to face in the opposite direction) of your ship at the end of your move. This does not affect the number of speed tokens on your ship, and it does count as a maneuver.

Ace
Factor: 3
Prerequisite: Pilot IV
I: You may add this skill's rank to any attempts to make complicated or delicate maneuvers, stacking with the bonus from Pilot or other skills.
II: Add one to your starship's Speed.
III: Add one to your starship's Acceleration.
IV: Add two to your starship's Speed.
V: Mundane starship crews receive -2 to any attack rolls they make against you.

Defensive Maneuver
Factor: 3
Prerequisite: Pilot V
I: +1 to your starship's Armor Class
III: +2.
V: +3.

Starship Operation
Cost: FREE
I: You may operate Frigates or Shuttles.
II: You may operate Gunboats.
III: You may operate Cruisers.
IV: You may operate Heavy Cruisers.
V: You may operate Battleships.
Factor: 3

Advanced Starship Operation:
Factor: 4
Prerequisites: Starship Operation V
I: You may operate Advanced Frigates or Shuttles.
II: You may operate Advanced Gunboats or Cruisers.
III: You may operate Advanced Heavy Cruisers or Battleships.
IV: You may operate Capital Ships.
V: You may operate Doom Stars.

Starship Engineering Skills

Starship Engineering
Factor: 2, FREE
Prerequisite: NONE
This skill is essential for understanding how starships are constructed and how their systems work together. This skill can be used to understand, repair, and modify starship designs.
I: This skill's rating is added to any attempt to understand the structure or function of a starship.
II: You may repair a starship when it is docked or landed, by physically crawling around the ship and working on it with tools.
III: You may modify the design of a starship at the time of its construction by adding one additional passive module for which you meet the prerequisites. You must still pay the cost normally.
IV: If you equip Repair Bots to a starship (requires Waldoes IV), you may use the Repair action in combat.
V: Starships you design and construct for your own use may have an additional +1 bonus in any physical attribute, at no additional cost.

Warp Drive Operation
Factor: 2, FREE
I: You are capable of operating a starship's Warp Drive, including setting a course to the target star system. This makes available to you the Charge Warp Drive and Warp Out actions.
III: When you use the Charge Warp Drive action, you may spend 2 power to add 2 warp tokens instead of 1.
IV: You may spend only 1 power and add 1 heat to add 2 warp tokens instead of 1.
V: You may spend an additional action per round on Charge Warp Drive.

Shield Management
Factor: 2
Prerequisite: Starship Engineering II
I: The starship's maximum shield rating is increased by 1
III: The starship's shield recharge is increased by 1.
V: The starship's maximum shield rating is increased by 2.

Armor Integrity
Factor: 2
Prerequisite: Starship Engineering III
I: Once per day, when a critical hit would cause you to lose a point of armor, you can make your opponent reroll the attack roll and take the new result, whether it is better or worse.
III: Once per day, you can require an opponent to reroll a damage roll against you and take the new result, whether it is better or worse than the original.
V: Add one to your starship's armor rating.

Capacitor Management
Factor: 3
Prerequisite: Starship Engineering IV
I: Your starship's maximum Power is increased by your rank in this skill.

Power Core Management
Factor: 3
Prerequisite: Starship Engineering IV
Prerequisite: Power Core Management V
II: You regain an additional power token during cooldown.
IV: You regain two additional power tokens during cooldown.

V: You regain three additional power tokens during cooldown, if you have zero power tokens left when the cooldown phase begins.

Heat Management
Factor: 4
Prerequisite: Starship Engineering IV
I: Your starship's Heat Threshold increases by your rank in this skill.
V: You remove one additional heat token during cooldown.

Thief Skills

Somewhat awkwardly, we will depart from the normal skill system here in order to maintain OSR compatibility. That is, thief skills will continue to use percentages, so you can treat Immortals using thief skills the same way you would an OSR thief. It's easiest to just use your favorite OSR game here, but you might let your players successfully lobby for a different one, so long as they're all using the same rules.

Basic Infiltration
Factor: 1
I: You have the ability to hide, move silently, climb walls, and hear noise of a first-level thief.
II: Second Level Thief.
III: Third Level Thief.
IV: Fourth Level Thief.
V: Fifth Level Thief.

Professional Infiltration
Factor: 3
Prerequisites: Basic Infiltration V
I: You have the ability to hide, move silently, climb walls, and hear noise of a sixth-level thief.
II: Seventh Level Thief.
III: Eighth Level Thief.
IV: Ninth Level Thief.
V: Tenth Level Thief.

Master Infiltration
Factor: 5
Prerequisite: Professional Infiltration V

I: You have the ability to hide, move silently, climb walls, and hear noise of an eleventh-level thief.
II: Twelfth Level Thief.
III: Thirteenth Level Thief.
IV: Fourteenth Level Thief.
V: Once per game day, you can reroll an unsuccessful skill check of any skill granted through your Infiltration skills.

Basic Legerdemain
Factor: 1
I: You have the ability to find and remove traps, open locks, and pick pockets of a first-level thief.
II: Second Level Thief.
III: Third Level Thief.
IV: Fourth Level Thief.
V: Fifth Level Thief.

Professional Legerdemain
Factor: 3
Prerequisites: Basic Legerdemain V
I: You have the ability to find and remove traps, open locks, and pick pockets of a sixth-level thief.
II: Seventh Level Thief.
III: Eighth Level Thief.
IV: Ninth Level Thief.
V: Tenth Level Thief.

Master Legerdemain
Factor: 5
Prerequisite: Professional Legerdemain V
I: You have the ability to find and remove traps, open locks, and pick pockets of an eleventh-level thief.
II: Twelfth Level Thief.
III: Thirteenth Level Thief.
IV: Fourteenth Level Thief.
V: Once per game day, you can reroll an unsuccessful skill check of any skill granted through your Legerdemain skills.

Skullduggery
Factor 2
Prerequisite: Basic Infiltration II, Basic Legerdemain II
Description: Skullduggery must be used from a hex adjacent to the target. It must use an unarmed, melee, or handgun attack. It cannot be used with rifles.
I: You gain an additional +2 to hit when attacking an opponent from the rear or flank, or if they cannot see you. Step up your weapon's damage dice by one step whenever you hit an opponent who is surprised, cannot see you, or from the rear or flank.
II: You gain +2 to hit an opponent that you have surprised, whether they can see you or not. Step up your weapon's damage dice by two steps whenever you hit an opponent who is surprised, cannot see you, or from the rear or flank.
III: Three steps.
IV: Four steps.
V: Five steps.

Unarmed Combat Skills

Boxing
Factor: 1
Prerequisite: None
I: +1 to hit with unarmed attacks.
III: +2.
V: +3. One additional unarmed attack action allowed per round.

Savate
Factor: 2
Prerequisite: Boxing III
Notes: A character must normally have one hand free in order to make unarmed attacks.
I: The Character can make Unarmed attacks at -3 to hit, even if they have no hands free.
III: The Character can make Unarmed attacks without penalty, even if they have no hands free.
V: Increase the die type of the Character's damage with unarmed attacks by one step.

Martial Arts
Factor: 3
Prerequisites: Boxing IV
I: +1 damage with unarmed attacks.
III: +2 damage.

V: +3 damage.

Kung Fu
Factor: 4
Prerequisites: Martial Arts V.
I: Mantis Style: The character can Interfere as though he were armed with a melee weapon even though she is using unarmed attacks or techniques. This is also useful when attacking inanimate objects, as the character's unarmed attacks are as good as hammers of an equivalent damage die. It also allows them to claim the Defense bonus from Parry, if they have that skill. +1 to hit with unarmed attacks.
II: Crane Stance: Character can play an Action card to take an Unarmed attack, and "hold" the attack. They have the option of using the attack on any enemy that enters their front arc for the remainder of the round. If they do not use it by the end of the round, the held action is discarded during Cooldown. +1 to AC against Melee or Unarmed attacks.
III: Snake Style: If an opponent rolls a natural 1 against this character using a melee attack, they must immediately make a saving throw versus Petrification or Polymorph. If they fail, they are disarmed. This character takes away their weapon or hurls it 2d6 meters in a random direction at their option. +2 to hit with Unarmed attacks.
IV: Tiger Style: Increase the damage die of unarmed attacks by one step. +2 to AC against Melee or Unarmed attacks.
V: Dragon Style: The character is considered to face all directions when they are engaged in combat. All adjacent hexes are in their front arc, enemies cannot gain flanking or rear attack bonuses against this character unless they are surprised. +3 to hit with Unarmed attacks.

Book 8: Magic

Please Note: If you begin the campaign as suggested, at 24 hours after the existence of Nonpareil is reported, no magical skills will be available. The arts of magic are unknown outside of Nonpareil. Ambitious outsiders will have to journey into the Dyson Sphere and recover magical lore from the natives. Only then could it be taken back to the complex data processing facilities that can turn it into a downloadable Quantum Information Packet. In fact, gathering the necessary magical lore is potentially highly remunerative, since all of galactic civilization is desperate to gain command of the power of Magic.

The use of magic is an ancient and occult art which any player of OSR-compatible games is well familiar with. Some Immortals will learn the practice of Magic in order to give themselves an edge over the competition. Their many advantages with regard to how quickly they learn will

all apply as well to the practice of magic. However, some special rules will also apply. I do not intend a massive duplication of effort, and so I will not create entirely unique spell lists for this game. The Referee is encouraged to take the spell lists from their favorite OSR-compatible game and adapt it.

The division between arcane and divine magic does not exist for Immortals as such. In Nonpareil, the practice of divine magic is much different from the practice of Arcane magic, but Clerics do not need to serve any specific deity (nor do they usually do so!) They are the lawyers, diplomats, and accountants of the spirit world, and their relationship with the alien and incomprehensible extradimensional beings that are known as "gods" is that of intercessor rather than worshipper.

So, while the division between clerics and magic users may be an unbridgeable divide for the OSR classes, it takes only a moderate additional effort for Immortals to learn both types of casting. Convert spells from any list willy-nilly, adjusting the statistics of the spell as you see fit. The following changes to the spell lists should be made:

1. Any spell that does substantial direct damage. I would personally keep Magic Missile, but almost all other damage-dealing spells would be removed. This is to preserve a role where Psychic powers and mundane weapons are superior.
2. Secondly, anything that seems too much like a psychic power. Any kind of telekinesis, teleportation, flight, etc. should not be allowed.
3. Spells such as Weather Control or Locate Object should have very much improved areas of effect. This game happens on a larger scale and characters will have access to large-scale effects and rapid transportation. Therefore, so that magic can keep up at least a little, Locate Object should work at least within a few miles, and Control Weather should allow the projection of severe storms over at least a few hundred square miles.
4. Spells to revive the dead may interact strangely with Immortals.
5. Wish spells should not be usable to increase attributes, nor should permanency be allowed to take the place of cybernetic implants, etc. "Permanent" effects such as these only attach to the one clone they are directly cast upon, in any case. Changing clones may also be a good way to escape curses, at the Referee's option.

This should leave plenty of room for characters of both magical and mundane abilities.

Magical Skills, Spellbooks, & Spells

Please Note: This game assumes that clerics and magic users guard their magic *jealously.* See the guidelines in the Advanced version of the referee's book for the kind of efforts required to squeeze magical lore out of NPC spellcasters.

Thanks to the assistance of their CI in storing and processing information, Immortals do not need to maintain a physical spellbook as mortals do. Instead, they store spells as quantum information in their CI. Attempting to convert a scroll into a quantum information packet destroys the scroll, just as learning it and copying it into a spellbook would destroy it for a mortal magician. Learning magical skills is VERY skill intensive, and is recommended for more advanced characters.

Immortals thus have a use for scrolls, but do not generally bother learning how to scribe spells into spellbooks or scrolls. If they wish to do so, the Referee may invent some type of Calligraphy skill to allow them to do so.

Magical spells can only be cast through a live clone. They cannot be cast while the character is operating a starship through their CI, nor can they be cast through Avatoids. Casting a spell uses special initiative rules. At the completion of one of their actions, the character announces that they are beginning to cast a spell. They only need to declare what spell they are casting if another character present has sufficient skills to identify the spell as it is being cast. The player otherwise has the option of writing it down on a notecard or something and leaving it face-down (or showing it only to those other players whose character can determine what spell it is) until the casting is complete. This DOES mean that they have the option of keeping their spell secret from the Referee. A character can normally identify any spell that they themselves know. If at any point while the spell is being cast, the casting character takes damage to their Hit Points (damage stopped by Shields or Armor does not count) then the spell is disrupted. They lose one casting of a spell of whatever level the disrupted spell was, and they cannot cast the spell. If no one manages to disrupt the caster, then the caster may use their next action card for the Cast Spell action. They cannot continue casting while taking another action, they must use the first available action card or else lose the spell as though it had been Disrupted. At this point, they reveal what spell they were casting, and expend a casting of one spell of the appropriate level. The spell then takes effect as normal.

A character may give up higher-level castings in order to cast a lower-level spell, but not the reverse.

Magic Items

Characters may sell magical items for XP, or may keep them for their own use. An Immortal can by default use any magic item that is usable by a fighter. If they have at least Rank I in Skullduggery, then they can use magical items available to thieves. Using magical items allowed only to Magic Users or Clerics requires the Artifice skill, below.

Magical Skills

Occult
Factor: 1
Prerequisite: NONE
I: The character has some knowledge of the occult. Their rating in this skill may be added to any relevant skill check. This will allow the character to do things such as know the appropriate way to fight vampires and to recognize the use of magic.

Spellcraft
Factor: 2
Prerequisites: Occult V
I: The character is able to read and understand magical spells, and determine what they do. This skill renders the Read Magic spell unnecessary. The Immortal can read and understand first-level arcane spells.
II: The Immortal can read and understand second- and third-level arcane spells.
III: The Immortal can read and understand fourth- and fifth-level arcane spells.
IV: The Immortal can read and understand sixth- and seventh-level arcane spells.
V: The Immortal can read and understand eigth- and ninth-level arcane spells.

Spellcasting 1
Factor: 1
Prerequisite: Spellcraft I
I: The character may cast a number of first-level spells per day equal to their rank in this skill.

Spellcasting 2
Factor: 1
Prerequisite: Spellcasting 1 IV
I: The character may cast a number of second-level spells per day equal to their rank in this skill.

Spellcasting 3
Factor: 2

Prerequisite: Spellcasting 2 IV
I: The character may cast a number of third-level spells per day equal to their rank in this skill.

Spellcasting 4
Factor: 2
Prerequisite: Spellcasting 3 IV
I: The character may cast a number of fourth-level spells per day equal to their rank in this skill.

Spellcasting 5
Factor: 3
Prerequisite: Spellcasting 4 IV
I: The character may cast a number of fifth-level spells per day equal to their rank in this skill.

Spellcasting 6
Factor: 3
Prerequisite: Spellcasting 5 IV
I: The character may cast a number of sixth-level spells per day equal to their rank in this skill.

Spellcasting 7
Factor: 4
Prerequisite: Spellcasting 6 IV
I: The character may cast a number of seventh-level spells per day equal to their rank in this skill.

Spellcasting 8
Factor: 4
Prerequisite: Spellcasting 7 IV
I: The character may cast a number of eighth-level spells per day equal to their rank in this skill.

Spellcasting 9
Factor: 5
Prerequisite: Spellcasting 1-8 V
I: The character may cast a number of ninth-level spells per day equal to their rank in this skill.

Theurgy
Factor: 3
Prerequisite: Spellcraft III, Spellcasting 1 Rank I.

I: The character understands clerical magic. They can add clerical spells of 1st level to their spell list, provided they can find scrolls or other means to learn them.
II: 2nd or 3rd level clerical spells.
III: 4th or 5th level clerical spells.
IV: 6th or 7th level clerical spells.
V: The character can turn undead as a first-level cleric.

Turning
Factor: 3
Prerequisite: Theurgy V
I: The character can turn undead as a second-level cleric.
II: Third level.
III: Fourth Level.
IV: Fifth Level.
V: Sixth Level

Banishing
Factor: 4
Prerequisite: Turning V
I: The character can turn undead as a seventh-level cleric.
II: Eighth-level.
III: Ninth-level.
IV: Tenth-Level
V: Eleventh-Level.

Forbiddance
Factor: 5
Prerequisite: Banishing V
I: The character can turn undead as a twelfth-level cleric.
II: Thirteenth Level.
III: Fourteenth Level
IV: Once per day, when the character successfully turns (or destroys, etc.) undead, they may affect twice the usual number of hit dice.
V: Once per day, the character may reroll a failed turning check.

Artifice
Factor: 4
Prerequisite: Spellcraft III

I: If you have at least Rank I of Spellcasting 1, you can use magic items that are restricted to magic users.
II: If you have at least Theurgy I and Rank I of Spellcasting 1, then you can use magic items that are restricted to clerics.
IV: You can craft magical items as a Magic User would, provided that: Your character level is equal to the magic user level required to craft the magic item AND: You know and can cast magic user spells of at least as high a level as that level of magic user can cast.
V: You can craft magical items as a Cleric would, provided that: Your character level is equal to the cleric level required to craft the magic item AND: You know and can cast cleric spells of at least as high a level as that level of cleric can cast.

Book 9: Encounters & Conversion Notes

Surprise
When two groups encounter each other unexpectedly, roll 1d6 for each group. On a 1 or 2, that group is surprised. For small groups or if the Referee prefers a more mixed result, they might roll individually for the PCs, individual enemies, or sub-groups of enemies. Once surprise is determined, deal action cards normally. All characters that are Surprised must discard their highest-ranked card. If they have an ace, they may decide to play it after deuces in order to discard a non-ace card.

Morale & Reaction Rolls
Morale is indispensable to OSR games. Use Morale as per the rules in your favorite OSR game, usually whichever one you are pulling monsters from.

Reaction rolls use the following additional rules. When an encounter begins, reaction is not rolled until the first enemy uses an action card. Until then, the PCs are not sure how they will react. The PCs cannot add their Charisma modifier to the reaction roll unless and until one PC attempts to speak to them using a common language. So, if a group of orcs gets the drop on the characters and acts before any of the PCs do, they might make a reaction roll indicating hostility and attack before the characters can attempt to dissuade them. However, if a high-charisma PC manages to act before the Orcs take a definitively hostile action (an actual attack, not just a move to enter melee combat, the drawing of weapons, etc.) or any other PC launches an attack, they can go ahead and apply their Charisma modifier to the reaction roll and attempt to sway the Orcs into neutrality or uncertainty. Only the Charisma modifier of the PC speaking to the enemies counts, and only one PC can apply their Charisma modifier at a time (a second

PC with a better Charisma modifier might act later in the round, and improve on the first PC's efforts, of course, by superseding the original modifier.)

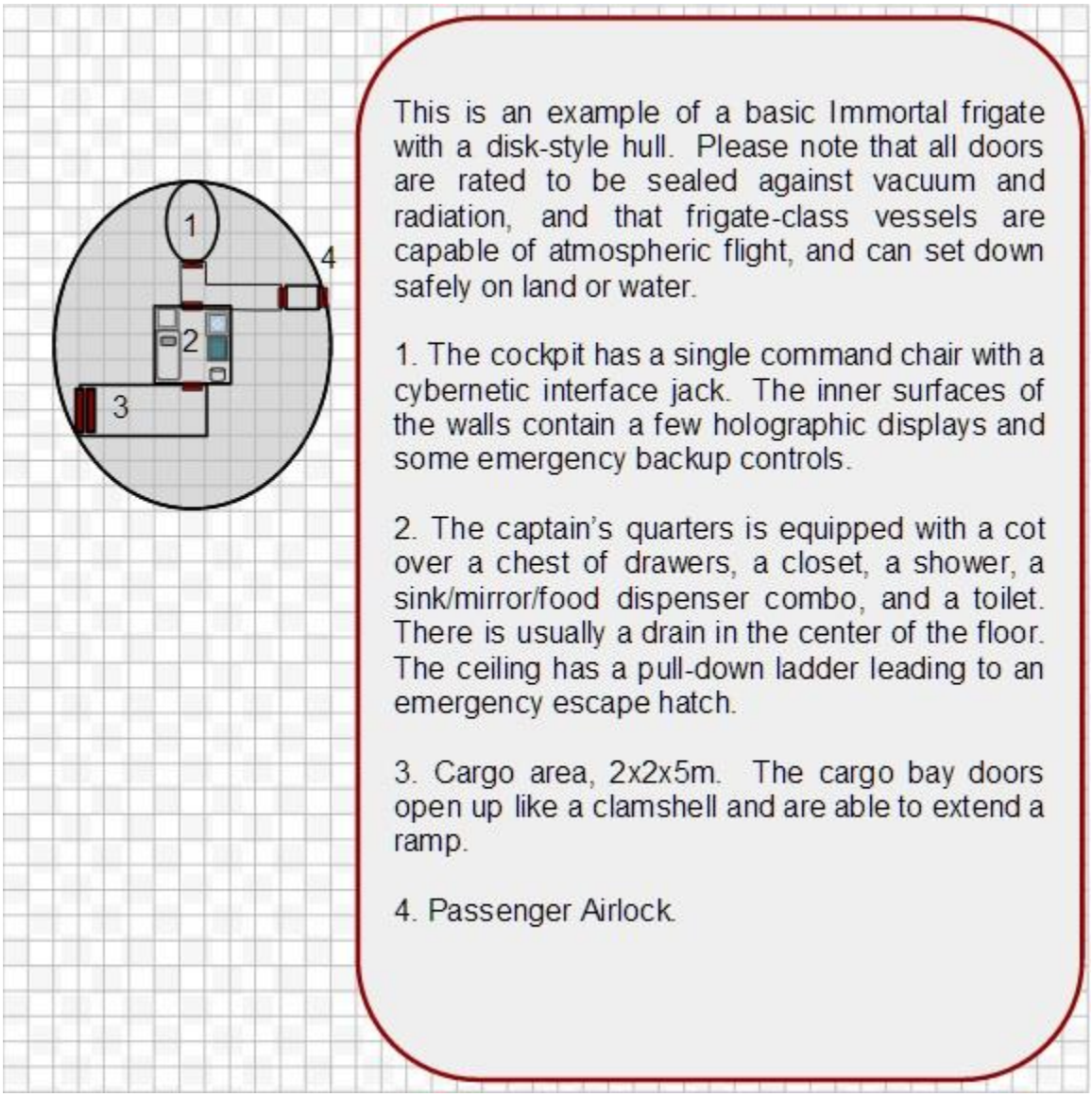
Flipping AC & Attack Bonuses

This game uses ascending AC and to-hit bonuses instead of to-hit charts. Some of you will already be familiar with this. Some of you will not. In any event, it is important to understand how to convert these values if you are pulling monsters or characters from OSR games that do not use ascending AC.

Attack Bonuses are determined by figuring out what a character or monster must roll in order to hit AC 0. Determine the difference between this value and 20, and that is their to-hit bonus. For example, a Fighter who hits AC 0 on an 18 would now have a +2 attack bonus.

Armor Class is determined by a similar process. See how far below 9 is a creature or character's AC. That is now the amount by which their AC is above 10. For example, a very quick thief in your OSR game of choice might have Leather Armor (AC7.) In this game, their AC would instead be 12. Their dexterity bonus would add normally. If they had a Dexterity of 16, their AC would now be 14. Please note that primitive armor does not translate into Armor points, as some advanced armors grant. At the Referee's option, they may modify the stats of some monsters to have a worse AC, but a few points of Armor. This is most appropriate for massive, thick-hided monsters such as some dinosaurs, or magical creatures such as Dragons.

Appendix 1: Example Frigate



This is an example of a frigate. The squares are in a one meter scale. An industrial or transport frigate be larger, but a courier or combat frigate could fit in a hull of this size. This vessel is approximately 13 meters long by 11 meters wide, and 5 meters thick through the center.