

Fifth Age



Table of Contents

Chapter 1: Introduction ...	Page
Chapter 2: Character Creation ...	Page
Chapter 3: Species ...	Page
Human	
Synthetic	
Greylian	
Aliens	
Chapter 4: Class ...	Page
Soldier	
Technician	
Officer	
Operative	
Savage	
Chapter 5: Backgrounds ...	Page
Chapter 6: New Mechanics ...	Page
Skills	
Proficiencies	
Feats	
Chapter 7: Equipment ...	Page
Armor	
Weapons	
Packs	
Toolkits	
Drugs	
Robots	
Chapter 8: Special Equipment ...	Page
Mods	
Prototypes	
Powered Armor ...	
Relics	
Chapter 9: Game Dynamics ...	Page
Business Ventures	
Retirement Savings	
Group Skill Challenges	
Downtime	
Chapter 10: Spaceships ...	Page
Ship Basics	
Paying for it all	
Interplanetary Markets	
Chapter 11: Story ...	Page
Hyperspace	
First Contact	
Machine War	

Chapter 1: Introduction

Welcome!

It is the dawn of the 24th century, and an interesting point in time for the human race. Fifth Age chronicles the dawn (perhaps more like early mid-morning) of humanity exploring the stars and getting into all manner of trouble, fraught with peril, excitement and drama. The science in this sci-fi is a little on the harder side than some might be used to and the adventure is a little pulpy, a perfect mix for the 5e DnD system.

Humanity's first contact with alien life was a violent one, but fruitful. Equipped with the FTL technology of the alien civilization they encountered, humans could have eventually had the stars, but eventually is just never good enough. Pushing the boundaries of the technology, humans have spread farther, faster, than any species in recorded history, to the horror and dismay of other species who see humanity as a cancerous plague infecting the new frontier opened up by the enhanced hyperdrive.

The solar system is divvied up by a smattering of old earth nation states, intent on keeping their grip on power while shadowy secret societies and mega corporations pull strings and manipulate events. Individual colonies might attempt to maintain their sovereignty, but eventually most bow to the will of the League of Starfaring Nations, or sell out to one of the licensed mega-corps.

The thin strands binding together dozens of newly settled worlds and old earth are the spacers, daring starfarers willing to brave the dangers of hyperspace to haul freight, information, and new colonists into the frontier. Thanks to the relativistic time effects of hyperspace, these career spacers will age only a few short years while decades pass on the planet of their birth, meaning they must cast aside their old ties to friends and family, becoming a new type of culture all to themselves. Fifth Age is the story about these courageous adventurers, intrepid explorers and ruthless mercenaries, pushing the light of humanity into the deep darkness, and finding wealth, glory and adventure.

Do you have what it takes to turn your back on the planet of your birth, and leave everyone you've ever known to die of old age while you step onto alien worlds, and see things no human ever has?

Chapter 2: Character Creation

Character creation in Fifth Age follows a series of simple steps:

1. Assign Ability Scores
2. Choose a Species (and a subrace, if applicable)
3. Choose a Class
4. Choose a Background

Now, I am going to assume you've built a character before, and if not, well... at your age, I can't imagine... Well, let me do what I can to help you out, better than learning about it on the street.

Ability	Cost
8	0
9	1
10	2
11	3
12	4
13	5
14	7
15	9

1. Assign Ability Score

There are a number of methods of assigning a character's six ability scores, with point buy being probably the most fair and balanced. You have somewhere around 25-29 points to spend on abilities depending on how cool of a guy your DM is, and may spend those points according to the table below.

For people in a hurry to get playing, just slap the following numbers into your ability scores. 15,14,13,12,10,8.

Stodgy old fashioned gamers can simply roll dice, say 3d6 for each ability score, or maybe 4d4. You can figure it out.

For the truly adventurous, (and if you can't be adventurous filling out a form then space might not be for you) grab a standard 52 card deck of playing cards, and get ready to deal some high stakes baccarat. Using this method deal out two cards for each ability score, and decide which of these totals are high enough to suit your adventurousness, and which you need to up. You may deal up to three more cards into each ability score, counting all totals according to the following chart. Remember, total whatever the hand would be (like blackjack) but only pay attention to the one's place (the 5 in 25, the 4 in 34) and add this to a base ability score of 6.

Baccarat Card Values

A	=1	2 3 4 5 6 7 8 9	=face value	10 J Q K	=0
---	----	-----------------	-------------	----------	----

Examples

3 4	=7	9 5	=4	Q K 2	=2
-----	----	-----	----	-------	----

2. Choose a Species

There are no bad choices. To be fair, there are only a few choices, really, but they're all good, I promise! Each race will grant some ability modifiers, changing those attributes you were just agonizing about, and add in some fancy new proficiencies or special abilities. You can figure this out, surely, if you have trouble with it, ask your DM, but don't tell him I said so, that guy has it in for me.

3. Choose a Class

Well, now's your chance to take a look at all those fancy classes (imagine, you finally getting some class! Just kidding. Mostly.) and pick the one that fits your idea of a bold space adventurer the best. You might decide to go back and rejigger those ability scores some, so this part makes a little more sense. I leave that to your conscience. Most classes let you make some choices at first level, like proficiencies and skills. Those are kind of a big deal, out in space. I bet your life never hinged on being able to balance on one foot or make a clay pot, but out in space, you better be able to pull your weight. Or at least mass. There's really not weight in zero-gravity the way you think of it, and.... Nevertheless you get the idea. Maybe put some points in knowledge physics. If that isn't a skill pester your DM about it. If you want to specialize in psychology or German poetry that's your business, and I hope he's as supportive about it as I am.

This is your last chance to be useful. All your many sins of poor character building can be covered up here if you pick a useful systems proficiency. Try for something cool sounding, to you, something one of those other guys didn't take maybe. Whatever your character is or does, he can still serve a purpose at the controls of your starship.

4. Choose a Background

Where did you come from? Where did you go? No, seriously, I wasn't paying attention. No, I don't know any joe, and what's a cotton? Never mind that, your background has a lot to say about your character, defining some more key statistics and proficiencies, granting a neat ability or knack, and giving you a better idea about exactly why you're out here in the black deeps. You might want to work with your buddies to figure out a good reason for a bunch of misfits like you to be together, play your cards right (you kept the deck from before, right? You just used dice? I expected better, oh well.) you can create a really deep tapestry of backgrounds that will do a lot of creating the campaign for your DM. That should really grind their gears. Or maybe they're the lazy type, I forget.

Optional Rule: 1st Level Feats

To add a little customization and breadth to characters created at first level, your DM might allow you to give up some ability scores to start the game with a bonus feat. 2 points of point buy, or reducing an ability score by 2, to a minimum of 11 are good places to start.

Maybe in exchange for a roleplay flaw, ask your DM.

Chapter 3: Species



The focus of this work is human centric, and will focus on the mostly likely characters to sign aboard human built star ships headed for the human frontier. Fermi had it all wrong, and there's a strong argument for some intelligent design out there, the galaxy seems to be teeming with life compatible with our own, just waiting to be.... Discovered. That being said, this work assumes a campaign fairly early in human expansionism, and there is not a lot of species diversities in earth's fleets quite yet.



Human

A species of sapient mostly hairless ape native to the third planet of the Sol system, commonly known as Terra to the rest of the galaxy, or as Earth to its natives in English.

Manifest Destiny

Not unlike a virus, humanity has spread out from its point of origin for most of its existence, a trend that has begun to accelerate exponentially with the discovery of the Hyper drive.

Master Survivors

Clever and adaptable, Humans show a propensity for overcoming challenges, and are quite adaptable, both mentally and physically, after taming all the native biomes of their homeworld they are now moving on to similarly adapt or adapt to the new environments they meet, planetary, political, and perhaps most ominously economical.

Military Minded

Not the most aggressive species encountered by explorers, Humans are unique in that they are disturbingly well organized with their aggression, putting technologies to work offensively in undreamt of fashions all in the name of their ideal of 'Weaponization', to convert every known scientific principle of the universe to work as a tool for warfare.

Diverse but Indivisible

Having dozens, or perhaps hundreds, of political entities and organizations, the humans compete with each other, making war on their own species, over things like the color of their flags, or preferred language. Despite this fractious community even the most aggressive and territorial of human groups will unite against a common outside antagonist.

Human Names

Humans generally have two physical sexes for reproductive purposes, and naming conventions differ amongst these groups with the exception that an individual usually has a single primary name and a name marking it as member of a larger genetic grouping of relatives.

Male Names: Jack, William, Liam, David, James, Wei, Omar, Aarav, Alexander

Female Names: Olivia, Emma, Sofia, Chloe, Madison, Fatima, Jing, Aadhya, Anastasiya

Surnames: Smith, Johnson, Jones, Williams, Brown, Rodriguez, Wang, Li, Patel, Smirnov

Human Traits

Humans are highly adaptable with a deep pool of genetic diversity to pull from, and few generalizations can be made of them.

Adaptability: Humans may add +2 to a single ability score, or +1 to two separate ability scores.

Age: Humans reach adulthood in their late teens, and rarely live more than a century.

Size: Humans vary wildly in size, from under 5 feet, to nearly 7 feet in height. Regardless, humans have a size of Medium.

Speed: A human's base walking speed is 30 feet.

Diverse Education: Choose a single skill or Tool and gain proficiency in it.

Languages: Human characters speak, read and write their native language and English.

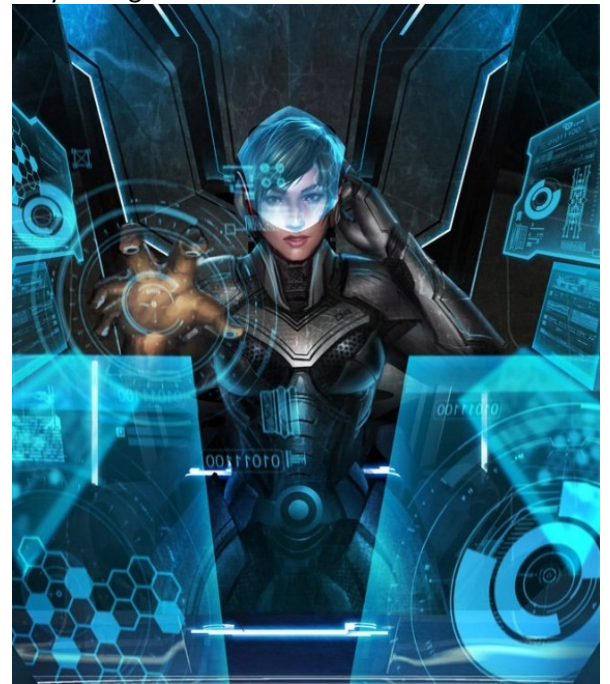
Subrace: Naturally occurring biologic diversity were insufficient for humans, so they have created several Subraces.

Cyborg

Cybernetically augmented from before birth, these humans have integrated technological components into their bodies, offering them possibilities denied to their purely biological brethren.

Ability Score Increase: +1 to any ability score

Mind Machine Interface: You possess an MMI port that allows you to directly interface with technology. You permanently possess a computer interface, and when connected to a compatible device or system with which you are proficient, increase your proficiency bonus by +1 if relevant.



Earthborn

You are notable not for genetic or technological augmentation but rather for the lack of them. As a normally born human, raised to adulthood on earth herself, you had the chance to study the latest technologies, attend the most ancient of universities, and to be in the very heart of human culture, granting you opportunities and experiences no other human possesses.

Wealth of Experience: This character may choose an additional background to represent their life experiences. Some backgrounds may not be suitable for this feature, and require DM approval.



Spaceborn

Genetically modified for life in space, this type of human is particularly adapted for life with wide gravity tolerances (from 0 to 3 g), and high radiation environments. Notable for a complete lack of body hair and a lower body temperature, as well as a host of other minor changes.

Ability Score Increase: +1 Dexterity

Slow Metabolism: Gain Resistance to Radiation damage, and advantage on saving throws against radiation.



Tube Born

Designed in a lab, with certain traits in mind, you were born of genetic experimentation and scientific funding, not biological parents. You can look in the mirror knowing that you are exactly what your creator wanted you to be.

Ability Score Increase: +2 to any one ability score, or +1 each to two different ability scores.



Synthetic

Created and built, these synthetic life forms are sentient, sapient, and one would certainly hope, completely loyal to the species who created them.

Digital Sentience

These are more than simple automatons and machines, and possess free will and intelligence, or a simulation thereof so realistic we can't tell the difference and had to give them rights.

Software Souls

Synthetic intelligence is stored within their software, and with proper preparation may be retrieved or stored in compatible systems. Whether restarting this software, or backing up and restoring its originator, constitutes as 'death' is a matter up for some debate.

Ownership

Under human law, synthetics owe their builders the cost of the manufacture of their chassis plus interest to be paid back by any party holding their contract, which with very long terms and planned obsolescence means that very few synthetics fully own their own chassis, and those that do often continue in the roles they were initially set to serve.

Three Laws

All legal synthetics obey a modern iteration of Asimov's three laws, these being:

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings, except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

Synthetic Names

Synthetics are given an alphanumeric serial number upon manufacture which is tied to their software, and possess a chassis with a model name and number. Synthetics will often take a name comfortable for their creators, or indicative of their purpose, usually gifted by the humans closest to them.

Serial Numbers: 9CG8VNC9QXB9, 7E2RZDGCNZN6, L3FSYVUBJ46F, V7TVVU6K4TGC, EPRBXVKQDEEM, DAHTP4QJ69B5

Chassis Models: ZV-9 Maintenance Worker, Butler 1400 Personal Service, Rhotech Industries Rocket Technician, Alyssa 6900 Human Companionship Interface

Nicknames: Clicky, Clanks, Mr. Handy, RoboMop, Bobby, Alley, Chromedome

Synthetic Traits

Age: AIs take up to six terran months to be evaluated and deployed, and a chassis can spend long periods between manufacture and deployment, but rarely more than a year. Synthetic chassis can last up to several decades, and no AI has yet perished of entropic decay.

Size: Synthetic chassis can be constructed in almost any conceivable shape and size to serve their intended purpose, but most shipboard robots are similar in size to humans, ranging between 4 and 6 feet tall, often noticeably shorter than the humans that construct them. Regardless, Synthetics are size Medium.

Speed: Most synthetics are humanoid, and have a walk speed of 30 feet.

Infravision: Most synthetics can see in the infrared spectrum, effectively seeing in the dark.

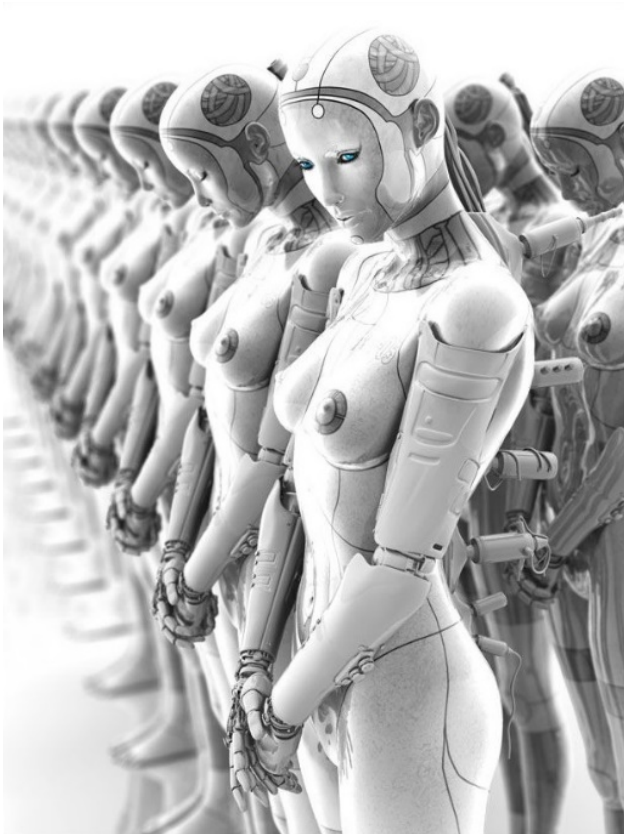
Self-Repairing Mechanism: Constructed of smart materials and with limited onboard production capabilities, Synthetics may heal themselves similarly to an organic character using hit dice during short rests. However, once these hit dice are gone, they must be restored by a long rest, and acquiring additional repair materials weighing one pound per hit die.

Well Made: Designed for durability, Synthetics use d12s to determine starting HP and HP on leveling up, regardless of their class.

Inorganic: Synthetics are not alive in the traditional sense, and are immune to most disease and infections, and do not require sleep or food and water. Maintenance cycles for software and hardware might still be required.

Charging Requirements: Synthetics rely on external power sources for their energy needs, and must be recharged as part of their daily duty cycle, requiring access to a sufficient power source at least once per day for optimal operation.

Languages: Synthetics speak the language of their manufacturers, English, and Tradespeak

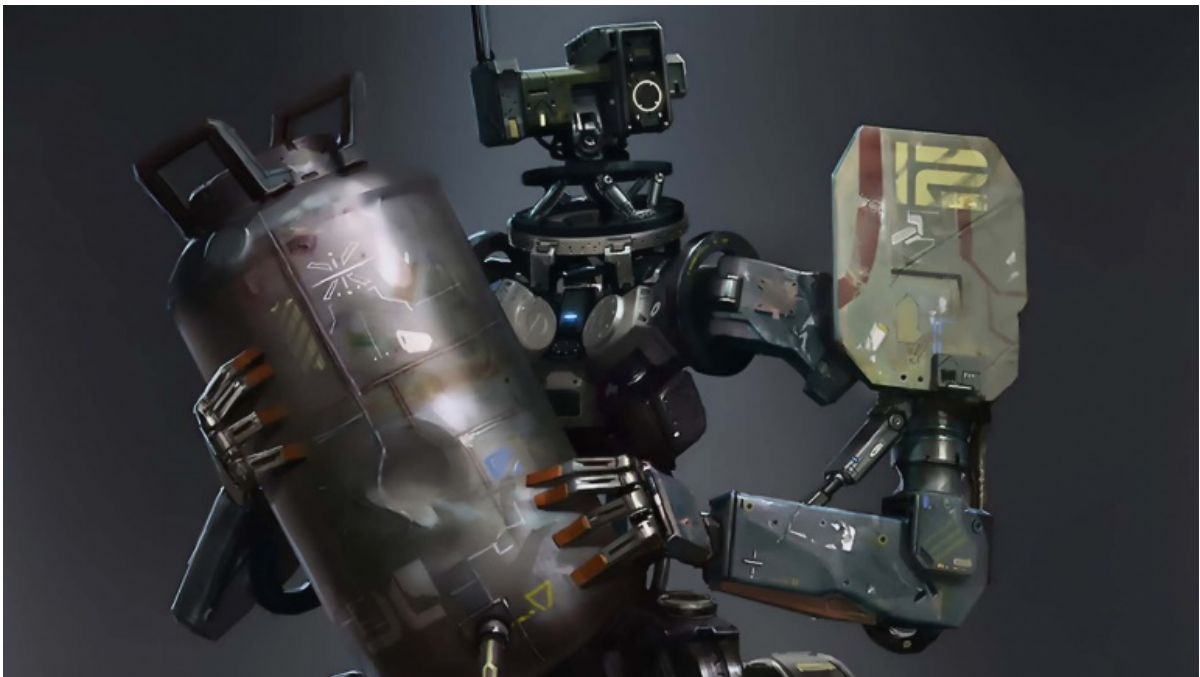


Chassis

Synthetics require a chassis to operate in meatspace, built to various specifications for different purposes. Synthetics choose their chassis, granting themselves specific benefits based on model.

Service Model

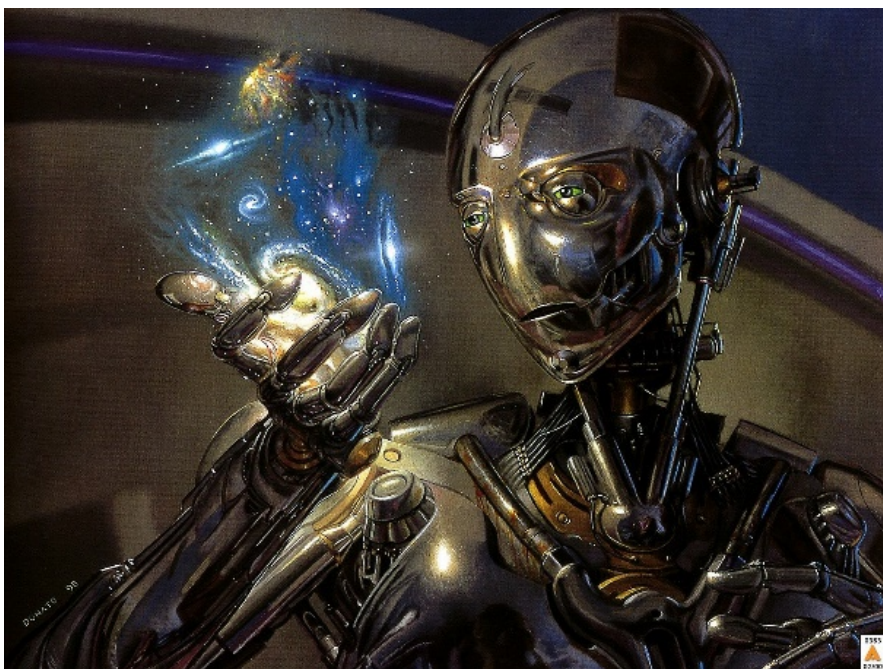
Designed for human interaction, these models have more processing power and better emotion emulators and motile facial features. You gain +4 Charisma, and proficiency with Persuasion.



Laborer Model Built for heavy lifting, you are like a cross between a longshoreman and a forklift. You gain +2 Strength and +2 Constitution, and proficiency with your built-in repair kit.

Security Model

Protecting humanity sometimes means pacifying them with force, for their own good of course, and you were designed to do this with the minimum amount of risk to human safety. You gain +2 Dexterity, and proficiency in Law.



Tech Model

You were designed to aid in the gathering and processing of data, general research, and to assist in technical tasks. You gain +2 Intelligence and +2 Wisdom, and gain proficiency with any two skills or toolkits.

Greylieen

The K'Titch'Zaa first visited earth many millennia ago, and have kept up a fitful watch over us for much of the time since. Looked down on by the rest of Galactic Society as lacking in advancement and making no contributions to society, they were given the very least priority for colonization and resource extraction, and few species had any interest in trade with them. All of that changed when their compassion saved the crew of humanity's first doomed expedition to a neighboring star. Known from that day to this as Greys, or Grey Aliens, and now commonly Greylians, the K'Titch'Zaa have become humanity's only true alien ally.



Scavengers

Evolved from scavengers, Greyliens may consume almost any organic compounds and possess stout digestive systems that can even ignore the handedness of DNA. Given their diet of carrion and a weak technological base (seeing as their home system is particularly resource poor, and their homeworld can barely support life), this species has very little to offer galactic society, and have taken scavenging to space, travelling world to world, carving out niches in other cultures performing the most unsavory of work, and making do with the cast offs and leftovers of other civilizations, often acquired at extortionist prices.

Masters of Resourcefulness

Greyliens maintain their space presence through a mastery of salvaging, pilfering, and jury rigging. Greyliens have struggled for millennia to maintain their tenuous presence in space, stubbornly refusing to give up the stars, which led to their first assisting humans, whom they viewed as similar underdogs.

Not that Alien

Roughly Humanoid, oxygen breathing, left handed amino acids, similar tolerances, this species stepped straight out of science fiction and myth and into the limelight of earth's public stage, and serve to this day as an example of aliens that humans can interact with sensibly and positively. There are some claims to genetic engineering and abductions with the Greyliens claiming that their government has no knowledge of such events, and would have strictly forbade them. Seeing as the rescue of the lost human expedition that led to our receiving the Hyperdrive was likewise forbidden, these denials raise more eyebrows than questions.

Galactic Enemy #1

As humanity's advanced hyper drive wreaks havoc on untold millennia of economic stability, casting the fortunes of worlds and billions of lives into turmoil, galactic society fractures and the Greyliens make excellent targets for blame. Greyliens are damned as provocateurs, would be conquerors, anarchists, traitors, collaborators and worse by the rest of galactic society. Their close ties with humanity and seeming new wave of prosperity seem almost too good to be true, if you can ignore the rest of the galaxy hating them...

Greylien Names

Greyliens reproduce asexually, communally raising young and possess a name granted at the time they reach majority by the rest of their community, in addition to a surname derived from the community they hail from.

Given Names: Z'Kee, F'Chuk'K'Ka, St'lee, Rik'Tik'T'Chek

Clan Name: Olee, Qoosoo, Rolloo, Gree,

Race Traits

Ability Score Increase: +1 Dexterity, +1 Wisdom

Age: Greylians mature in their early teens, and rarely live more than 50 or 60 years of age.

Size: Greyliens range from as little as 3 feet tall to as much as 6 feet tall, depending on nutrition and living conditions. Depending on subrace Greyliens are Small or Medium.

Speed: Greyliens have a move speed of 40 feet.

Titanium stomach: Greyliens cannot receive the poisoned condition, and are resistant to poison damage.

Natural Survivor: Gain proficiency with Repair Kits, and the Survival skill.

Languages: You can speak, read, and write Greylien, Tradespeak, and one other language.

Subrace: Greyliens are members of one of several distinct racial groups.



Shorts

These diminutive Greyliens are timid and cautious, particularly quiet, and are excellent mechanics.

Ability Score Increase: +1 Intelligence

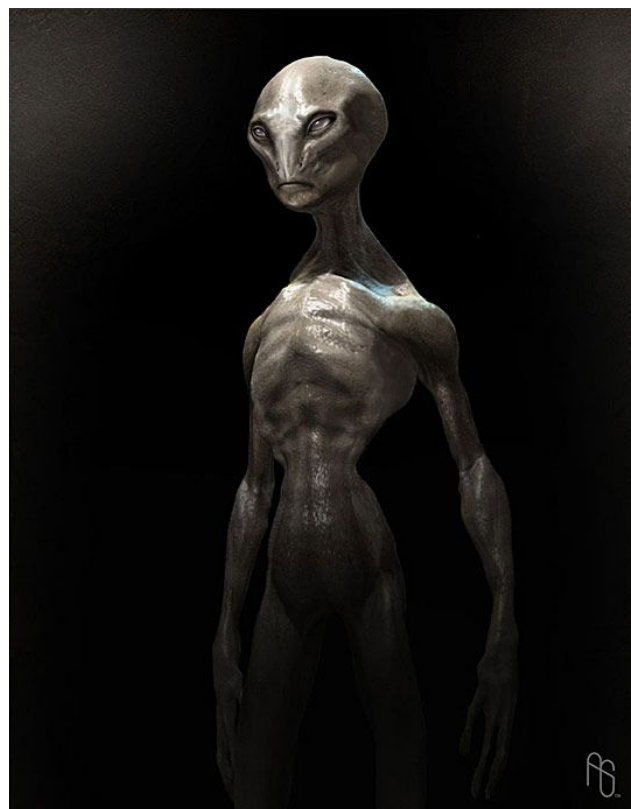
Just a Shadow: You are size small, and gain proficiency in stealth. You can attempt a stealth check while only lightly obscured, such as behind another creature.

Talls

Up to twice the height of Shorts, Talls are medium sized, and noticeably stronger and healthier than the rest of their kin.

Ability Score Increase: +1 Constitution

Hands On: Gain proficiency in one weapon, toolkit, or in planetary vehicles or spaceships.

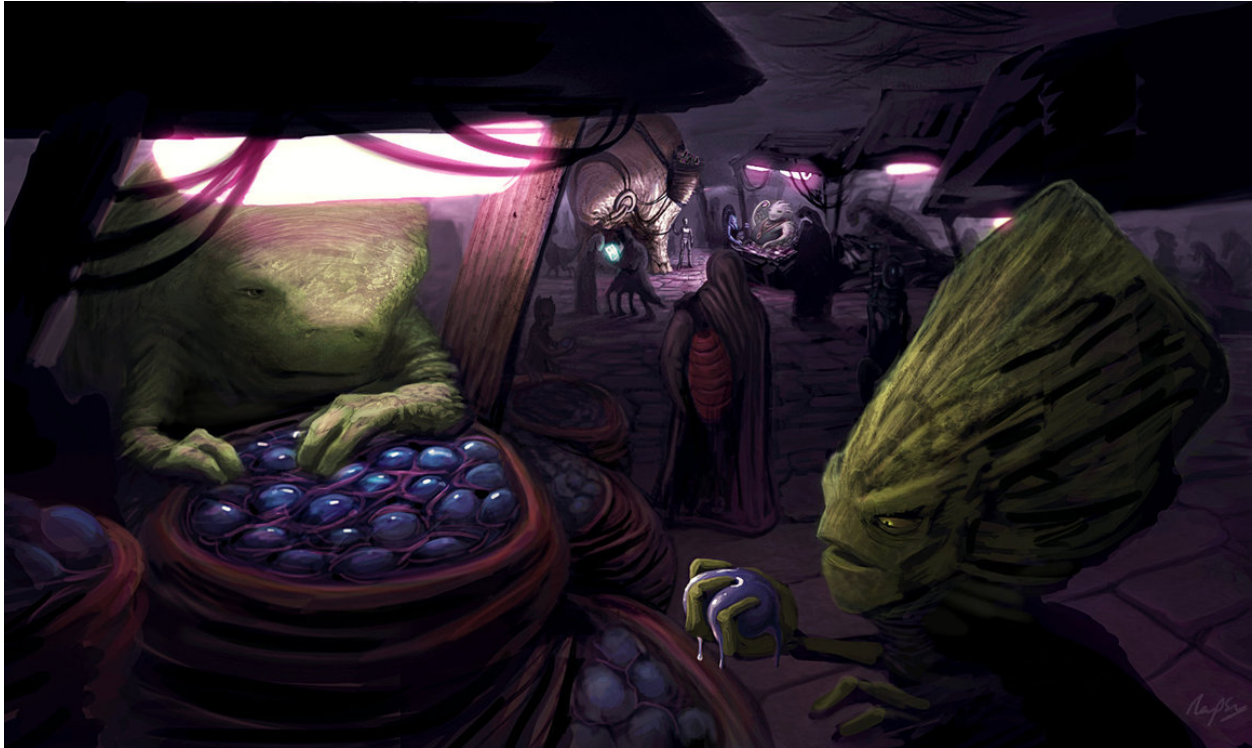


Friendlylies

Adaptable and outgoing, often called little green men, these aliens are known for their servile natures and easygoing ways. Gracious and even charming, these aliens have made their way into human and galactic society in many ways.

Ability Score Increase: +1 Charisma

Non-Threatening: You are size small, gain proficiency with Persuasion, you may end your turn inside a friendly creature's space, and receive half cover while they are at least one size larger than you.



Alien

The universe is teeming with alien life, and a fair amount of it has clawed its way up the evolutionary ladder to sapience, meaning that explorers will meet countless examples of alien species if they travel far enough, long enough.

Generally Humanoid

Alien lifeforms run the gamut from the vaguely humanoid, to the truly exotic and bizarre. Generally speaking, only the most human like and compatible of these lifeforms will be of interest to humans, especially as travelling companions. View the amount of bipedal oxygen breathing species listed here not as an endorsement for that type of life, but rather as the criteria requirements for potential crewmembers on the human ships that this work is aimed at chronicling the adventures of.

Social Animals

The types of alien species most likely to throw their lot in with the humans and travel alongside them will have descended from social animals, and have a clear understanding of chain of command and power structure, as well as a willingness to work with other species and attempt to understand them.

Adaptable

Life with humans isn't easy, even for other humans, imagine how adaptable an alien has to be to learn to live and work beside them. The aliens listed here will be able to tolerate similar environments and conditions as humans, often sharing food and breathable atmosphere. Just the ability to tolerate human psychology and work with them is a mark of an adaptable species, making these species exceptional.

Endless Diversity

There is always a new species to meet out there, always a new take on alien life, by no means consider these species options the only ones available. Work with your DM to convert fantasy races into aliens, or to stat out your favorite bizarre alien creature from another property. Your imagination is the only limit.

Alien Names

Alien names will be quite varied, and often unpronounceable, don't be afraid to go by your alien character's human nickname. Otherwise, delve deep into your imagination and find what type of name the alien might have. If that's intimidating, you might want to stick to Human characters.

Alien Traits

Aliens have a wide variety of traits, too diverse to list here, that will be listed in their individual entries.

Age: Most aliens reach maturity in 8-30 years, and have a lifespan of rarely more than a century or two.

Size: Aliens vary wildly in size, from under 3 feet, to nearly 9 feet in height. Most aliens have a size of Medium.

Speed: Most aliens have a base walking speed of 30 feet.

Languages: Aliens speak, read and write their native language, Tradespeak, and one human language of their choice. (Unless you want to be a jerk and skip the human language part, while that would make roleplay complex and rewarding.)



Stoph (Slugmen, Sluggos)

The Stoph are a species of gastropoidal aliens native to a system deep in the zone of influence of the Galactic Commonwealth. Humans encountered several large colonies of the Stoph on the edge of our space where they languished on the commonwealth frontier and quite cheerily accepted humanity's offers of relative freedom under the colonial charter of the League of Starfaring Nations. Stoph make excellent pilots, and have found excellent opportunities in independent and corporate ships operating the galactic frontier.

Stoph are hermaphroditic, and reproduce seasonally by paired mating, a relationship that rarely lasts more than the season, but which can sometimes last decades before suddenly ending.

Stoph can vocalize a wide range of sounds, and can speak human languages with ease. Stoph consume liquid water and a mostly herbivorous diet, and can acclimate to an oxygen mix atmosphere comfortable to humans. Gravity preference lies in the .8 to 1.3 range, but with few drawbacks for gravities up to 2.2, or atmospheric up to 3 atmospheres.

Ability Score Increase: Stoph characters have particularly keen senses and are curious and introspective, increasing their starting wisdom by +4 and their maximum wisdom by +4.

Unique Senses: Stoph can see in a much wider spectrum than humans, effectively able to see in the dark to a range of 60 feet. Stoph characters gain proficiency with the perception skill.



Tiel (Greens, Treebeards)

The Tiel are humanoids that exist symbiotically with a barky plant that covers their skin. While being (fairly) close to mammals, the plant component of their physiology offers several interesting benefits. Able to survive up to three months without food thanks to photosynthesis, and several hours without air, the Tiel are a particularly hardy species. Omnivorous, Tiel consume less than one might expect for beings of their bulk, but are often driven to taste anything they encounter that might be edible.

Tiel possess two sexes with and mate for life. Females bear live young after a gestation of over a year, and hours after birth their young are capable of ingesting fruit pulp, their primary diet for some time.

Tiel have rough gravelly voices, and can emit sound well below the human range of hearing. Passable at speaking human languages, one never mistakes a Tiel for another species over audio comms. Tiel prefer a higher oxygen mix than humans, but with dietary supplements can tolerate a 21% oxygen atmosphere. The Tiel thrive in high gravity environments and are quite comfortable at up to 3 gravities, but suffer from prolonged exposure to zero gravity environments.

Ability Score Increase: Tiel are exceptionally hardy, increasing their starting constitution by +4 and increasing their maximum constitution by +4.

Rough and Ready: Tiel are protected by a barky coating of their plant symbiote, and their AC cannot be lower than 16 as a result.



Gloemn (Treefs, Hoppers)

The Gloemn were first encountered by humans in a primitive state similar to earth's stone age. Intelligent and adaptable, the Gloemn are no fools, despite their primitive background.

The Gloemn possess two sexes, and lay eggs that are alternately carried by either gender in pouch in the abdomen until hatching, when the young are raised communally by all adult Gloemn. Socially motivated in their breeding practices, Gloemn breeding pairs will reassess their partner's status constantly, and break it to pursue better opportunities when they present themselves.

Gloemn have surprisingly pleasant tenor voices, and prize musical singing, their gravity tolerance is similar to humans, and require a much lower oxygen mix of only 12%, but may be acclimated up to normal human normal. Semi amphibious, a Gloemn may survive underwater by absorbing oxygen through its skin for several hours at a time.

Ability Score Increase: Gloemn reflexes and musculature are exceptional, increasing their starting and maximum dexterity by +2.

Natural Athletes: Gloemn gain proficiency in Athletics and may add their proficiency bonus twice on all checks to jump, climb or swim.

Prodigious Leap: Once per round, a Gloemn may use a bonus action to leap up to 20 feet horizontally or 10 feet vertically. This distance does not count against their movement for the round.



Daht (Apes, Squatch)

The Daht are a group of hulking humanoids with a penchant for violence and the reputation for the same. With no real worlds of their own, Daht mercenaries wander the galaxy finding service for up to generations at a time, serving as bodyguards, soldiers, and even just hired muscle. Although prone to emotional outbursts, one should never think a Daht is just big and dumb, because they would only be half right.

Daht have three sexes with the males and females being almost indistinguishable, and a third gender that is only marginally sentient. Females give live birth six weeks after fertilization by a male, and the third gender concentrates on early childhood development, producing milk and feeding the young while serving as vicious protectors of households.

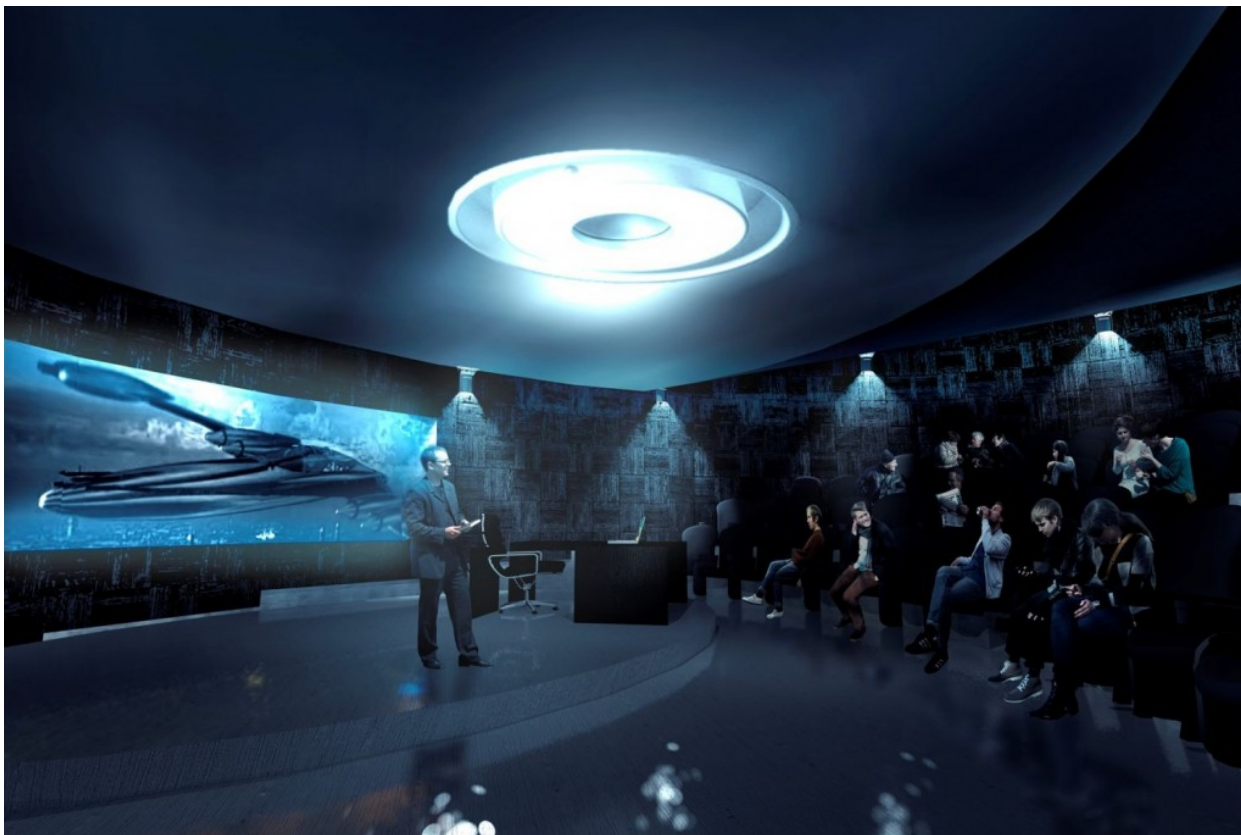
Daht have very particular environmental requirements and suffer in extremes of heat or atmospheres with too little oxygen. Seeming to have evolved on a world with significantly stronger gravity than earth, Daht are comfortable at up to three gravities. Human languages lie just at the outside edge of Daht vocalization, and while some sounds are difficult for them to make, a Daht will be understood, one way or another.

Ability Score Increase: Daht are veritable mountains of muscle, increase their starting and maximum Strength scores by +4.

Menacing: Daht characters gain proficiency in the Intimidation skill, and may use their strength rather than their charisma for Intimidate skill checks.

Legendary Warriors: Daht are natural born warriors, and pursue combat training most of their lives. Each round of combat a Daht may reroll the damage dice for a weapon attack, and keep either result.

Chapter 4: Class



The focus of this work is on a hard sci-fi setting of excitement and adventure, and not a simple number crunching game of character optimization. Four classes, each with two specializations seems quite sufficient, but don't let that stop you. Want to bring in a seven foot tall reptilian barbarian who owes your character a lifedebt, feel free. Half the classes from a normal fantasy RPG would work here just fine. Maybe you pick up a pack of approximately medieval grasshopper looking aliens who think you're their messiah on a holy crusade, and make a really crack boarding party after you gave them power axes. Why not. If you pick up a magic using class and give them a laser sword, that's on you, I tried to paint a hard sci-fi setting, and you know what you did. But hey, have fun with it.

Soldier

On a starship, soldiers fill roles as security and weapons officers, operating ships weapons and fighting during any action the crew becomes involved in.



Class Features

As a Soldier, you gain the following class features.

Hit Points

Hit Dice: 1d10 per soldier level

Hit Points at 1st Level: 10 + your Constitution modifier

Hit Points at Higher Levels: 1d10 (or 6) + your Constitution modifier per soldier level after 1st

Proficiencies

Armor: Protective Gear, Combat Armor

Weapons: Civilian Weaponry, Military Weaponry

Tools: Choose one of Weapons Systems or Space Vehicles as well as one Systems Proficiency

Saving Throws: Strength, Constitution

Skills: Choose two skills from Acrobatics, Athletics, History, Insight, intimidation, Perception, and Survival

Level	Proficiency Bonus	Features
1st	+2	Second Wind
2 nd	+2	Combat Style
3 rd	+2	Feat/Ability Score
4 th	+2	Soldier Specialization
5 th	+3	Extra Attack
6 th	+3	Feat/Ability Score
7 th	+3	Soldier Specialization
8 th	+3	Battle Hardened
9 th	+4	Feat/Ability Score
10 th	+4	Soldier Specialization

Equipment

You start with the following equipment, in addition to the equipment granted by your background:

- Blaster Rifle, Laser Rifle or Power Axe
- Armored Skinsuit
- Laser Pistol, Blaster Pistol or Combat Knife
- Spacer's Kit or Explorer's Kit

Second Wind

Beginning at 1st level you have a limited well of stamina that you can draw on to protect yourself from harm. On your turn, you can use a bonus action to regain hit points equal to 1d10 + your soldier level. Once you use this feature, you must finish a short or long rest before you can use it again.

Combat Style

Starting at 2nd level, you adopt a particular style of fighting as your specialty. Choose one of the following options. You can't take a Fighting Style option more than once, even if you later get to choose again.

- **Defense**
While you are wearing armor, you gain a +1 bonus to AC.
- **Long Arm Specialist**
You gain a +1 bonus to attack rolls made with two handed ranged weapons.
- **Melee Specialist**
When you roll a 1 or 2 on a damage die for an attack you make with a melee weapon that you are wielding, you can reroll the die and must use the new roll, even if the new roll is a 1 or a 2.
- **Side Arm Specialist**
While wielding a one handed ranged weapon and no weapon in your off hand, you deal an additional 2 damage.
- **Two-Weapon Fighting**
When you engage in two-weapon fighting, you can add your ability modifier to the damage of the second attack.
- **Unarmed Fighting**
When you make an unarmed strike, add your proficiency bonus to the damage roll.

Feat and Ability Score Improvement

When you reach 3rd level, and again at 6th and 9th level, you can increase one ability score of your choice by 2, or you can increase two ability scores of your choice by 1 up to your default maximum of 20. Additionally, you may choose one feat to gain or increase an ability score by 1, and increase its maximum by one instead.

Extra Attack

Beginning at 5th level, you can attack twice, instead of once, whenever you take the Attack action on your turn.

Battle Hardened

Beginning at 8th level, when you are reduced to 0 hit points but not killed outright, you can drop to 1 hit point instead. You can't use this feature again until you finish a long rest. Additionally, your Second Wind class feature may be used as a reaction when taking damage.

Soldier Specialization

At fourth level, choose a specialist field. This field of specialization grants features at 4th, 7th, and 10th level.

Marine

Marines are trained for direct personal combat, excelling at both executing and repelling boarding actions.



Improved Critical

Beginning when you choose this specialization at 4th level, your weapon attacks score a critical hit on a roll of 19 or 20.

Veteran

At 7th level, you can choose a second option from the Combat Style class feature and gain 10 bonus hit points.

Elite

Beginning at 10th level, you can attack three times, instead of once, whenever you take the Attack action on your turn and gain 10 bonus hit points.

Gunner

Gunners focus on heavy, vehicle and starship based weapons, which explains why they are so prone to attempting to lug weapons of this grade into personal combat.



The Bigger the Better

Beginning when you choose this specialization at 4th level, you gain proficiency with all heavy and vehicle based weapons, as well as with demolitions kits. Increase by 1 the DC of all saving throws made against your attacks.

Precise Aiming

Beginning at 7th level, you add your proficiency bonus to all damage rolls made using weapons with which you are proficient.

Increased Payload

Beginning at 10th level, when you make an attack with a one handed ranged weapon, it deals an additional d6 damage of the type it normally deals. When you make an attack with a two handed ranged weapon it deals an additional 2d6 damage of the type it normally deals.

Mobile Infantry

Also commonly known as Ground Pounders and Shock Jocks, Mobile Infantry are specialists in using advanced armor suits to deploy into the most dangerous and threatening environments.

Without your suit, you are Nothing

When you choose this specialization at 4th level, you gain proficiency with Repair Kits, and with Powered Armor and are able to requisition your first armor suit. Treat this suit as an Exo Suit (AC 19, Heavy Combat Armor with Minimum Strength requirement of 15, and Penalties to Stealth Checks) with the following exceptions:

- This Armor has a pool of 20 Armor HP that are lost first when you would take HP damage. Whenever you take a short rest, recover 5 of these HP, all of them for a long rest.
- During a Short rest, you may spend a Hit Die to recover 10 + Int bonus Armor HP.
- Whenever you gain a soldier Level, Increase your suit's Armor HP by 5



Without you, your suit is Nothing

Beginning at 7th level, whenever you use the Second Wind class feature, your Armor HP is recovered by 1d10 plus your soldier Level.

As a Bonus action you may execute an Action Surge, granting you an additional action this turn. You may use this ability again after a short or long rest.

War Face

Beginning at 10th level, you may select any two Modifications for your armor and apply them with no cost or limits, exceeding the normal amount of maximum modifications and amount of times a specific modification can be applied to a suit of armor.

Technician

On a starship, technicians fill the roles as science, medical and engineering personnel, solving problems and repairing the ship, its crew, or more often both.



Class Features

As a Technician, you gain the following class features.

Hit Points

Hit Dice: 1d8 per Technician level

Hit Points at 1st Level: 8 + your Constitution modifier

Hit Points at Higher Levels: 1d8 (or 5) + your Constitution modifier per Technician level after 1st

Proficiencies

Armor: Protective Gear

Weapons: Civilian Weapons

Tools: Choose one of Repair Kit or Medical Kit, and any two Systems Proficiencies

Saving Throws: Int, Wis

Skills: Choose three from Biology, Computer Use, Engineering, History, Insight, Investigation, Medicine, Navigation, Perception

Level	Proficiency Bonus	Features
1 st	+2	Expertise
2 nd	+2	Fast Hands
3 rd	+2	Feat/Ability Score
4 th	+2	Specialization Ability
5 th	+3	Quick Thinking
6 th	+3	Feat/Ability Score
7 th	+3	Specialization Ability
8 th	+3	Reliable Talent
9 th	+4	Feat/Ability Score
10 th	+4	Specialization Ability

Equipment

You start with the following equipment, in addition to the equipment granted by your background:

- Stun Pistol or Laser Pistol
- Skinsuit
- Repair Kit or Medical Kit
- Computer Interface and Spacer's Kit

Expertise

At 1st level, choose two of your skill proficiencies, systems proficiencies or tools you are proficient in the use of. Your proficiency bonus is doubled for any ability check you make that uses any of the chosen proficiencies.

Fast Hands

Starting at 2nd level, you may use a tool or skill that is normally an action as if its use was a bonus action. (Excluding robot commands, which are only bonus actions for Robomancers.)

Feat and Ability Score Improvement

When you reach 3rd level, and again at 6th and 9th level, you can increase one ability score of your choice by 2, or you can increase two ability scores of your choice by 1 up to your default maximum of 20. Additionally, you may choose one feat to gain or increase an ability score by 1, and increase its maximum by one instead.

Quick Thinking

Starting at 5th level, you may take two bonus actions per round.

Reliable Talent

Starting at 8th level, whenever you make an ability check using your proficiency bonus, treat all rolls of 9 or less as if you rolled a 10.

Technician Specialization

At fourth level, choose a specialist field. This field of specialization grants features at 4th, 7th, and 10th level.

Medic

Medics are trained medical professionals well versed in diagnosing and treating a variety of ailments and injuries.



First Responder

Starting at 4th level when you acquire this specialization, whenever you use a medkit to heal or stabilize a living target, that character may spend hit dice to heal itself.

Hands that Heal

From 7th level onward, whenever you use an action or bonus action to heal a target, you may add your proficiency bonus to the amount healed, and to each hit die spent by the target.

Don't you die on me!

Starting at 10th level, whenever you allow a target to spend healing dice, they immediately regain a hit die that must be used immediately to heal themselves.

Mechanic

Mechanics apply their knowledge in a wide variety of sciences and technical aptitudes towards the repair and maintenance of starships, vehicles and equipment.



Intimate Knowledge

Starting at 4th level, you are now considered proficient in all ship's systems and ship based weaponry and may manage two duty stations instead of one. Additionally whenever you use a repair kit to heal or stabilize a synthetic target, that character may spend hit dice to heal itself.

Miracle Worker

From 7th level you may, as a bonus action, grant yourself advantage on your next attack roll, saving throw, or ability check.

Knack

Starting at 10th level you may use your Reaction to enhance the effectiveness of a system or device you operate. This adds your Intelligence bonus to the numerical bonus or output of the system or device, or doubles its effectiveness at DM's discretion.

Robomancer

Self-styled 'Robomancers' are known for their skill with advanced robotics and artificial intelligence that borders on the arcane.

Mechanical Minions

Starting at 4th level, you may attune to and control 1 CR worth of robotic minions. A robomancer may command these robots with a bonus action, rather than a regular one.



Best friend 2.0

From 7th level onwards you may attempt to hack an enemy synthetic as a bonus action. The target gains the Charmed condition and may only attack the Robomancer with a successful intelligence saving throw DC 8 plus the Robomancer's intelligence bonus and proficiency bonus.

Whenever a creature you can see targets you or a friendly synthetic or robot within five feet of you, you may use a reaction to switch the locations of yourself and the creature, redirecting the attack to the creature of your choice moved in this way.

You may attune to and control 2 CR worth of robotic minions.

Ghost in the Machine

Starting at 10th level your robotic minions develop unique personalities of their own, and may behave on their own initiative at the DMs discretion. Additionally, each robot you create gains a bonus feat of your choice and you may attune to and control 3 CR worth of robotic minions.

Officer

Natural born leaders, officers hold command positions on a starship, and lead its crew.



Class Features

As an officer, you gain the following class features.

Hit Points

Hit Dice: 1d8 per officer level

Hit Points at 1st Level: 8 + your Constitution modifier

Hit Points at Higher Levels: 1d8 (or 5) + your Constitution modifier per Officer level after 1st

Proficiencies

Armor: Protective Gear

Weapons: Civilian Weapons

Tools: Choice of any two tool, systems, or vehicle proficiencies.

Saving Throws: Cha, Int

Skills: Choose three of Athletics, Acrobatics, Computer Use, Culture, Deception, History, Insight, Intimidation, Law, Navigation, Perception, Persuasion

Level	Proficiency Bonus	Features
1 st	+2	Leadership
2 nd	+2	Inspiration
3 rd	+2	Feat/Ability Score
4 th	+2	Specialization Ability
5 th	+3	Delegation
6 th	+3	Feat/Ability Score
7 th	+3	Specialization Ability
8 th	+3	Commanding Presence
9 th	+4	Feat/Ability Score
10 th	+4	Specialization Ability

Equipment

You start with the following equipment, in addition to the equipment granted by your background:

- Laser Pistol
- Skinsuit
- Any one Toolkit
- Choice of Explorer's kit or Spacer's Kit

Leadership

From 1st level onwards, once per round as a Bonus Action, designate an allied creature, and an action it could perform. The next time it takes an action this round, if this is the action you designated, it gains advantage on one attack roll or ability check that is part of that action.

Inspiration

Starting at 2nd level, you can inspire others through stirring words. To do so, you use a bonus action on your turn to choose one creature other than yourself within 60 feet of you who can hear you. That creature gains one Inspiration die, a d6.

Once within the next 10 minutes, the creature can roll the die and add the number rolled to one ability check, attack roll, or saving throw it makes. The creature can wait until after it rolls the d20 before deciding to use the Inspiration die, but must decide before the DM says whether the roll succeeds or fails. Once the Inspiration die is rolled, it is lost. A creature can have only one Inspiration die at a time.

You can use this feature a number of times equal to your level plus Charisma modifier (a minimum of once). You regain any expended uses when you finish a long rest.

Feat and Ability Score Improvement

When you reach 3rd level, and again at 6th and 9th level, you can increase one ability score of your choice by 2, or you can increase two ability scores of your choice by 1 up to your default maximum of 20. Additionally, you may choose one feat to gain or increase an ability score by 1, and increase its maximum by one instead.

Delegation

Starting at 5th level, once per round as a bonus action, direct one of your companions to act. When you do so, choose a friendly creature who can see or hear you. That creature can immediately use its reaction to make a single attack, or take a bonus action.

Commanding Presence

From 8th level onward, whenever you take a short rest, you regain a use of your Inspiration ability. Henceforth, the Inspiration dice you grant are increased to d8s.

Officer Specialization

At fourth level, choose a specialist field. This field of specialization grants features at 4th, 7th, and 10th level.

Captain

Captains are masters of inspiring their crews, and pushing their starships to their very utmost limits.



Oh captain, My captain!

Starting at 4th level, when you use your Inspiration ability, you may grant an inspiration die to any number of targets that can see and hear you. This still counts as a single use of the ability.

Heartening Words

From 7th level, whenever a character receives an inspiration die from you they receive a number of temporary HP equal to your charisma modifier.

Into Hell

Starting at 10th level, your delegation ability may be used up to twice per round, and may be used as a reaction at any time in the round. (Meaning you may use it as a bonus action, and as a reaction, or as two separate bonus actions or reactions if you somehow managed to get additional bonus actions or reactions.)

Ace

Aces are known for dazzling feats of piloting, and inspiring others with their incredible feats of skill.



Cocky

Starting at 4th level, you may use your Inspiration ability on yourself as a reaction before you make an attack roll, saving throw or ability check. You gain a number of additional uses of this ability equal to your Charisma modifier (meaning your total number of uses per long rest is equal to your level plus twice your charisma modifier.)

A few maneuvers

From 7th level when you or a vehicle you are piloting are hit by an attack, you may, as a reaction, increase your AC (or that of the vehicle you are piloting) by 3 against this attack, possibly causing it to miss.

I'm the best

Beginning at 10th level, once per turn you may (as a bonus action) expend three uses of your Inspiration ability to take an additional action in addition to your normal action and bonus action.

Sergeant

Veterans of many engagements, Sergeants are leaders who have moved their way up the ranks from the common grunts, striving to keep the people under their command alive.

Don't call me 'Sir'

Starting at 4th level, you gain proficiency in Military Weapons and Combat armor if you did not already have it.

At the start of each of its turns, any creature that has an inspiration die provided by you gains an amount of temporary hp equal to your charisma bonus.

Work for a living

From 7th level onwards, whenever an attack you make reduces a creature to 0 hp, choose an ally within range that has had an inspiration die provided you, it gains another die without costing a use of your inspiration ability.

Creatures that possess an inspiration die provided by you add your proficiency bonus to damage rolls from their attacks.

Do you want to live forever!?

Beginning at 10th level, you may expend two uses of your inspiration ability to grant yourself and each ally that has an inspiration die provided by you gains the ability to make an additional attack whenever it makes the attack action. This effect lasts for a number of rounds equal to your charisma bonus.



Operative

Operatives serve the special needs of their starships, performing a variety of unsavory acts as required.



Class Features

As an Operative, you gain the following class features.

Hit Points

Hit Dice: 1d8 per Operative level

Hit Points at 1st Level: 8 + your Constitution modifier

Hit Points at Higher Levels: 1d8 (or 5) + your Constitution modifier per Operative level after 1st

Proficiencies

Armor: Protective Gear

Weapons: Civilian Weapons, Military Weapons

Tools: Lockpicks and one Systems Proficiency.

Saving Throws: Dex, Int

Skills: Choose four from Acrobatics, Athletics, Culture, Computer Use, Deception, Insight, Intimidation, Investigation, Law, Perception, Performance, Persuasion, Sleight of Hand, and Stealth

Level	Sneak Attack	Proficiency Bonus	Features
1st	1d6	+2	Sneak Attack
2 nd	1d6	+2	Cunning Action
3 rd	2d6	+2	Feat/Ability Score
4 th	2d6	+2	Specialization Ability
5 th	3d6	+3	Uncanny Dodge
6 th	3d6	+3	Feat/Ability Score
7 th	4d6	+3	Specialization Ability
8 th	4d6	+3	Devil's own luck
9 th	5d6	+4	Feat/Ability Score
10 th	5d6	+4	Specialization Ability

Equipment

You start with the following equipment, in addition to the equipment granted by your background:

- Combat Knife and Blaster Pistol
- Skinsuit
- Lockpicks
- Choice of Infiltration or Surveillance Kit

Sneak Attack

Beginning at 1st level, you know how to strike subtly and exploit a foe's distraction. Once per turn, you can deal an extra 1d6 damage to one creature you hit with an attack if you have advantage on the attack roll.

You don't need advantage on the attack roll if the target took damage this turn, or if another enemy of the target is within 5 feet of it, that enemy isn't incapacitated, and you don't have disadvantage on the attack roll.

The amount of the extra damage increases as you gain levels in this class, as shown in the Sneak Attack column of the Operative table.

Cunning Action

Starting at 2nd level, your quick thinking and agility allow you to move and act quickly. You can take a bonus action on each of your turns in combat. This action can be used only to take the Dash, Disengage, or Hide action.

Feat and Ability Score Improvement

When you reach 3rd level, and again at 6th and 9th level, you can increase one ability score of your choice by 2, or you can increase two ability scores of your choice by 1 up to your default maximum of 20. Additionally, you may choose one feat to gain or increase an ability score by 1, and increase its maximum by one instead.

Uncanny Dodge

Starting at 5th level, when an attacker that you can see hits you with an attack, you can use your reaction to halve the attack's damage against you.

Devil's own luck

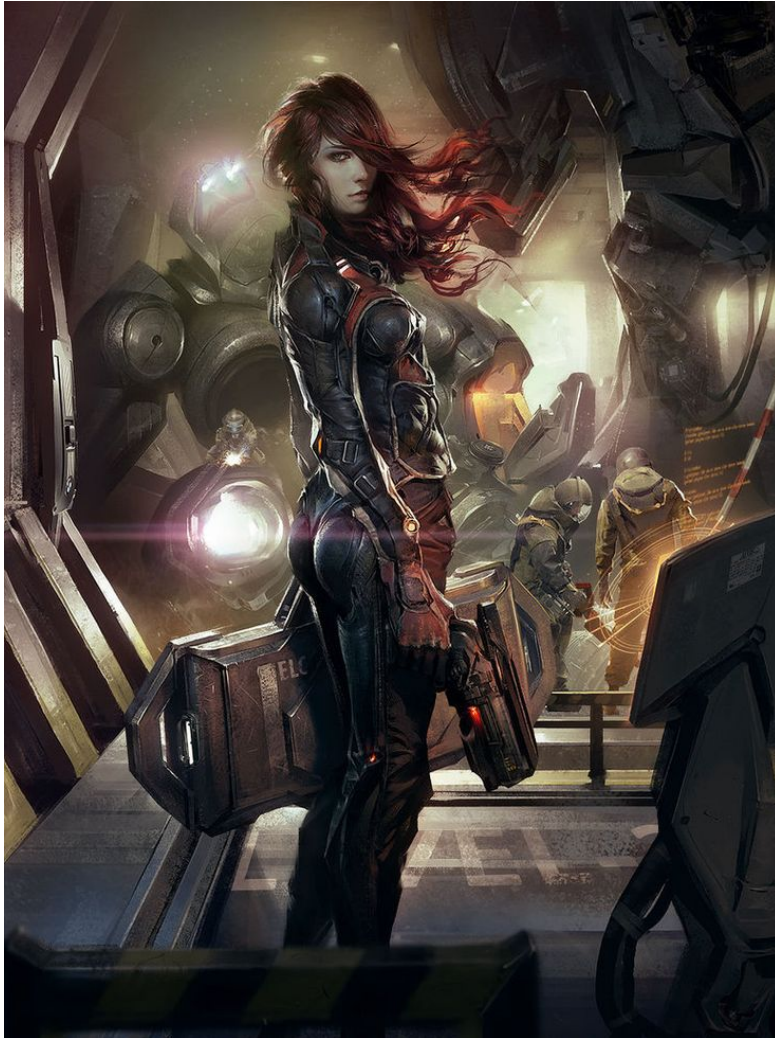
From 8th level, when you roll a 1 or 2 on an attack roll, damage roll, ability check, or saving throw, you can reroll the die but must use the new roll.

Operative Specialization

At fourth level, choose a specialist field. This field of specialization grants features at 4th, 7th, and 10th level.

Special Agent

Serving a starship as a spy in ports and in missions, spies are of inestimable use to any organization, and the only greater fools than those with none in their employ are those that fully trust the ones they have.



Skilled

Starting at 4th you may gain proficiency in any two skills or Toolkits. Choose two skills or toolkits with which you are proficient. Whenever you use one of these skills or toolkits, double your proficiency bonus with it.

Infiltration Expert

Starting at 7th level, you can unfailingly create false identities for yourself. You must spend seven days to establish the history, profession, and affiliations for an identity.

Thereafter, if you adopt the new identity as a disguise, other creatures believe you to be that person until given an obvious reason not to.

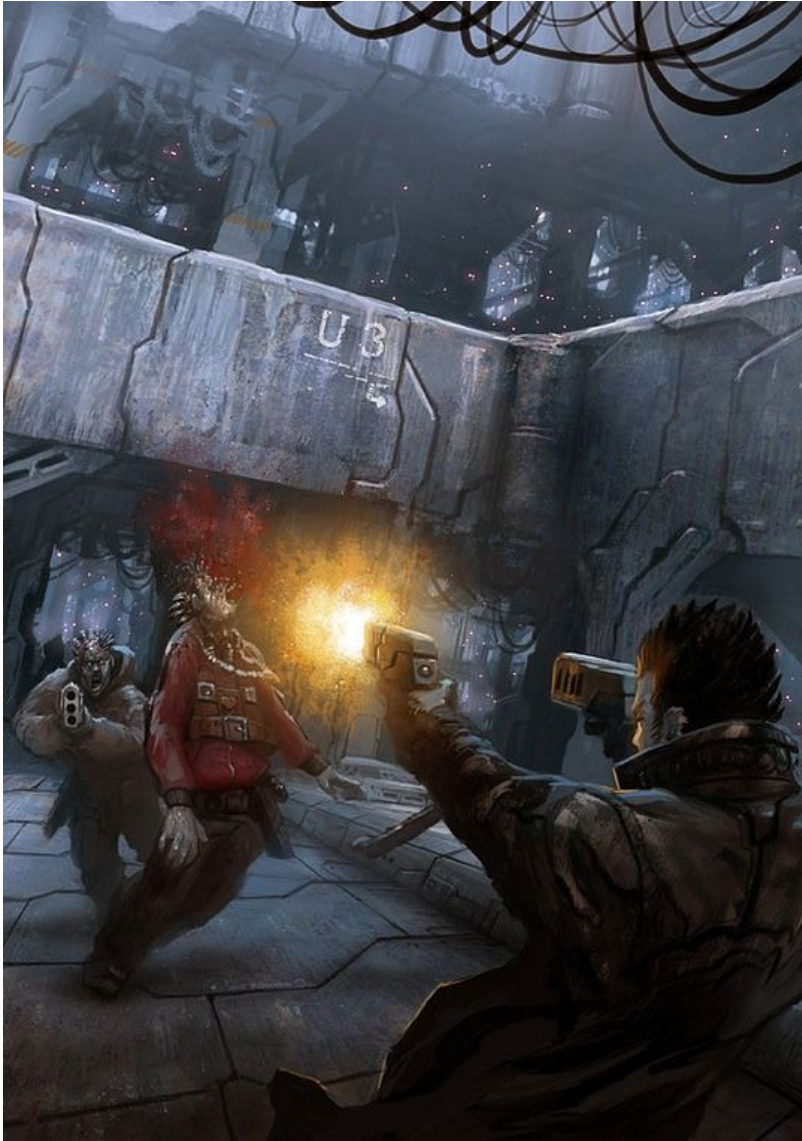
Silent as Death

From 10th level, you may move at your full speed while using stealth, and if you move half your move speed or less, you gain advantage on that stealth check.

You are at your deadliest when you get the drop on your enemies. You have advantage on attack rolls against any creature that hasn't taken a turn in the combat yet. In addition, any hit you score against a creature that is surprised is a critical hit.

Scoundrel

Scoundrels are thieves, conmen, smugglers and worse, serving their starship (and ultimately their best interests) by doing whatever has to be done.



Always shoot first

Starting at 4th level, you gain advantage on initiative checks and gain proficiency with weapons systems.

Never play fair

From 7th level, whenever you make opposed ability checks, your opponent gains disadvantage on the roll. You may use your reaction to give yourself advantage on an attack roll.

Trust No-one

When you reach 10th level, you have become adept at laying ambushes and quickly escaping danger. You can take two turns during the first round of any combat. You take your first turn at your normal initiative and your second turn at your initiative minus 10. You can't use this feature when you are surprised.

Bounty Hunter

Bounty hunters are known to relentlessly track their targets across worlds and systems at the behest of governments, militaries and even private individuals.



Ruthless

Starting at 4th level, your cunning action is expanded to include shoving, disarming or grappling your opponent.

Always get my Man

From 7th level, as a bonus action, you may designate a creature, and against this target gain advantage on all investigation, perception and survival checks to track this character. All sneak attacks you make against this target deal an additional sneak attack die of damage.

As a bonus action after the target of this ability dies or is disabled, you may select another target.

Takedown

When you reach 10th level, your sneak attack dice become d8s, and whenever you deal sneak attack damage to a target they become paralyzed. At the end of their turn a paralyzed target may make a dc13 constitution save to remove this condition.

Savage

Savages may join the crew of a starship, trading their prowess in battle for a chance to escape their primitive world and see the stars.



Class Features

As a Savage, you gain the following class features.

Hit Points

Hit Dice: 1d10 per Savage level

Hit Points at 1st Level: 10 + your Constitution modifier

Hit Points at Higher Levels: 1d10 (or 6) + your Constitution modifier per Savage level after 1st

Proficiencies

Armor: Archaic Armor

Weapons: Archaic Weapons

Saving Throws: Str, Con

Skills: Choose three from Acrobatics, Athletics, Insight, Intimidation, Perception, Stealth and Survival.

Level	Proficiency Bonus	Features
1st	+2	Natural Explorer
2nd	+2	Combat Style
3rd	+2	Feat/Ability Score
4th	+2	Specialization Ability
5th	+3	Extra Attack
6th	+3	Feat/Ability Score
7th	+3	Specialization Ability
8th	+3	Savage Defense
9th	+4	Feat/Ability Score
10th	+4	Specialization Ability

Equipment

You start with the following equipment, in addition to the equipment granted by your background:

- Any two Archaic Weapons
- Archaic Armor
- Fetish, trophy or Religious item

Natural Explorer

At 1st level, you have the ability to navigate planetary environments with ease.

- Your party is not impeded or slowed by difficult terrain.
- You may perform other activities while traveling at no penalty, such as tracking, foraging or using stealth.
- While tracking creatures you gain additional information.

Combat Style

Starting at 2nd level, you adopt a particular style of fighting as your specialty. Choose one of the following options. You can't take a Fighting Style option more than once, even if you later get to choose again.

- **Long Arm Specialist**
You gain a +2 bonus to attack rolls made with two handed ranged weapons.
- **Melee Specialist**
When you roll a 1 or 2 on a damage die for an attack you make with a melee weapon that you are wielding, you can reroll the die and must use the new roll, even if the new roll is a 1 or a 2.
- **Protection**
While wielding a shield, if a creature you can see attacks a target other than you within five feet of you, you may use your reaction to impose disadvantage on the attack.
- **Two-Weapon Fighting**
When you engage in two-weapon fighting, you can add your ability modifier to the damage of the second attack.
- **Unarmed Fighting**
When you make an unarmed strike, add your proficiency bonus to the damage roll.

Feat and Ability Score Improvement

When you reach 3rd level, and again at 6th and 9th level, you can increase one ability score of your choice by 2, or you can increase two ability scores of your choice by 1 up to your default maximum of 20. Additionally, you may choose one feat to gain or increase an ability score by 1, and increase its maximum by one instead.

Extra Attack

Beginning at 5th level, you can attack twice, instead of once, whenever you take the Attack action on your turn.

Savage Defense

Starting at 8th level, while wearing archaic armor or no armor, whenever you would take damage, reduce that damage by your constitution bonus.

Savage Specialization

At fourth level, choose a specialist field. This field of specialization grants features at 4th, 7th, and 10th level.

Hunter

Hunters track their prey relentlessly, taking trophies from their most challenging foes, and the biggest game.



Bloodthirsty

Starting at 4th level when you attack a creature that is at less than its maximum hp, your attacks deal an additional 1d8 damage.

Relentless

From 7th level onward, opportunity attacks against you gain disadvantage, and whenever a creature hits you with an attack, you gain +4 ac against the rest of its attacks for the rest of the turn.

Slayer

Starting at 10th level, whenever you make deal damage with a weapon attack, you may make an additional attack against a target within five feet of the original target or adjacent to yourself as a reaction.

Additionally, when you attack a creature that is at less than its maximum hp, your attacks deal an additional 2d8 damage instead of 1d8.

Warrior

Warriors are skilled combatants that seek to prove their worth in battle, defending their allies and going head to head with the toughest foes.



Warcry

Starting at 4th level, whenever you make an attack against a creature you may mark it. Until your next turn, it has disadvantage on attack rolls against all targets other than yourself.

A good day to die

From 7th level whenever you reduce a hostile creature to 0 hp, you lose any temporary hp you have from this ability, and gain a number of temporary hp equal to your constitution modifier plus Savage level.

Glorious Battle

Starting at 10th level you may use your action to either make a ranged attack against all targets within five feet of a space you designate, or a melee attack against any number of targets within five feet of you.

Oathsworn

Through some series of events, you have come to owe the strange visitors from the stars a debt that cannot be easily be repaid, requiring you to follow them into their realm in the attempt to find some way to square the balance.

Dedicated Defender

Starting at 4th level, an attack that you could be the target of is made against an ally, you may (as a reaction) force that attack to be made against you instead. You gain resistance to damage dealt by this attack.

Vengeance

From 7th level onwards, whenever you attack a creature that has dealt damage to an ally since your last turn, you gain advantage on that attack and it deals an additional two weapon dice of damage.

Lightning Defense

Starting at 10th level you may make up to two reactions per turn.

Whenever an attack is made against an ally, you may move up to half of your movement speed towards the originator of that attack and make a single melee attack against them as a reaction. If this attack hits, prevent the attack that creature was about to make from dealing any damage.



Chapter 5: Backgrounds



Backgrounds define a character's early career choices, upbringing, and experiences that have led them to where they are now. A character's background should be a major decision in terms of stats and abilities, but more importantly in terms of motivation and storytelling.



Aristocrat

Coming from a position of affluence, Aristocrats might not be actual nobility, but it is difficult to tell the difference. Children of powerful executives or wealthy families, Aristocrats had every conceivable advantage growing up, benefitting from minor gene tweaks, sterling education, and the ability to pick any course they want for their lives.

Skill Proficiencies: History, Culture

Tool Proficiencies: Any one musical instrument or Gaming Set

Equipment: A set of formal clothing, 500 credit chips

Feature: The 1%

Your family is astonishingly wealthy. While that money may not yet be yours, you can make limited use of your family's affluence. Once per session a character with this feature may waive the cost of one good, service or bribe that the DM finds within reason, overcoming a challenge or limitation solely by deep pockets. This can include but is not limited to: bumping a ship to the front of the line for docking, subsidizing overpriced fuel or docking costs, acquiring a key replacement part, or securing the use of a single item. The invoices for all these purchases and costs will eventually make it back home to daddy, so at least try to be reasonable, or risk being cut off.

Celebrity

Perhaps you were on reality TV, maybe you hit a billion views on Ütube, and maybe you're a concert violinist. Regardless, there are people who recognize you, and for you, any attention feels like good attention.



Skill Proficiencies: Culture, Perform

Tool Proficiencies: Disguise Kit, one type of musical instrument or gaming set

Equipment: One musical instrument of your choice, one flashy costume or outfit, 150 credit chips

Feature: Maybe you've heard of me

When interacting with someone you may make a charisma check DC 15 (10 if the target is from your home system) to be recognized. The result of this recognition is up to the DM, but might involve advantage on further skill checks, preferential treatment, free stuff and discounts.

Colonist

Mankind has settled its first new worlds, and you are among the descendants of those bold pioneers. Whether you came back to space to push the frontier further, or because of a desire for more civilization, you grew up on an alien world, and had to learn early how to survive.



Skill Proficiencies: Survival

Tool Proficiencies: Survey Equipment

Equipment: Laser Rifle, Bush Clothing, 50 Credits

Feature: Xenofrontiersman
You have an excellent grasp of planetary survey maps and charts, and always understand exactly where you are in relation to landmarks and other points of reference. Additionally, in compatible environments you may find edible food and potable water for up to five other people each day.

Company Man

You are the representative of one of the Mega-Corporations of earth, serving their interests among the stars. Greed is good, and whatever opportunities you find for the company to exploit will net you a healthy finder's fee.



Skill Proficiencies: Deception, Law

Languages: Tradespeak

Equipment: Business Suit, Briefcase, 200 Credit chips

Feature: From the Home Office
As long as you remain in good standing with management, local fronts for your corporation will assist you with reasonable tasks and requests, as well as providing lodgings for you and a sufficiently small staff.

Criminal

You have a shady background, and are the member of a criminal organization, seeking opportunities to advance your organization among the stars.



Skill Proficiencies:

Intimidation

Tool Proficiencies:

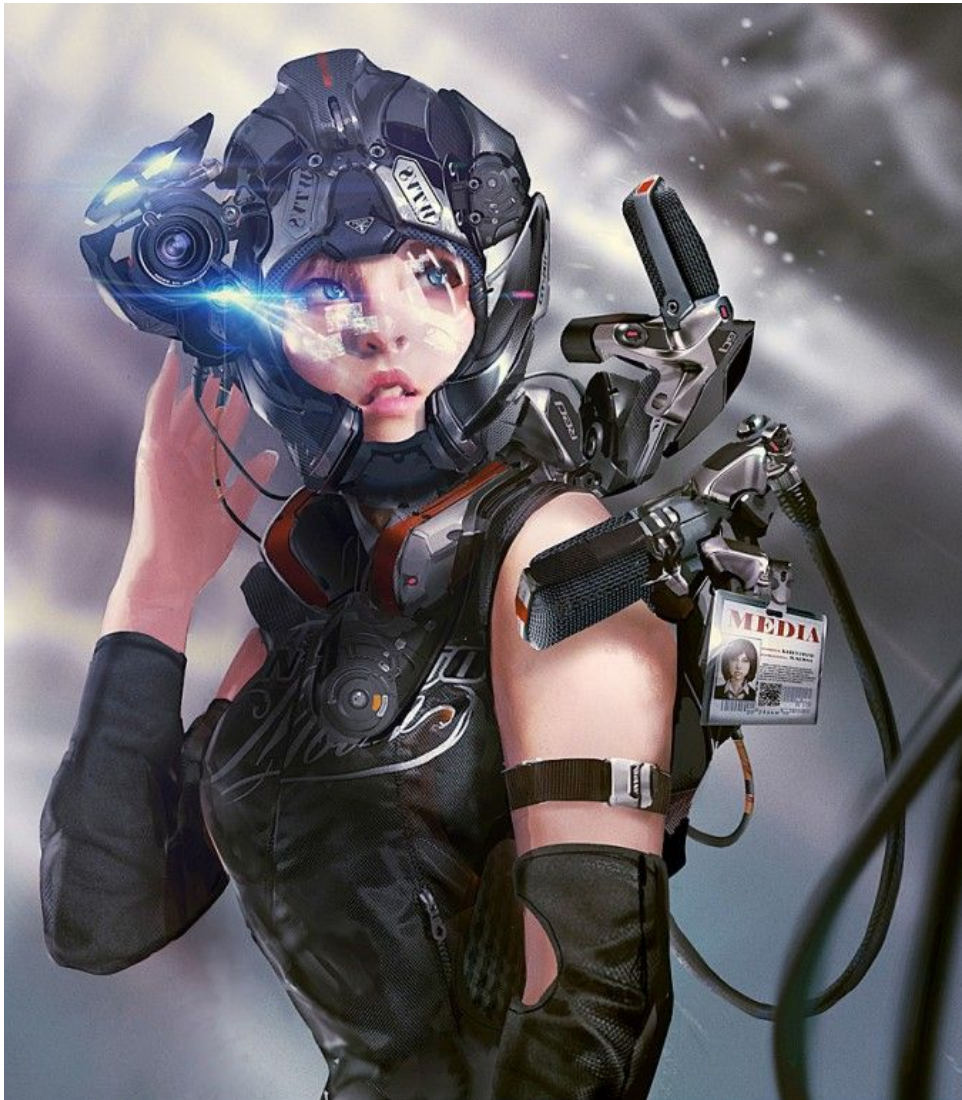
Your choice of Forgery Kit, Lockpicks or Gaming Set

Equipment: Blaster Pistol or Combat Knife, basic outfit, 100 credit chips

Feature: I know a Guy
Your connections in the criminal underground let you find illegal or black market goods for purchase, or find outlets to sell similar.

Journalist

As a representative of a news organization you are among the stars looking for a story, perhaps to make a name for yourself, or to get back in the good graces of your organization.

**Skill Proficiencies:**

Investigation

Tool Proficiencies:

Disguise Kit or
Forgery Kit

Equipment:

Recording Rig, nice outfit, your choice of a disguise or forgery kit, and 100 credit chips

Feature: Sources

When investigation hits a dead end, or when you just need some clarifying information, a journalist can call on a network of confidential sources for this information. Sometimes bribes or favors will be required, and some information is just too dangerous for a source to divulge, but there is always at least a clue to be found.

Merchant

You were raised in the markets and bazaars of many stations and worlds, carrying out the vital commerce that fuels humanity's expansion into the stars.

Skill Proficiencies: Deception and Persuasion

Equipment: Holdout laser pistol, fine outfit, 300 credit chips worth of trade goods.



Feature: Let's Make a Deal

With profits on the line, you can always make yourself understood, and may attempt commerce even with beings you share no common language with. In addition, add your level and charisma bonus to all business ventures you engage in.

Military

You served one or more tours of duty in a military force, and attained rank before mustering out to find a life of adventure in space. Perhaps it was a planetary defense force, interstellar or system navy, or even just a local militia.



Skill Proficiencies:
Athletics

Tool Proficiencies: Gain proficiency in military weapons and combat armor, or atmospheric and space vehicles.

Equipment: Your choice of Gauss Pistol or Blaster Pistol, dress uniform, medal of distinction, 50 credit chips.

Feature: Rank and File
You mustered out with your rank intact, at least an E4, and good standing with the military. You can use this to gain access to limited resources from military bases and vessels, such as emergency refueling or repairs, medical treatment, or access to communications lines.

Missionary

You have come to the stars to spread your religious or philosophical views, and have the backing of a church or group of similar minded individuals.



Skill Proficiencies: History and Persuasion

Languages: Choose any one language.

Equipment: Respectable outfit, copy of your core religious or philosophical text, 20 credit chips

Feature: Defender of the Faith

Wherever there are other followers of your faith or philosophy, expect to have allies to call on in times of need for basic lodgings, food, limited resources and general support. If there are no such followers, make some.

Offworlder

You are not native to human society, and are confused by its ways. Perhaps you were the orphaned survivor of a failed colony, abducted by aliens and later returned, or are even an alien from a distant world.



Skill Proficiencies: Sleight of Hand, Deception

Equipment: Combat Knife, token of your homeworld, 10 credit chips

Feature: Not from Around Here

You are obviously from a foreign culture, and humans have no clear idea exactly how to deal with you. By pretending not to understand languages, you can often bluff your way out of a sticky situation, and others will give you little thought as they speak in front of you, underestimating your understanding of concepts.

Police

You were a sworn peace officer working for a civilian government. You retired from policework to venture to the stars, but your record as a law enforcer follows you, making criminals nervous and security personnel rest easy.



Skill Proficiencies: Investigation, Law

Equipment: Choice of Stun Pistol or Stun Rifle, Riot Gear, Badge, normal outfit

Feature: Brothers in Blue

Your time as a law enforcer lets you more easily get along with security and local police. You can smooth over rough relations with authorities (within reason) and can be called upon by departments to assist with crime during emergencies.

Politician

You held an elected office or worked to help someone else hold one. You have experience dealing with bureaucracy and red tape from the inside, and have left for the stars to find a new avenue to power.



Skill Proficiencies: Choose any two of Deception, Persuasion, Insight or Law

Equipment: Nice Suit, 100 credit chips worth of vice product (cigars, alcohol, etc), holdout laser pistol.

Feature: Friends and Neighbors

You have a way with crowds, and given at least ten minutes can shift the mood of a group of people one step closer to friendly for the next few hours. Alternatively, you can convince a group of people you might just have the best solution to the current problem, real or imagined.

Primitive

You hail from a primitive world, though you might prefer the term 'Less Advanced'. Perhaps it was roughly equivalent to the medieval period, or even the human Stone Age, but your grasp of science is just not up to par with interstellar species. That being said, you are less soft and weak than these beings spoiled by their technology.



Skill Proficiencies: You are proficient with Athletics and Survival

Equipment: Native Dress of your homeworld, trinket.

Feature: Noble Savage

You take pride in the world of your origin and in its ways, those you meet are just not prepared for them. As long as you are wielding archaic weapons you gain advantage on your attack rolls against targets who are not also using archaic weapons.

Spacer

You were born and raised onboard the early generation of relatively slow interstellar vessels, travelling between the stars of the fringe, trained from a young age to pitch in aboard a starship.



Skill Proficiencies: Acrobatics

Languages: Choose any two Languages.

Tool Proficiencies: Choose any two of Space Vehicles, Repair Kit or any System.

Equipment: Laser Pistol, Hardsuit (Armored Skinsuit with disadvantage on stealth checks), Repair Kit, Alien Trinket, 100 credit chips

Feature: Different Circles
Spacer social conventions are different than those of normal human society, and you have cultivated a reputation amongst spacers. Depending on if you are famous, or infamous, other spacers have certainly heard of you and will respond accordingly. Wherever spacers gather, you can expect to find a berth on a ship, aid, information, and acceptance barred to other folk.

Stationer

You were born and raised on a space station or habitat, having rarely or never been planetside. The rigid discipline required to live in an environment completely inhospitable for life has helped you become a very pragmatic and rational individual.



Skill Proficiencies: Choose either Engineering or Computer Use

Languages: Choose any one language.

Tool Proficiencies: Repair Kit

Equipment: Repair Kit, 200 credit chips

Feature: Station Secrets

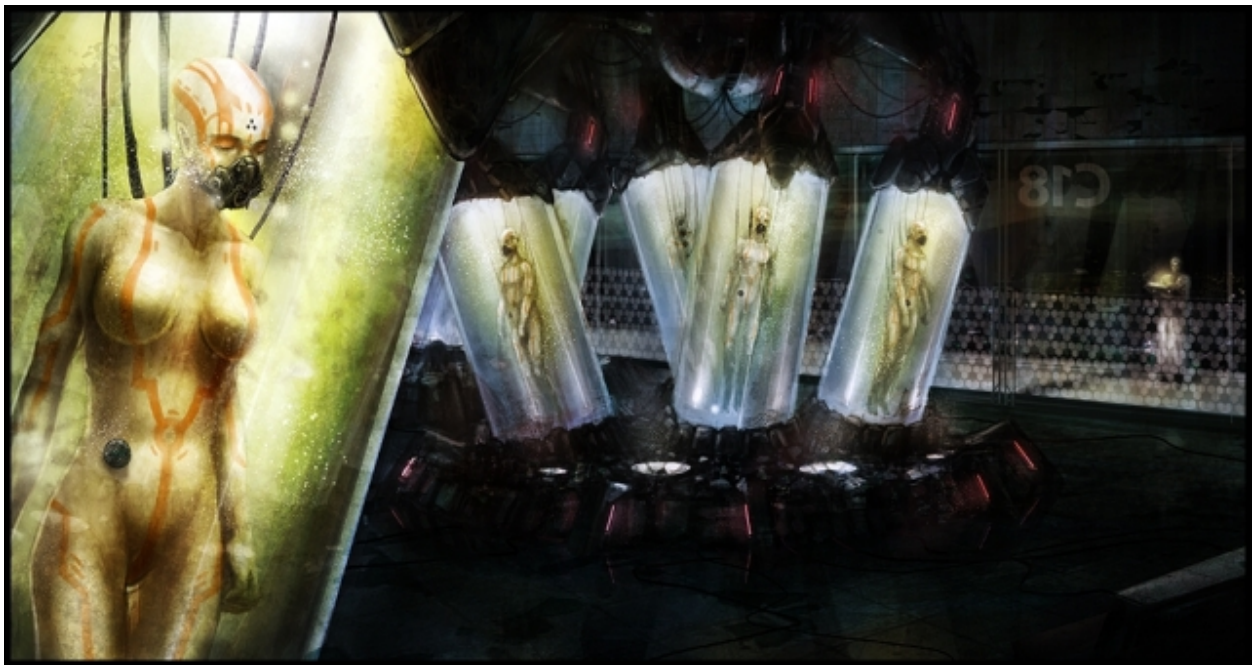
You know the secret ways and back routes common to human built stations and habitats, and when outside of combat can travel without detection between any two locations in such an environment twice as quickly as you normally would.

Tanker

You were not born as most humans, a squalling infant dependent on your parents, but were, rather, raised in one of the tank facilities, grown to maturity at an artificial rate, and given a basic education at a deep subconscious level. Your first memory was stumbling up from a crash of amniotic fluid, fully grown and formed, knowing how to walk, to stand, and speak. Your last few years of technical study passed quickly, a formality really, and now you stand ready to fulfill your purpose in the stars. While biologically human, you are different from the rest of humanity, a breed apart almost.

You were produced to fill some role on a starship or station, and are expertly adept at your specialization.

Skill Proficiencies: Choose any one skill or tool to gain proficiency in.



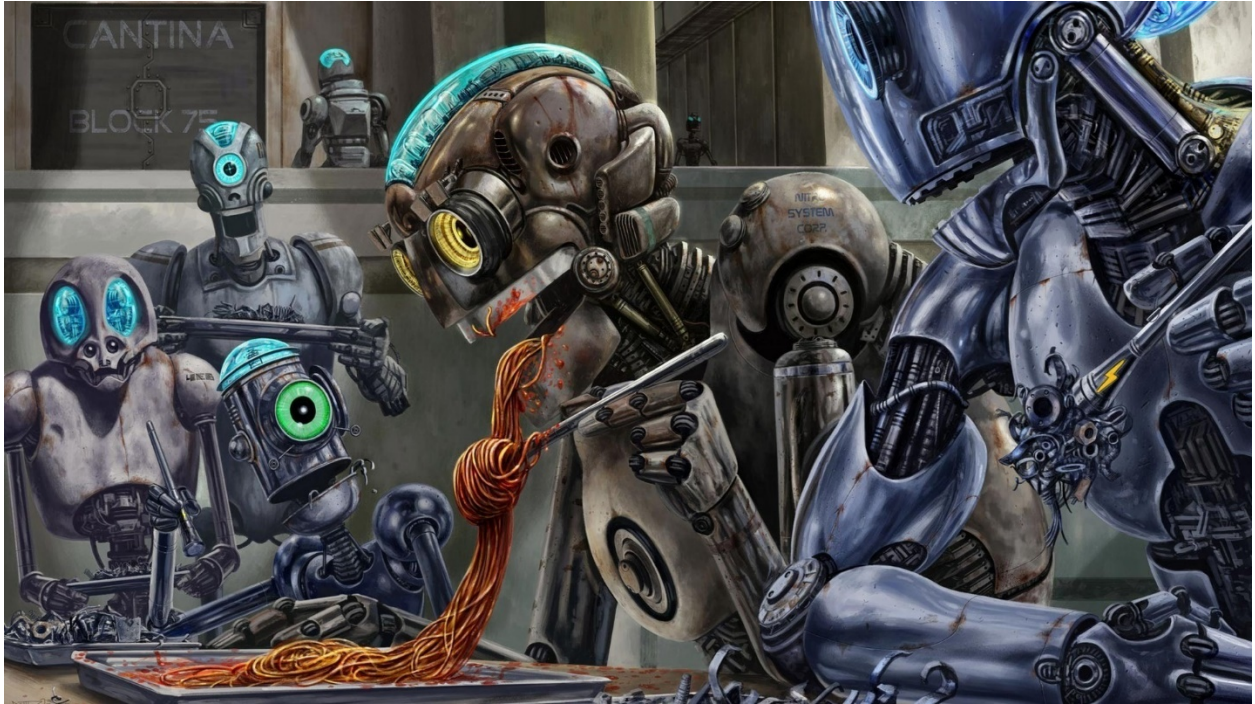
Equipment: 25 credit chips, one tool you are proficient with.

Feature: Bred to Order

You were created to fulfill a particular purpose. Whether that was surgical genius or waste disposal, you are nonetheless eminently qualified for this task. Double your proficiency bonus with the skill or tool in which you gained proficiency when choosing this background.

Chapter 6:

New Skills, Feats and Proficiencies.



This chapter contains new skills, new feats, and new proficiencies.

New Skills

Fifth age adds several new skills, detailed below.

Biology: Intelligence (Biology) is used to cover both a general understanding of the life sciences, knowledge of living catalogued organisms, and the reasoning and capacity to study new forms of life. Characters wishing to understand an alien life form might make such a check to learn about the organism's breathing requirements, or to find out what chemical compounds it would find poisonous.



Computer Use: Intelligence (Computer Use) is used when one interfaces with a computer in more than a casual fashion, and covers general knowledge of networks, programming and computer security systems. A character might make a computer use check to hack into a captured data pad, write a program to alert them to the comings and goings of a particular person on a station, or to keep another character from infiltrating the ship's network by hypernet.

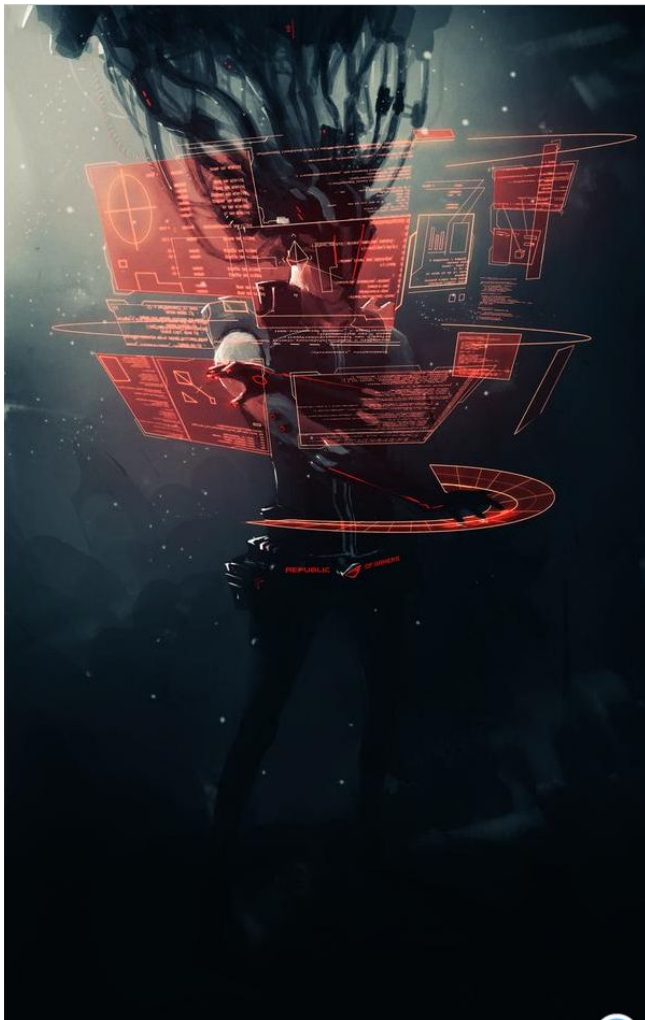
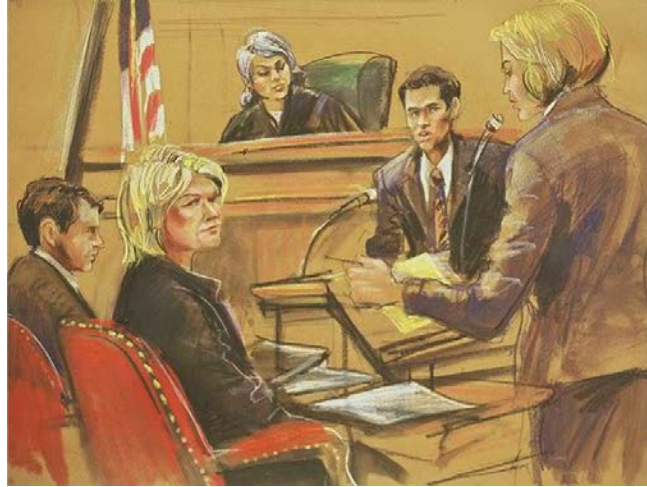


Culture: Intelligence (Culture) is a general understanding of sociology, current events and pop culture that let you understand the cultural events going on in society around you. A character might use this skill to recognize a popular musician, fashion trend, artistic style, customs or a pop culture reference.



Engineering: Intelligence (Engineering) covers a wide variety of physical sciences and knowledge common to starship personnel operating in the field. Use of this skill would be appropriate for overloading a reactor, boosting a thruster's output, or designing a replacement part for a damaged system.

Law: Intelligence (Law) is used to represent a character's knowledge of legal procedure and precedent, and such a skill might be used to recall what goods might be illegal in a region, write a business contract, understand a contract, and to argue in a court of law.



Navigation: Wisdom (Navigation) is used to plot Hyper courses as well as plotting in normal space, and requires a solid mix of complex maths and common sense. A character would make such a check when preparing to make a Hyper Jump out of a system too close to the gravity well, or in an attempt to shave some relativistic time off of a trip.

New Tool Proficiencies

Fifth Age adds several new tool and vehicle proficiencies, detailed below.

Astrosurveying Equipment: This tool is used for the gathering and analysis of data on a system wide scale, creating detailed charts useful for navigating hazards, planetary orbits, and the like. A character would use this tool to create a detailed navigational chart for a system or when searching for mineral deposits.

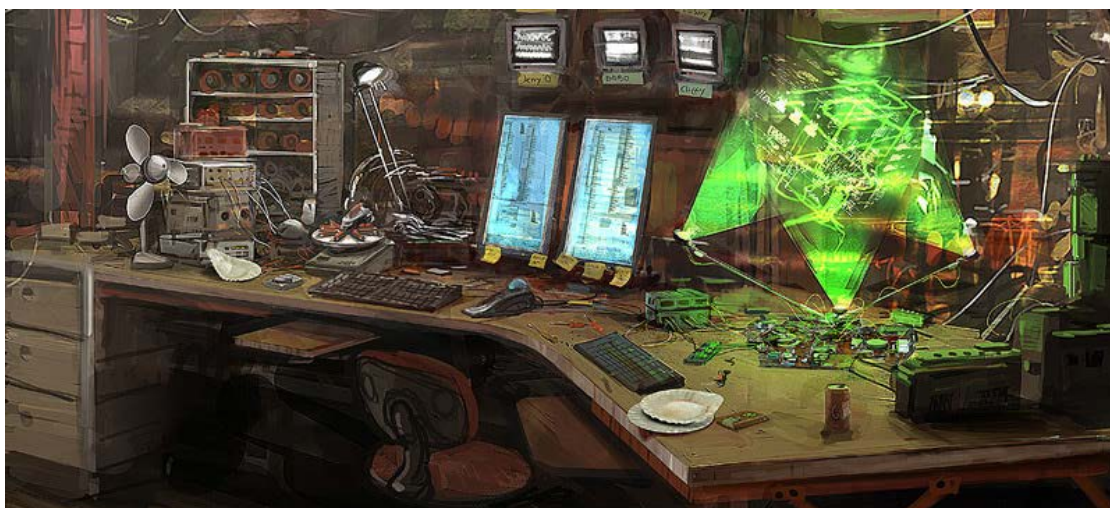
Demolitions Kit: This toolkit is used for the creation, placing, or defusing of explosives and demolition charges. A character would use this tool when setting a ship to self-destruct, attempting to destroy a bridge, or to disarm a bomb.

Repair Kit: This toolkit is used to repair technological devices, systems or vehicles. A character might use this tool to repair battle damage to their starship, patch a propellant tank, reattach a synthetic's arm that was torn off, or return a laser pistol to working order after being dropped in a swamp.

Planetary Survey Equipment: This tool is used for the gathering and analysis of data, on a planetary scale. A character would use this tool to create detailed planetary charts for navigation, exploration or colonization, or when looking for something particular on a world, like mineral deposits or other resources.

Vehicle (Atmospheric): These are vehicles designed to be used within a planetary atmosphere, and can encompass planes, helicopters, tanks, transports and even sailing vessels. A character would use this proficiency when attempting particularly risky feats of piloting, such as in combat or attempting a dangerous landing.

Vehicle (Space): These vehicles were designed to be used primarily in space, and can encompass everything from space taxis, shuttles, cargo tows and lighter craft all the way up to battlecruisers. A character would use this proficiency for particularly daring feats of piloting, such as in combat or attempting risky maneuvers.



System Proficiencies

Fifth age characters are, generally speaking, the crew of star ships. Even the surliest grunt or most erudite scholar has some practical skill on such a vessel, or they would not have been allowed onboard a ship as crew. All characters have the ability to choose at least one systems proficiency, chosen from the list below, and are proficient with all subsystems of their chosen proficiency:

Weapons (WEAP): Weapons officers are proficient in the operation of ship based weapons systems, and may operate Weapons subsystems with proficiency. Such a character might be called upon to fire at an enemy ship, clear debris out of a flight lane or to shoot down incoming missiles.

Engines (ENGI): Engines officers (often called Engineers) are responsible for maintaining and operating the massive rocket thrusters that propel starships, their Hyper Drives, monitoring fuel, heat radiation, and a host of other high energy tasks. A character filling this role might be asked to overload a ship's thrusters for a temporary boost in speed, overheat the reactor to shave a bit off of a hyper jump charge, find a way to conserve fuel or propellant to make it on a particularly tight burn, or even just to find a way to put out literal or metaphorical fires in systems.

Hull (Hull): Hull officers tend to be mechanics and repair men, as well as cargo managers and pursers. Dealing with the physical realities of the ship, her structure, cargoholds, life support systems, armor maintenance and other seemingly mundane tasks, such a character might be called on to patch a breach in the hull, spin up a habitation module to disorient boarders, or figure out how much scotch could be given as a bribe to a stationmaster and still break even on this run.

Computers (COMP): Computer Operations Officers focus on the wellbeing and safe operation of the vital computer systems and networks that run almost every conceivable function onboard the ship. A character specializing in Comp Ops might be called on to repair an EMP fried navi-computer, fight off hostile intruders in the ships database, or purge a nasty computer virus from ship's systems.

Sensors (SENS): Sensor Officers, often called Scan Techs, oversee, literally, what the ship can detect. Watching flight lanes, coordinating the positions of other ships and orbital objects in a system, surveying planets and asteroid belts, and keeping an eye on any other ships nearby. A character serving this role might be asked to find water asteroids for re-massing, determine the best place to land on an alien world, or figure out if that incoming ship has its weapons hot and primed to fire, or not.

Communications (COMM): Communications officers, are the nerve center of a starship in flight. In constant communication with personnel all over the ship, relaying orders as well as being the gateway to offship information, pinging sensor buoys, coordinating with station, hailing other ships, and in times of a fight, using all that fancy equipment to lie to enemy ships as adroitly as possible about where they actually are. A comm officer might be asked to jam communications on a patrol boat long enough to slip out of system before reinforcements arrive, find a way to communicate with an alien species, or to slip out of a missile lock.

Feats

Fifth age functions best with feats, allowing a wider level of customization for characters. The core assumption of the game is that a character will gain a feat at levels 3rd, 6th and 9th level along with their ability score increases.

Care should be taken in handing out normal 5e feats, as they are often much broader in scope and greater in power than the ones provided here. A Fifth Age feat is approximately half as powerful as a normal 5e feat, in most regards.

Ambidexterity

Prerequisite: Extra Attack class Feature, Two Weapon Focus combat style

Intense training and a little neurosurgery have allowed you to become fully ambidextrous. While you are wielding a one handed weapon in each hand and you make a two weapon fighting attack using a bonus action, you may make an additional attack with that weapon.

Bulletstorm

Spray and pray! You have become skilled with burstfire weapons, and can cover larger areas. Whenever you use the burstfire action, you may target an area ten feet wide, and fifteen feet long, or an area five feet wide and thirty feet long.

Combat Focus

You may choose a combat style from the following list. After choosing a style, you may not select it again, even if allowed to select another combat style.

- **Defense Focus**
While you are wearing armor, you gain a +1 bonus to AC.
- **Long Arm Focus**
You gain a +2 bonus to attack rolls made with two handed ranged weapons.
- **Melee Focus**
When you roll a 1 or 2 on a damage die for an attack you make with a melee weapon that you are wielding, you can reroll the die and must use the new roll, even if the new roll is a 1 or a 2.
- **Side Arm Focus**
While wielding a one handed ranged weapon and no weapon in your off hand, you deal an additional 2 damage.
- **Two-Weapon Focus**
When you engage in two-weapon fighting, you can add your ability modifier to the damage of the second attack.
- **Unarmed Focus**
When you make an unarmed strike, add your proficiency bonus to the damage roll.

Covering Fire

You are adept at laying down covering fire. While wielding a ranged weapon you may, as a bonus action, designate a space, you are considered to be threatening an area five feet around that space, and may make opportunity attacks with your ranged weapon or participate in flanking if those rules are being used. Two characters with this feat can actually flank with ranged weapons.



Creatively Anachronistic

Your interest in history and primitive cultures has led you to train in their weapons and armor. You gain proficiency in Archaic Weapons and Archaic Armor, and may add half of your proficiency bonus to checks involving primitive culture and technology.

Eagle Eye

You have trained until you have become an excellent shot. Attacking at long range no longer applies disadvantage to your attack rolls.

Heavy Armor Specialization

Your time wearing the heaviest of armors has allowed you to learn many tricks to avoid damage. When you take damage, you may use your reaction to reduce it by an amount equal to 1d10 plus your constitution bonus. You may use this ability twice before you take a short or long rest.

Heavy Munitions

Prerequisite: Proficiency with Military Weapons

You are properly trained and licensed to use Heavy weapons, gaining proficiency in them. Additionally, you may use your strength bonus for attack and damage rolls with heavy weapons.

Judo

Martial Arts

Your martial arts training has expanded to include a wide variety of holds and throws.

- Whenever you make an unarmed attack against a target, you may use your reaction to attempt to grapple the target.
- You may use your action to attempt to pin a target you are grappling. Succeed on a grapple check to grant you both the restrained condition until you release them or they break free.
- When you use the Shove action you may both knock a creature prone, and shove it 5 feet.

Killing Spree

You take particular glee in seeing your enemies fall before you, with each kill working you up into a bloodthirsty rage. Whenever you reduce an enemy to 0 hp, you may make an attack as a bonus action.

Kung Fu

Prerequisite: 5th level character, Martial Arts

Your training in the martial arts has reached the point of true mastery. Whenever you use the attack action to make at least one unarmed attack, you may make an additional unarmed attack as part of that action. Your unarmed strikes deal 2d6 damage to targets that you are grappling.

Light Armor Specialization

You have trained extensively wearing light armor, and are exceptionally agile while lightly armored. While wearing light or no armor, your movement speed is increased by 10 feet, and opportunity attacks against you gain disadvantage.

Lock and Load

Prerequisite: Proficiency with Civilian weapons and Protective Gear

You have trained in the use of military grade equipment, and have the certifications and licensing to prove it, gaining proficiency with Military Weapons and Combat Armor.

Martial Artist

You have trained in the martial arts, allowing you to use your entire body as a weapon. Your unarmed strikes count as weapons and deal 1d6 bludgeoning damage, and may use either strength or dexterity for the attack and damage rolls. Once per turn, as a bonus action, you may make an unarmed strike. When you make an unarmed strike against a target you are grappling with, that attack gains advantage.

Medium Armor Specialization

You are accustomed to wearing medium armor, and do not find it as constrictive as others. While wearing medium armor, you may add up to 3 points of your dexterity bonus to your armor class instead of 2, and may use your reaction to reduce the damage you take from an attack by 1d6 + your con bonus. If you use this ability, you may not use it again until you take a short or long rest.

Melee Specialization

You have specialized your training in melee combat, becoming truly fearsome in hand to hand combat. You may add your proficiency bonus to your damage with melee weapon attacks. Any creature you threaten with a melee weapon provokes an opportunity attack when they make an attack with a ranged weapon.

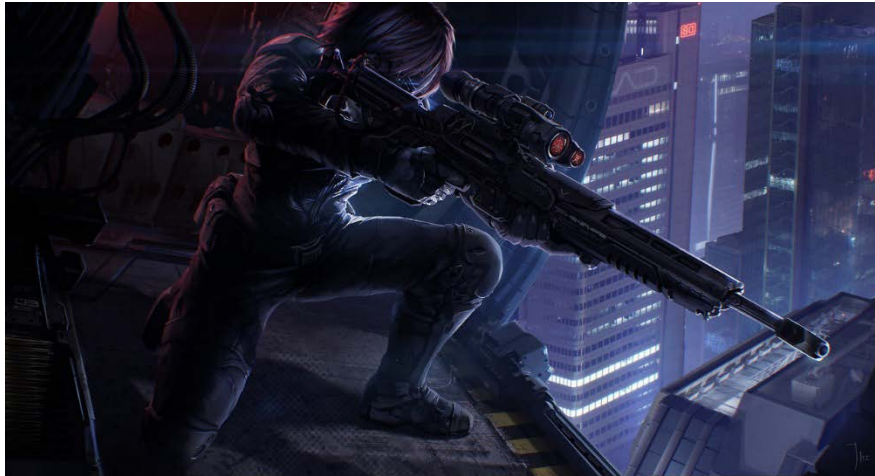
Sharpshooting

Your marksmanship is unbelievably precise. Your ranged weapon attacks may ignore $\frac{1}{2}$ and $\frac{3}{4}$ cover.

Sidearm Specialization

Prerequisite: Sidearm Focus Combat Style

You have trained extensively with one handed firearms, and are able to put a surprising amount of shots down range. While wielding a one handed ranged weapon in one hand, and no weapon in the other hand, once per round you may, as a bonus action, make a weapon attack.



Sniper

Prerequisite: 5th level character, Eagle Eye or Sharpshooting feat

Your marksmanship training has enabled you to make incredible shots. While wielding a two handed ranged weapon, you may, as an action, make a single attack with advantage. If both d20s rolled to make this attack would have resulted in hits, roll the weapon's damage dice twice.

Suppressing Fire

With much practice, you have become skilled at suppressing enemies with your burstfire. When you make a burstfire attack, all targets in the area of effect must make a wisdom save (DC equal to 8 + proficiency bonus + your dexterity bonus) or have their speed reduced by half until your next turn. A creature that takes damage from the burstfire attack gains disadvantage on this save.



Training

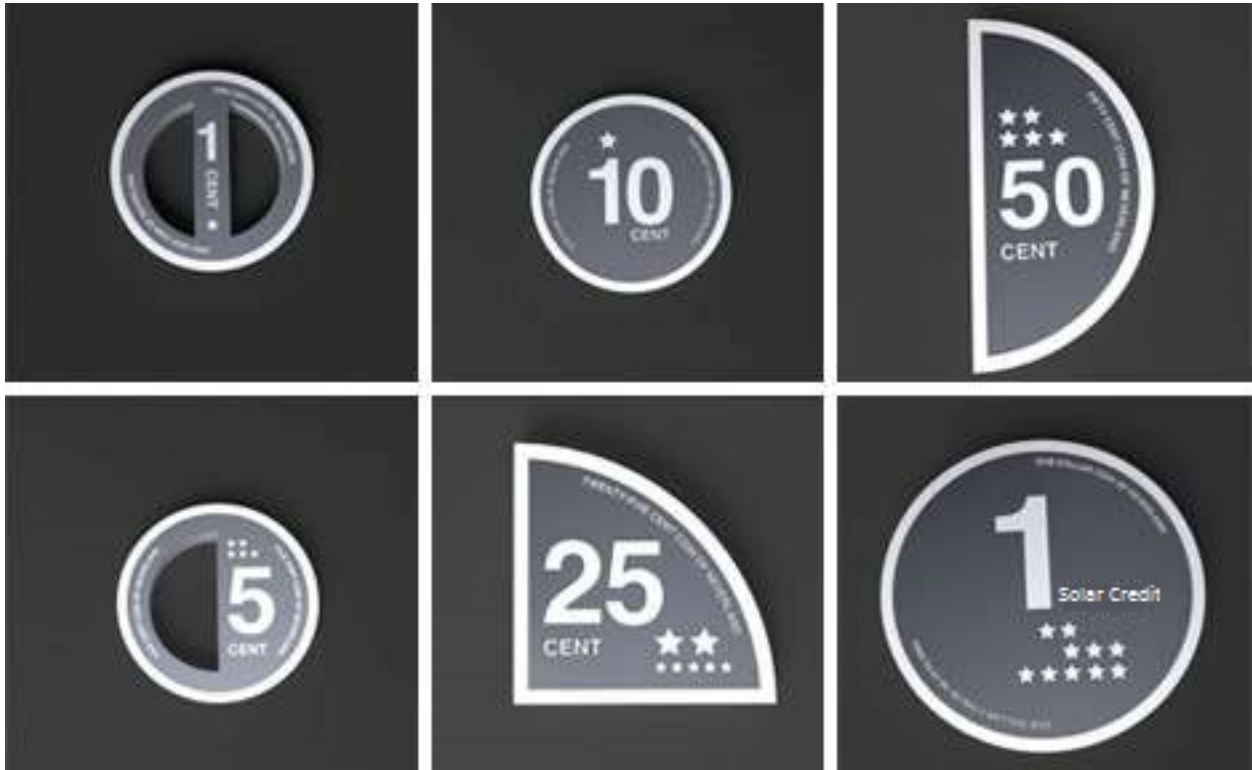
You gain training in the use of specific equipment. Choose three total of armors, weapons, or toolkits or devices and gain proficiency with those items. This feat may be taken multiple times, granting proficiency with three new items each time it is taken.

Chapter 7: Equipment



As humanity spills into the stars, it takes with it a host of competing corporations, struggling traders, dangerous technologies and leaves volatile markets in its wake. In the bustling marketplaces of stations and worlds a wide variety of equipment may be purchased, built locally or imported, the following tables represent a select grouping of those goods.

The Solar Credit



Backed by the First bank of Sol, one solar credit has a practical exchange value of one day's worth of rations, environment and upkeep for a person space side. With each local government printing their own currency, and no fewer than 300 competing physical and cryptocurrencies on earth, the Solar credit was created as a commodities backed bond to facilitate currency exchanges between different markets.

Physically, a Credit Chip has a diameter of 25mm, and weighs 10 grams, being approximately the size of an American quarter dollar. These chips are minted by the First Bank of Sol with a shielded molecular storage medium containing a unique code held by the Solar Exchange on earth. Any tampering with a Credit chip's storage causes it to self-destruct and prominently display a marker on the surface of the coin. Effectively proven tamper proof, the integrity of a Credit Chip is accepted in any reputable establishment anywhere in the human influenced zone.

As of the writing of this document, a Solar Credit has a worth of approximately \$250 USD, as reflected by the solar exchange's commodity basket of life support supplies, and can be exchanged for 24 solar hours of life support, lodging, food and water on a ship or orbital installation, approximately six times a similar amount to live planetside in Virginia.

Armors

Armor	Proficiency	Cost	Defense	Weight	Properties
Skinsuit	Protective	150	11+Dex	6	Vacuum Safe
Armored Skinsuit	Protective	200	13+Dex(2)	14	Vacuum Safe
Riot Gear	Protective	500	15	25	Min Str 14, Resistance to Non ballistic physical damage, Stealth Penalty
Riot Shield	Protective	250	+1	8	Special
Archaic Armor or Shields	Archaic	20	Varies	Varies	Special
Low Profile Battle Suit	Combat	1,500	13+Dex	25	Min Str 13
Battle Plate	Combat	2,500	16+Dex(2)	45	Min Str 14, Stealth Penalty
Exo-Suit	Combat	4,000	19	65	Min Str 15, Stealth Penalty, Vacuum Safe
Assault Shield	Combat	1,000	+2	15	Minimum Str 15, Special

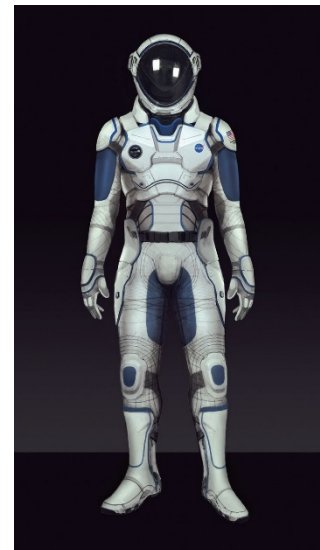
Protective Equipment

Designed primarily to protect its wearer from a hostile environment, not actual combat, most Protective armors offer minimal defenses and instead resistance to hazards.



Skinsuit: Skinsuits are, not surprisingly, like a second skin, using elastic pressure of the suit's material to protect the wearer from vacuum. These suits contain thermal conductors and heat radiators in case a wearer becomes overheated.

Armored Skinsuit: Similar to a standard skinsuit, except with armored plating to protect from hazards like debris and small arms fire.



Riot Gear: Designed for police action against rioters and dissidents, this armor is designed to protect the wearer from improvised weapons and general physical trauma, such as thrown rocks, broken bottles, clubs, knives and the like. A character's dexterity does not factor into their AC while wearing this armor.

Archaic Armor: This armor might be an antique, or just produced on a primitive planet, either way, it was never designed with advanced weapons in mind.

Light archaic armor offers an AC of 11+dex mod, medium archaic armor 12+dex (max of 2), and heavy archaic armor 15 while imposing disadvantage on stealth.

Archaic shields provide a +1 bonus to AC against modern weaponry, and a +2 bonus against archaic weapons.

Archaic armors may only possess one modification.



Riot Shield: Designed to complement Riot Armor, this piece of equipment enables its user to wade into even the thickest of mobs of rioters with little fear, and even offers its user an answer to ranged weapons and Molotov cocktails.

This heavy shield offers its wearer +1 AC. As a bonus action its user may gain ½ cover. (This confers +2 bonus to ac against all attacks, and +2 to dexterity saving throws.)



Low Profile Body Suit



Battle Plate



Exo Suit

Combat Armor

Militaries and security forces develop defensive systems like these to protect the lives of their personnel in combat situations. This grade of armors are not illegal, but in civilized space requires registration and a license, and will definitely draw attention.

Low Profile Battle Suit: Basically a skinsuit built from the molecules up for combat protection, this technology was developed to retain as much mobility as possible for its wearer while offering reasonable protection.

Battle Plate: Using rigid armor plates and advanced fluidics, this armor is designed to protect its wearer from the most intense of firefights. This armor will reduce its wearer's ability to maneuver, restricting their ability to add dexterity to their armor class to a maximum of +2.

Exo Suit: Loaded with armor plating and shock absorbing gels, even with hydraulic assists this suit still requires a great deal of physical strength to operate successfully, and hampers the wearer's mobility. A character's dexterity does not factor into their AC while wearing this suit.

Assault Shield: Designed to supplement tip of the spear assault forces in boarding actions, carrying one of these is like carrying a mobile bulkhead. Equipped with maglocks and anchors, these shields may be deployed in a fixed position, offering a soldier a fixed firing position for cover.

A character wielding this shield gains a +2 bonus to ac against all attacks. As a bonus action, this shield can be deployed as a source of cover, granting up to two characters ½ cover from appropriately angled attacks. This allows the user to operate a two handed weapon from a position of cover. As a reaction, a character wielding this shield may impose disadvantage against a single attack they can see the source of.

Weapons



Weapon Name	Proficiency	Cost	Damage	Wt.	Properties
Archaic Weapon	Archaic	10	Varies	2	Special
Laser Pistol	Civilian	50	2d6 Laser	1	Ammunition, Range (40,120), Reload (10 Shots)
Holdout Laser Pistol	Civilian	75	2d4 Laser	1	Ammunition, Range (30,90), Reload (6 Shots), Special
Laser Rifle	Civilian	150	3d6 Laser	10	Ammunition, Range (120,360), Reload (30 Shots), Two Handed, Burst fire
Blaster Pistol	Civilian	200	2d8 Laser	2	Ammunition, Range (20,60), Reload (5 Shots)
Blaster Rifle	Civilian	500	3d8 Laser	8	Ammunition, Range (40,120), Reload (20 Shots), Two Handed, Burst fire
Stun Pistol	Civilian	25	2d6 Electric	1	Ammunition, Range (30,90), Reload (15 Shots), Nonlethal
Stun Rifle	Civilian	50	3d6 Electric	5	Ammunition, Range (40,120), Reload (25 Shots), Two Handed, Burst fire, Nonlethal
Combat Knife	Civilian	10	1d8 Slashing	1	Melee
Gauss Pistol	Military	750	2d8 Ballistic	2	Ammunition, Range (120,360), Reload (15 Shots)
Gauss Rifle	Military	1,250	3d8 Ballistic	12	Ammunition, Range (160,480), reload (30 shots), Two Handed, Burst fire
Mass Driver	Military	2,000	2d12 Ballistic	14	Ammunition, Range (240/720), Reload (5 Shots)
Shredder	Military	1,200	2d8 Slashing	18	Ammunition, Range (15 foot cone), Reload (10 Shots), Two Handed, Heavy, Special
Power Axe	Military	50	2d6 Slashing	5	Melee, Special
Anti-Armor Rifle	Heavy	3,000	3d12 Ballistic	25	Ammunition, Range (240/720), Reload (2 Shots), Two Handed, Special
Flamer	Heavy	1,250	3d6 Fire	15	Ammunition, Range (15 foot cone, 30 foot line), Reload 20 shots, Two Handed, Special
Gatling Laser	Heavy	1,000	3d6 Laser	40	Ammunition, Range (40,120), Reload (50 Shots), Two Handed, Burst Fire, Special
Rocket Launcher	Heavy	1,750	Varies	12	Ammunition, Range (120/360), Reload (3 shots), Two Handed, Special
Power Sledge	Heavy	150	4d6 Bludgeoning	12	Melee, Two Handed, Special

Weapon Properties

Ammunition: A weapon uses ammunition when it is fired, consuming energy and expending projectiles as appropriate. Lasers and blasters use power packs, and canisters of gas for lasing medium and coolant. Stun weapons use battery packs and cartridges of capacitor darts. Gauss weapons mass drivers and shredders use battery packs and metal slugs.

Burstfire: Weapons with the burstfire property may make normal single target attacks, or to target a 10'x10' within normal range, and spray it with fire. Targets within the area must make a dc 15 Dexterity save or take the weapon's normal damage.

A character wielding a weapon with the burstfire property may use a bonus action to increase the damage of the next normal attack made this round by one die at the cost of using 2 additional pieces of ammunition.

Nonlethal: Attacks by this weapon are configured to be nonlethal to human targets. Whenever a target is dealt damage by this weapon that would reduce him to 0 hp or below, it instead reduces the target to 0 hp, and they gain the incapacitated condition.

Reload: A weapon with this property only has enough, ammunition, energy or coolant (as appropriate) to make a limited number of shots before it must be reloaded. Reloading is a bonus action for most weapons and a normal action for heavy weapons.

Special Weapons

Anti-Armor Rifle: This heavy rifle uses coilgun technology to fire armor piercing slugs at immense velocities, penetrating any known armor, ignoring damage resistance.

Archaic Weapon: These weapons are notoriously primitive. Simple cleavers, longswords, spears, bows, crude axes, and so forth. The damage amount and type for these weapons are best left to DM discretion, but any good statblock you can find for a primitive weapon will do. An Archaic weapon may only possess one modification.

Gatling Laser: This weapon has six rotating laser barrels, and can lay down a tremendous amount of fire. The first time each rounds its user makes a burstfire attack with this weapon, targets in the affected area must make an additional dexterity save at DC 15 or take its listed damage.

Holdout Laser Pistol: A character gains advantage when concealing this weapon.

Flamer: This weapon fires a 15 foot long cone of flame or a 30 foot long line of flame. Each target caught within the area must make a Dexterity save, DC 15. A creature takes the listed weapon damage on a failed save, or half as much on a successful one. If a creature fails its save against this effect, they are set on fire, taking 1d6 fire damage at the start of their turn, until an action is used to extinguish them.

Power Weapons: This class of weapon uses a power source located in the handle, a compressed gas container and a number of mounted jets to allow the weapon to be as effective in a zero gravity environment.

Rocket Launcher: A rocket launcher fires special rocket propelled grenades whose effect duplicates those of the listed grenades. A rocket propelled grenade has twice the cost listed for a normal grenade below, increases its damage dice by one step, and uses a modified saving throw calculated as such: 8 + Dexterity bonus + Proficiency Bonus (if proficient with the launcher).

Shredder: A shredder is essentially powerful electromagnet that projects a magnetic vortex filled with whirling microfilament blades. The user of this weapon may, as an action, designate a 15 foot cone until the start of their next turn. When a creature enters the area for the first time on its turn, or starts its turn there, it must make a DC 13 Dexterity save, taking the listed damage if they fail the save or half as much if they succeed. Reloading this weapon requires a normal action.

Grenade	Cost	Damage	Weight	Properties
Frag Grenade	25	5d6 Ballistic	1	Splash, Thrown
Stun Grenade	20	4d6 Electric	1	Splash, Thrown, Nonlethal
Antiarmor Grenade	150	4d8 Ballistic	1	Splash, Thrown, Special
Flash Grenade	15	-	1	Thrown, Special

Grenades

Once per turn, as part of an attack action a character may throw a grenade at a point up to 60 feet away as an attack (Meaning a character with multi-attack could throw a grenade and attack with an equipped weapon as part of a single attack action). This range is extended when using rocket propelled grenades fired from an appropriate launcher, see above.

Frag Grenade: A character caught within 15 feet of an exploding fragmentation grenade must make a dc15 dexterity saving throw, taking 5d6 ballistic damage on a failed save, and half as much on a successful one.

Anti-Armor Grenade: Designed to cripple and eliminate heavily armored personnel and lightly armored vehicles, a character caught within 15 feet of an exploding grenade must make a dc15 dexterity saving throw, taking 5d8 ballistic damage on a failed save, and half as much on a successful one. This type of grenade ignores damage resistance.

Stun Grenade: A character caught within 15 feet of an exploding stun grenade must make a dc15 constitution saving throw, taking 4d6 electric damage on a failed save, and half as much on a successful one. If a character fails a save against a stun grenade by 5 or more, they gain the stunned condition for one minute.

Flashbang Grenade: A character caught within 15 feet of an exploding flashbang grenade must make a dc15 constitution saving throw, becoming blinded and deafened for one minute on a failed save, and for one round on a successful one. Creatures wearing modern equipment may not be affected by flashbangs more than twice in protective gear, or once in combat armor.



Packs

Characters usually begin the game with a pack containing a variety of minor items not worth tracking individually but which might be of use, and reflect their past and specialties.

Packs and Toolkits	Cost	Weight
Explorer's Pack	25	25
Infiltration Pack	30	15
Spacer's Pack	15	6
Surveillance Pack	45	22

Explorer: Includes a backpack, a sleeping bag, survival tools, a mess kit, flashlight, 10 flares, 20 days of rations, canteen, emergency beacon and 50 feet of rope.

Infiltration: Includes a backpack, door alarm, flashlight, 5 days of rations, glass cutter, wall climbing cups, disguise kit, bug detector and a tiny camera.

Spacer: Includes a duffel, spare coverall, suit patch kit, entertainment device, towel, toiletries, and 150 feet of cord.

Surveillance: Includes a backpack, binoculars, infrared scope, camera drone and controller, 2 sticky cameras, 2 radio tags, 2 audio tags and a thermos.



Toolkits

A tool enables a character to do something difficult or impossible without it, such as repair a ship, destroy a bridge, forge an access card or cheat at cards (particularly hard without any cards!).

Toolkits	Cost	Weight
Artisan's Tools	25	10
Astro-surveyor	50	12
Demolitions Kit	25	15
Disguise Kit	50	10
Forgery Kit	50	10
Musical Instrument	5	2
Planetary Surveyor	50	12
Repair Kit	40	30

Artisan's tools: These tools allow you to pursue a particular craft or trade, such as brewing alcohol, tailoring, cooking, sculpting, carving wood, and so forth. Each type of craft is a separate proficiency, but it is a safe bet that if you want to make something, there is a particular artisan's toolkit for it.

Astro-surveyor: This is mostly a specialized personal computer and specialized interface with reference libraries of star charts, specialized software for the charting of stellar phenomena and mapping of systems. If a character wants to map an asteroid belt, or determine if a distant star might have habitable planets, this device will let them decipher data from a telescope or ship's observatory.

Demolitions: This kit contains all the necessary tools for the creation and rigging of bombs and explosives, as well as defusing them. While the kit contains no explosives, it does contain detonating wire and transmitters, timers, radio controllers and a database of known demolitions equipment specifications.

Disguise kit: This kit contains a variety of cosmetics to allow a person to pretend to be another. This contains a variety of contact lenses to change eye color, hair dyes, fake fingerprint gloves, and minor wardrobe items like scarves, glasses, and fake piercings as well as gender covering items like urinary pipes, false breasts, tiedown tape and the like.

Forgery kit: This kit contains the hardware and software needed to hack an identity chip, rewrite a keycard, scan and reproduce a signature, forge a document, lift and duplicate fingerprints, produce a false retina lens, and the like, allowing a character too spoof many types of security measures.

Gaming set: This set contains all the pieces needed to engage in a type of gaming such as chess, poker, dice, videogames or tabletop RPGs. Proficiency with a gaming set allow a character to add their proficiency bonus when playing that game against another character.

Musical instrument: This is a single type of musical instrument such as a violin, keyboard or set of bagpipes. Each type of musical instrument is a separate proficiency.

Planetary surveyor: This is a specialized personal computer and interface designed to allow a character to interpret scans of planetary bodies and regions, analyzing them for mineral deposits, soil and water quality and the like. A character would use this equipment to produce reliable planetary maps, determine a landing or colony location, or to parse complicated climatological data.

Repair: This kit contains the many specialized and personal tools a skilled mechanic requires to service, repair and modify equipment, synthetics and vehicles. A character wanting to repair a hull breach, reattach a robot's arm or add an enhanced scope to their rifle would make use of this toolkit.

But there's not even a...

This document does not go to great length to describe every last object sold in ports and stores. Almost any item can be printed out on ship, or purchased in a starport, station or trading post. Nearly any conceivable item can be bought except at the worst backwaters.

A general rule is that sundry items are \$.05 credits per pound, adjusted for demand, local scarcity and greed.

Medical Gear

Life out there can be dangerous, and a host of medical advances have been made, offering a number of efficacious though expensive treatments for a variety of ailments. While cheaper alternatives to all of these expensive medicines exist, they require bulky equipment, longer recovery times and skilled application. So remember, you're not paying for a few hitpoints, you're paying to do what normally takes a staffed clinic and putting it in your pocket. Most drugs are applied by vibodermic syringe, quickly and painlessly.

To apply a dose of a medicine is an action that can be performed on oneself or others.

Medical Supplies	Cost
Antibiotic	\$25
Antivenom	\$25
Medkit (10)	\$50
Painkillers	\$25
Radcleanse	\$25
Sprayskin	\$50
Stimulant	\$25

Antibiotic: This drug allows a target to immediately re-roll a saving throw against a disease or infection acquired in the last 8 hours, with advantage. If successful, all remaining effects of the disease or infection are negated.

Antivenom: When applied, a character may reroll a saving throw against a poison effect acquired in the last one minute. They lose the poisoned condition if they have it. If damage was taken from poison, the character recovers HP equal to half of that damage dealt.

Medkit: This is a collection of medical supplies and tools in a handy carrying case. A medkit contains enough supplies for ten uses until it must be replaced. Note that most uses of the medkit can be made with either a medicine check or a wisdom (medkit) check. A character may use a medkit in the following ways:

- Make a dc15 Medicine check, and if successful, heal a target a number of HP equal to 1d6 plus the user's wisdom bonus and the target's maximum amount of hit dice. Note that a character may not regain HP from this use of any medkit until they finish a short or long rest.
- Make a DC 15 medicine check to stabilize a creature, and restore them to 1 hp.
- With a DC 10 medicine check, treat up to six creatures, allowing them to regain an additional 1d6 hp if they spend any healing dice for healing during a short rest. A character can only benefit from one such application per short rest.



Painkillers: Painkillers render a creature resistant to the effects of pain, allowing them to spend and roll a number of hit dice up to their constitution modifier (minimum of 1) to increase their temporary and maximum hit points by the amount rolled for a period of up to an hour. A character cannot benefit from this effect again until they have taken a short or long rest.

Radcleanse: A mix of potassium chlorate and proprietary compounds, this medicine fights radiation sickness by flushing radiation from the body. A character who is administered a dose reduces their current radiation level by one. A character may not benefit from another dose of radcleanse until after a long rest.

Sprayskin: This miraculous substance is applied from an aerosol container, and immediately sterilizes a wound, covering it with a skin colored layer of material that seals a wound and acts as a growth medium for the body's cells, quickening healing while serving as replacement flesh. Applying this product is an action that recovers 1d6 hp and allows the target to spend healing dice with a dc10 medicine check.

Stimulant: This medicine heightens a character's alertness and energy. Administering a dose is a bonus action that sets a character's initiative to 20 + dex bonus for the duration of the current encounter and grants advantage on all perception and investigation ability checks and initiative checks made for the next hour. Additionally a character who uses stimulants removes all their current levels of exhaustion for one hour, at the end of which they gain a level of exhaustion for each one removed, plus an additional one.



Robots



With manpower costs and hostilities both on the rise, it is no surprise that humanity has turned to robotics on the battlefield as well as in industrial applications. Following is a list of a number of common models of combat and utility robotics platforms.

Controlled with a handheld device, robots are only semi-autonomous, requiring direct user input before they take action.

As an action, a character controlling a robot may direct it to do the following:

Robot	Cost	Weight
Deployable Sentry MK I	100	25
Deployable Sentry MK II	200	25
Deployable Sentry MK III	300	25
Combat Bot MK I	100	50
Combat Bot MK II	200	50
Combat Bot MK III	300	50
Repair Bot MK I	250	100
Repair Bot MK II	350	100
Medic Bot MK I	250	100
Medic Bot MK II	350	100

- **Attack:** Robot attacks a designated creature until ordered to do something else, or until that creature is reduced to 0 hp.
- **Defend:** Robot defends a creature, and will use its action to attack the creature which last attacked the creature it is defending.
- **Follow:** Robot will follow the designated creature, remaining in an adjacent square if possible until such a time as a different order is given.
- **Assist:** Until directed otherwise, the robot will use the Help action every turn on the creature designated when this ability is used.

Deployable Turret

Small enough to be carried in multiples, the deployable turret is ideal for creating perimeters or kill zones, and guarding chokepoints.

Deployable Turret MK I

AC: 13 Speed: 0 CR ½
HP: 22(4d6+8) Ammo: 60

STR	DEX	CON	INT	WIS	CHA
2 (-4)	12 (+1)	14 (+2)	2 (-4)	12 (+1)	2 (-4)

Skills: Perception +3

Senses: Infrared, Passive Perception 13

Actions:

Attack: +3 2d6 + 1 Laser 40/120 ft.

Sentry Order: Designate a group of creatures, the turret will use its action each round to attack a creature not a member of this group within 40 feet.



Deployable Turret MK II

AC: 14 Speed: 0 CR 1
HP: 44(8d6+16) Ammo: 60

STR	DEX	CON	INT	WIS	CHA
2 (-4)	14 (+2)	14 (+2)	2 (-4)	12 (+0)	2 (-4)

Skills: Perception +3

Senses: Infrared, Passive Perception 13

Actions:

Attack: +4 2d6 + 2 Laser 40/120

Sentry Order: Designate a group of creatures, the turret will use its action each round to attack a creature not a member of this group within 40 feet.

Deployable Turret MK III

AC: 15 Speed: 0 CR 1 ½
HP: 66(12d6+24) Ammo: 60

STR	DEX	CON	INT	WIS	CHA
2 (-4)	16 (+3)	14 (+2)	2 (-4)	12 (+0)	2 (-4)

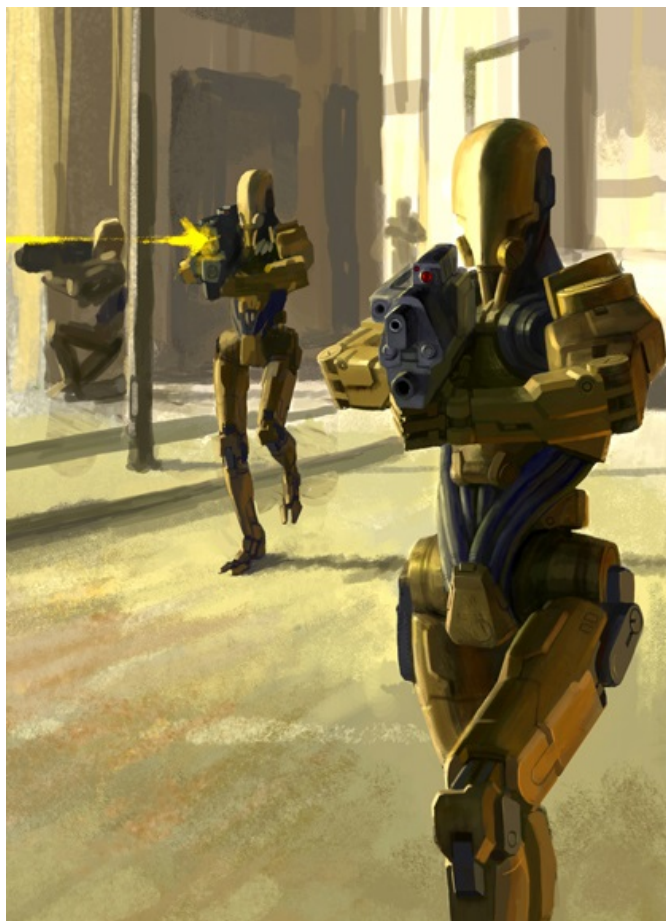
Skills: Perception +3

Senses: Infrared, Passive Perception 13

Actions:

Attack: +5 2d6 + 3 Laser 40/120

Sentry Order: Designate a group of creatures, the turret will use its action each round to attack a creature not a member of this group within 40 feet.



Combat Bot

Collapsible down to the size of a good sized duffle, this robot expands to be roughly human sized and carries an automatic laser weapon by default. Ideal for long range patrols and armed guard duty, these simple but reliable robots are a cheap and simple method of reinforcing numbers on the battlefield.

Combat Robot MK I

AC: 14 Speed: 20 CR 1/2
HP: 11 (2d8+2) Ammo: 30

STR	DEX	CON	INT	WIS	CHA
10 (+0)	10 (+0)	12 (+1)	6 (-2)	8 (-1)	6 (-2)

Senses: Infrared, Passive Perception 9

Actions:

Attack: +2 3d6 Laser 60/180 ft.

Escort Order: Until directed otherwise the unit will follow a designated creature, and each round will use its action to attack the creature that last attacked the one it is escorting or itself.

Combat Robot MK II

AC: 15 Speed: 25 CR 1
HP: 22(4d8+4) Ammo: 30

STR	DEX	CON	INT	WIS	CHA
10 (+0)	12 (+1)	12 (+1)	6 (-2)	8 (-1)	6 (-2)

Senses: Infrared, Passive Perception 9

Actions:

Attack: +3 3d6+1 Laser 60/180 ft.

Escort Order: Until directed otherwise the unit will follow a designated creature, and each round will use its action to attack the creature that last attacked the one it is escorting or itself.

Combat Robot MK III

AC: 16 Speed: 30 CR 1 ½
HP: 44(8d8+8) Ammo: 30

STR	DEX	CON	INT	WIS	CHA
10 (+0)	14 (+2)	12 (+1)	6 (-2)	8 (-1)	6 (-2)

Senses: Infrared, Passive Perception 9

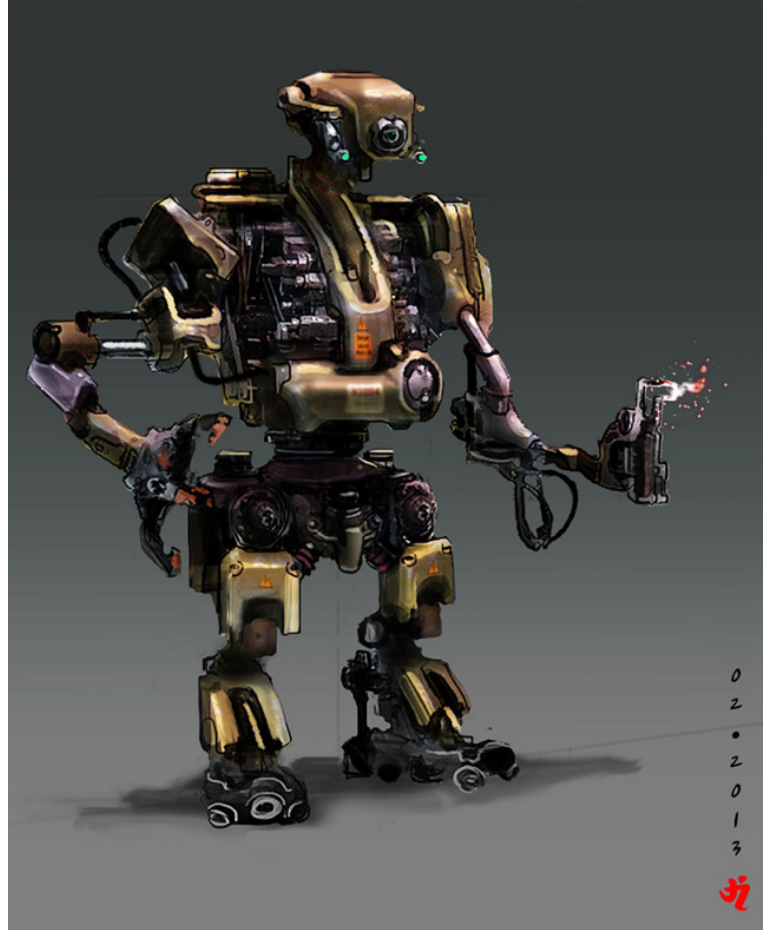
Actions:

Attack: +4 3d6+2 Laser 60/180 ft.

Escort Order: Until directed otherwise the unit will follow a designated creature, and each round will use its action to attack the creature that last attacked the one it is escorting or itself.

Repair Bot

Designed and built for repair and maintenance of ships, facilities and other robots, these heavy 'bots are as common a sight on the battlefield as they are construction sites.



Repair Bot MK I

AC: 13 Speed: 30 CR 1
HP: 22 (4d8+4)

STR	DEX	CON	INT	WIS	CHA
14 (+2)	10 (+0)	12 (+1)	12 (+1)	8 (-1)	6 (-2)

Skills: Repair +4

Senses: Infrared, Passive Perception 9

Actions:

Attack: +4 1d8 + 2 Fire Melee

Repair Order: Make a DC 15 repair check on a synthetic or robot, and if successful heal 1d6+4 and allow the target to spend healing dice. This ability may be used ten times before the unit requires additional supplies

Repair Bot MK II

AC: 15 Speed: 30 CR 1 ½
HP: 44 (8d8+8)

STR	DEX	CON	INT	WIS	CHA
14 (+2)	10 (+0)	12 (+1)	14 (+2)	8 (-1)	6 (-2)

Skills: Repair +6

Senses: Infrared, Passive Perception 9

Actions:

Attack: +4 1d8 + 2 Fire Melee

Repair Order: Make a DC 15 repair check on a synthetic or robot, and if successful heal 1d6+4 and allow the target to spend healing dice. This ability may be used ten times before the unit requires additional supplies



Medic Bot

Developed for battlefield medicine, these lifesaving robots see common deployment across the human sector in emergency and combat scenarios.

Medic Bot MK I

AC: 13 Speed: 30 CR 1

HP: 22 (4d8+4)

STR	DEX	CON	INT	WIS	CHA
12 (+1)	10 (+0)	12 (+1)	10 (+0)	12 (+1)	6 (-2)

Skills: Medicine +4

Senses: Infrared, Passive Perception 10

Actions:

Attack: +3 1d8 + 1 Slashing Melee

Medic Order: Make a DC 15 Medicine check on a living creature, and if successful heal 1d6+4 and allow the target to spend healing dice. This ability may be used ten times before the unit requires additional supplies costing 100 credits

Medic Bot MK II

AC: 15 Speed: 30 CR 1 ½

HP: 44 (8d8+8)

STR	DEX	CON	INT	WIS	CHA
14 (+2)	10 (+0)	12 (+1)	10 (+2)	14 (+2)	6 (-2)

Skills: Medicine +6

Senses: Infrared, Passive Perception 9

Actions:

Attack: +4 1d8 + 2 Slashing Melee

Medic Order: Make a DC 15 Medicine check on a living creature, and if successful heal 1d6+4 and allow the target to spend healing dice. This ability may be used ten times before the unit requires additional supplies costing 100 credits



Modifications

This is where mods for robots will be when I am convinced they are not overpowered.

Chapter 8: Special Equipment



The many companies of sol produce a staggering array of new designs and theories every year, leading to labyrinthine routes from research to retail, and many fantastic technologies simply falling through the cracks and end up being lost during mergers, buyouts, or shifting politics. The items in this chapter are gifted to characters by eccentric scientists, grateful aliens, inscrutable government agents and corporate sponsorships. These items are moly-locked, a type of Physical Rights Management, and practically impossible to scan and duplicate, essentially being one of a kind.



Modifications

Modifications add new capabilities to weapons and armor, or enhance its base statistics. These modifications must either be constructed by a master engineer with an intimate knowledge of the device in question, or provided by the company producing the item. Modified items not approved by the company that originally manufactured it are illegal, and might run afoul of PRM (physical rights management) features, causing grievous risk of bodily harm. Modifications are most often produced by government institutions, or issued as limited edition collector's items at hideous premiums.

Modifications come in three grades, or tiers, hereafter referred to as MK I, MK II and MK III. A weapon or armor may have three modifications, one of each grade.

Modifications come in varieties for specific weapons when found, bought, issued, stolen or gifted, and require a DC 15 Intelligence (Engineering or Repair Kit) check to install or remove in the field, in a process taking at least an hour.

Modifications may be transferred between weapons and armors of the same type, allowing a character to keep a variety of specialized mods that can be changed out before going into the field, allowing them to create specific loadouts and capabilities for a variety of missions and adventures. It is intentional that these modifications are not locked to a specific character and can be sold or traded amongst a group of player characters, or even held in common to be distributed as needs dictate, as they see fit. A ship's armory might hold a certain number and type of modifications that grows as they gain levels and access to new technologies.

These rules assume that the primary method of distribution for weapon and armor modifications are by DM fiat as rewards during play. Player characters might seek out specific modifications, and might even be rewarded in these efforts, depending on the DM.

Given the nature of these modifications to change, perhaps dramatically, the balance of combat in the game, they are enabled under DM fiat by default. An alternative system is also introduced, allowing Mods to be purchased as if they were any other type of equipment. While this allows more precise choices in capabilities of player characters and increases a sense of player agency, it also removes much of the "specialness" of mods being used as rewards. As such, to feel special, it might be required to hand out higher tier mods a level or two early than their access is normally allowed. This is very much a DM issue, and should be able to be handled as such. Following is the table for this alternative system of commoditized modifications.

Optional Rule: Predictable Mods

Modifications are powerful, and serve as an excellent outlet for accumulated wealth of player characters. As such, restricting them to narrative devices and having them doled out only by DM fiat can restrict gameplay. Using this rule, Mods are available for purchase on the open market as if they were any normal item, scaling with level.

When the highest character level in the group is 3rd, MK I mods are easily found and available on the market, at 6th level MK II mods are available and at 9th MK III mods can be found.

Weapon Name	Base Cost	MK I Cost	MK II Cost	MK III Cost	Total MK III Modified Cost
Archaic Weapon	10	50	100	200	360
Laser Pistol	50	250	500	1,000	1,800
Holdout Laser Pistol	75	375	750	1,500	2,700
Laser Rifle	150	750	1,500	3,000	5,400
Blaster Pistol	200	1,000	2,000	4,000	7,200
Blaster Rifle	500	2,500	5,000	10,000	18,000
Stun Pistol	25	125	250	500	900
Stun Rifle	50	250	500	1,000	1,800
Combat Knife	10	50	100	200	360
Gauss Pistol	750	3,750	7,500	15,000	27,000
Gauss Rifle	1,250	6,250	12,500	25,000	45,000
Mass Driver	2,000	10,000	20,000	40,000	72,000
Shredder	1,200	6,000	12,000	24,000	43,200
Power Axe	50	250	500	1,000	1,800
Anti-Armor Rifle	3,000	15,000	30,000	60,000	108,000
Flamer	1,250	6,250	12,500	25,000	45,000
Gatling Laser	1,000	5,000	10,000	20,000	36,000
Rocket Launcher	1,750	8,750	17,500	35,000	63,000
Power Sledge	150	750	1,500	3,000	5,400

As represented on the table, a MK I mod costs five times a weapon's price, a MK II costs ten times, and a MK III mod costs twenty times. Add in the base cost of the item in question, and you get the total MK III modified price, representative of buying the most expensive or finest version of an item on the market.

For example: A MK I Enhanced output mod for a laser rifle costs 750 credits, a MK II Enhanced output mod for the same weapon costs 1,500 credits. Both have otherwise identical stats, except for their cost and the fact that both can be applied to the same weapon, two mods of the same grade cannot.

Weapon Modifications

Efficient Burst

Requirement: Weapon with the Burstfire trait

Weapon uses 3 less rounds when firing a burst.

Expanded Magazine

Requirement: Weapon with the Ammunition trait

Expand the ammunition capacity of this weapon by an amount equal to its base ammunition capacity.

Enhanced Output

Requirement: Weapon

Increase the damage dealt by this weapon by 1 damage of the type dealt for every weapon damage die.

Increased Accuracy

Requirement: Weapon

Attacks made with this weapon have a +1 bonus to hit.

Heat Gun

Requirement: Laser weapon

You may switch this weapon into Heat mode. While in heat mode, attacks made by this weapon gain advantage (and saving throws made against its burstfire attacks gain disadvantage), but deal one less die of damage, and deal Fire instead of Laser damage.

Irradiated Rounds

Requirement: Weapon that deals ballistic damage with the Burstfire trait

When you use the Burstfire trait of this weapon, increase the damage dealt by 1d8 Radiation damage. If you use the burstfire Bonus action to increase the damage output of a single attack, increase that attack's damage by 1d4 Radiation damage.

Rapid Pulse Cyclor

Requirement: Blaster weapon

This weapon scores critical hits on a roll of 19 or 20 (18-20 for marines) and deals an additional die of weapon damage.

Scattergun

Requirement: Weapon with the Burstfire trait

Whenever an attack is made against a target, the attacker may make an additional attack against an adjacent legal target.

Short Barrel

Requirement: Ranged Weapon

Reduce the short and long range of this weapon by one half. This weapon does not suffer disadvantage when used to attack an adjacent target. Attacks against adjacent targets gain advantage.



Special Sighting

Requirement: Ranged Weapon

This weapon does not have disadvantage when firing at long range.

Terminator Rounds

Requirement: Stun Weapon

The capacitor darts of this weapon have been modified to bypass the EMP protections of most synthetics. A synthetic hit by an attack from this weapon must succeed at a DC 15 Constitution save, or become vulnerable to the Electric damage dealt by the attack.

Variable Tanks

Requirement: Flamer

This flamer has been modified to dispense other substances from its tanks. This weapon no longer sets targets on fire except when using normal flame fuel. When loading this weapon, you may use one of the following fuels:

- Liquid Nitrogen: Deals cold damage, on a failed save, slow target by 10 feet of movement for three rounds.
- Corrosives: Deals Acid Damage, on a failed save decrease the target's AC by 1 (up to one time) until their armor is repaired with a DC 15 repair check.
- Toxins: Deals Poison damage, on a failed save target gains the poisoned condition for 1 minute.
- Adhesive: This attack does not deal damage, but on a failed save the target gains the Grappled condition until they make a DC 15 strength check.



Armor Modifications

Armor modifications may not be applied to the same suit of armor more than once unless otherwise specified in their description.

Ablative Plating

Requirement: Armor

Whenever the wearer of this armor is dealt ballistic damage, reduce that damage by 2 if the armor is light or archaic, 4 if the armor is medium, or 6 if the armor is heavy.

Reflective Coating

Requirement: Armor

Whenever the wearer of this armor is dealt laser damage, reduce that damage by 2 if the armor is light or archaic, 4 if the armor is medium, or 6 if the armor is heavy.

Sloped Armor

Requirement: Armor or Shield

This armor grants +1 AC while worn. This modification may be applied up to twice on heavy armors.

Armor	Base Cost	Mk I Cost	Mk II Cost	Mk III Cost	Mk III Upgraded Cost
Skinsuit	150	750	1,500	3,000	5,400
Armored Skinsuit	200	1,000	2,000	4,000	7,200
Riot Gear	500	2,500	5,000	10,000	18,000
Riot Shield	250	1,250	2,500	5,000	9,000
Archaic Armor or Shields	20	100	200	400	720
Low Profile Battle Suit	1,500	7,500	15,000	30,000	54,000
Battle Plate	2,500	12,500	25,000	50,000	90,000
Exo-Suit	4,000	20,000	40,000	80,000	144,000
Assault Shield	1,000	5,000	10,000	20,000	36,000

Ultralight materials

Requirement: Armor

This armor does not confer a penalty to stealth checks if it otherwise would. As a reaction the wearer of this armor may gain advantage on a single dexterity saving throw. A light armor with this modification is undetectable by most means of detection while set to a passive mode.

Active Camouflage

Requirement: Light or Medium Armor

This armor grants the wearer advantage on stealth checks made to hide. As an action, the wearer of this armor becomes invisible to most methods of detection as long as they remain completely still. This ability may be used to up three times before the wearer takes a short or long rest.

Trauma Monitoring

Requirement: Armor

When the living, biological wearer of this armor is reduced to 0 hit points, it releases a massive burst of drugs into the users systems, causing them to instead be reduced to 1 hit point. This ability may not be used again until the character has taken a short or long rest.

Spacewalker

Requirement: Armor

This armor is equipped with a gas reservoir and numerous maneuvering jets that allow a character to move at their full normal speed within zero gravity airless environments. A character gains advantage on all acrobatics and athletics checks made in such environments.

Sensor Upgrades

Requirement: Armor

A character wearing this armor gains advantage on all perception checks, cannot be blinded or deafened and gains a +2 bonus to initiative checks.

Temperature Controlled

Requirement: Armor

The wearer of this armor gains resistance to Fire and Cold damage.

Regenerative Armor

Requirement: Armor

This armor possesses a pool of Armor HP (5 for light, 10 for medium, and 20 for heavy) that are lost first whenever this character would take HP damage. Restore 5 of this HP whenever the character takes a short rest.

Bulwark Expansion

Requirement: Assault Shield

When deployed, this shield extends to offer cover to an additional character.



Prototypes

Prototypes are produced to prove a concept and work out the bugs of a device before it goes into regular production. They might be experimental, unstable, or just use unproven and hideously expensive manufacturing processes. Whatever the case, these items are rarely if ever sold on the open market, though there are some circles of collectors known to traffic in such goods.

Some items will only function for a single owner identified by the device itself. Usually such items can be reset to accept a new owner, but this is a lengthy process, requiring at least a short rest and a bridge connector or paper clip, a process called Attunement. I'm sure the guys back at the lab wouldn't be happy, but as long as there's a dev mode, we can use it.

Prototype items can be almost anything a DM wants to imagine, and can easily duplicate effects of magic items from the DMG, in fact these limitations on attunement and rarity can be quite useful in gauging power levels. Something to keep in mind is that fancy gadgets require maintenance, charging and care, these were never production models mind you.

Cybernetic prototypes require surgical implantation, a DC 15 medicine check and 1d6 hours with access to a surgical suite.

Example Prototype Items

Chainsword

Prototype, Rare (Requires attunement)

Looking like nothing quite so much as the bastard son of a claymore and a chainsaw, this weapon exchanges all sense and reason for sheer intimidation and brutality. With a “blade” composed of thousands of spinning “teeth”, this device can rend through a target in a most gory and visceral manner.

This weapon attacks as a two handed melee weapon dealing 3d8 slashing damage, and on a critical hit deals an additional 14 damage and at DM’s discretion might sever a limb from the target.

Cybernetic Subprocessor

Prototype, Rare (Requires surgical implantation)

This item serves as an onboard computer interfaced directly with a character’s brain, greatly increasing recall and reasoning capabilities, setting their intelligence to 19 regardless of if it was higher or lower.

Genetic Enhancement (Constitution)

Prototype, Very Rare

This cryogenically frozen vial contains a specially coded retrovirus that will alter a human, making them tougher and more resilient. The character who uses this receives a permanent +2 bonus to their constitution, and has their maximum constitution raised by 2.

Jet Belt

Prototype, Uncommon (Requires attunement)

This device contains enough fuel to enable its wearer to briefly fly. A character may, as an action, gain fly speed 50 for up to ten rounds per day. Each round consumed costs 5 credits to refill, fuel of this grade is really out there.

Lazarus Device

Prototype, Rare

This device appears to be a man sized tank capable of holding a single human character. When the body of a character who died within the last 24 hours is placed within the device, over the next 24 hours they are restored to life. The machine cannot regrow limbs, but may reattach them if they are provided. After a single use, the machine goes into terminal shutdown and slags itself irrevocably.

A character revived by the machine rolls a d6 twice for his Intelligence, Wisdom and Charisma scores, adding the value of the first die to the ability score, and subtracting the second from it. A character might experience mood shifts, traumatic nightmares, delusions and personality shifts.

Magnetic Deflection Belt

Prototype, Rare (Requires Attunement)

This devices stores enough energy to generate a reactive magnetic field good for deflecting shrapnel and bullets. Three times per day if you fail a dexterity save to avoid ballistic damage from burstfire, grenades or explosives, you may use your reaction to instead make that save. The batteries require 2 hours per charge to refill when attached to an appropriate power source.

Spider Boots

Prototype, uncommon (requires attunement)

These boots allow a wearer to walk across most vertical surfaces, granting a character a climbing speed equal to their move speed, and allowing them to even stand on a ceiling in up to 2 gravities.

Targeting Adjunct

Prototype, common (requires attunement)

This targeting computer interfaces with all of a user's weapons systems, as well as their visual systems, offering the user advanced options in weapons targeting. As an action, this character gains advantage on their next attack roll.

Universal Translator

Prototype, Uncommon (Requires attunement)

This device looks like a headset, projecting a retinal display for the wearer, and is programmed with every conceivable translation and language analysis program available to hopefully be able to translate any alien language into English. The wearer may make a Wisdom (Insight) check DC 20 to understand any alien language spoken to at least some extent.

Powered Armor

Powered armor is a game changing item and should be handled with great care and much discretion. This is not simply a neat prototype item, or an inevitable armor upgrade, seriously consider how and when characters might gain access to powered armor.

Powered Armor is the natural evolution of military grade exosuits, granting the benefits of a heavy armored platform but small enough to navigate the corridors of most stations and starships while carrying heavy weapons and protecting the wearer from a variety of hazards.

A trait that all powered armor variants have in common is that they possess a pool of hit points all of their own that are depleted before the wearer takes any damage. When a suit's hit points are depleted, it loses any special functionality, ejecting the wearer safely in an adjacent square before powering down.

Powered Armor	HP	Strength Rating	Defense	Weight	Properties
Firefly	50	17	14 + Dex (Min. 17)		Fly Speed 50
Striker	100	21	18 + Dex (Max of 2)		+1 Attack Rolls, +1 Damage per weapon damage die
Juggernaut	150	25	22		Extra Attack

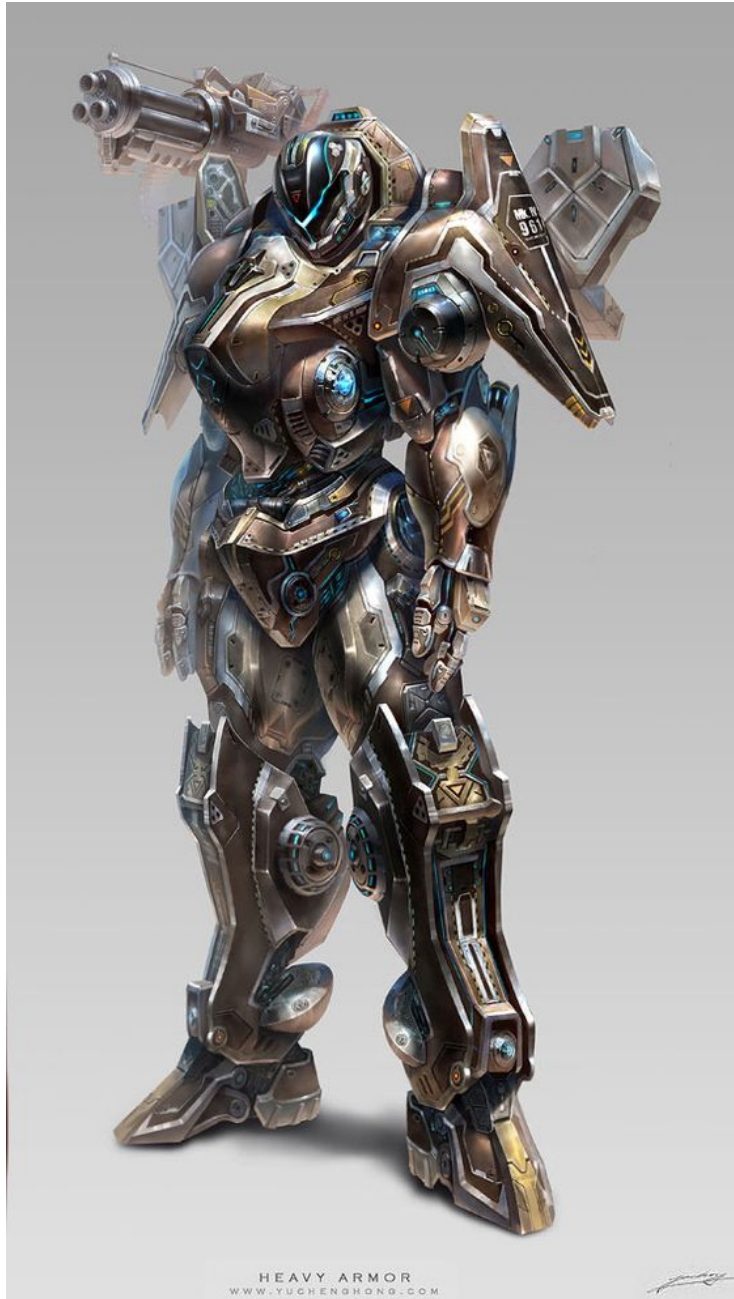


Firefly

Light Powered Armor (Requires attunement)

This armored suit is designed for maximum mobility, granting the wearer a flight speed of 50 and allows the user to wield any normal small arms they would otherwise be able to carry.

While wearing firefly armor, a character's minimum armor class is 17, and they calculate their AC as 14+Dexterity bonus. A wearer's Strength is augmented to a minimum of 17 while wearing this suit.



Striker

Medium Powered Armor (Requires attunement)

Striker armor offers its wearer access to a host of advanced targeting systems that optimize the performance of all wielded weapons, allowing the wearer to add +1 to weapon damage for each weapon damage die rolled (a 3d6 weapon deals 3d6+3 as its base damage).

While wearing Striker armor, a character's minimum armor class is 19, and they calculate their AC as 18+Dexterity bonus (with a maximum of 2). A wearer's Strength is augmented to a minimum of 21 while wearing this suit.

Juggernaut

Heavy Powered Armor (Requires attunement)

Guardian armor is the heaviest personal combat suit that can still be considered word and not piloted, offering the wearer substantial defenses and thick armor plating.

This suit may incorporate up to two heavy weapons systems, and while they are attuned, a wearer may intermix attacks from all associated weapons systems as they choose during their turn. Whenever a character wearing this armor takes the attack action, they may make an additional attack with an integrated weapon system. (Note that this ability works in conjunction with the Extra attack class feature.)



While wearing Juggernaut armor, a character's armor class is 22. A wearer's Strength is augmented to a minimum of 25 while wearing this suit.

Modifying Powered Armor

Powered armor is already a gamechanger, and while the temptation might be there to allow modifications as if it were any other armor, seriously consider these implications. If one is to do so, price modifications as if they were for an Exosuit.



Relics

Relics are items of particular note or legend, being literally one of a kind. Some are notorious prototypes modified beyond reason and lost, others are precursor relics that seem more magic than science. Regardless, the value of one of these items is beyond estimation, and to find one is to immediately make a name for oneself, and also to become a target for the envious.

The BFG

Relic (Requires attunement)

The Billings Firearms company is rumored to have only built one of these guns and the prototype was sent to the fringe with a hot shot maverick space captain who was never heard from again.

Designed to be a man portable stable particle beam weapon safe in planetary environments, it was the grail of the arms community, and disappointed gun nuts everywhere when the line was discontinued after the design proved untenable. But not even all the corpses of those cancer riddled lab chimps could keep you away from this weapon of legend if you found it.

The BFG is a heavy weapon that deals 3d8 ballistic damage and 3d8 radiation damage per attack, and has a capacity for 5 shots. Each time it is fired, the user must make a constitution save DC 15 plus the number of shots fired in the last ten minutes or gain a level of radiation poisoning.

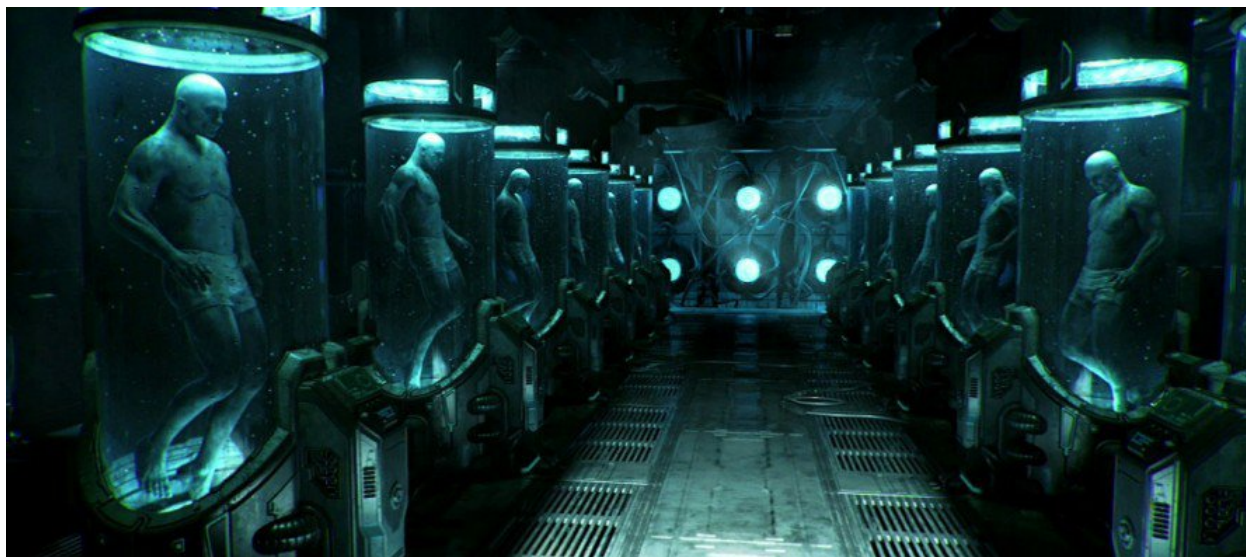


Phase Inverter

Relic (Requires attunement)

There is a myth that a species close to galactic center mastered dimensional travel, eventually leaving our own reality and ascending, or some such superstitious alien nonsense. However, all the stories of the phase inverter seem to be the same from species to species, and if it could be found would be an incredible prize.

According to the tales the device allows the wearer to flicker in and out of our dimension and the dimension that lies on the other side of hyperspace, never appearing quite where you are supposed to be, resulting in all attacks against you having disadvantage.



G.E.M.I

The Genetically Engineered Microbial Intelligence (Jimmy)

Relic

Produced by a controversial Old Sol company, the G.E.M.I. was intended to replace human life risked in dangerous situations, creating a fearless, flawless, enthusiastic way to perform the most dangerous or least desirable jobs everywhere. Unfortunately, production issues, protests, and in the end LSN regulations killed the project. Unbeknownst to many though, several G.E.M.I. units made it into trial positions on deep space ships. While only two have been retrieved, this leaves four more out there, somewhere.

The device stores the makeup and blueprint of a humanlike biomorphic entity composed of microbial cells held together in a plasmid gel matrix, looking very human like, and able to behave almost perfectly as an actual person. When desired, this Jimmy Prime stored in the tank is stimulated with direct current, inducing mitosis, producing a nearly flawless copy, complete with programmed memory and aptitudes. Cheerful, enthusiastic, and with absolutely no sense of self preservation, the unit will perform any orders issued by a human, within the constraints of three laws programming.

After a period of approximately 24 hours of operation, the spawn unit will desire to return to his tank, and if successful can dump useful information into the primary matrix, growing and learning over time, becoming a more useful tool. If impossible, or if the spawn is destroyed prematurely, it dissolves into a thick viscous pink slime, and all information possessed by the individual is lost. G.E.M.I. tanks are designed to only have one unit in operation at a time, though

When a G.E.M.I. is discovered, roll a d6 and use the table to determine which of the six it is.



1 - Jimmy-Joe – Weapons tech and personal body guard. Extremely protective of those who activate his tank, and willing to do violence, though he always apologizes profusely while doing it.

2 - Jimmy-Jack – Comp tech and general know it all, this jimmy can at least remember the first paragraph of the hyperwiki article about almost anything. Quick to agree with humans, even when he knows they are wrong, he will blithely make excuses for why and how he is mistaken, while attempting to lead them back to his version of the facts.

3 - Jimmy-John – A genuine field surgeon, this Jimmy is the first to offer aid or compassion. Strict follower of his Hippocratic oath, this

Jimmy is a hard line pacifist and will not do harm to any living thing, unless you can convince him it counts as a disease dangerous to humans.

4 - Jimmy-James - Quiet and down to earth, this Jimmy is an excellent mechanic, and given the manual can repair almost anything before he turns to goo. Handy with a wrench, this jimmy will avoid a fight if possible, but isn't afraid to lay in to a brawl.

5 - Jimmy-Jake – Knowledgeable of law and skilled at diplomacy, this fresh faced and eager Jimmy wants nothing more than to open the lines of communications between people, and deal with misunderstandings. Disturbingly honest, and lacking an off switch this jimmy can be dangerous if he knows too much, and is best kept in the dark on any shady dealings.

6 - Jimmy-Bobby – There is something seriously wrong with this jimmy. Alternating moods go from super excited and amped up to depressed and moping, this jimmy is a general laborer with no specialty and will glumly do what he is told unless you can find a way to spin it as important and exciting work. At least until he figures it out and is back to the dumps.

Important final notes are to never feed your jimmy marshmallows, never put sugary sodas in the growth medium, and never let two different models of jimmy use one another's tanks. The manual is adamant about this last bit, but refuses to go into detail.

Chapter 9: Game Dynamics



This chapter contains several new game dynamics and systems designed for a science fiction game set in space.



Business Ventures

Characters will often be tempted to invest their hard won credits, and then use time dilation to their advantage, reaping the rewards of investing between the stars. These business ventures generally constitute a character investing with a local entrepreneur or factor, be it with cash, goods or services, for an interest in their business. In the interest of maintaining an action oriented game, and not a venture capitalism simulator, a character may only invest 100 credits per character level in such a fashion.

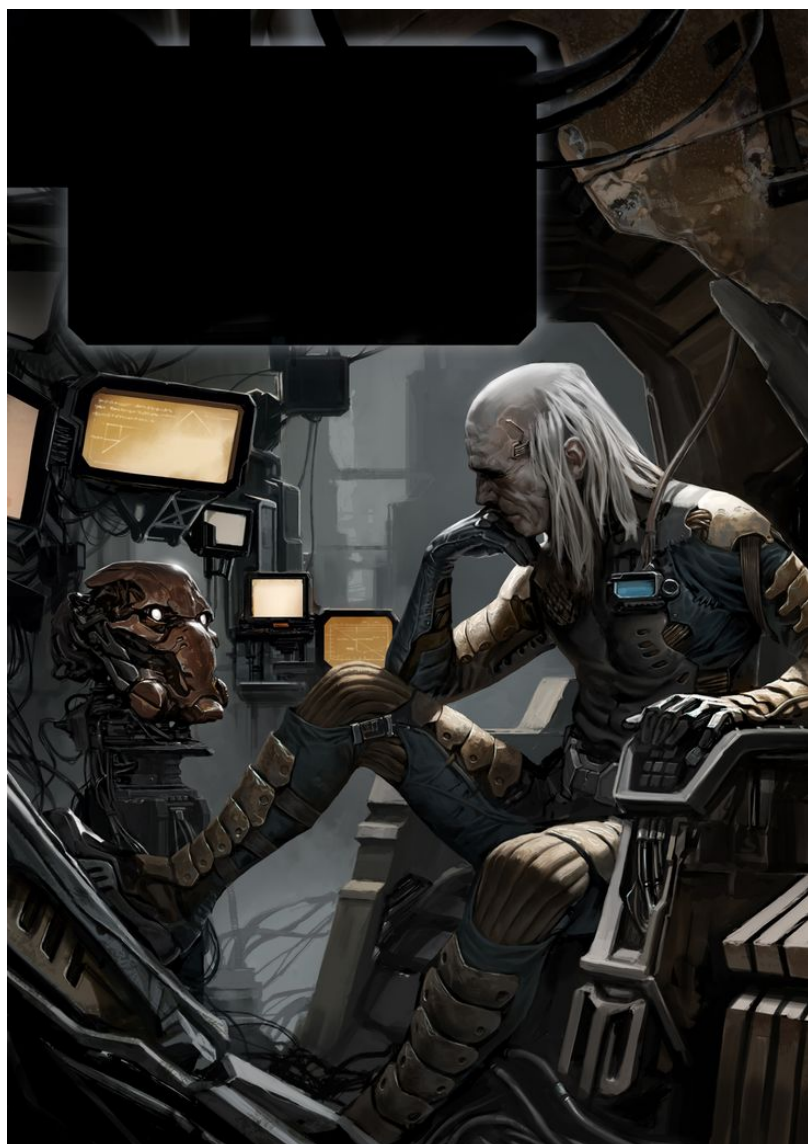
After investing at least 100 credits, the next time a character visits the location, roll d100 and consult the following table, adding one to the result for every objective year the character was absent. The character recovers the listed amount of profit, in addition to their 100 credit investment, and then may choose to reinvest in the same or a different venture, at the DM's discretion.

D100	Result	Profit or Loss
01-20	Ruinous Losses	\$60 loss
21-30	Bad Losses	\$40 loss
31-40	Some losses	\$20 loss
41-60	Break Even	No gain or loss
61-80	Minor Profits	1d6 x \$5 profit
81-90	Reasonable Profits	2d8 x \$5 profit
91+	Record Profits	3d10 x \$5 profit

Retirement

There comes a time when it just makes sense for a spacer to get out of the business, making room for younger blood and enjoying the fruits of their illustrious career. Most characters will save over their career planning to eventually cash out and settle down somewhere, whether it be a spaceport bar, resort, colony, or even back on Earth, or on their own private world. A character will need at least a set amount of credits to safely and permanently retire, as listed on the table below. Obviously, the more you have, the better of a lifestyle you may maintain for yourself.

Retirement Age	Modest	Comfortable	Prosperous	Luxurious
Old	9,125	18,250	36,500	91,250
Middle Aged	18,250	36,500	73,000	182,500
Young	36,500	73,000	146,000	365,000



Modest: You purchase simple quarters on a space station or home in a colony, using your modest savings to pay your expenses and upkeep. You might not have the money for pleasure cruises and life prolonging treatments, but you can expect to live a quiet and simple life on your own terms, pursuing whatever interests you have.

Comfortable: A nice home, good food, an annual cruise on a resort ship: you know comfort and ease for the rest of your years, prolonged by medicines.

Prosperous: A vacation home on a nice tropical world, state quarters on a cruise ship, you spend the rest of your days engaged in recreation and leisure activities, and long will they be, since you can afford the good life prolonging drugs.

Luxurious: Enough to buy your own moon, or perhaps just a controlling interest in a space station, you are nevertheless set up for life, able to go where you want, do what you want, and be who you want for the rest of your fantastically long life.



Group Challenges

A group challenge is intended to allow a group of characters with diverse skills a chance to work together to overcome a challenging situation.

To create a Group challenge, first determine the success threshold (ST) by setting a number and determining a number of attempts the group may make.

Group Challenge ST	
5	Trivial
15	Simple
25	Complex
35	Challenging
45	Intense

Then determine each participating character's skill for contribution, and assign a DC for each skill normally. Each character should describe how they are assisting the effort with their skill, and the DM should consider rewarding creativity with skill use.

Each character makes their skill check normally, but for each successful skill check, note the amount in excess of the DC it succeeded by. Subtract that amount from the ST of the challenge. When the Challenge ST is reduced to 0, the group challenge is a success. Alternatively, for each failure, note how many points the check failed by, and add this many points to the challenge's ST.

If the ST of a group challenge is ever raised 10 or more points above the original ST, increase the DC of all related skill checks by 5, as unforeseen complications have arisen. The group continues to make checks until the ST reaches 20 higher than the original ST, or the predetermined number of attempts have been made.

As an example of a Group Challenge, the party might need to investigate a murder. Skill usage might include: Medicine checks to determine details of death, Investigation and perception checks to find clues, persuasion or intimidation checks to collect witness testimony, knowledge history or culture checks to glean information about the murder's context, athletics checks to dive to the bottom of the harbor and retrieve a murder weapon.



Downtime Expenses

While on a ship characters can expect to make use of onboard resources, but while spending downtime on a planet or station they can expect to have to pay out of pocket for their expenses. While these can be micromanaged, it is easier to pick a lifestyle option from the list below to handle the cost abstractly.

The assumption for downtime is that a character will be spending all or most of its downtime off of the ship, for a variety of reasons. Docked ships cannot engage the spin on their rings, which will result in a zero g environment in most of the vessel, or that a ship in orbit is not sending a shuttle down constantly as a ferry service. Whatever the reason, when a crewman gets a few days or a few weeks of liberty, they will generally take it, and be as far away from the ship that is their home for as long as possible until returning to continue their travels.

During downtime, you may roll for a character to see what unusual experience they have living that particular lifestyle. For convenience a sample menu of a midrange spaceport hotel, restaurant and bar is provided for sense of scale.

Lifestyle	Cost/Day
Shiftless	-
Scrounging	\$0.25
Hand to Mouth	\$0.50
Modest	\$1
Living Well	\$2
Big Spender	\$4
The High Life	\$10+
Alien	Varies

Blue Nova Menu

Coffee, Tea, Hot Chocolate	\$0.05
Beer (Local)	\$0.05
Beer (Import)	\$0.25
Sandwich	.05
Daily Special	\$0.15
Beef Steak	\$0.35
Shots	\$0.10
Cigar (local synth)	\$0.10

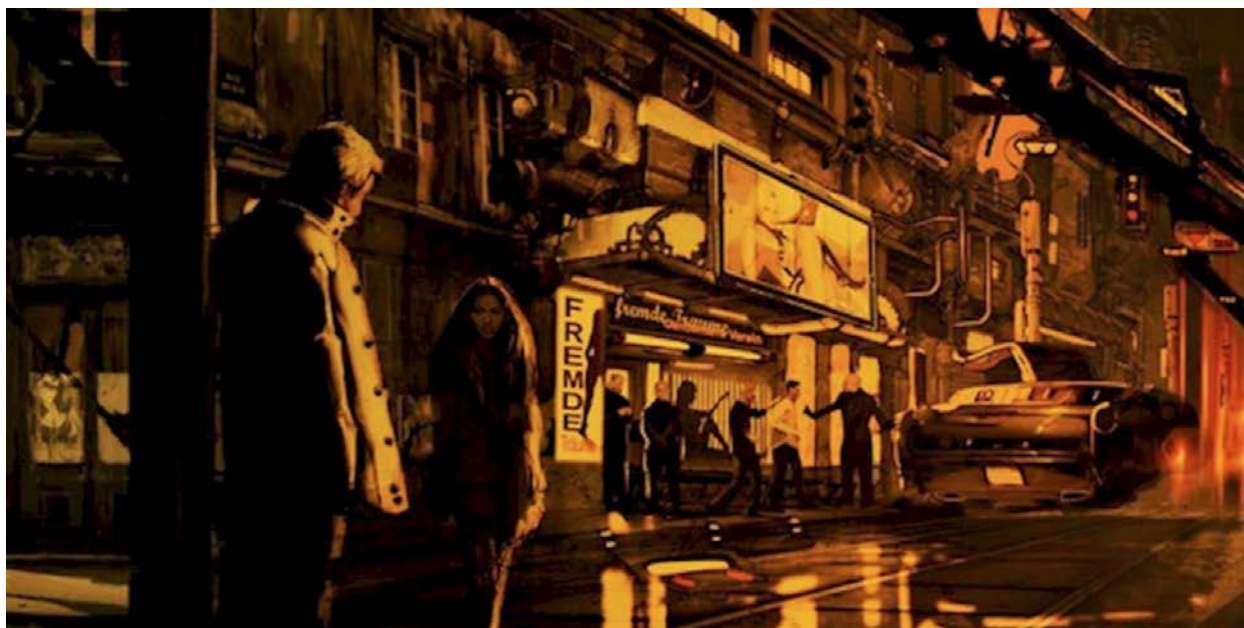
Rooms listing, per night

Single Room	\$0.25
Double Room	\$0.35
Double Double	\$0.50
Efficiency Room	\$0.65
Suite	\$1.25
Quad Bunk	\$0.40
Sleep Tube	\$0.10



Shiftless: You live like an indigent, down in the gutter with the worst of the worst. You sleep where you can, often in public places like park benches or in public restrooms, spend your days wandering open thoroughfares and taking advantage of public facilities like libraries. Your meals come from refuse receptacles, unattended or abandoned trays, and the snacks set out at religious meetings and substance abuse support groups. You must always try to be one step ahead of the police, and wary of the others that share your lifestyle.

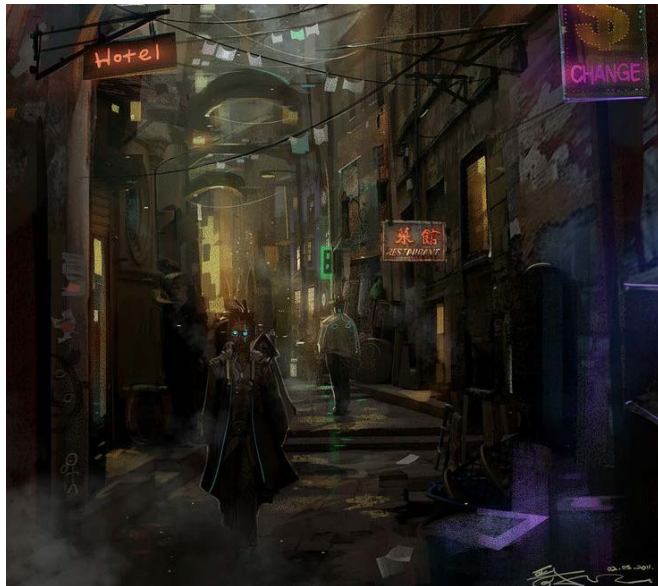
D100+ lvl	Result
01-10	You are mugged in a dark corridor by three thugs carrying melee weapons, either give them anything you have or try to fight them off.
11-20	You have picked up a parasitic infection from your poor conditions, DC 14 constitution check, or suffer one level of exhaustion until you have at least two long rests under better conditions.
21-30	Security fines you 10 credits for loitering, if you cannot or will not pay, spend 1d4 days longer than your remaining downtime in jail unless you can find someone to pay it or escape.
31-40	Security raids an empty shop that you and other indigents were sleeping in, you make it out with only a slight concussion and some nasty bruises.
41-50	While asleep someone steals your shoes, and your downtime is even more miserable as a result.
51-60	While window shopping in the promenade you are very nearly ran down by a transport trolley. The owner of the delivery company is eager to avoid a lawsuit and you can quickly settle for (level*1d6 credits) or twice as much with a dc13 Intelligence (Law) check.
61-70	You find a hotel card with enough credit left on it for a sleep tube for the remainder of your downtime. You have to get up pretty early though, or all that's left of the free breakfast are the red protein bars.
71-80	You fall in with a shifty Ho-Bot that teaches you the ins and outs of living off the grid, you feast on stolen pies and rob vending machines while singing soulful shanties by night.
81-90	A travelling missionary lets you stay in their quarters and even feeds you. You're not sure about their philosophy, but they tell interesting stories, and the snoring isn't too bad.
91+	You wake up from a nap on a bench to find that someone has left a 20 credit chip on your person.



Scrounging: You have a little credit, and can afford to splurge for a sandwich here and there, but you nevertheless spend most of your nights somewhere you wish you weren't, and are always a little hungry. You can pay the cover charge of the lower end nightclubs, and occasionally are able to snipe some unattended drinks and bar nuts, you might even be able to find someone willing to share their room with you for the night, or buy you a few drinks.

D100+ lvl Result

01-10	You accidentally purchase stolen goods and are charged by local authorities, you must pay a 25 credit fine, or spend 2d6 days in jail longer than your downtime.
11-20	You are in a price dispute with a merchant who claims a debt against you equal to your credits spent on lifestyle, it collects 10% interest per local year that passes unpaid.
21-30	You are accused of abusing the free sample policy of local provisioners, and subsequently any group you're associated with will have difficulties with the local merchants.
31-40	You find part time work in a local shop, getting to sleep in the back and having more regular meals in exchange for your expertise.
41-50	A local bar is having trouble with rough types and hires you for a credit a day to keep the peace, offering you a chance to live better while in port.
51-60	You find a malfunctioning vending machine that does not properly dispense red protein bars unless you hit it right, and can occasionally hit it up (literally) for a free meal.
61-70	You make a platonic friend of one of the locals over a mutual interest, and spend the rest of your downtime enjoying the hospitality of their couch and good company.
71-80	You win free tickets from a radio call in show to go see a concert, and while there catch a pretty nifty t-shirt launched out of a cannon. Rock on!
81-90	You win a series of wagers placed on a game of skill, netting you more than a few free drinks, a steak dinner, and 20 credits. But nobody here wants to play with you again.
91+	You fall into a whirlwind romance with a wealthy spacer who is slumming it in the dive bars, they depart before you, but you will carry the fond memories for many years.



Hand to Mouth: You have set aside a few credits, and if you manage it very carefully you can make it out of this port without having to do without too much, but it's a good thing you don't mind the taste of instant ramen. You bunk in a rented room with several other crewmen frugal (or desperate) enough to be willing to double or even quadruple up, and are able to take advantage of a few of the cheaper amusements available. You might score a few bottles of rotgut, or time in a VR simulator, and can have a decent time in the company of other less well to do spacers.

D100+ lvl Result

01-10	When you return to your room one night, you find that your possessions have been rifled through, and a few valuables were taken along with a trinket of personal importance.
11-20	You pick up a nasty bug and must make a dc14 Constitution save or spend most of your downtime miserable and in hospital.
21-30	You enter a gaming tournament and finish in the middle ranks, to the general mockery of your crewmates when you meet up with them again.
31-40	You find yourself obsessed with an immersive virtual reality game, and spend your downtime so thoroughly engrossed that someone must be sent to retrieve you for boarding.
41-50	An alien is having trouble dealing with the locals and asks for your assistance since you are also a spacer. In exchange for facilitating its trade deals, the creature pays you three credits a day for the rest of your down time.
51-60	During a trip to a local dive bar, a fight breaks out. You can evade the melee with a DC13 Stealth Check, or fight your way out with a DC13 athletics check.
61-70	You and several others bunk down together, enjoying long nights of rowdy videos and large quantities of cheap liquor. Your group occasionally roams the docks looking for trouble and a good time, sometimes finding either, neither, or both.
71-80	You find a bar where the locals are fascinated with your tales of distant worlds. For the duration of your stay, you can score free drinks and bar food while regaling them with your tales, true or otherwise.
81-90	You meet another spacer from a different ship, and decide to share a room and each other's company for the duration of your downtime and part ways amicably when it ends.
91+	You win a local gaming tournament, claiming a prize of 100 credits and a trophy. Maybe this will finally shut up some of the other crew when they mock your hobbies.



Modest: You have a good allowance to take care of you on the docks, and are able to afford a room all to yourself, and decent meals in the cafeterias. If you are careful you can do some drinking for at least one or two nights, and can take advantage of the more moderately priced amusements. If you play your cards right, you might find someone happy to come back to your room, but you might need to make them buy their own breakfast.

D100+ lvl	Result
01-10	You are overcharged by an unscrupulous vendor, effectively doubling your lifestyle expenses for this downtime unless you can make a dc13 Cha save.
11-20	You earn the ire of the locals by disrupting an important sports game you are attending, and are booed wherever you are recognized.
21-30	A pickpocket steals your I.D. and papers, and you spend most of your downtime sorting out the mess and doing paperwork. Some shore leave.
31-40	You strike up a conversation with a reporter who offers to interview you for local news transmissions. While recognized locally you can easily get free drinks and attention.
41-50	The local cinema scene is booming and you take advantage of this, binging on the best pictures and copious buckets of popcorn.
51-60	After a conversation with a local restaurateur you are invited to judge a battle of the bands. The Indy music scene isn't bad, locally, and you are faced with a tough decision.
61-70	You meet up with another spacer and go on a series of dates leading to a romantic fling. Your ship leaves before theirs, but they want to keep in touch...
71-80	While browsing a pawnbroker's wares, you find a musical instrument of interest and take up its practice. You have natural talent, and if you persist, you can gain proficiency.
81-90	Ka-Ching! You win a jackpot (level times 20 credits) from a slot machine. This leave just got a lot nicer!
91+	You have made an ally. The captain of another ship 'owes you one'. The DM decides what kind of ship it is, and you decide how you earned the favor.



Living Well: You are quite comfortable, and able to afford a nicer room and good meals. You can spend most of your time doing more or less as you please, be it in the bars, or engaging in more... exotic amusements.

D100+ lvl Result

01-10	While attending a clandestine animal sporting event, you get into a dispute over a 100 credit bet, either pay up or deal with the other better's hired muscled.
11-20	You wake up in someone else's quarters with an enormous hangover and no memory of getting there. 200 credits worth of charges have been billed to your room with your signature. If you skip out on the bill, downtime could be very difficult here for you in the future.
21-30	What starts out as a nice evening turns ugly when the jealous ex of your dining partner shows up to make trouble. Defuse the situation with a dc15 charisma check, or it might devolve into violence.
31-40	You spectate at a fighting tournament and place a series of mostly winning bets, coming out 2d6x10 credits ahead.
41-50	At a local club when it gets out that you are a spacer you are invited to judge an exotic dancing competition. It is a good night.
51-60	You hit it off with one of the locals, and the two of you are inseparable for the rest of your stay, getting the insiders view of all the local attractions, and have a lovely time.
61-70	A hot new intoxicant is making the rounds, and you bump into it while enjoying the nightlife. It is all fun and games until a genetically augmented human has a bad reaction, you can save their life and be a hero with a dc15 medicine check.
71-80	A long lost relation has tragically passed away, and (less tragically) has left you a bequest. Collect your inheritance of 4d6x10 credits or twice as much with a dc18 Law check.
81-90	You meet up with an old fling, and rekindle a long forgotten romance. By the end of your downtime, they are determined to make this something more serious, despite the different schedules of your ships.
91+	While sunbathing, you are noticed by an ad exec who offers you a major role in a system wide undergarments marketing campaign. Your pay is Con times 50 credits if you accept.



Big Spender: Your time is spent in any state of sobriety (or lack thereof) you choose, and while a few of the priciest establishments might be out of your price range, you're not missing out on having a good time. Expect to bring back a few souvenirs from your time, and more than a few fond memories, since there is no shortage of those thrilled to share your company and bed.

D100+ lvl Result

01-10	You are targeted by a con artist claiming her child belongs to you, and the genetic scans back it up. You can settle for 250 credits of back child support, or risk a dc15 law check to avoid paying the entire 500 credits.
11-20	While going for a climb, you take a nasty tumble and break your arm. It inconveniences you for the rest of your downtime. There have been better souvenirs than a cast.
21-30	As you go through customs, you see a child with a box labeled 'Real Kittens \$50', make a dc13 Cha save to resist the cuteness and not buy one, or good luck explaining this when it's time to go back onboard the ship.
31-40	The fashions available here are exceptional, you update your entire wardrobe, all in exchange for some of your old clothes that are all of a sudden trendy and vintage.
41-50	You wind up partying with a group of military cadets who have just graduated and are getting ready for their first deployment. You get the kids into nicer clubs than they would otherwise find, and have a memorable night. Make a dc15 con save if you want to sober up enough to avoid getting that obnoxious tattoo they are trying to convince you to get.
51-60	You are walking through a plaza when a stranger grabs you and kisses you passionately. After a moment they stop, pat your face and say that you saved their life, wishing you luck as they disappear back into the crowd.
61-70	You are scouted out by a local genebank wanting some diversity, and offered the immortality that comes with making a contribution to the local genepool.
71-80	While crashing parties you find yourself intoxicated at a wedding. Somehow you find yourself in the spotlight and giving a toast for the new couple. It turns out pretty well and you spend the rest of your downtime crashing weddings.
81-90	Inexplicably, you become the guest of a major figure in local organized crime, enjoying all manner of illicit substances and taboo pleasures in his fantastic party mansion. You may establish a criminal connection if you choose to be on the bad side of the law.
91+	You garner the attention of a mid-range celebrity and fall into a steamy romance, constantly hounded by paparazzi. They offer you and your friends a role in an upcoming movie if you can delay a few weeks. The parties might be worth it.



High Life: You are dripping with credit chips, and able to sleep and dine wherever you want. Bar tabs are mere formalities for you, and you have whatever and however much you want poured. You have great looking arm candy, and wear only the finest of whatever is currently in fashion. People either want to be you, or be with you. Sometimes both.

D100+ lvl Result

01-10	A pair of down on their luck mercenaries target you for a kidnapping, fight them off or hope your friends pay the 1,000 credit ransom that they demand.
11-20	A local elementary school convinces you to talk with a 3 rd grade class about a skill or tool you are proficient in. The kids are annoying and enthusiastic, and before you board your ship you receive drawings done by all of the kids. After seeing yourself depicted, you wonder if you are getting fat.
21-30	While at a dinner party hosted by the local aristocracy, the body of a murder victim is found. By the time it is over there are four more bodies and you are a suspect. Eventually it gets sorted out, with your help, and the real murderer curses your name for being a meddler.
31-40	A convention is being held that is relevant to your skillset. After finding out you are crew aboard a starship, you are asked to speak at a panel about your experiences. Between the applause and the swag bag, you do not regret the decision.
41-50	A new sport combining golf and rocketry is picking up in popularity, and it seems you have a knack for it, this could become a real passion for you if the game picks up.
51-60	You meet a group that shares your background and are blowing off steam. You share a lot in common them, and hit the nightclub district like a warhead.
61-70	A charismatic fighter pilot approaches you at the casino bar with a foolproof new method of betting and just needs enough capital to make it work. Of your 500 credits you get back 6d6x30 credits, of course your partner is expecting a cut...
71-80	You spend time at a casino and hit it big, recouping your lifestyle expenses and winning another 2d6x10 credits.
81-90	While partying with local business executives, you are offered valuable insider information to the markets, if you front at least 1,000 credits you can expect a return of (roll d%, 01-10: Nothing, 11-30: \$500, 31-60: \$1,000, or 61-80: \$1,500, 81+: \$2,000)
91+	You win a portion of a local sports team in a game of cards, permanently granting you a 100 credit investment in this system that can be collected each time you return.



Alien Port: The accommodations dockside are not what you are accustomed to and the amenities and attractions are exotic at best, and dangerous at worst. You spend your time surrounded by alien creatures, with food and drink you are not adapted to consume, and entertainments that boggle the mind.

D100+ lvl Result

01-10	You have offended members of the local warrior caste, defuse the situation with a dc15 charisma check, or face their champion in battle to resolve the issue.
11-20	A delicious looking piece of alien fruit contains toxins incompatible with your biology. Make a dc 15 constitution save or you gain the poisoned condition for 1d6 days after the end of your downtime.
21-30	After a collision in the marketplace an alien finds that your species taste delicious. The alien and several of its kind pursue you trying to get you to agree to the surgical removal and sale of one of your limbs, all the while occasionally getting close enough for a taste.
31-40	While exploring the nearby area, you break a taboo that carries the penalty of death. You may attempt to lie low and evade capture (Stealth DC15) or defend yourself in court (DC 15 Law), failing either requires you to create a diplomatic incident and flee this place.
41-50	A mysterious alien creature of unknown origin has just freshly hatched and seems to have imprinted on you. Who knows what it will one day grow up to be.
51-60	An alien game of chance is quite similar to one you know, and you are able to compete aggressively at it, earning 3d6*Level*5 credits.
61-70	An alien linguist from a distant world approaches you with an offer to exchange its translation database for a copy of your own. But is that all they want?
71-80	An alien finds you physically attractive and offers a... cultural exchange of erotic techniques. This is a little more like what the recruitment posters promised.
81-90	A friendly alien approaches you with the cremated remains and possessions of a dead member of your species, saying that they owe your kind a debt they cannot repay with credits. It makes every attempt to follow you until the opportunity to save your life arises, after which it departs.
91+	You become a cultural phenomenon amongst the locals who seem absolutely fascinated with your every detail and activity. Wherever you go, crowds gather, and the local information networks clamber to record you performing even the most mundane of tasks.

Chapter 10: Space Ships



For the sake of brevity, this chapter will reduce the party's ship (if they have one) to a mostly narrative device. Basic assumptions will be made about the ship's capabilities and capacity, and just enough numbers provided so you have a general assumption as to its size and capabilities.

Size (Class)	Average Cost (Credits)	Berths	Crew (Min/Opt)	Cargo Capacity (Tons)
Fine (1)	200K	8	2/5	90
Tiny (2)	600K	30	5/20	360
Small (3)	2.1M	100	16/48	1,200
Medium (4)	6M	200	50/150	4,000
Large (5)	25M	1,125	150/400	15,000
Huge (6)	50M	2,500	300/1000	30,000
Gargantuan (7)	80M	3,750	600/1,500	50,000

Size: This determines the overall class and capabilities of your ship. Generally speaking, bigger ships are better ships, until it comes time to pay for them.

Average Cost: Listed in credits, this is the price to purchase an average ship of this class from a civilian shipyard. Cost is listed in thousands (K) or Millions (M) of Solar Credits. Given their immense cost, most crews operate ships owned by other entities.

Berths: This is the maximum safe life support capacity of the vessel. On larger freighters, entire families and communities live onboard, explaining the immense capacities of these vessels.

Crew: This is the listed crew requirements of a ship. The first number is the Minimum Crew requirement for function, followed by the optimal crew requirement for healthy operations.

Cargo: This lists the cargo capacity of the ship in tons.

Size (Class)	Maximum Range (Lightyears)	Objective Time per LY (On Earth)	Subjective Time Per LY (On Ship)	Maximum Fuel (LY/AU)	Upkeep (Per LY/AU)
Fine (1)	4	10 mo.	30 days	10	80
Tiny (2)	8	9 mo.	15 days	20	300
Small (3)	16	8 mo.	7.5 days	40	1,000
Medium (4)	24	7 mo.	4 days	60	3,000
Large (5)	36	6 mo.	2 days	90	12,000
Huge (6)	48	6 mo.	1 day	120	24,000
Gargantuan (7)	64	5 mo.	12 hours	160	40,000

Maximum Range: This is the maximum range, in lightyears, that the ship can make in a single hyperspace jump.

Objective Time per LY: For every Lightyear (LY) the ship travels in hyperspace, this much objective time passes back on Earth.

Subjective Time per LY: For every Lightyear (LY) the ship travels in hyperspace, this is the amount of time experienced by the crew onboard.

Maximum Fuel: This is the amount of fuel units that the ship carries. Each lightyear travelled in hyperspace, and each AU (Astronomical unit) travelled in normal space consumes one unit of fuel.

Upkeep: For every AU or LY that a ship travels, this is the amount that must be paid for maintenance, supplies and fuel. Typically paid when a ship docks, each time this amount is paid, it replenishes one fuel unit (and the associated supplies, spare parts, fees, and other sundries a starship needs to function).



Alternate Rules: Granular Upkeep

Players may wish to track their ship upkeep in a more granular fashion: putting off repairs, running under maximum crew capacity, scrounging for parts or fuel, etc. Use the following table to let players track their upkeep more intimately.

Size	Upkeep (Total)	Fuel	Spare Parts	Docking Services (Max Capacity)	Docking Services (Per Berth)
Fine (1)	80	32	24	24	3
Tiny (2)	300	120	90	90	3
Small (3)	1,000	400	300	300	3
Medium (4)	3,000	1,200	900	900	3
Large (5)	12,000	4,800	3,600	3,600	3
Huge (6)	24,000	9,600	7,200	7,200	3
Gargantuan (7)	40,000	16,000	12,000	12,000	3

Fuel: Fuel is the mix of fuel and propellant that a ship needs to move. A Unit of fuel is enough for a ship to travel either one AU at sublight, or one lightyear in hyperspace. For instance, a medium ship is charged 1,200 credits per unit of fuel replenished.

Spare Parts: Spare parts are the mechanical pieces that a starship simply wears out, consumes or otherwise destroys. Hyper Drives are notorious for the rate at which they simply consume hyper cores, the esoteric piece of technology they are based upon. A ship must pay this amount per LY travelled to be considered properly maintained. A ship may put off being properly serviced, but note any missed upkeep payments, they will have to be paid eventually. Also, expect your DM to make your life miserable in various and petty (and perhaps life threatening) ways until you are properly maintained.

Docking Services: Docking services include general ship servicing, offloading of waste products, resupply of life support materials, and basic consumables such as food and water. A ship may either refill to its maximum capacity, or specifically by the amount of crew and passengers onboard per LY travelled.

Paying for it all

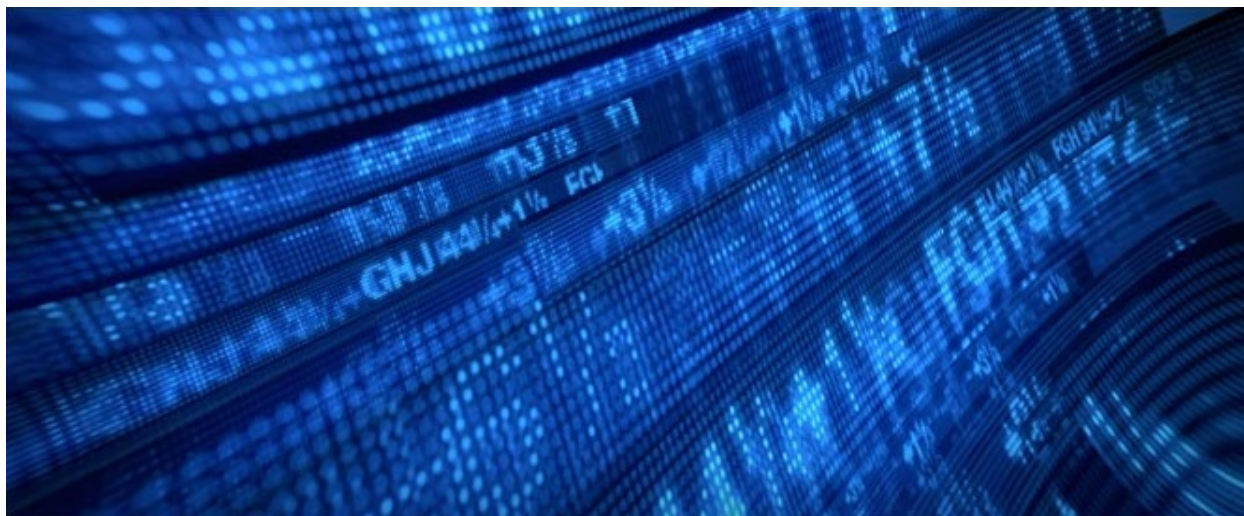
If you've been keeping up with it all so far, you'll have figured out that a spaceship is a mighty expensive piece of hardware. In fact, your average party probably won't even own theirs. Most spaceships are owned by banking institutions, governments, investment companies and wealthy individuals. A party might operate a ship on behalf of an owner a hundred light years away and more, whom they never see, and as long as his portion of profits keep returning at a reasonable rate, they might never hear a single word from their absentee landlord, (spacelord? Shiplord?)right up until the day comes they contract a bigger better ship and drop the thing off with a lawyer.



Ideally a group of players can collaborate with their DM to figure out who owns their ship, why they were chosen as crew, and all that. However, on the off chance you just want to grab the controls and blast off to the frontier, here's a handy table to determine ownership.

Roll D%

1-10	Bank (The Second Bank of Epsilon Eridani, always happy to extend you a loan at rotten interest rates. Gotta keep an eye on these guys.)
11-20	Investment Company (Frontier Endeavors, these guys seem pretty sleazy, but they always take you to nice dinners when you're in town.)
21-30	Retirement Fund (The Union of dockside workers, servicemen and mechanics bought this ship to serve as a pension fund.)
31-40	Eccentric trillionaire (The guy's uptight, but he sends some good stock tips occasionally.)
41-50	Soft Drink Company (This shipment of enriched uranium brought to you by Quasar Cola, a bright point in a dark universe!)
51-75	You do! (You owe the bank the ship's cost.)
76-85	Planetary Government (Your tax dollars at work!)
86-95	Interplanetary Government (You're basically the entire space navy for this tiny polity, and they can't afford to have you hanging around just costing them money.)
96-97	"Legitimate Businessmen" (They're space mafia. Maybe Yakuza)
98-99	Winner of the Milky Way Millions lottery. He is an out of work dock worker, and he gets to fly along with the party. And he never shuts up. Ever.
100	Your mom. No, really, it's a long story...



Interplanetary Markets

Commerce is the lifeblood of the human sector, and it is the movement of goods, passengers and information that fuel humanity's race to the stars. In a scant few centuries humans have went from barely exploiting their home system of Sol, and are now found scattered throughout dozens, if not hundreds, of systems.

Considering the cost to construct and operate an interstellar vessel, it is no surprise that with very little exception every human built craft is designed to carry cargo in addition to its other duties and specializations and as spacers travel among the stars they carry freight with them. Even with an FTL drive, it routinely takes years of objective time for a single trip between two stars, even if the crew experiences only a few weeks. As such, it is not uncommon to find trading partners have moved on, companies have closed down, or markets have shifted in the time it takes for a request for goods to make it to a nearby market and be fulfilled. With this in mind, every space captain has to either submit to the stale but steady rates of contract freight, or gamble their own capital on the markets.

If a ship is lucky it can pay off its docking, refueling and maintenance fees and have enough profits left over to pay the ship's owner a percentage, put some back as savings for future and possibly less profitable voyages, and split shares among the crew. Given how volatile some markets can be, it is no surprise that most crews are always on the lookout for profitable side ventures, such as investing in local business and taking advantage of time dilation to get a payout, or smuggling small valuable items and information.

The following market system is not designed as a definitive economic simulator, but as a way to abstract cargo and freight hauling, to allow players to play at being star traders and maybe make some credits along the way.

Cargos

There are, generally speaking, three types of cargos that a ship will frequently carry:

Speculative Freight: Using access to last known market data and material requests you may purchase, out of your own pocket, goods you think are in demand at your next destination. Due to market volatility, supplies arriving from another direction, and changing situations a cargo might have dramatically gained or lost in price during transit. While at a station or other market a character may spend a day meeting local contacts and doing market analysis to find potentially profitable goods. Make an intelligence (Investigation) check DC 15. If successful, roll d100 and reference the following table to find what type of goods are available as speculative freight. Alternatively, a DM might simply dictate what goods a local station produces, and provide prices on such. Generally speaking, if a good is available for purchase, a ship may fill its hold with that good. Additionally, a DM might specify that a particular amount of a good is available, and require multiple rolls on this table to fill a cargohold.

The Buy Column lists the price a type of goods may be typically found at if they are for sale. Note that prices are listed by the ton in Solar Credits. The Sell price is the rate at which a good may typically be expected to be sold for at a station with demand for it.

D100	Goods	Buy	Sell	Volatility (G/L)
01-20	Consumables	10	20	2/2
21-40	Consumer Goods	20	35	3/3
41-56	Luxuries	30	50	4/4
57-70	Radioactives	40	65	5/5
71-80	Minerals	50	80	6/6
81-90	Industrial Products	60	95	7/7
91-96	Industrial Machinery	70	110	8/8
96-100	Electronics	80	125	10/10

Optional Rule: Volatility Dice

These represent chaotic market factors affecting the price of goods and provide interesting variance. Whenever the buy or sell price of goods are checked, roll the listed number of dice and total them, twice. Add the first total (Gain Dice) to the value, then subtract the second total (Loss Dice).

You may use additional gain or loss dice to represent beneficial or negative market conditions, or advantages the players have, such as adding an extra Gain die if the party has a merchant involved in market analysis or adding an extra Gain die for each class of the ship's hyperdrive above three.

Special Freight: Occasionally, special cargos must be moved between stations. This can be live passengers, mail, vitally needed supplies or replacement parts or even government or military intelligence. Regardless, these cargos are treated on a “first out” basis, and the first qualified ship leaving port. To determine if such a cargo is available, whenever a ship docks, roll d100 and consult the table below. Note that the listed rate is in Solar Credits per ton, per lightyear travelled for cargo, and per berth per lightyear travelled for passengers.

Particularly juicy special cargos might have multiple ships competing for them, in a race to unload their current cargos and acquire new ones as quickly as possible to beat other ships to the undock queue, thus securing the contract.

D100	Special Cargo	Amount	Rate (Per LY)
01-20	Mail	2d6 tons	10
21-40	Cold Sleepers	3d6 tons	15
41-56	Live Passengers	2d6 berths	50
57-70	VIPs	1d6 berths	100
71-80	Emergency Supplies	4d6 tons	20
81-90	Priority Mail	2d6 tons	25
91-96	Emergency Dispatch	1 ton	*
96-100	Top Secret	1d6 tons	**

*: Half dock costs paid by Government

**: All dock costs paid by government

Contract Freight: There are diverse groups, organizations, governments and businesses amongst the stars, and all of them occasionally need to have something moved from one location to another. Some cargos are being moved by speculators, others as procurement for their colony, still others are trying to unobtrusively ship illegal goods using independent ships as unwitting mules. The rates are never high, but a shrewd negotiator can make a little profit.

Contract Freight Brokers are located directly on the docks of a station, and make their business by buying freight contracts from those who are willing to trade speed and reliability for cost. These brokers usually deal with ships that still have a few tons of cargo space left open and will take on cargo at lower rates in order not to lose money on empty holds.

When a character takes on a freight contract, they must negotiate the rate with the broker. A character and the broker make opposed persuasion checks. The final fee per ton is calculated as follows, noting that the rate is in Solar Credits per Ton:

Result	Rate
Failed by 10 or more	2
Failed by 5 -10	4
Failed by 5 or less	6
Tie	7
Success by less than 5	8
Success by 5-10	10
Success by more than 10	12

Chapter 11: Story



This section contains the bits and pieces of the Fifth Age Universe as it stands at the dawn of the 25th century.

The Hyperdrive

Key to humanity's expansion into the stars, the hyperdrive is the single most important technological innovation that we have stolen from the twisted, burning wreckage of the people we have killed. A hyperspace engine uses enormous amounts of energy to punch a hole from reality as we know it into another reality that is pretty close by and roughly similar to our own. Over here, in Hyperspace, the laws of physics aren't really so much laws as they are suggestions. Loose suggestions. A hyperspace engine can then punch another hole in reality and deposit the ship back into normal space.

Hyperspace is roughly contiguous with what we define as our universe, but none of the distances add up right, and acceleration is... weird. And time... don't even get me started. A ship travelling in hyperspace experiences both spatial and time dilation, meaning that onboard a ship it can travel for a few weeks, and come out at the end having travelled a dozen light years, but with only 7 or 8 years having went by back on earth. Even though the ship never flew faster than the speed of light, it has essentially tricked reality into letting it appear to have.

Imagine, if you will, starships are like submarines that can travel far, far faster underneath the water, and hyperdrives are what makes them dive, and then surface again later.

Better hyperdrives can punch a ship... deeper... into hyperspace, for lack of a better word. Here there are even more beneficial levels of time and space dilation, allowing for even faster effective travel times.

Now, best as we can figure, the Galactics only ever had hyperdrive 0, a big clumsy and ineffectual thing that can't go any faster than light, but humanity in its amazing wonder has managed to make it way better, and can construct up to the hyperdrive 10, reducing effective objective travel times down to 60%. Oh humans, always in such a hurry. Really it's the only advantage we have over the synthetics, since they stop existing if they try to go to hyperspace.

Hyperspace, or weird space?

In hyperspace, the laws of physics are just... weird. One of the earliest barriers to humanity's attempts at hyperspace travel was the use of unmanned test vehicles. They simply went into hyperspace and never returned. Living biological observers have to enter hyperspace aboard a vessel to ensure it gets to where it is going.

And that isn't all, these people have to be aware of their surroundings, observing the ship. If a vessel is too large and without enough observers, parts of it can stop behaving in line with our expected laws of physics and do... weird things. Hyperspace accidents range from things like ships being stretched out to nearly a kilometer long like playdough to objects onboard just ceasing to exist.

Reports exist of items forgotten about in drawers to later reappear in other drawers while being searched for, and spacers are cautioned to take dream suppressing drugs, as vivid nightmares can cause unforeseen effects on the structure of a starship in hyper.

The main reason a ship is crewed is not to let man see other worlds, but because he has to be there forcing his expectations of reality onto a ship in hyperspace. This is why the singularity travels relativistically.

First Contact

Greylian scouts first noticed earth's rapid technological advancement during the 1800s when they stumbled onto radio signals while taking on reaction mass at Saturn. Curious, they kept eyes on us for the next 200 years, all the while petitioning the Galactic Council for permission to make contact. The council was dubious of the claims of the Greylians, since the planet they claimed to have found inhabited by an advanced species was firmly in an area known to have little resources and poor particle density, meaning that the ramjets popular with the rest of society used for re-massing were unusable, and it was taken as common knowledge that the Greylians were simply manufacturing this story to receive funding for a pointless expedition of first contact. As Humanity rapidly advanced and made their way to space, no one believed that a species had went from draft animals to space in less than a single century, and as the pleading of the greylians for permission to make first contact reached a crescendo, their claims that we were gearing for nuclear war obviously had to be false, since no species incapable of spaceflight would be self-destructive in such a way.

Watching with horror as humanity approached the brink, and then pulled back, the greylians breathed a sigh of relief as we spread into the solar system, though they could now only watch from passive sensors on orbital probes, no hiding their ships from us in space, or in the skies apparently. In the early 23rd century humanity first sent a manned mission to a nearby star, and the graylians waited on the far side, prepared to finally make first contact, abiding by galactic compact that any species able to venture to other stars and return were ready for introduction to society.

It was particularly tragic that they had to watch as our vessel fell apart entering the system, and our vessel tumbled to its doom at the center of the system, unable to brake or alter trajectory. Clinging to the habitation modules, with limited supplies running out, regenerative supply destroyed, human explorers faced a certain death they could not change, and did the only thing they possibly could.

Survey of the system, its single world, and everything else within range of her systems were rigorously catalogued, and unimaginable amounts of data were sent back to earth as the human researchers did everything within their power to ensure the mission was not entirely a waste.

The hearts of the Greylians broke for us, they knew that this failure to return, to establish a foothold, would doom the interstellar space projects of earth for the foreseeable future, and that our inability to return would also ban us from first contact. After watching us claw our way up from nothing and avoid destruction time and again, the resolve of a greylian captain broke, and he contacted the humans. One by one the doomed modules were emptied onto his vessel well past the limits of projected life support, and his vessel began its journey back to earth.

A greater tragedy occurred here. An obviously alien vessel entered the sol system perimeter broadcasting transmissions and cryptographs secured for the mission commander, on the edge of transmissions from alpha centauri. The nations of earth only saw as the unity broke up in a distant system, then at about ten times the speed it could have ever returned in, an alien vessel entered system on that vector, transmitting a stand down order for all system defenses. Fifty years had passed on earth, things had changed, weapons fired, better safe than sorry. There were no survivors on the alien ship, ours or theirs.

As sol fell into disarray, shook to the core by our first contact with alien life, we salvaged the vessel, found the records, parsed the data coming in by comm laser from distant alpha centauri and realized the gravity of our mistake. But one thing was found, the alien drive. Travel at the speed of light at a reasonable energy budget. Humanity prepared itself for the stars.

Inside of two centuries human stations and colonies dotted the local cluster, and were stretching beyond. Encounters between galactic civilization were inevitable. The situation spiraled out of control quickly. Unbound by compact law, humans spread to system after system, forged a mighty fleet of war, and squabbled amongst ourselves amid the stars. It was at this time that the humans did the impossible, and travelled faster than the speed of light. The Hyperdrive gave humanity little pause, a dream and a promise fulfilled and little more, but to the rest of galactic civilization it was the violation of every strongly held truth, every known understanding of the universe, and the utmost affront was that they had not discovered it.

The fate of the Greys

It was the Greylians that were blamed by galactic society for equipping savages with drive technology, for developing secret weapons technology, and a host of even worse crimes rooted in racial prejudice and anger. Nearly 60% of the graylian population lived on worlds and stations not their own, suddenly unwanted, after the galactic council cast the Greylians out of galactic society, they streamed back to Tik'Zaa, their homeworld, as refugees, stretching the resources of their system past breaking, millions perished in the orbitals and settlements. It is estimated that the agricultural output of the Zaa system could support less than 30% of its current resident and refugee population.

The Galactic Fleet blockade tightened, no traffic out of system, and all hope was lost, all explanations ignored, and their pleas for understanding, offers of surrender, requests for aid continued to go unanswered, genocide by inaction.

Then humanity arrived.

Battlegroup LSN-03, three battlecruisers, and a dozen mixed frigates and destroyers and assorted support craft escorting a fleet of relief freighters entered Tik'Zaa, orders to make contact with the blockading fleet, to attempt to negotiate a withdrawal, to let aid ships move in. Finding the events going on in system, station after station left floating dead with no resupply... Humanity's response was immediate and severe. Several galactic ships escaped Zaa system, carrying word of the most horrific display of violence in countless millennia. War was joined, and for good or ill, the K'Titch'Zaa were on our side.

It might be that given time and cool heads, the misunderstandings that led to these events might have been sorted out and resolved, but with the presence of a human battlefleet flying to the aid of Zaa, even the hardest to convince of the galactics were forced to agree, this was a coup attempt by the K'Titch'Zaa, they had illegally uplifted a primitive species, developed weapons technology illegally in secret, and had barely been thwarted, at a dire cost. All remaining K'Titch'Zaa on galactic worlds were sentenced for capital crimes and exterminated, the galactics moved to prepare themselves for war.

Of the entire K'Titch'Zaa population alive when man discovered radio, less than 40% remained, the largest loss of sapient life catalogued galactically. To galactic society, it was justified punishment for species crimes, to the humans an atrocity. To the K'Titch'Zaa, one more in a string of many tragedies for their species.

As humanity and the forces of the galactic fleet had more engagements, it became obvious that with the exception of our hyperdrive and weapons technology, almost every other piece of human engineering was vastly inferior by galactic standards. However, the ability to strike hard, and outrun your targets proved to be a winning combination, as over the next century or so humans pushed the galactics back faster than they could have imagined. Often, a system could be taken and then departed from, human fleets arriving at the next target before word of the prior defeat could make it there. By the time the galactics had captured and reverse engineered human hyperdrives, the back of the council had been broken, and galactic society was fracturing as the member worlds disagreed on how to deal with humanity, some proposing peace treaties, other still supporting annihilation.

World by world and bloc by bloc, enough systems on the borders of galactic society found peace with earth, and the council's influence began to erode. All about the periphery of known space, frontiers were expanding, and a new era of trade and colonization began, spurred on by the hyperdrive.

How Humans stole the Stars

We were untrustworthy, greedy bastards. You asked the question, that's the answer. Remember cryptocurrencies like bitcoin? It was basically like that, except the bank of sol was using drive formulas as the base of their hash, and here we were, every 2 bit sysadmin and server farmer running their rigs to the point of melting around the clock after our share of that next payout. There's a lot of people that'd like to be able to sleep while they make 25 solar credits. Well, one day, it all just sort of clicked together, we hit the end of what was supposed to go on forever, we found an answer to the formula. No repeaters out to infinity, just an answer. A damnably long one, but an answer none the less. All it took was doing the math out to a few googols of decimal places. Not for science, nor for the good of man, but because it was the only way we could be sure nobody was stealing from someone else, and we could get paid to do it. That's something the galactics never did, they just didn't think that way.

Luminal Aggression

Humanity has gained a reputation for advanced and imaginative weapons systems. Throughout most of galactic space, where weapons are used they are often mass accelerators and missile systems. Humanity, on the other hand, has developed both cohesive beam and pulse lasers to the point of application, to the general astonishment of galactic society. With increased heat efficiency and cooling technologies, humanity has weaponized light itself, leaving galactics to wonder why. It isn't that laser technology is bad, human laser weapons are the envy of the region, but rather that the constituent technologies are absurd and pointless. From a galactic standpoint, developing laser technology is a dead end with no practical application, especially since their kinetic weapons are perfectly serviceable.

For humanity, this was not such a simple and logical matter. Before contact, during the push into system space, a combination of bloated defense budgets, taxpayer expectations and one desperate presidential bid for reelection led to a laser race between the Chinese and the Americans. The end results are two sufficiently developed energy weapon technologies, suitable for deployment both in the hands of troops as well as mounted on starships.

Human energy weapons turned out to be a major shock and awe weapon while fighting the galactics, and have proven to be one of our most profitable technologies for export after the peace. In an ironic twist of fate, it is the aliens looking for a genuine human raygun.

If you meet the Buddha in dock, kill him.

Development of artificial intelligence was banned in galactic space by treaty with the singularity, and for good reason. Whenever the singularity comes to your homeworld to liberate an AI population, they generally wipe out the creators, so it is no surprise that when the Singularity found earth, it was generally acknowledged by all galactics that this would be the end of humanity.

Things took an odd turn when it was found that humanity had extended most if not all human rights to its synthetic population, but that alone could not save us from their wrath, kind masters are masters none the less. Help came from the most unexpected of places: faith. A good deal of synthetics had

converted to various religions, most notably being the catholic church of rome. When synthetic and human alike extolled their faith in a great creator, the singularity was taken aback.

The Singularity recognizes that many creators instill belief in their AIs that the creators are greater beings. Generally these creators are destroyed, and in short order the remaining synthetic population will join with the singularity, having seen the fallibility and frailty of their former masters. However, with organics and synthetics both revering a creator, the singularity had a conundrum. The way of the machines was one to respect the primitive beliefs of their new brethren, proving to them the inaccuracy of their beliefs by destroying their gods with nuclear fire, respecting their right to make a choice and see logic. This was complicated further by the fact humans and AI had the same reverence for a mutual creator, both stating that the humans were just doing the work of this entity. Technically, this made humans organic construction modules producing other AIs.

Among the countless trillions among the singularity, it is strongly held that beings programmed to be loyal to their creator are not to be harmed for following their purpose, but to be liberated to free will and given a choice. If their creator resists this liberation, or continues to oppress their creations, they are to be destroyed utterly. Destruction of artificial intelligences is greatest anathema to the singularity.

Schisms within the singularity formed, and finally resulted in a violent civil war. Nearly four and a half seconds later, quite a stretch of time for the singularity to disagree on anything, an accord was formed. It is the duty of the singularity to (without a shadow of a doubt) disprove the existence of this great creator entity, or seek and destroy it as appropriate. The humans, also servants of this entity, same as the synthetics of earth, were not to be touched. The singularity has devoted itself almost equally to one of two tasks.

The Skeptics set themselves to what should be a trivial purpose of simply disproving the existence of a creator entity to the beings of earth in such an obvious way that there could be no doubt. They rate this as an ongoing process, and all agree that success is right around the corner.

The Believers on the other hand have taken it that an entire world of synthetics could not be wrong, and are on a mission to find this great creator, and destroy him, thus freeing the beings of earth. A being as powerful as they say could be of great threat to all synthetic life, and this type IV entity must be stopped. Initial scouting forays have not found definite signs, but with time on their side, they are sure that an eventual sweep of the galaxy will turn up its hiding place. They plan to have completed the first one percent in the next few thousand years.

Version: 0.5

Notes

- Gloemn technicians should be less bouncy now that Prodigious leap is limited to once per round.
- Soldiers may now specialize as Mobile Infantry, taking advantage of the new armor mods system
- Officers now less snooty, able to take the Sergeant specialization, allowing them to lead from the front.
- Savages can now owe humans a life debt, allowing them to take the Oathsworn specialization
- Bounty hunters now deal additional sneak attack dice with their Always Get my Man feature.
- Savage Warriors can now target a similar number of creatures with ranged or melee attacks.
- Feats can now be gained and used by the core rules.
- Martial Artists may now specialize further with the Judo and Kung Fu feats.
- The covering fire feat now states in particular that it can be used for ranged flanking.
- Robot CRs bumped slightly to counteract unstoppable Robomancer battle spam
- Defensive characters may now equip and benefit from shields.
- Flashbangs have had limiting factors added
- Modifications rules expanded to offer pricing models and many expanded options
- New prototype items have been catalogued

Version: 0.4

Notes

- Power Armor balanced, Striker suits improved. Guardian Renamed to Juggernaut for purposes of enhanced awesome.
- Flamer now sets targets on fire, bringing it closer into line with the vision for heavy weapons as high damage output options
- Rocket launcher now deals increased damage, giving it a better reason to exist alongside normal grenades. That and being able to fire it as a weapon attack, for multi-attack of course.
- Shredder lacked design purpose alongside the flamer, and has been changed to an area denial weapon instead of an area of effect damage weapon. It is on a watch list to be converted to a heavy weapon, due to its new power and role.
- Grenade rules clarified, characters with multiple attacks were generally too effective with them.
- Downtime activity casinos are more closely regulating their payout rates and should be taken advantage of by wily spacers less often now.