



Expanded Ephemeris Equipment List

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EXPANDED EPHEMERIS EQUIPMENT LIST

IMPORTANT RULE CHANGE

Since we're figuring that most players and game masters will be using this list, we wanted to put in a note about an important rule change we think you should implement in your games. Instead of having characters make a Sanity check every time they jump into hyperspace, we would recommend that hyperspace should have a cumulative effect on a character's Sanity, and that the checks should be made with every five jumps into hyperspace. If the current rule is used, characters with low initial Sanity scores fall into insanity far too fast.

THE LIST

This Ephemeras supplement details a variety of items that characters might want to buy at the start of the game, and as they advance in levels and "earn" more money. Each section in this supplement will give a brief description of what the category of items is. After that, there will be tables, which will list all of the items plus their price (in credits) and any other information that is immediately important. Following the table will be more specific descriptions of each item. This list includes all of the items in the original *Ephemeras* rulebook (with some additions), plus lots of other items that we didn't have room for in that book. Even though there are **a lot** of items in this supplement, this list is far from complete, and game masters should feel free to add more items to their games as the need arises.

In order to buy items, characters must be on a space station, inhabited moon, inhabited planet, or anywhere that sentients are living. It's also important to note that not all items will be available at all ports. For example, cybernetics and nano programs might be hard to find because they could be illegal in some systems...of course, there's always the black market, but then items will be much more expensive than what's listed here.

Computer Programs

Computer programs are designed to be installed in a character's computer system or in their AI. Most of them are designed to assist a character in their day to day business, but it is entirely possible that some of them may be illegal in the game you're playing, or they may be illegal in certain star systems within the game that you're playing. All of that is up to the game master.

The table below shows each program that is available. It also includes the price of those programs, and the computerese score that is required to install such a program. Several of the programs list a level in the price, it's important to note that once a specific level of a program is installed on a computer or AI, that level can not be installed again. For example, if a character has installed a 2nd level ICE program, they can not install another 2nd level ICE program. Instead, they have to upgrade to a 3rd level ICE program.

Item Name	Price	Computerese Score
Anti-Virus	2500/level	12
Astrogation Program	1000/level	8
Attack Program	1000/level	8
Attribute Modifier Program	2000	12
Defense Program	1000/level	8
Hacking Program	2000/level	12
Health Program	1500	10
Hyperspace Navigation Program	2000	12
ICE Program	1200/level	9
Virus Program	3000	15

Anti-Virus: These programs help to ward off virus attacks on computers and AIs. For every level of programming that is installed on a system, the computer or AI gets a +5 bonus on their defense rolls. The price on these programs gets higher the more advanced that the anti-virus programming is. For every level of protection, the program costs 1000 credits. For example, a 1st level program costs 1000 credits, but a 4th level program would cost 4000 credits. The computerese score for installation also goes up by two for every level. Thus a 1st level program would require a Computerese skill score of 8, while a 4th level program would require a score of 14.

Astrogation Programs: These programs can be installed in an on-board computer in any kind of spacecraft. They allow a pilot and navigator to get through space better. For every level of programming that is installed in a ship's computer, the navigator or pilot can add 3 to any navigation skill checks. The price on these programs gets higher the more advanced that the program is. For every level of knowledge, the program costs 1000 credits. For example, a 1st level program costs 1000 credits, but a 4th level program would cost 4000 credits. The computerese score for installation also goes up by two for every level. Thus a 1st level program would require a Computerese skill score of 8, while a 4th level program would require a score of 14.

Attack Programs: Computers and AIs are often forced into combat against other systems. For every level of attack program that is installed on a system, the system rolls an extra six-sided die for its attack rolls. The price on these programs gets higher the more advanced that the program is. For every level of attack ability, the program costs 1000 credits. For example, a 1st level program costs 1000 credits, but a 4th level program would cost 4000 credits. The computerese score for installation also goes up by two for every level. Thus a 1st level program would require a Computerese skill score of 8, while a 4th level program would require a score of 14.

Attribute Modifier Programs: Computers and AIs have attributes just like a character would, and sometimes characters might want to upgrade their systems. These programs allow the character to modify their computers and AIs. Each program adds one point to the attribute that it was designed to modify.

Defense Programs: Computers and AIs are often forced into combat against other systems. For every level of defense program that is installed on a system, the system rolls an extra six-sided die for its defense rolls. The price on these programs gets higher the more advanced that the program is. For every level of defense ability, the program costs 1000 credits. For example, a 1st level program costs 1000 credits, but a 4th level program would cost 4000 credits. The computerese score for installation also goes up by two for every level. Thus a 1st level program would require a Computerese skill score of 8, while a 4th level program would require a score of 14.

Hacking Programs: These programs are installed in a character's computer system or in their AI. They make it easier to get into a computer system that a character might not normally be able to get into. For every level of hacking program that is installed in a computer or AI., the character adds 4 to any hacking checks. The price on these programs gets higher the more advanced that the program is. For every level of knowledge, the program costs 2000 credits. For example, a 1st level program costs 2000 credits, but a 4th level program would cost 8000 credits. The computerese score for installation also goes up by three for every level. Thus a 1st level program would require a Computerese skill score of 12, while a 4th level program would require a score of 21.

More information on hacking can be found in **CHAPTER 9: CYBERSPACE**.

Health Program: Like any character, an AI or a computer has a health score. If a

character adds a health program to their system, the system is able to roll an additional six-sided die which is added to the system's health. It's important to make sure that this roll is modified by the computer or AI's Endurance modifier.

Hyperspace Navigation Program: Hyperspace can be a very dangerous place, and it can be hard to navigate. When this program is added to a ship or AI, the system gives the characters a +3 bonus on any navigation checks they need to make while in hyperspace.

ICE Programs: ICE is a term that's used for all types of Intrusion Countermeasures that are installed in a computer system or AI. For every level of ICE that's installed, the computer or AI adds 4 to its defense bonuses against hacking attacks, or any other form of unauthorized intrusion. For every level of knowledge, the program costs 1200 credits. For example, a 1st level program costs 1200 credits, but a 4th level program would cost 4800 credits. The computerese score for installation also goes up by two for every level. Thus a 1st level program would require a Computerese skill score of 9, while a 4th level program would require a score of 15.

More information on hacking can be found in **CHAPTER 9: CYBERSPACE**.

Knowledge Programs: These are programs that can be installed in a computer system or AI that allow the character to access information that they may not have learned on their own. Any type of knowledge (sciences, hyperspace mechanics, net running, etc.) can be a knowledge program. Each program contains information on just one subject, but the information is extensive enough that a character using these programs can add a +2 bonus to any check using the skill specific to the Knowledge Program...provided they have access to their computer or AI while trying to make the skill check. These programs can only be added to a computer or AI once, so there is no additional bonus for adding more than one program.

It's important to note that a knowledge program will not help a character unless they've dedicated at least one skill point to the skill the program is designed to assist.

Virus Programs: These are programs that are designed to do damage to a computer system or an AI. A character might use them against another person's system, or someone might use them against the character. It's also possible that less reputable dealers may sell Virus Programs, while trying to imply that they're some other type of program.

The actual damage caused by a virus program should be determined by the game master, but it should be something that is reasonable for the type of game that's being played. You don't necessarily want to destroy a character's computer system, unless they've done something really stupid to deserve it.

It's also important to note that typically an AI will be better able to defend itself against a Virus Program because it has self-awareness, and it will often be aware of what's going on within its systems.

More information on viruses can be found in **CHAPTER 9: CYBERSPACE**.

Nanos

Nanos are microscopic machines that are designed for a specific purpose. Nanos that are designed for one skill can not be used for something else without extensive reprogramming. This type of reprogramming requires a Nanotech skill level of at least 30.

Nanos also have very short lives, usually only a couple of rounds. This is to prevent them from getting out of control. It is possible to create nanos that are able to replicate themselves, but this can be very dangerous, and usually the programmer will limit how many times the nanos are able to reproduce. Should a game master want, it could be possible to encounter entire planets that have been wiped out by nanos.

Characters can buy nanos in a variety of places, but it's important to note that some star systems may outlaw nanos...or they may be highly regulated (meaning much more expensive.) These types of decisions should be made by the game master before the game begins, because as soon as characters can start using nanos, they're going to want to get their hands on them some how.

In order to use nanos, a character must have a certain nanotech skill score. Any character trying to use a nano that they don't have enough skill points for will fail to get the desired effect, and the nano will be wasted.

The table below shows a selection of some of the nanos that might be available to a character. The table shows the type of nano, the price in credits of that nano, and the nanotech score that is needed to use the nanos. It's important to note that the price is the recommended price in a free market. Trying to buy nanos where they are illegal will mean that they have a much higher price.

This list is far from complete, and a game master should feel free to create nanos that are similar to these. Any newly designed nanos should have prices and require nanotech scores that are similar to the nanos on this list.

Nano type	Price in credits	Nanotech score required to use this nano
Combat	3000	20
Disease Curing	1000	10
Effect Countering	500/level	5
Enhancement	1500/level	15
Healing	500/level	5
Metal Melting	1500/level	15
Nano Shell	5000	25
Nano Shield	10000	40
Poison	1500/level	15
Tissue Eating	1500/level	15
Transference Duplicating	1000/level of transference	5/level of transference
Truth	10000	40
Vaccines	1000	10

Combat: These powerful nanos will enhance the combat abilities of the character that takes them for one hour. During this time, the character gains a +1 bonus to their Strength, Agility, and Endurance. At the same time, however, they suffer a -1 penalty to their Charisma and Sanity.

In order to administer this type of nano, a character must have at least 20 skill points in Nanotech.

Disease Curing: These are designed to cure any kind of disease. Typically a disease has a strength score of 6...although more virulent strains will have a higher strength score. When Disease Curing Nanos are administered, three six sided dice are rolled. If the disease's strength score is beaten, the disease is cured. Thus it's easy to see that most diseases can be cured with just one administration. A severely virulent plague might be much harder to cure.

In order to administer this type of nano, a character must have at least 10 skill points in Nanotech.

Effect Countering: These are designed to counter Poison Nanos, Flesh Eating Nanos, Metal Melting Nanos, or any other kind of Nanos that have a deleterious effect. For every level of strength of Nanos that are purchased or created, a character would roll one six sided die to attempt to counter the deleterious agents. Thus a third level Effect Countering Nano would roll three six sided dice. Each level upgrade to these nanos costs an additional 1500 credits. Thus a 3rd level Effect Countering nano would

cost 4500 credits.

In order to administer this type of nano, a character must have at least 5 skill points in Nanotech.

Enhancement: These nanos are designed to enhance a characters attributes. They can be purchased or created to enhance Intelligence, Strength, Agility, or Endurance. When administered, the nanos grant a two point bonus for every level of strength. The duration is short term, however. As they only last for one hour. Each level upgrade to these nanos costs an additional 500 credits. Thus a 3rd level Enhancement nano would cost 1500 credits.

In order to administer this type of nano, a character must have at least 15 skill points in Nanotech.

Healing: These nanos are designed to cure damage of any kind. For every level of nano purchased or created, a character would roll one six sided die to determine how much damage was healed. Thus a level three Healing Nano would heal three six sided dice worth of damage. Each level upgrade to these nanos costs an additional 500 credits. Thus a 3rd level Healing nano would cost 1500 credits.

In order to administer this type of nano, a character must have at least 5 skill points in Nanotech.

Metal Melting: These nanos are designed to destroy metals of all kinds. For every level of nano purchased or created, they do one six sided die of damage every minute for five minutes...at which point the nanos become inert. If someone wants to try to use an Effect Countering Nano against these nanos, they would make their effect countering roll against one six sided die for every level of the Metal Melting Nano. Each level upgrade to these nanos costs an additional 1500 credits. Thus a 3rd level Metal Melting nano would cost 4500 credits.

If a game master so chooses, they could decide that harder metals take less damage per round, but that is completely up to the game master.

In order to administer this type of nano, a character must have at least 15 skill points in Nanotech.

Nano Shell: These nanos create a shell that covers the recipient. When encased in a nano shell, the character receives a +4 defense bonus, and also receives +4 on any checks against other nanos or Cyber Wizard spells. These nanos only last for ten minutes.

In order to administer this type of nano, a character must have at least 25 skill points in Nanotech.

Nano Shield: These nanos create a mist that encircles a character. While they're encircling a character, that character is completely immune to any attacks. However, the character can not attack anyone else, as any weapon would also be encased in the nano shield. These nanos only last for ten minutes.

In order to administer this type of nano, a character must have at least 40 skill points in Nanotech.

Poison: These nanos are pretty self-explanatory. They're designed to kill or wound someone by poisoning them. A game master could decide that a poison has to be specific to the anatomy of a specific kind of species.

When Poison Nanos are administered, the game master or character rolls one six sided die for each level the Poison Nanos have. The roll is then compared to the victim's endurance. If the Poison number is higher, the nanos damage is computed by taking the difference in the two rolls and multiplying it by the level of the nano. For example, if an opposing Diplomat attacks James' Law Enforcer with a level three poison nano, the Diplomat rolls three six sided dice. His roll is a 12, and James' character's endurance is only a 10. The difference between the two rolls is 2, and the level of the poison is 3, thus $2 \times 3 = 6$. James' character suffers 6 points of damage in the first minute. These rolls are done each minute for four minutes, after that, the Poison Nano becomes inert. If a character's Endurance beats the roll of the poisoning individual, then the character takes no damage during that minute...but they could still take damage the next minute.

Each level upgrade to these nanos costs an additional 1500 credits. Thus a 3rd level Poison nano would cost 4500 credits.

In order to administer this type of nano, a character must have at least 15 skill points in Nanotech.

Tissue Eating: These nanos are used to destroy the tissues of a creature. A game master could decide that Tissue Eating Nanos are designed to effect only one type of creature.

When Tissue Eating Nanos are administered, the game master or character rolls one six sided die for each level of the Tissue Eating Nanos. The roll is then compared to the victim's endurance. If the Tissue Eating number is higher the nanos do one six sided die of damage per point difference. Using the same rolls as in the Poison Nanos description, this time the opposing Diplomat would roll two six sided dice to determine how much damage his character did to James' character. Thus the possible damage would be 2-12 points. These rolls are done once each minute for three minutes, after that, the Tissue Eating Nano becomes inert.

Each level upgrade to these nanos costs an additional 1500 credits. Thus a 3rd level Tissue Eating nano would cost 4500 credits.

In order to administer this type of nano, a character must have at least 15 skill points in Nanotech.

Transference Duplicating: These nanos can duplicate many of the transferences from the Nanist's transference list. The actual transferences that can be duplicated are up to the game master, and any nanos listed in this section of this book, should not be included in this type of nano. For example, the poison transference can not be duplicated by this transference, as there is already a poison nano.

Whatever transferences are allowed, the cost for purchasing these nanos will be 1000 credits for each level of the transference. Also, a character must have 5 points in

Nanotech for every level of the transference that these nanos are designed to replicate.

Truth: The Truth nano is a very powerful nano. When administered to someone, that person must tell the truth to any question they're asked. For game purposes, the game master should have the person under the influence of these nanos roll two six-sided dice. To this total they should add their Endurance modifier. In order to lie under the influence of Truth Nanos, a character's modified roll must be 12 or higher. If they roll less than 12, they have to tell the truth.

Vaccines: There are a variety of Vaccine nanos. Each is designed to fend off a specific illness, virus, or bacteria. It typically takes one week for any of the vaccines to take effect, so characters must think carefully about when they're going to need to be vaccinated.

In order to administer this type of nano, a character must have at least 10 skill points in Nanotech

Cybernetics

Cybernetics are mechanical or robotic implants that are fused with a creature's body. Because of the extensive amount of surgery, and the trauma caused by the implantation of cybernetics, any implant requires a sanity check once it's complete. The sanity check is done by rolling the number of dice specified in the description, and comparing that number to the character's Sanity attribute. If the rolled number is equal to or less than the attribute score, then the surgery has been a success. If a cybernetic implant fails, then the implant doesn't work and the character permanently loses one point of sanity. Plus, they're out the credits they spent to get the implant in the first place, and quite possibly the credits they used to pay for the surgery.

The prices listed are just for the cybernetic devices. If a character needs to hire someone to perform the surgery, then the price for that service will generally be the same as the price for the cybernetic device, although the game master can alter that price depending on a lot of factors.

As would probably be expected, many cultures will view cybernetics as an abomination. As a result, they might be illegal in some systems...or perhaps a species will rule that they're a religious crime. Those decisions are up to the game master, and those decisions will greatly influence the price of having the cybernetics implanted.

The table below gives a partial listing of cybernetic implants that could be available in a game. This list is far from complete, and the game master should feel free to add more as they see fit. Prices and sanity check rolls should be comparable to what is already on this table.

The table shows the name of the cybernetic implant, the price, how many sanity dice are required for a character to roll on implantation, the cybernetics score needed for someone to be able to implant the device, and the implant's health score. This health score does not relate to the character's health, but rather is the amount of health a fully functioning implant would have on its own. The number is mostly used for countering the effects of nanos that are programmed to destroy cybernetics.

Item	Price	Sanity Dice	Cybernetics Score	Health Score
Armored Skin	500,000	4	40	200
Artificial Fingertip	20,000	1	10	50
Artificial Limb	200,000	3	30	150
Claws	50,000	1	10	50
Extra-Sensitive Nose	100,000	2	20	100
Gills	100,000	2	20	100
High Frequency Ear Inserts	100,000	2	20	100
I-R Eyes	150,000	2	20	100
Low Frequency Ear Inserts	100,000	2	20	100
Low Light Eyes	100,000	2	20	100
Major Organ	300,000	3	35	100
Minor Organ	150,000	2	25	75
Muscle Enhancements	250,000	3	30	150
Neural Enhancements	300,000	3	30	150
Neural Interface Shunt	200,000	3	30	150
Recording Eyes	150,000	2	20	100
Subcutaneous Communicator	150,000	2	20	100
Telescopic Eyes	150,000	2	20	100
Voice Modulator	125,000	2	20	100

Armored Skin: Cybernetic skin can be implanted under the outer layer of skin of any creature. The skin has a defense bonus of 5 against all forms of attack, and it can be used with other forms of armor. The implantation of this skin causes a permanent loss of two points of Endurance.

When Armored Skin is implanted, a character must make a Sanity check using four six sided dice. If the implantation fails, not only does the character lose one Sanity point, but still lose the two Endurance points.

Artificial Fingertip: The tip of a character's finger, or whatever the equivalent for their species can be removed, and a cybernetic implant can be put in its place. This fingertip can be used for carrying small items. It can be perfect for smuggling very small items, or possibly for carrying poison.

When an Artificial Fingertip is implanted, a character must make a Sanity check using one six sided die.

Artificial Limb: Character's can have limbs replaced should they lose one...or should they desire a better one. These limbs can be arms, legs, or whatever else the species might have. When an Artificial Limb is placed on a character, they gain a +1 bonus to their Strength, but they also suffer a -1 penalty to their Endurance because of the toll of having such a large cybernetic device.

When an Artificial Limb is implanted the character must make a Sanity check using three six-sided dice. If they fail the check, not only does the implant not take meaning that they will be without the limb they were having replaced, but they also suffer a permanent loss of 10 health points.

Claws: These are made of a very hard metal. The claws are retractable and come out just above the fingers. In combat, they have a damage factor of 1, but because they're actually a part of the body, the user gains a +2 on their attack dice.

When Claws are implanted, a character must make a Sanity check using one six sided die.

Extra-Sensitive Nose: With this cybernetic device a character will have an olfactory sense that is slightly better than that of an Earth dog.

When an Extra-Sensitive Nose is implanted, a character must make a Sanity check using two six-sided dice.

Gills: These can be added to an air breathing creature to allow them to breathe water as they would air.

When gills are implanted, a character must make a Sanity check using two six-sided dice.

High Frequency Ear Inserts: These allow a character to hear frequencies that are higher than what their species would normally be able to hear.

When High Frequency Ear Inserts are implanted, a character must make a Sanity check using two six sided dice.

I-R Eyes: If a character is unable to see in the infrared spectrum, they might consider having I-R Eyes implanted. If a game master chooses, there could be other forms of

Cybernetic Eyes, but the laws of physics should always be considered. For example, Radio Wave Eyes would not be possible because the eyes would have to be far too large, but eyes capable of seeing into the ultraviolet would certainly be possible.

When I-R Eyes are implanted, a character must make a Sanity check using two six-sided dice.

Low Frequency Ear Inserts: These allow characters to hear frequencies that are lower than what their species would normally be able to hear.

When Low Frequency Ear Inserts are implanted, a character must make a Sanity check using two six-sided dice.

Low Light Eyes: With these implants a character is able to see with very little light as if they were seeing in normal light. An important distinction is that the character will only be able to see in black and white when using their eyes in low light. In many ways, these eyes give the character eyesight that is similar to that of a cat.

When Low Light Eyes are implanted, a character must make a Sanity check using two six-sided dice.

Major Organ: Characters that might develop problems with a major organ like the heart or the lungs could opt to have a cybernetic organ implanted. The cybernetic device will function exactly as the organic version would, but it is not susceptible to disease. However, the cybernetic organ's health does deteriorate at the rate of one health point per year, which could make it susceptible to cybernetic attacks.

When a Major Organ is implanted, a character must make a Sanity check using three six-sided dice.

Minor Organ: Characters that might develop problems with a minor organ like the pancreas could opt to have a cybernetic organ implanted. The cybernetic device will function exactly as the organic version would, but it is not susceptible to disease. However, the cybernetic organ's health does deteriorate at the rate of one health point per year, which could make it susceptible to cybernetic attacks.

When a Minor Organ is implanted, a character must make a Sanity check using two six-sided dice.

Muscle Enhancements: Characters can have cybernetic implants placed throughout their bodies that strengthen their muscles. This will enhance their Strength attribute by three points, but because of the strain it puts on the body, they also permanently lose one point of Endurance.

When Muscle Enhancements are implanted, a character must make a Sanity check using three six-sided dice. If the character fails their Sanity check, they still lose the one point of Endurance.

Neural Enhancements: Characters can have cybernetic implants placed throughout their brain or nervous system. Implants in their brain will enhance their Intelligence attribute by three points, while implants in their nervous system will enhance their Reflex attribute by three points. Because of the strain either enhancement puts on their bodies, characters suffer a permanent loss of one point of Endurance. If

characters should get both enhancements, they suffer the permanent loss of two points of Endurance.

When Neural Enhancements are implanted, a character must make a Sanity check using three six sided dice. If the character fails their Sanity check, they still lose the one point of Endurance.

Neural Interface Shunt: This is a device that's implanted directly into the skull. Filaments in the Shunt then burrow their way into the character's brain. Once the Shunt is in place, a character can link their brain directly into a computer or AI. Anyone attached to a computer or AI in this way adds a +4 bonus to anything they're doing with the computer or AI.

When a Neural Interface Shunt is implanted, a character must make a Sanity check using three six sided dice. If the character fails their Sanity check, they lose one point of Reflex because of damage to their brain.

Recording Eyes: Although they're called recording eyes, these are actually a small cybernetic device that is implanted into a character's eyes. With Recording Eyes, a character is able to record and recall anything that their eyes have seen.

When Recording Eyes are implanted, a character must make a Sanity check using two six sided dice.

Subcutaneous Communicator: With this implant, a small communications device is implanted under the skin that can be operated by a simple touch. The communicator can be used up to a range of 10 kilometers unless there is a Communications Beacon in place, in which case the Subcutaneous Communicator can be used with a Planetary or System-wide beacon.

When a Subcutaneous Communicator is implanted, a character must make a Sanity check using two six-sided dice.

Telescopic Eyes: With these implants, a character is able to focus their eyesight on objects that are extremely far away. A character can use Telescopic Eyes to see objects that are as far away as 10 kilometers as if they were 10 meters away.

When Telescopic Eyes are implanted, a character must make a Sanity check using two six-sided dice.

Voice Modulator: This device allows a character to manipulate their voice. They can imitate any voice they've heard, or they can create a new one. The voice can be a different age, gender, or even a different species. It's important to note, however, that even though the character can imitate another species, they can't actually use that species' language unless they already know it.

When a Voice Modulator is implanted, a character must make a Sanity check using two six sided dice.

Weapons

This section outlines some of the weapons that can be used in the game. Below is a table which lists the weapons. It also includes the price of each weapon, the weapon's damage factor, and what class of weapon it falls under. The last listing is only important for Soldiers when they decide what weapon class to specialize in.

An important note about weapons is that many of them are species specific...meaning that the weapons will be contoured to fit the body types of a specific species. The game master can rule that characters using a weapon that is not designed for their species suffer a -2 penalty on their attack rolls.

Weapon Name	Price	Damage Factor	Weapon Class
Attack Wand	750	Special	Neuronic
Axe	10	.5	Primitive
Bow	100	.5	Primitive Ranged
Club	5	.25	Primitive
Crossbow	150	1	Primitive Ranged
Cyber Wizard Staff	10,000	2	Only usable by Cyber Wizards
Explosives	500-5,000	5-10	Explosive
Flechette Pistol	300	2	Flechette
Flechette Rifle	1,500	4	Flechette
Flame Thrower	1000	5	Primitive Ranged
Grenade	200	5	Explosive
Grenade Launcher	2000	As per the grenade	Explosive
Knife	10	.25	Primitive
Laser Pistol	600	3	Laser
Laser Rifle	3,000	5	Laser
Mace	25	1	Primitive
Missile Launcher	20,000	2 vs. ships, 20 vs. individuals	Explosive Ranged
Neuronal Whip	8,000	Special	Neuronic

Non-Lethal Slug Thrower	500	Special	Primitive Ranged
Plasma Assault Rifle	20,000	8	Plasma
Plasma Pistol	700	3	Plasma
Plasma Rifle	3,500	3	Plasma
Plasma Spear	1,000	4	Plasma
Sling	5	.5	Primitive
Slug Machine Gun	500	5	Primitive Ranged
Slug Thrower	200	2	Primitive Ranged
Spear	20	1	Primitive Ranged
Staff	10	.5	Primitive
Sword	25	1	Primitive

RANGED WEAPONS:

This table gives the range for each weapon. Ranged weapons have four ranges: short, medium, long, and extremely long. If a character attempts to fire a weapon beyond short range, they suffer a penalty to their attack bonus as follows:

Medium -3

Long -6

Extremely Long -10

All ranges are given in meters:

Weapon	Short	Medium	Long	Extremely Long
Axe	3	6	9	12
Bow	20	40	60	80
Crossbow	30	60	90	120
Flechette Pistol	30	60	90	120
Flechette Rifle	50	100	150	200
Flame Thrower	2	4	6	8
Grenade	3	6	9	12

Grenade Launcher	30	60	90	120
Knife	3	6	9	12
Laser Pistol	20	40	60	80
Laser Rifle	50	100	150	200
Missile Launcher	100	200	300	400
Non-Lethal Slug Thrower	5	10	15	20
Plasma Assault Rifle	50	100	150	200
Plasma Pistol	30	60	90	120
Plasma Rifle	60	120	180	240
Plasma Spear	20	40	60	80
Sling	3	6	9	12
Slug Machine Gun	10	20	30	40
Slug Thrower	10	20	30	40
Spear	10	20	30	40

Below are complete listings for all of the weapons. Some of the weapons have very special abilities or limitations that must be taken into account during combat.

Attack Wand: A favored weapon of anyone that might need to try to subdue people, the attack wand is a one meter long club that has an electronic charge to it. When used as a clubbing weapon, the damage factor is .5, but the wand can also be used to stun opponents. If a character scores a hit with an attack wand, they roll one six sided die for each point of damage they inflict on an opponent (rounded down.) This number is compared to the opponent's Endurance score. If the number is higher than the opponent's Endurance score then they are stunned for one minute.

Axe: An axe is usually a handheld weapon, although it is possible to have throwing axes as well. These weapons are extremely primitive, and will usually only be used on low tech worlds, or in an environment where an axe could be used as more than

just a weapon...such as a jungle environment.

Bow: Bows will differ from species to species, due to different anatomies, but in general, a bow is a wooden shaft with a string (or some other substance) from which arrows can be launched. These are primitive weapons, and will usually only be used on low tech worlds.

Club: The club is perhaps the most primitive of weapons. It will usually be made out of wood, stone, or bone. It will usually only be used on low tech worlds.

Crossbow: Crossbows are a somewhat more advanced form of bow. They have a longer range than a standard bow, and they typically do more damage. The weapon has to be cocked and loaded, and thus can only be fired once every other round. If a bolt is not already loaded when combat begins, the character can not attack until they second round of combat. These are very primitive weapons, and will typically be found only on low tech worlds.

Cyber Wizard Staff: In the hands of anyone other than a Cyber Wizard, this weapon acts like a basic staff. However, in the hands of a Cyber Wizard, the weapon is much deadlier. The Cyber Wizard can infuse the staff with cybernetic energies, causing it to do more damage when it strikes an opponent. A Cyber Wizard can also “enchant” the weapon so that it discharges a pre-determined spell when it strikes an opponent. The enchantment is only good for one strike. After that, the staff must be recharged with a new spell, but it can continue to do damage with the Cyber Wizard’s cybernetic energies.

If the Cyber Wizard chooses to enchant their staff with one of their spells, they must do so at the beginning of the day. When they enchant the staff, they use one of the spells they have available...and thus expend the appropriate number of cyber points.

Explosives: This is a catch-all category for anything that blows up. Typically, Explosives are not used in combat, but rather are placed somewhere to do damage at a later time. It’s also possible to strap Explosives onto an object, or even a creature, and have them deliver the Explosives to a chosen area...although this is usually fatal for anyone wearing the Explosives.

The price range for explosives also determines the damage factor. The more expensive an explosive is, the higher the damage factor is going to be.

Flame Thrower: Almost every creature can be harmed by flame, and each of the sentient species has realized this throughout time. As a result, they’ve all designed their own form of Flame Thrower. Although these weapons can do a tremendous amount of damage, their range is somewhat limited.

Flechette Pistol: A Flechette Pistol delivers several small dart-like objects into a victim. It is possible, although difficult to hit more than one target with a single flechette shot. If a character decides to attempt this, they suffer a -4 attack penalty to hit the first target, a -8 penalty to hit the second, and a -12 penalty to hit the third. It should also be noted that damage is reduced when this action is taken. If a character targets two enemies, the damage is reduced by half, and if a character targets three

enemies, each enemy suffers only one-third of the typical damage. It should also be noted that these damage reductions are in place even if the character misses the second and third character.

A typical Pistol can hold one flechette package, which holds 20 shots. When the pistol is first purchased, it comes with one flechette package.

Flechette Rifle: A Flechette Rifle is a more powerful version of the Flechette Pistol. This weapon has a longer range, and it also delivers more damage. Unlike the Flechette Pistol, however, the Rifle can not be used to target more than one enemy.

A typical Rifle can hold one flechette package, which holds 20 shots. When the rifle is first purchased, it comes with one flechette package.

Grenade: This is any type of weapon that is designed to be thrown and explode on contact. Unlike most weapons, a near miss can still inflict damage on a target. When a grenade is thrown, an attack roll is made against all targets in the blast range. Any successful hits take full damage. If an attack roll is one less than what was required for a hit, the target takes one-half damage, and if the attack roll is two less than what was required to hit, the target takes one-quarter damage. All fractions in reduced damage are rounded up. The typical blast diameter is five meters.

Explosive Grenades are not the only type of grenade. There are also Flash Grenades which create a powerful burst of light that can blind intended victims. It's also possible to have Nano Grenades, which are designed to deliver some type of nano, which activates on impact.

Grenade Launcher: Although Grenades can be thrown, this gun will also allow for them to be launched a much greater distance.

Knife: A knife is any kind of small blade. Even though this would seem to be a primitive weapon, many characters still use knives because they are easy to hide, and at close quarters, they can be quite fatal.

Laser Pistol: A Laser Pistol is a handheld pistol that's designed to deal a very hot laser light. The range tends to be short, but the damage can be quite lethal.

A Laser Pistol is charged with a clip that holds 50 charges. Each Pistol is equipped with one clip when it's first purchased.

Laser Rifle: A Laser Rifle is a more powerful version of the Laser Pistol. Generally a Laser Rifle must be held with two hands, but the Rifle has a longer range, and does more damage than a Pistol can.

A Laser Rifle is charged with a clip that holds 50 charges. Each Rifle is equipped with one clip when it's first purchased.

Mace: Mace is a rather generic term, as each species has their own form of this primitive weapon. Usually it's a metal handle with a chain. Attached to that chain is a spiked ball.

Missile Launcher: These weapons are designed to launch missiles that are usually around a meter long. They aren't always effective against character sized opponents, but they can be quite lethal against ships. Due to the bulkiness of the missiles, and

the difficulty in aiming them, a character using a missile launcher suffers a -4 penalty to hit a character sized opponent. However, unlike most handheld weapons, a Missile Launcher does full damage against ships, buildings, or other vehicles.

Neuronal Whip: The Neuronal Whip is a small object that fits firmly in the hand of a character. When charged, the whip releases a micro-thin filament that can strike a character and paralyze them. The filament can shoot out as far as five meters, and unlike most handheld weapons, a character using this weapon uses their Agility bonus to modify their attack rolls.

When a character uses a Neuronal Whip in an attack, and scores a hit, they roll one six sided die. That number is multiplied by the difference between the attack roll and the defense roll. That number is then compared to the victim's Endurance attribute. If it's higher than the victim's Endurance, then they're paralyzed for that number of rounds.

As an example, Zach's Soldier uses a Neuronal Whip against an enemy Bandit. He rolls an attack and scores a 17, while the Bandit rolls a 12 for its defense roll. Zach then rolls a single six-sided die for a 5. The difference between the attack roll and the defense roll was 5 and Zach multiplies that number times the 5 he rolled on the single six-sided die. This gives him a total of 25. The poor Bandit only had an Endurance score of 8, so they are stunned for 17 rounds... $25-8=17$.

Non-Lethal Slug Thrower: These weapons are designed to fire slugs that will sting or even stun a potential opponent, while not killing them. When a character successfully hits with a Non-Lethal Slug Thrower, the target rolls an Endurance check. This number is compared to the difference between the attack roll and the defense roll. If the Endurance check is lower, the target is stunned. If the Endurance roll is equal to or higher than the difference between the attack and defense rolls, the character has been stung by the slugs and suffers a -1 on all rolls and checks. This damage is cumulative with each successive hit.

Plasma Assault Rifle: The Plasma Assault Rifle is a scary weapon. When fired, it launches super-heated plasma towards an opponent. The Rifle can be set to launch anywhere from one to ten bursts of plasma in a round. If opponents are close enough to one another, the Rifle can then be used on multiple opponents, although the attacker suffers a -1 penalty to his attack bonus each time he shifts to a new target. Thus, if he shoots at one person, he suffers no penalty, but he would suffer a -1 penalty when shooting at a second victim, a -2 penalty when shooting at a third, and so on. The character must state how many charges he is going to fire at the beginning of each round, and if shooting at multiple targets, he must state how many charges he will use on each target at the beginning of each round. The character also must roll an attack roll for each plasma burst that they fire.

The Plasma Assault Rifle takes a full round to charge, thus the character can not fire it in the first round of combat. The weapon only stays charged for ten rounds unless it's fired, and if the weapon is charged five times without being fired, it permanently uses

up one charge.

The Plasma Assault Rifle typically holds 30 charges, which are stored in a container called a “cap.” When a cap is expended, it can’t be recharged, but a new cap can be placed into the Plasma Assault Rifle. When a Plasma Assault Rifle is first purchased, it will come with one cap.

The advantage to using a plasma weapon is that they’re less likely to do damage to hulls and bulkheads in ships and space stations.

Plasma Pistol: The plasma pistol is a hand-held gun that fires a super-heated plasma at an opponent.

The Plasma Pistol takes a full round to charge, thus the character can not fire it in the first round of combat. The weapon only stays charged for ten rounds unless it’s fired, and if the weapon is charged five times without being fired, it permanently uses up one charge.

The Plasma Pistol typically holds 30 charges, which are stored in a container called a “cap.” When a cap is expended, it can’t be recharged, but a new cap can be placed into the Plasma Pistol. When a Plasma Pistol is first purchased, it will come with one cap.

The advantage to using a plasma weapon is that they’re less likely to do damage to hulls and bulkheads in ships and space stations.

Plasma Rifle: This weapon is a long range version of the Plasma Pistol. The Plasma Rifle gives a character longer range, but the super-heated plasma does the same amount of damage as a Plasma Pistol.

The Plasma Rifle takes a full round to charge, thus the character can not fire it in the first round of combat. The weapon only stays charged for ten rounds unless it’s fired, and if the weapon is charged five times without being fired, it permanently uses up one charge.

The Plasma Rifle typically holds 30 charges, which are stored in a container called a “cap.” When a cap is expended, it can’t be recharged, but a new cap can be placed into the Plasma Rifle. When a Plasma Rifle is first purchased, it will come with one cap.

The advantage to using a plasma weapon is that they’re less likely to do damage to hulls and bulkheads in ships and space stations.

Plasma Spear: This weapon is a more advanced version of the primitive Spear. Like its archaic ancestor, the Plasma Spear does damage from impaling a victim, but when the Plasma Spear hits, it delivers a super-heated plasma into the victim, which increases the damage done.

A Plasma Spear typically contains 40 charges, with each hit discharging one charge. The Plasma Spear can not be recharged, and once all of its charges are expended, it is simply a regular Spear. At that point, the game master must make sure that damage is adjusted accordingly.

Sling: The Sling is one of the most primitive of weapons. It’s used to fire off small

stones in the hope of hitting a target. The weapon does not have a great deal of range, and it doesn't do much damage, but they are very easy to build if the characters find themselves on a planet with no weapons.

Slug Machine Gun: Like the Slug Thrower, this weapon uses a chemical reaction to propel a metallic ball, slug, or bullet. The main difference is that the Slug Machine Gun fires a large number of these projectiles, thus causing a great deal of damage. The Slug Machine Gun, however, can be a bit unwieldy to use, and as a result, characters using them suffer a -1 attack penalty.

Slug Thrower: This is a generic catch-all category for any primitive weapon that uses a chemical reaction to propel a metallic ball, slug, or bullet. The Earth handgun would be a good example of this. All of the species used slug throwers in their past before they developed better ways of killing opponents.

Spear: The Spear is basically any long shaft with a pointed head or blade on the end. It's usually a primitive weapon, but can be found in use on more advanced worlds as well, especially when individuals have expended the charges in their Plasma Spears.

Staff: A Staff is basically a walking stick that is used to bludgeon opponents. Although it is generally a primitive weapon, they can still often be found in more advanced settings. Some Cyber Wizards will use them (especially if their Cyber Wizard Staffs are destroyed) because it matches the ancient legends of what a wizard should be...legends that are strangely similar on most of the advanced worlds.

Sword: Any longish blade can be considered a sword. Whether it's a long sword, scimitar, cutlass, or whatever a species might have used in their distant past. Typically, the Sword will only be found on primitive worlds, but many human Bandits use them...or at least wear them because they think it goes well with their image. Most of the other species don't get the allusion. Human soldiers will also often use them as part of their dress uniforms...again, it's an allusion that most of the other species just don't get.

Armor

There are a number of types of armor in the game. Some work versus all kinds of attacks, while others work differently against different types of weapons.

The table below gives the types of armor and the price. It also gives the various defense bonuses that each armor has against the various types of weapons. If only one bonus is listed, then that's the number that is added to the character's defense rolls against all types of weapons. If there are several listings for the defense bonus, then the character adds the bonus that is appropriate for whatever type of weapon they are being attacked with.

Enhancing Armor: It is possible for a character to enhance the armor they have without buying new armor. An enhancement costs half the price of the original armor and it adds a +1 bonus to all of the protection factors that the armor would normally have. This can be done up to four times on any individual armor. It's important to note that Force Shields, Primitive Leather, and Shields can not be enhanced. These types of enhancement are usually not done with Body Armor since they are upgradeable, but if a player really wants to do this, the game master should let them.

Following the table are detailed descriptions of each form of armor. It's important to note that two types of armor can not be worn together. The only exceptions to this are the Ablative Shield, the Force Shield, and the Shield. These can be used with any other type of armor.

It's also important to keep in mind that with the exception of the Ablative Shield, the Force Shield, and the Shield, all armors are specifically designed for a single species and can not be worn by a character that is not of that species. For example, if a human Trader pulls Ablative Armor off of a Tulmath Diplomat after a fire fight, the human can not wear the armor because it is specifically designed for the Tulmath's anatomy.

Armor Name	Price	Defense Bonus
Ablative Armor	4000	+6 vs. laser +4 vs. plasma +2 vs. all other attack forms
Ablative Shield	1000	+3 vs. laser +2 vs. plasma +1 vs. all other attack forms
Armored EVA Suit	10000	+6 vs. primitive & flechette +2 vs. laser & plasma
Armored Under Water Suit	5000	+3 vs. primitive +2 vs. all others
Battle Vest	750	+2
Body Armor	20000/level	+4/level
Force Shield	40000	No bonus-absorbs 100 pts. of damage
Molded Armor	30000	+6
Primitive Leather	500	+1 vs. laser & plasma +2 vs. all other attack forms
Shield	100	+1 vs. primitive & flechette no bonus vs. laser & plasma

Ablative Armor: This armor is designed to absorb damage from laser and plasma weapons. It's very light and form fitting, but is typically worn over clothing. The armor adds a +6 defense bonus against laser weapons, and a +4 defense bonus against plasma weapons, but it also absorbs five points of damage caused by the same weapons as well. The damage absorbed is against each strike that hits the armor. Thus, if a character wearing Ablative Armor were hit by three different laser blasts in a single round, the Armor would absorb five points of damage from each of those hits. Ablative Armor does have some thickness to it, so it will offer a +2 defense bonus against other types of weapons as well.

Ablative Shield: These shields act very much like the armor of the same kind. They offer a +3 defense bonus against laser weapons, and a +2 defense bonus against plasma weapons, but they will also absorb three points of damage that is caused by those weapons. This absorption works just as the absorption of Ablative Armor. They also offer a +1 defense bonus against other kinds of weapons as well.

Armored EVA Suit: EVA can be dangerous, and the last thing anyone wants is for their suit to be damaged. An armored EVA suit is set up to offer a lot of protection against some weapons. Although it does well against striking and flechette weapons, it doesn't do quite as well against laser and plasma weapons. The Armored EVA Suit offers a +6 defense bonus against primitive and flechette weapons, but only a +2 bonus against laser and plasma weapons.

Armored Under Water Suit: This suit acts in the exact same way as an Under Water Suit, with the exception that it has ablative plating that helps to ward off attacks. Other than the defense bonuses, the Armored Under Water Suit has the same properties as an Under Water Suit.

Battle Vest: This simple garment wraps around the torso of the individual wearing it. The Battle Vest has limited reflective qualities and has the thickness of Primitive Leather, giving the character a +2 defense bonus against all attacks whenever they're wearing it.

Body Armor: There are various levels of Body Armor. The simplest offer slight protection against weapons, while the stronger versions can turn a character almost into a moving tank. Body Armor offers a +4 defense bonus for each level. Thus, the very basic 20,000 credit armor offers a +4 bonus against all weapons. Each additional upgrade adds a +4 bonus to the character's defense rolls, but it also costs an additional 20,000 credits. Another option with body armor is that an ablative layer can be applied to it. This upgrade costs 50,000 credits, and it doesn't add to the defense bonus of the armor, but it will allow the armor to absorb damage from laser and plasma weapons. In this way, it works just like Ablative Armor...absorbing five points of damage from every laser or plasma blast that hits the character.

If the character has enough money, both upgrades can be added to Body Armor.

Force Shield: The Force Shield is a very powerful defense. The Force shield creates an energy barrier around a character that will absorb all damage inflicted on a target, no matter what type of weapon, while still allowing the character to fire weapons, hold objects, or whatever else they need to do with their appendages.

The Force Shield is capable of absorbing up to 100 points in damage, and it's rechargeable. For every ten minutes that the shield is powered down, it regains one point of strength...until it reaches the 100 point maximum. However, if a Force Shield reaches 0 points, it will power down, and it can't be turned back on for a full three days, so it's a good idea to power the Force Shield down before it's forced to shut off.

Another side-effect of the Force Shield is that it tends to create a very tiny warp in

space-time around the character using it. Although the effect is basically unnoticeable, any character who keeps a Force Shield on continually for more than one hour must make a sanity check against three six-sided dice. Failure will cost them one sanity point, and the loss is permanent.

Molded Armor: Molded Armor is made of the same material as Body Armor, but it is specially designed to fit perfectly to the body of the creature that is wearing it. As a result of this special molding, another character can not use Molded Armor...even if they're the same species. Because it's almost like having a second skin, Molded Armor offers quite a bit more protection than standard Body Armor, but Molded Armor can not be upgraded.

Primitive Leather: This is a simple suit of hardened leather. It's light weight and easy to wear normal clothing over, which makes it difficult to detect, but it doesn't offer much protection. This type of armor will usually be found on primitive worlds, but some characters, especially Bandits will still use it.

Shield: A Shield is a very primitive defense. It's basically a piece of forged metal that is designed to repel blows. Although it does offer a +1 defense bonus against striking and flechette weapons, it offers no bonus against laser and plasma weapons. A game master could even decide that those types of weapons could easily destroy a Shield.

General Equipment

This section details the equipment and goods that don't fall into the previously listed categories. The table below lists the general equipment (and this is far from an exhaustive list) and the price of that equipment. Following the table are detailed descriptions of all of the equipment.

Some equipment, especially suits, are species specific and can only be used by characters of the species that the item is designed for. The ultimate decision on what is species specific lies with the game master, but in general, anything that is fitted to a creature's anatomy should be species specific.

Equipment	Price
Acetylene Torch	300
Air Tanks	200
Alien Environment Suit	5000
Ammo Belt	30
Arc Welder	300
Arrows	5 each
Artificial Intelligence System	50000
Binoculars	100
Blanket	10
Bolts	5 each
Breather	250
Breaching Charge	100
Bug	2000-20000
Bug Detector	1500-15000
Bullhorn	200
Camouflage	500 or 5000
Canteen	25
Carrying Container	10-200
Changeling Suit	50000
Chemsniffer	200
Chronometer	50
Communications Beacon	5000-100000
Communicator	2000-50000
Compass	25
Computer System	2000
Cutting Laser	500
Data Code breaker	5000
Data Encryption System	5000

Disguise Kit	500
Duct Tape	10
Electronic Lockpick	5000
Electronic Torch	50
Emergency Beacon	200 or 2000
Emergency Blanket	300
Entrenching Tool	500
EVA Suit	2000
Excavating Tools	2000
Filtration Mask	200
First Aid Kit	300
Flare	20
Flare Gun	200
Flechette Package	100
Generator	1000
Goggles	30
Grappling Equipment	300
Grav Lifter	4000
Handheld AI	20000
Holo Recorder	500
Holster	20
Homing Device	1000
ID Scanner	2000
Infra-Red Goggles	1000
Jamming Device	20000
Jetpack	2000
Laser Clip	200
Laser Drill	1000
Laser Microphone	1000
Laser Torch	1000
Laser Welder	500
Lock, Combination	10-100
Lock, Electronic	500-10000
Lock, Standard	5-50
Micro Recorder	5000
Mining Equipment	5000
Mirror	10
Nano Microphone	15000
Neural Activity Sensor	5000

Ore Sampler	700
Parachute	100
Perimeter Sensors	1000
Pestguard	2000
Plasma Cap	200
Powered Hoist	1000
Pre-fab Expanding Shelter	20000
Pressurized Tent	2000
Radiation Counter	300
Restraints	15
Rope	5
Satellite	100000 +
Scanner	500
Ship AI	250000
Ship Computer Upgrade	150000
Slugs	5/each
Snorkel & Mask	50
Solar Vaporator	25000
Spotlight	50
Surgical Kit	1000
Survival Gear	2000
Tent	50
Toolkit-Armor	1000
Toolkit-Computer	4000
Toolkit-Cybernetics	5000
Toolkit-Electronics	2000
Toolkit-Engines	5000
Toolkit-Hyperspace Engines	8000
Toolkit-Weaponry, Personal	3000
Toolkit-Weaponry, Ship	5000
Translator	500
Under Water Suit	1000
Video Recorder	200
Water Purification Kit	500
Water Survival Gear	2500

Acetylene Torch: An Acetylene Torch can be used to weld simple metals together. Because they need oxygen, they can not be used in the vacuum of space. If a game master wants, they can create a Torch that would be more appropriate for each species, but that would have similar properties.

Although it's not recommended, it is possible to use an Acetylene Torch as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -3 penalty on their attack rolls because the Torch is really not designed for combat. In addition, because of the nature of the Acetylene Torch, the character would use their Agility modifier instead of their Strength modifier. Should a character successfully hit a target, the wound is painful, but not necessarily life threatening. The Acetylene Torch would have a DF of .25, with all damage being rounded up.

Air Tanks: These tanks can be attached to an EVA suit, and Alien Environment Suit, or an Under Water suit. Each tank provides two hours of the creature's atmosphere, and they can easily be refilled.

Alien Environment Suit: If a character wants to move about in an environment that they can't normally survive in, they must take certain precautions. An Alien Environment Suit (AES) allows them to take a piece of their own atmosphere with them. Typically an AES contains about four hours of atmosphere. After that point, the character is dead. A character can survive for a number of seconds equal to 20 times their Endurance score...thus a character with a 9 Endurance can survive for 180 seconds without atmosphere.

Typically an AES is not armored, which can be very dangerous. A character taking damage while in an AES could die if the suit is ruptured, which most weapons will do. Any time a character takes damage while wearing an AES, they must roll two six-sided dice. If the roll is less than the amount of damage that they took, the suit has been ruptured. Every AES carries six patches, which can be placed over a leak (taking two rounds to do it), but any time the character's roll is more than ten less than the damage sustained, the suit is torn, and no amount of patching will fix it. The character must get out of the alien environment immediately, or they are dead.

Enhancements are available for an AES that will allow it to be armored, either by plating or ablative covering. Each of which will defend against some attacks, but not all. The plating enhancements will protect against striking and flechette weapons, while ablative enhancements will protect against laser and plasma weapons.

Plating an AES costs an additional 5000 credits. Once it's done, the suit grants a +4 defense bonus against all attacks except plasma and laser attacks.

Adding an ablative layering to an AES costs an additional 10000 credits. This covering grants a +2 bonus against laser and plasma attacks, and the layering will also absorb five points of damage from each strike that it takes.

It is possible to add both layerings to an AES.

Ammo Belt: If a character wants to carry extra ammo for whatever weapon they're using, they're going to need someplace to store that ammo. While a backpack might be one place a character can put extra ammo, it's not very accessible there, so an Ammo Belt will allow a character much quicker access to their ammo. The typical Ammo Belt can hold Laser Clips, Plasma Caps, and Flechette Packets. They're also typically designed to fit only one species.

Arc Welder: This is a tool that is used to weld metal together. Like the Acetylene Torch, it needs oxygen, so it can not be used in the vacuum of space.

Although it's not recommended, it is possible to use an Arc Welder as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -2 penalty on their attack rolls because the Arc Welder is really not designed for combat. In addition, because of the nature of the Arc Welder, the character would use their Agility modifier instead of their Strength modifier. Should a character successfully hit a target, the wound is painful, but not necessarily life threatening. The Arc Welder would have a DF of .5, with all damage being rounded up.

Arrows: These are wooden or metal shafts with a sharpened rock or piece of steel on the tip. They're used with bows.

Artificial Intelligence System: An Artificial Intelligence System (AI) is a very smart computer. In fact, an AI is actually self-aware. An AI will process computer programs faster than a typical computer, and it can also offer advice to a character. In addition, an AI is better able to protect itself against hacking and virus attacks.

More information about AIs is covered in **CHAPTER 9: CYBERSPACE**.

Binoculars: Binoculars allow characters to look at objects that are distant. Using them to view an object that is far away grants a character a +4 bonus on their Search and Spot skills. Even though they are called binoculars, each species has their own variety, which is designed to work with their visual sensors.

Blanket: This is a simple lined cloth object that helps keep sentients warm. It can help any time the temperature is cold for a character, but it does not offer significant protection against dangerous cold.

Bolts: Similar to Arrows, these are wooden or steel shafts with a sharpened piece of metal or stone on the tip. Bolts are less pliable and are designed for Crossbows.

Breaching Charge: These are specially designed explosives that can blow holes in the hull of a ship. As the explosives are completely self-contained, they will function in the vacuum of space. Each breaching charge will do five six-sided dice of damage to whatever hull they are attached to. They can also be used inside of a ship to breach a sealed hatchway or an airlock.

Breather: Sometimes a character will be able to survive the pressure and atmosphere of an alien environment, but they still won't be able to breathe the atmosphere. Instead of using an Alien Environment Suit, the character would just need a simple Breather. These units have a mask that goes over whatever orifice the character uses

to breathe, and they have a small tank that straps to the side of the character. They typically have two hours of atmosphere for the character to breathe. If the character runs out of atmosphere, they can survive for a number of seconds equal to 20 times their Endurance score.

Bug: Any kind of listening device is often called a Bug. The bug is a very small device that also comes with a receiver that the individual planting the Bug takes with them so they can hear what the Bug hears. The more expensive a Bug is, the harder it is to find. More expensive Bugs also transmit more clearly than the cheaper varieties. A Bug allows a character to make a Listen check in an area they normally wouldn't be able to hear in. For every 2000 credits that are spent, the bug has a transmitting distance of 10 KM. Also, for every 2000 credits the character has spent on a Bug, they gain a +1 to their Listen check. In addition, for every 2000 credits the character has spent, anyone searching for the Bug suffers a -1 penalty to their Search skill.

Bug Detector: This is a device that's used to search out Bugs. If a character is using a Bug Detector, they roll a Search check (more expensive Bug Detectors will allow a Search bonus). The resulting roll is compared to a Hide check that is made by the creature that placed the Bug in the first place. For every 1500 credits beyond the initial 1500 that the character spends on the Bug Detector, they gain a +1 on their Search check.

Bullhorn: This is a simple voice amplification device. The device can be used to amplify the voice of a character up to ten times what their normal voice is capable of.

Camouflage: Camouflage comes in two varieties, personal and area. Personal Camouflage costs 500 credits and it can be used by an individual to attempt to blend in with their surroundings. When used, the character receives a +10 bonus to their hide skill.

Area Camouflage costs 5000 credits for every 100 cubic meters. Much like Personal Camouflage, this is designed to help blend buildings or other objects into their surroundings. Anyone trying to search for an area that is covered with Area Camouflage receives a -5 penalty to their Search and Spot skills.

Canteen: This is a very simple water carrying device. It's normally made of a hard substance that makes it difficult to break.

Carrying Container: These come in a variety of sizes, everything from small pouches up to large duffel bags. The containers will often have covert sections placed in them that allow a character to hide items. The larger a Carrying Container, the more expensive. Also, the more elaborate any hiding places are, the more expensive the Carrying Container will be. Any hiding places drive up the price of the Carrying Container by an additional 10-100 credits, depending on how elaborate they are.

Generally, the size of a Carrying Container is one cubic centimeter per credit. Hiding places and elaborate designs will alter the final size of any Carrying Container.

Changeling Suit: This is a skintight suit that allows a character to take on the appearance of anyone they have touched. Changeling Suits, however, use a lot of energy, and can sometimes be detected by scanners. If a character has good reason to think someone has a Changeling Suit, they should be given a +2 bonus when using a Scanner. The energy of the Changeling Suit can also be detrimental to a character's Sanity. Anyone wearing a Changeling Suit continuously for 8 hours must make a Sanity check against 1 six sided die. 16 hours requires a Sanity check against 2 six sided dice, and wearing a Changeling Suit continuously for a full day requires a Sanity check against 3 six sided dice. If there's anyone foolish enough to wear the suit for even longer, an extra six sided die should be added for every 8 hours of exposure. A failed Sanity check results in the immediate, and permanent, loss of 1 point of Sanity.

Chemsniffer: This device is used to quickly evaluate the chemical composition of anything it's exposed to. It can be used to analyze atmosphere, fluids, or anything else the characters might need to analyze.

Chronometer: This is a simple device for telling time. Most Chronometers can be set to display three different times. What times those are is up to the characters. In addition, a Chronometer can access a local computer system and automatically adjust itself to whatever the time is at the characters present location. They are also able to adjust themselves based on planet's rotation, and whatever other factors go into a local areas way of telling time. A Chronometer can not do this if the planet does not have a computer system for the Chronometer to access.

Communications Beacon: A Communications Beacon is a device that will relay communications signals from one communicator to another. In general, any inhabited system will already have these in place, but if characters are exploring in uncharted areas of the galaxy, they may need to set up their own Communications Beacons. There are four varieties of Communications Beacons. There are planetary, system, interstellar, and hyperspace. The range and price for each is as follows:

Planetary beacons can relay messages to planetary orbit, and to other parts of a planet that are not beyond the horizon. The price for these items is 5000 credits.

System beacons can relay messages anywhere within a solar system. A system beacon can act as a planetary beacon as well. The price for these items is 20000 credits.

Interstellar beacons can relay messages from star system to star system up to a range of 20 light years. However, all of these messages would be relayed at the speed of light, so a star system 20 light years distant would receive the message 20 years after it was sent. An interstellar beacon can act as a system beacon and a planetary beacon. The price for these items is 50000 credits.

Hyperspace beacons can relay messages through hyperspace to star systems that are up to 20 light years away. The messages take one hour for every light year that they must travel, but this is much faster than the speed of light. A hyperspace beacon can not act as an interstellar, a system, or a planetary beacon. The price for these items is 100000 credits.

Communicator: A Communicator is a small device that can be used to communicate between individuals or from individuals to ships. Generally, these items are the size of a 21st century cellphone or smaller. There are a variety of types of communicators, but almost all of them are limited to a range of 10 kilometers unless a communications beacon is in place. If there is a beacon in place, then the range of the communicator will change as follows:

Planetary communicators are able to communicate with anyone else on the planet, or anyone in low planetary orbit, provided a beacon is in place. The price for a planetary communicator is 2000 credits.

System-wide communicators are able to communicate with anyone within the same star system as the user, provided a beacon is in place. The price for a system-wide communicator is 10000 credits.

Interstellar communicators are able to communicate with anyone with 20 light years, provided a beacon is in place, but speed of light limits are still in place. The price for an interstellar communicator is 25000 credits.

Hyperspace communicators are able to communicate with anyone within 20 light years provided a hyperspace communications beacon is in place. The time delay will still be present however, and hyperspace communicators cost 50000 credits.

Ship communicators are the one communicator that does not rely on a beacon. They're able to communicate with the ship they are tuned to provided that ship is within 5 AU of the individual using the communicator. The price for a ship communicator is 5000 credits.

Compass: A Compass allows a character to determine direction when on a planet or moon. There is one important limitation to the compass, and that is that it only works in a magnetic field...so if the planet or moon that a character is on does not have a magnetic field, the Compass is useless.

Computer System: This is a small handheld device that allows a character to run programs, interact with other Computer Systems, interact with star ships, or just about anything else a character might need to do.

A more detailed description is given in **CHAPTER 9: CYBERSPACE**.

Cutting Laser: This is a handheld tool with a very narrow laser beam that can be used to cut through objects. In general, a Cutting Laser can slice 10 inches deep and 10 inches across for every minute of use when they're used on normal steel. Harder metals will of course take longer, while soft metals will cut much more easily.

Although it's not recommended, it is possible to use a Cutting Laser as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -3 penalty on their attack rolls because the Cutting Laser is really not designed for combat, having such a fine cutting "edge". In addition, because of the nature of the Cutting Laser, the character would use their Agility modifier instead of their Strength modifier. Should a character successfully hit a target, the wound is painful, but not necessarily life threatening. The Cutting Laser would have a DF of

.25, with all damage being rounded up.

Data Code breaker: Many times characters will come across codes that they will need to try to break. A Data Code breaker can be incorporated into a Computer System or an AI. A Data Code breaker gives a character a +5 bonus on their Decipher skill.

Data Encryption System: Just as characters might need to break a code, they will often need to encrypt data to send it from one place to another. The Data Encryption System is incorporated into a Computer System or an AI. Using one of these units gives characters a +5 bonus on their Encryption skill.

Disguise Kit: This kit is filled with make-up, gels, and substances that will allow a creature to greatly alter their appearance. Although the Disguise Kit will not allow a creature to appear as if they are from another species, they can change their gender within their own species...assuming their species has genders. The Disguise Kit will allow a creature to change the color and texture of their skin, the overall structure of their face and body, their hair and eye color, and just about anything else that might be species specific. Using this kit gives a character a +6 bonus on their disguise skill. It's also important to note that a Melanathee using a Disguise Kit will be able to blend in with whatever species they are currently disguised as.

The kit is equipped with enough material for three full body changes. If the character chooses to only alter their face, they can do this 10 times.

Duct Tape: It's one of those strange facts of nature that no one can really explain, but for some reason, every sentient species has invented Duct Tape at some point in their evolution. Duct Tape can be used for just about anything other than sealing hull breaches.

Electronic Lockpick: This device can be attached to an electronic lock, and with it the character can attempt to open the lock. Normally, when a character attempts to pick an electronic lock, they would roll two six-sided dice and add their Intelligence modifier. If that number beats the lock's CS, the character has succeeded in picking the lock. The Electronic Lockpick gives the character a +6 bonus on those checks.

Electronic Torch: This is a fancy name for a flashlight. They can run on a variety of power sources, depending on how the game master sets up the game. The lifespan of an Electronic Torch is typically about 40 hours. Most Electronic Torches can easily be recharged by plugging them into a power slot on just about any spacecraft.

Emergency Beacon: There are two varieties of the Emergency Beacon. The first is the personal beacon, which an individual in distress can use to announce their situation. This beacon has a computer range of 20 kilometers and a visual range of five kilometers. This means that any computer system within 20 kilometers will be able to pick up the signal, and any individual within five kilometers will be able to see the signal. The price for this beacon is 200 credits.

The second variety of Emergency Beacon is the ship's beacon. This can be deployed by a ship in distress. The range for this beacon is 20 AU. The price for this beacon is 2000 credits.

Emergency Blanket: This simple blanket will keep an individual warm up to a temperature of -20 C.

Entrenching Tool: This tool is approximately one meter long and it weighs 30 KG. It can be used to quickly dig through ground to create a trench. It can move 20 KG³ of dirt and rock every minute.

EVA Suit: Any time a character is going to be in space, they need an EVA Suit. None of the major species are capable of surviving in the near vacuum of space, so they must use an EVA Suit. All suits are typically equipped with a collection of tools, and each usually has an atmosphere supply of about six hours...although more atmosphere can be placed in extra tanks, although this will reduce a character's Agility.

EVA Suits can be upgraded with weapons, armor, and anything else a character might think of adding, but these are expensive. Outfitting an EVA suit with these kinds of things should cost three times as much as just buying the items individually.

Excavating Tools: These are fully automated tools that can be used to do all varieties of excavation. When in use, the tools can excavate 100 KG³ of material every minute. The tools are fully programmable, so they can dig out whatever the characters might want them to.

Filtration Mask: This is a simple mask designed to help keep out contaminants. Characters wearing a Filtration Mask that are exposed to airborne poisons, viruses, or anything else that might harm them by inhaling, should receive a +2 bonus to their Endurance when making an Endurance check against these pathogens.

First Aid Kit: This kit contains adhesives, bandages, medicines, and many other 22nd century healing tools. In order to use a First Aid kit, a character must have the Medicine skill. More information about how to use the kit is listed with the Medicine skill.

Flare: These are the explosive armaments used in a Flare Gun.

Flare Gun: This is a large-mouthed gun designed to fire exploding flares into the air. It's usually used by individuals in distress. The explosion can usually be seen by individuals that are up to 10 kilometers away. The Flare Gun can be used as a weapon, but it's not recommended, and any character trying to use a flare gun suffers -2 to their attack roll. Short range would be 20 meters, medium range would be 40 meters, long range would be 60 meters, and extremely long range would be 80 meters. If the Flare Gun is used as a weapon, it has a DF of 2.

Flechette Package: These are designed to be inserted in flechette pistols and rifles. Each package holds 20 shots. Each package only weighs a couple of kilograms, so it's possible to carry several packages at one time.

Generator: This device can provide power for up to four energy using devices. A Generator can provide up to 12 hours of energy. Game masters can decide if a Generator will work on devices that have been invented by different species.

Goggles: These are designed to cover the eyes (or other visual sensors) of an individual. They will help the character see better if they're exposed to dust, snow, or something else that might hinder their vision.

Grappling Equipment: This kit features 30 meters of rope, grappling hooks, and an automatic winch designed to hold up to 200 KG. Using the equipment without the winch gives a character a +5 on their climb skill checks. If the winch is used, then the character receives a +8 bonus on their climb skill checks.

Grav Lifter: This massive device can lift and carry up to 20000 KG. It can lift the objects up to a height of five meters, or it can move them horizontally across a surface. Although a Grav Lifter is capable of carrying a lot of weight, it can't carry it very fast. A Grav Lifter moves at a rate of 10 meters/minute.

Handheld AI: Much like the computer system, this is a small device...about the size of a modern cell phone. The AI is just a more sophisticated and self-aware computer system.

A more detailed description is given in **CHAPTER 9: CYBERSPACE**.

Holo Recorder: This device will record, in three-dimensions, anything that it's pointed at while it's on. It can store up to 6 hours of material.

Holster: A character needs someplace to put their gun, and this is it. Each holster is specifically designed to fit only one type of weapon, and it's important to remember that weapon design differs for each species, so a holster might be able to hold a Human Laser Pistol, but not a Tulmath Laser Pistol.

Homing Device: These very small devices can be placed on a ship, and they will allow someone to track that ship through normal space, and even through hyperspace. Unless some sort of cloaking is used by the ship being tracked, the Homing Device is foolproof in evading detection. If a traced ship does cloak, a character must make a Search check against the pilot's Stealth skill.

If a Homing Device is placed on a ship, a careful search of that ship might turn it up, provided the character makes a successful Search check against a CS that is typically set by the game master. The CS should be determined by how much time the character had to place the Homing Device, where it was placed, and how suspicious the crew really is.

ID Scanner: This device is able to scan the DNA (or the alien equivalent) of any creature and obtain an ID. The game master should set a CS for the scan based on how well known the creature is. A famous person, and certainly an interstellar criminal would be easy to trace based on their DNA, but a low level Explorer might not be as easy to identify. Those factors should go into determining what the ID CS should be. The character then rolls three six sided dice to determine if the ID Scanner can read who they are.

Infra-red Goggles: The Goggles allow a character to see into the Infra-red part of the spectrum. Anyone using these is basically able to see in the dark as they would in full daylight, although sudden exposure to bright light will cause temporary blindness.

Jamming Device: Jamming Devices come in two varieties. There is the Personal Jammer, which will make it difficult for people to eavesdrop on conversations, and there is the Ship Jammer, which can jam communications and radar of a pursuing ship.

Use of a Personal Jammer lowers an opponent's listen check by 10, while use of a Ship Jammer lowers an opponent's Search and Spot skills by 10.

Jetpack: A jetpack gives a character the ability to fly. The Jetpack uses a fuel, typically hydrogen (although game masters should feel free to adapt this to their campaign), and the fuel supply will usually last four hours. During this time, the character can climb to a height of 100 meters, and they can travel at 30 KPH. The Jetpack is not very maneuverable, however, and should the character come under attack while wearing a Jetpack, they would suffer a -2 defense penalty.

Laser Clip: A Laser Clip is used in any kind of laser weapon. Each clip holds 50 charges, and the clips can not be recharged, although they can easily be changed out. The change takes one combat round, during which time, the character can not do anything else.

Laser Drill: This drill is one meter long and weighs 20 KG. It's capable of drilling through solid rock at the rate of one meter/minute. A Laser Drill will typically run for four hours, and then it needs to be recharged for an equal amount of time.

Although it's not recommended, it is possible to use a Laser Drill as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -3 penalty on their attack rolls to any target that is beneath the drill, and a -6 penalty on their attack rolls if they're trying to pick up the Laser Drill and yield it like a normal weapon, because the Laser Drill is really not designed for combat. In addition, because of the nature of the Laser Drill, the character would use the lowest of their Strength or Agility modifiers when trying to use it as a weapon. Should a character successfully hit a target, the wound is painful, and can be life threatening. The Laser Drill would have a DF of 1.

Laser Microphone: This is a unidirectional microphone that can be pointed at a person or location that the character is hoping to listen in on. The range for the Laser Microphone is one kilometer, but if the microphone is pointed correctly, the character will be able to hear what is going on as if they were right next to the event.

Laser Torch: This device is roughly a foot long, but will fit easily into the grasping appendage of whatever species it's designed for. The Laser Torch has two settings. It can be set to cut through objects, and it can also be used to weld. Since the Laser Torch does not require oxygen, it can be used in the vacuum of space. If it's used to cut through steel, it will cut through at a rate twice as high as a Cutting Laser.

Although it's not recommended, it is possible to use a Laser Torch as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -1 penalty on their attack rolls because the Torch is really not designed for combat. In addition, because of the nature of the Laser Torch, the

character would use their Agility modifier instead of their Strength modifier. Should a character successfully hit a target, the wound can be very painful, and can be life threatening. The Laser Torch would have a DF of 1.

Laser Welder: This handheld welder is ideal for welding in the vacuum of space because it does not require oxygen.

Although it's not recommended, it is possible to use a Laser Welder as a weapon, should the need ever arise. If a character chooses to do this, it's important to note that they suffer a -2 penalty on their attack rolls because the Welder is really not designed for combat. In addition, because of the nature of the Laser Welder, the character would use their Agility modifier instead of their Strength modifier. Should a character successfully hit a target, the wound is painful, but not necessarily life threatening. The Laser Welder would have a DF of .5, with all damage being rounded up.

Lock, Combination: Combination Locks come in a variety of sizes and complexities. The size and complexity determines the price of the lock. The more complex a lock is, the harder it is to pick. If a character wants to attempt a lock pick, they roll two six-sided dice, which are modified by the character's intelligence. This is then compared to the CS of the lock. Combination Locks typically have a CS that runs from 5-15, although it is possible to have more complex locks.

Lock, Electronic: Electronic locks come in a variety of forms. They can be simple number keypads, palm scanners, retinal scanners, and even DNA scanners. The complexity of the lock determines just how hard it is to pick. If a character wants to pick an Electronic Lock, they would do it in the same way that they would attempt to pick a Combination Lock. Typically, Electronic Locks have a CS that runs from 10-25, although it is possible to have more complex locks.

The complexity and style of lock is what determines the price of the Electronic Lock. In general, the more expensive a lock is, the higher the CS will be for picking that lock.

Lock, Standard: These are the more standard padlocks, and other likes of this kind. Although they can be picked, it is usually easier to just break these locks off. The health score of a lock is equal to one-half of its cost, with all fractions rounded up.

Micro Recorder: These tiny devices are almost invisible, and they're able to record any information they're exposed to. When a character places a Micro Recorder, they make a Hide check. If an opponent enters the room, they're allowed to make a Spot check to determine if they see the Recorder, but because of the size of the recorder, the opponent receives a -5 penalty to their Spot check. If someone thinks there's a reason they might need to look for a Recorder, then they can make a Search check, but again because of the size of the Recorder, they suffer a -3 penalty to their check. The Micro Recorder can store up to six hours of information. A major drawback to the Micro Recorder is that the character must retrieve the device in order to get the information that has been stored on it.

Mining Equipment: There are times when a character might need to do some mining. They might need to get some precious ore out of an asteroid, or they might need to recover an ancient artifact. If they're going to do that, they're going to need Mining Equipment. If characters spend more on their Mining Equipment, then they get a bonus on all of their Mining skill checks. For every additional 5000 credits spent on the equipment, they receive a +1 bonus.

Mirror: This is a reflective object.

Nano Microphone: This is a microscopic microphone that can be planted anywhere a character desires. The only way it can be detected is if an opponent actually can see the character while they're planting it. Even then, the opponent must make a successful Spot check in order to ascertain the character's true actions. The microphone comes with a small receiver that fits into the character's ear (or auditory organ.) They're able to hear whatever the Nano Microphone is hearing up to a distance of five kilometers.

Neural Activity Sensor: This device will allow a character to sense all neural activity within a five kilometer radius centered on the sensor. It will allow them to determine the number of individuals and what kinds of individuals are within the radius. The Neural Activity Sensor can be set so that it doesn't register the activity of "lesser" creatures, but instead only detects the neural activity of sentient creatures.

Ore Sampler: This is a handheld device that has to be put in direct contact with a rock. When this is done, the Ore Sampler will give a complete breakdown of the chemical composition of the ore. When plugged into a Computer System or an AI, it can also give the character an estimate of how much they could sell the ore for in the nearest systems.

Parachute: This is a canvas device that's used to slow descent...usually after jumping out of something, or off of something.

Perimeter Sensors: This sensor system is designed so that it can be laid out around a campsite or building. It creates an invisible laser stream from one sensor to the next. If any of these streams are broken, alarms will immediately go off, and the CPU of the system will be able to notify the characters as to where the break is.

Pestguard: Pestguard is an energy field that helps to repel insects (or their planetary equivalents.) It is up to the game master to decide whether Pestguard is a general device or if each individual planet needs their own specific form of Pestguard.

Plasma Cap: A Plasma Cap contains the plasma charges for any of the plasma weapons. Each clip holds 30 charges. When a character charges a plasma weapon, they slip the Cap on the back of the weapon, and this immediately starts to charge the weapon. During the first round of charging, the plasma weapon can not be fired, as the gasses are super-heating in the chamber. During this time, the character can not take any action. The weapon only stays charged for ten rounds unless it's fired, and if the weapon is charged five times without being fired, it permanently uses up one charge.

The advantage to using a plasma weapon, as opposed to a flechette or laser weapon is that they're less likely to do damage to hulls and bulkheads in ships and space stations.

Powered Hoist: This is a massive winch with 100 meters of coiled steel. The Powered Hoist can lift up to 5000 KG.

Pre-fab Expanding Shelter: When purchased the Pre-fab Expanding Shelter looks like a 20 KG square that measures one meter on each side. When deployed, it creates a three roomed building that measures ten meters by ten meters. The Pre-fab Expanding Shelter takes five minutes to form, and it's important to note that the structure is not air tight. It's basically a very nice and easy to carry tent.

Pressurized Tent: In most ways, this item is identical to the Tent. The main exception is that this Tent features an airlock which will allow the interior to be pressurized and to hold whatever atmosphere the characters prefer.

Radiation Counter: This device can measure the levels of radiation in an area.

Restraints: These are simple devices like handcuffs, although each species will have their own variety, and it's important that players and game masters realize that restraints that are designed for one species will probably not work for another.

Rope: Rope can be made from a variety of substances. It's usually purchased in a 10 meter coil, although larger and smaller coils are available. The game master should adjust the price accordingly based on what the character is buying.

Satellite: Satellites are devices that are placed in orbit around planets. There are a wide variety of satellites that would be available for characters. There are weather, communications, radar, spy, and just about anything else a character can think of. In general, a communications satellite is the simplest form of satellite, and these will cost 100000 credits. The more complicated a satellite is, the more expensive it should be, with spy satellites running at least 1000000 credits.

Scanner: This is a small handheld device that is capable of scanning just about anything a character might want to scan. Using a Scanner grants a character a +3 bonus on any of the following skills: Appraise, Hide, Interrogation, Linguistics, Listen, Mechanics, Search, Sense Motive, and Survival.

Ship Computer Upgrade: When this is installed into an onboard computer system, the computer immediately receives a +1 to each of its attributes. The computer's attack and defense dice, as well as its health score need to be immediately modified.

More information on attributes, attack and defense dice, and computer health can be found in **CHAPTER 9: CYBERSPACE**.

Ship AI: Although a computer system on a ship is a great asset, switching over to an AI can do wonders for a ship.

A more detailed description of Ais is given in **CHAPTER 9: CYBERSPACE**.

Slugs: These are ammo for slug throwers. Most of the sentient species have used slug throwers of some kind in their past, and some will still use them today.

Snorkel & Mask: If a character is going to be just below the surface of a body of water, then there won't always be a need for under water gear. Instead, the character can opt for a Snorkel & Mask.

Solar Vaporator: The Solar Vaporator uses solar energy to condense water out of the atmosphere of a planet. The water can then be purified into drinking water. There are two important limitations to the Solar Vaporator. First of all, they can only be used when the planet's star is "up," and secondly, they are only useful if there is actually water vapor in the planet's atmosphere.

Spotlight: This is a very powerful light source that will illuminate a 10 meter radius area. The Spotlight can be moved so that it can scan a large area.

Surgical Kit: A Surgical Kit will allow anyone with the Medicine skill to perform surgeries of a basic nature. Complex surgeries require an actual operating room, or at least an operating bot.

Survival Gear: There are a number of types of Survival Gear. Any environment a game master can envision (jungle, ice, desert, etc.) has a specific Survival Gear. This allows a character to better survive in that environment, but the environment has to be something that a character might survive in without the gear. For example, it has to have an atmospheric pressure that the character can handle, and it also has to have an atmosphere that is breathable by the character (although a Breather can get past this limitation.) In game terms, any character wearing a specific Survival Gear gains a +10 bonus to their Survival skill.

There is also General Survival Gear that is much more expensive. It allows a character to adapt to any environment they might find themselves in...assuming they can breathe the air (unless they use a breather), and there is enough atmospheric pressure for them to survive in. This Survival Gear costs 200,000 credits.

Tent: This is a collapsible cloth structure that usually measures roughly five cubic meters when it has been assembled, which normally takes about ten minutes. The Tent provides shelter from the elements, but it is not air-tight, and it will not provide protection against environments that the characters are not capable of surviving in.

Toolkits: There are a wide variety of Toolkits that are available, and the ones listed in this supplement are only given as an example. Game Masters should feel free to create Toolkits for whatever they feel is necessary.

In simple terms, a Toolkit is what allows characters to fix objects. Without a Toolkit, repairs are not possible.

Translator: This allows a character to instantaneously translate any spoken language they hear...provided that the Translator has been exposed to the language, or has at least had the language uploaded into its database. When a Translator is purchased, it will contain all of the primary languages of the major species.

Under Water Suit: This suit allows a character to function underwater. Each suit is normally equipped with one Air Tank, which allows the character to function for two hours underwater, or under a fluid with similar properties as water. The suit also

comes with a skin that helps to keep the individual warm, flippers to help them swim, and a mask to protect their face. Although an Under Water Suit is not very thick, it will offer a +1 defense bonus against primitive weapons.

Video Recorder: This device will record, in two-dimensions, anything that it's pointed at while it's on. It can store up to 12 hours of material.

Water Purification Kit: The Water Purification Kit can be used to turn any non-drinkable water (no matter how contaminated) into potable water. The Kit can be used to purify one liter of water every hour.

Water Survival Gear: This gear includes an Under Water Suit, depth sensors that are attached to the suit, buoyancy weights, an underwater light with a range of 100 meters, and echolocation gear with a range of 500 meters.

Bots

There are a variety of robots that populate the Epheris universe. The original outline of the initial rulebook had an entire section devoted to robots, but because of space constraints, it had to be dropped. A future supplement will delve deeper into the idea of bots, but this section will give a brief look at what could be possible.

It's important to keep in mind that this is far from a complete list, and game masters and players should feel free to develop other kinds of bots, using these bots as a template. For a more interesting game, a game master might consider making bots illegal in some systems.

Type	Price	Bot Intelligence
Attack Bot	100000	5
Security Bot	75000	6
Surveillance Drone	50000	4
Survey Bot	50000	5
Waldo Bot	25000	2

Attack Bot: This robot is specially designed for combat. The standard Attack Bot is armed with either a laser or plasma pistol and has four attack dice and four defense dice. Due to their limited Agility, an Attack Bot suffers a -1 penalty to their attack and defense rolls. An Attack Bot is a very tough opponent however, and rolls 12 six-sided dice to determine its health. To this number, it adds 4.

An Attack Bot can see slightly into the infrared and has extraordinary hearing.

Security Bot: This robot is designed to protect individuals or property. Although not as capable of a fighter as the Attack Bot, the Security Bot can certainly hold its own in a battle. The standard Security Bot is armed with either a laser or a plasma pistol and has three attack dice and three defense dice. Due to their limited Agility, a Security Bot suffers a -1 penalty to their attack and defense rolls. A Security Bot is a tough opponent, and rolls nine six-sided dice to determine their health. To this number, they add 3.

A Security Bot can see into the infrared and the ultraviolet, they also have low-light vision, and can see in the dark as well as a human can see in low-light. They can hear in a range from 1 hertz to 10,000 hertz. Most Security Bots are also equipped to be able to fly.

Surveillance Drone: These bots are designed to watch an individual or a location, although locations are better for them, as they are not designed to be very intelligent. The Surveillance Drone has limited infrared vision, and has hearing equivalent to an Earth dog. They also have limited stealth technology, meaning that anyone trying to use spot or search to find them, suffers a -4 penalty.

A Surveillance Drone is not meant to fight, and if pushed into combat, they are

equipped with what's the equivalent of a flechette pistol. They have two attack dice and three defense dice, but due to their limited agility, they suffer a -1 penalty to their attack and defense rolls. For health, a Surveillance Drone rolls six six-sided dice, and to this total, they add 2.

Survey Bot: These bots are designed to survey unexplored planets, or unexplored regions of known planets. They are able to function underwater just as well as they do on land. They have limited access to the infrared portion of the spectrum. They're also equipped with sensors that allow them to perform a variety of scientific experiments completely on their own. These include, but are not limited to, geological, meteorological, and archaeological experiments.

Survey Bots are not really designed for combat, but they are hearty fighters if they need to be. They are armed with either a laser or a plasma pistol. They have three attack dice and three defense dice. Unlike most bots, Survey Bots tend to be very agile, and they actually receive a +1 bonus on their attack and defense rolls. For health, a Survey Bot rolls nine six-sided dice, and to this total, they add 6.

Waldo Bot: These are perhaps one of the most primitive forms of bots. They have very little independent thought, and in fact, they have to be controlled by an individual from a different location. The individual plugs themselves into a virtual reality environment and then commands the Waldo Bot. These bots are limited to just being able to look around. They can move objects, and convey sensory impressions to the Waldo Operator, but there's not much else they can do.

It's best for a Waldo Bot to avoid combat, but if they must, they only have two attack dice and two defense dice. In addition, due to their limited agility, they suffer a -2 penalty to their attack and defense rolls. The Waldo Bot is typically armed with the equivalent of a flechette pistol. For health, a Waldo Robot rolls three six-sided dice, and to this total, they add 1.

Ships

There are a variety of ships that a character might encounter during a game. Many of these the character can never hope to afford, but they're listed below nevertheless. Mostly because the game master might need the data if the characters come up against one of them in battle...or if they might be serving on one of them during the course of a mission.

The tables below list the types of ships, as well as their cost, whatever shields the ship uses, what weapons it's armed with, the ship's attack dice, its defense dice, the typical health of a ship, and the ship's jump capability. The table lists what would be a typical Class 1 ship. Upgrades are possible for all ships, and this information is given in the detailed descriptions of the ships following the tables...as well as in the Ship Augmentation section. The price for an overall upgrade is 50% of the initial cost of the ship. Thus an upgrade of a Mining Craft would cost 75,000 credits.

A quick glance at the tables below will show that all ships have sensors. The range of the ship's sensors is given in Astronomical Units (the average distance between the Sun and the Earth or 1.6×10^8 KM.) When a character uses the ship's sensors, they make a Search skill check against whatever CS the game master has established. If the ship the character is not trying to do anything to hide itself, then the game master could rule that the Search skill is unnecessary. Ships trying to hide or stealth themselves would require a Skill check against the other pilot's skill check. Other factors can also come into play when using sensors. The search check will be harder in an asteroid belt, magnetic field, nebula, or anything else that might mask the signature of whatever it is the character is trying to find.

Type	Cost	Shields	Weapons
Battle Cruiser	20,000,000	Ablative or Force Shielding	4 cannons (mix of laser and plasma) and 2 missile launchers
Cargo Ship	10,000,000	Ablative or Force Shielding	2 weapons of choice
Carrier	30,000,000	Ablative or Force Shielding	2 cannons (laser or plasma) and 1 missile launcher
Explorer Ship	50,000,000	Ablative Hull or Force Shielding	2 cannons (laser or plasma) and 2 missile launchers
Fighter	100,000	None	2 cannons (laser or plasma) or 2 missile launchers
Luxury Yacht	5,000,000	Force Shielding	2 weapons-a combination of cannons and missile launchers
Mining Craft	150,000	Force Shielding	1 weapon of choice
Passenger Ship	2,000,000	Ablative Hull or Force Shielding	2 weapons of choice
Personal Cruiser	175,000	Ablative Hull or Force Shielding	2 weapons of choice
Shuttle Craft	400,000	Force Shield	1 weapon of choice
Trader Vessel	200,000	Ablative Hull or Force Shielding	3 weapons of choice
Warship	10,000,000	Ablative or Force Shielding	2 cannons (mix of laser and plasma) and 1 missile launcher

Type	Attack Dice	Defense Dice
Battle Cruiser	2 with a +3 attack bonus	2 with a +3 defense bonus
Cargo Ship	1	3
Carrier	1	3
Explorer Ship	2	2
Fighter	2	2
Luxury Yacht	1	2
Mining Craft	1	1 with a +1 defense bonus
Passenger Ship	1	3
Personal Cruiser	1	2
Shuttle Craft	1	2
Trader Vessel	2	3
Warship	2	2

Type	Sensors	Health	Jump Capability
Battle Cruiser	5 AU	500	10 ly
Cargo Ship	4 AU	200	10 ly
Carrier	5 AU	400	10 ly
Explorer Ship	10 AU	300	30 ly
Fighter	1 AU	50	n/a
Luxury Yacht	3 AU	100	5 ly
Mining Craft	2 AU	75	3 ly
Passenger Ship	3 AU	150	10 ly
Personal Cruiser	3 AU	75	3 ly
Shuttle Craft	5 AU	30	n/a
Trader Vessel	5 AU	100	5 ly
Warship	5 AU	300	10 ly

SHIP MOVEMENT & MANEUVERABILITY

The table below lists the speed that a ship can travel and how maneuverable they are. The speeds are listed in kilometers per hour and the maneuverability is scored from 2-12 (it's much like the Agility of a character.) When ships are trying to chase or flee from each other, their maneuverability is used to determine the success of those maneuvers. Two six-sided dice are rolled by each ship. To this number is added the bonus or penalty of the ship's maneuverability (see the attribute score modifiers to get this number.) This will give the ships' raw numbers. After this, the game master looks at the speed of each ship (obviously a faster ship will have a better

chance of escaping from or catching a slower ship.) The speed of the slower ship is subtracted from the speed of the faster ship. For every 50,000 km/hr. difference, the game master grants the faster ship a +1 bonus.

As an example:

David is playing a Culthan Diplomat who is piloting a fighter craft that is trying to flee from a Tulmath battle cruiser. David rolls two six-sided dice with a result of 9. The game master rolls a 5 for the battle cruiser. The fighter has great maneuverability (12), so David's character gets a +4 bonus...making his roll a 13. The battle cruiser is not very maneuverable (6), so the Tulmath gets no bonus...leaving their roll a 5. The fighter has a speed of 400,000, while the battle cruiser has a speed of 250,000. Using these numbers, the game master does the following math: $400,000 - 250,000 = 150,000$. This gives the fighter another +3 bonus...making David's final roll a 16. Obviously the Diplomat is going to make it through this chase scenario.

How many checks are required to catch an enemy or escape from an enemy is up to the game master. It could be ruled that if there is a huge difference in the two ships' final rolls, then escape or capture is automatic.

For every **three** upgrades that a ship goes through, it will increase its speed by 25% and its maneuverability will go up 1 point.

Type of Ship	Speed	Maneuverability
Battle Cruiser	250,000	6
Cargo Ship	200,000	4
Carrier	200,000	4
Explorer Ship	250,000	3
Fighter	400,000	12
Luxury Yacht	300,000	8
Mining Craft	100,000	4
Passenger Ship	300,000	9
Personal Cruiser	300,000	9
Shuttle Craft	300,000	11
Trader Vessel	300,000	10
Warship	300,000	8

Battle Cruiser: This is a large warship. A class 1 Battle Cruiser is typically crewed by 20 and can carry up to ten passengers (usually ground troops.) For each class upgrade the ship goes through, the amount is increased by a crew of 10 and by 5 passengers. A class 1 Battle Cruiser usually has a combination of 4 cannons (laser or plasma) and 2 missile launchers. Each class upgrade adds 2 more cannons and 1 more missile launcher.

A class 1 Battle Cruiser uses 2 six sided dice in an attack, but because of the advanced weapons on the ship, it adds a +3 bonus to any attack. Each class upgrade adds one more six sided die and an additional +1 bonus.

A class 1 Battle Cruiser uses 2 six sided dice in defense, but because of the heavy plating on the ships, they add a +3 bonus to their defense rolls. Each class upgrade adds one more six sided die and an additional +1 bonus.

When a Battle Cruiser is built, they're outfitted with either level 1 Ablative Shielding, or a level 1 Force Shield. See the descriptions of these items in Ship Augmentation for full details. With each class upgrade, the ship's shields should be raised by one level.

The Battle Cruiser's sensors have a range of 5 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Battle Cruiser is capable of making a 10 light year trip through Hyperspace. With each class upgrade, a Battle Cruiser is able to add an additional 5 light years to their maximum jump.

Cargo Ship: Trader Vessels can usually only haul small cargoes, so if someone needs something large ship, they will use Cargo Ships. These ships are usually bulky and hard to maneuver, but they are heavily armored. A class 1 Cargo Ship will have a crew of 10 and it will have two weapons of the character's choice. Each class upgrade allows the addition of two more crew members, and one weapon of the character's choice.

A Cargo ship is capable of carrying 1,000,000 KG of freight. For each class upgrade, that maximum freight is increased by 100,000 KG.

Cargo Ships aren't really meant to fight, so they only use 1 six sided die for an attack, but because of their thick hulls, they use 3 six-sided dice for their defense rolls. Each upgrade adds one six sided-die to each of these rolls.

A Cargo Ship is equipped with either level 1 Ablative Shielding or a level 1 Force Shield. Each upgrade increases this shielding by one level. With each class upgrade, the ship's shields should be raised by one level.

The Cargo Ship's sensors have a range of 3 AU. For every class upgrade, the sensor range increases by one AU.

A level 1 Cargo Ship is capable of making a 10 light year jump through hyperspace. With each level of upgrade, a Cargo Ship is able to add an additional 5 light years to their maximum jump.

Carrier: This is a ship that's designed to deliver fighter crafts into combat. The ship itself is not really meant for combat, but it can fight if necessary. A class 1 Carrier will have a crew of 20, and will also have 10 Fighters, each of which will have a pilot (these are in addition to the regular ship's crew.) For each class upgrade the ship goes through, the amount is increased by 10 crewmembers and 5 fighters (with pilots.) A class one Carrier will usually have 2 cannons (laser or plasma) and one missile launcher. Each class upgrade adds one more weapon of choice.

A class 1 Carrier isn't really designed for combat, and as a result, it uses only one six sided die for its attack rolls. Each class upgrade adds an additional six sided die.

A class 1 Carrier is heavily armored because it's an important part of any combat situation. As a result, a Carrier uses 3 six sided dice for its defense rolls. With each class upgrade, the ship adds one additional six sided die to its defense rolls.

When a Carrier is built, they're outfitted with either level 1 Ablative Shielding, or a level 1 Force Shield. See the descriptions of these items in Ship Augmentation for full details. With each class upgrade, the ship's shields should be raised by one level.

The Carrier's sensors have a range of 5 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Carrier is capable of making a 10 light year trip through Hyperspace. With each level of upgrade, a Carrier is able to add an additional 5 light years to their maximum jump.

Explorer Ship: These craft are designed for very deep space expeditions...often into the unexplored regions of the galaxy. As a result, they are large, a class 1 Explorer Ship has a basic crew of 50, plus they will also have 5 fighters...plus the pilots to crew those fighters. With each upgrade, an additional 10 crewmembers are added, as well as one additional fighter and pilot. Due to the extreme danger of the exploration of deep space, each Explorer Ship is outfitted with either an Ablative Hull or with Force Shields (see the Ship Augmentation section for more information on these items.) A class 1 Explorer Ship has level 1 shielding of the character's choice. With each upgrade, 1 additional level is added to the shielding.

It's always the hope that an explorer ship will not have to face combat, but they are ready should they need to. In a combat situation, an Explorer Ship uses two six sided dice for its attack rolls. Each class upgrade adds 1 additional six sided die. A class 1 Explorer Ship is outfitted with 2 cannons (laser or plasma) and two missile launchers. Each class upgrade adds two more weapons of choice.

An Explorer Ship is a bit bulky and hard to maneuver, but it does tend to be heavily armored. As a result, a class 1 Explorer Ship uses 2 six sided dice for its defense rolls. With each class upgrade, the ship adds 1 more six sided die to its defense rolls.

The Explorer Ship's sensors have a range of 10 AU. For every class upgrade, the sensor range increases by two AU.

Explorer Ships are designed to spend a great deal of time in hyperspace, since it's their primary mission to get to the places that no creature has gone before. As a result, a class 1 Explorer Ship is capable of making a 30 light year trip through hyperspace. With each class upgrade, the Explorer Ship is able to add an additional 10 light years to their maximum jump.

Fighter: This is a small craft designed for in-close fighting. It typically is designed for one or two creatures, but no more. A Fighter typically has two cannons (laser or plasma) or two missile launchers. Upgrades to these ships do not allow the addition of more crew, or the addition of more weaponry.

A class 1 Fighter uses 2 six sided dice for both its attack and defense rolls. Each upgrade adds 1 additional six sided die to each of the rolls. A fighter does not have any type of shielding when it's designed, nor does it receive any if it's upgraded...although the pilot could purchase shielding and have it installed.

The Fighter's sensors have a range of 1 AU. It takes three upgrades before a Fighter's sensor range increases by one AU.

Fighters can not jump into hyperspace. They can be deployed in hyperspace by a Carrier, but they have no way of jumping back to normal space, so this can be a very dangerous venture.

Luxury Yacht: These ships are designed for carrying people in class. They don't have cramped quarters like a Passenger Ship, and they don't have large mess halls like a Battle Cruiser. These ships have everything a wealthy space entrepreneur could possibly want. The ship usually has a crew that ranges from 10-20, and can luxuriously accommodate up to 10 passengers. Ship upgrades do not increase these numbers. These ships aren't really meant for combat, but it's a dangerous galaxy, so they do have weaponry. A class 1 Luxury Yacht will have two weapons. They can be a combination of cannons (laser or plasma) and missile launchers, or they could be two of one kind of weapon. With every upgrade, the ship adds 1 additional weapon of the character's choice.

A class 1 Luxury Yacht was never meant to go into combat...the passengers might spill their drinks. As a result, this ship only uses 1 six sided die for attack rolls. With each class upgrade, 1 additional six sided die is added.

Luxury Yachts are maneuverable, and as a result, a class 1 Yacht uses 2 six sided dice for their defense rolls. With each class upgrade, 1 additional six sided die is added to the defense rolls. For shielding, the Luxury Yacht is designed with level 1 Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Luxury Yacht's sensors have a range of 3 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Luxury Yacht is capable of making a 5 light year trip through Hyperspace. With each level of upgrade, a Luxury Yacht is able to add an additional 3 light years to their maximum jump.

Mining Craft: Mining crafts are small ships designed for 1-4 miners. They're heavy on mining equipment, but short on power, speed, and weaponry. A Mining Craft will only have one weapon (of a type of the character's choice.) Class upgrades do not allow for the addition of more crew, or for the addition of more weaponry. The ships are pretty much set in their design.

A Mining Craft's best choice in combat is to avoid it, but if that's not possible, they use 1 six sided die for their attack rolls. With each class upgrade, they add 1 additional six sided die.

A Mining Craft is not very maneuverable, and can make an easy target, but they do tend to have very solid hulls. When forced into combat, a Mining Craft uses 1 six

sided die in a defense roll, but it adds 1 to its roll because of the hard hull. Each class upgrade adds 1 additional six sided die and an additional 1 point bonus. In addition, a Mining Craft is designed with level 1 Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Mining Craft's sensors have a range of 2 AU. It takes two upgrades to increase the sensor range by an addition AU.

Mining Crafts aren't capable of traveling far in hyperspace. A class 1 Mining Craft is capable of making a 3 light year trip through hyperspace. With each level of upgrade, a Mining Craft is able to add 1 additional light year to their maximum jump.

Passenger Ship: A Passenger Ship is a bulky affair designed to carry as many people as possible as far as possible. They aren't designed for elegance, speed, or combat. A class 1 Passenger ship features a crew of 20 and can carry 100 passengers. Each class upgrade adds an additional 5 crew and 20 passengers. A Passenger Ship is armed with two weapons of choice. With each class upgrade, 1 additional weapon can be added. Unlike any other ship, the Passenger Ship comes out of the assembly docks with level 1 Hyperspatial Shielding (see the Ship Augmentation section for a full description.) With each class upgrade, the level of Hyperspatial Shielding is increased by 1 as well. Passenger Ships are not meant to go into combat, and the crews typically don't get more than minimal training. As a result, a class 1 Passenger Ship only uses 1 six sided die for its attack rolls. With each class upgrade, 1 additional die is added to the attack rolls.

Passenger Ships have very thick hulls to help protect everyone on board. As a result, a class 1 Passenger Ship uses 3 six sided dice in its defense rolls. With each upgrade, 1 additional six sided die is added to the rolls. For shielding, a Passenger Ship is designed with either level 1 Ablative Hull or level 1 Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Passenger Ship's sensors have a range of 3 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Passenger Ship is capable of making a 10 light year trip through hyperspace. Each class upgrade adds an additional 5 light years to the Passenger Ship's maximum jump.

Personal Cruiser: A Personal Cruiser is a ship designed for 1-6 people to travel in. The more people, the more cramped the conditions will be. The ships are designed to be maneuverable, but they're not designed for combat. A class 1 Personal Cruiser will have 2 weapons of the character's choice. Class upgrades do not allow for the addition of more people or of more weaponry.

The best defense for a class 1 Personal Cruiser is to flee, but if they have to fight, they use 1 six sided die for their attack rolls. Each class upgrade adds 1 additional six sided die.

A class 1 Personal Cruiser is maneuverable, which makes up for its thin hull. As a result, the Personal Cruiser uses 2 six sided dice in its defense rolls. Each class

upgrade adds 1 additional six sided die. For shielding, a Personal Cruiser is designed with either level 1 Ablative Hull or level 1 Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Personal Cruiser's sensors have a range of 3 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Personal Cruiser is capable of making a jump into hyperspace, but they can't travel far. They're limited to a 3 light year jump. With each class upgrade, the ship is able to travel 1 light year further.

Shuttle Craft: Designed to be light and maneuverable. The shuttle craft is the only ship that can actually enter a planetary atmosphere. All of the other ships in this section must dock with a space station in orbit, and then use shuttle crafts to reach the surface. Many of the larger ships will have shuttle crafts. Battle Cruisers will have four, Cargo Ships will have one, Carriers will have six, Explorer Ships will have six, Luxury Yachts will have one, Passenger Ships will have two, and Warships will have two. A Shuttle Craft can be added to a Personal Cruiser or a Trader Vessel, but they don't automatically come with those ships.

A shuttle craft can seat up to six people. They are designed to be maneuverable, but they are not designed for combat. A Shuttle Craft will have one weapon of the character's choice. The Shuttle Craft can not be upgraded, so no additional weapons can be added.

The best defense for a Shuttle Craft is to get into a planetary atmosphere where they can't be pursued, but if they have to fight, they use one six-sided die for their attack rolls.

These ships are very maneuverable, so if they do get into a battle, they use two six-sided dice for their defense dice. They are also equipped with Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Shuttle Craft's sensors have a range of 1 AU. It takes three class upgrades to increase the range of the sensors by one AU.

A Shuttle Craft is not capable of entering hyperspace.

Trader Vessel: These ships are designed with the sole purpose of carrying cargo, but they are also usually very maneuverable and fast. A class 1 Trader Vessel will have a crew of 1-6. Obviously the larger the crew, the more cramped the quarters will be. The ship also features three weapons that the character chooses when the ship is designed. Class upgrades do not allow for the addition of more crew or of more weaponry.

Traders don't generally like to fight, but their ships are designed to handle combat if they have to. When in battle, a class 1 Trader Vessel uses 2 six sided dice in its attack rolls. With each class upgrade, 1 additional six sided die is added to their attack rolls.

Trader Vessels are maneuverable. As a result, a class 1 Trader Vessel uses 3 six sided dice in its defense rolls. With each class upgrade, 1 additional six sided die is added to their attack rolls. For shielding, a Trader Vessel is designed with either level 1

Ablative Hull or level 1 Force Shielding. With each class upgrade, the ship's shields should be raised by one level.

The Trader Vessel's sensors have a range of 5 AU. For every class upgrade, the sensor range increases by one AU.

A class 1 Trader Vessel is capable of making a 5 light year trip through hyperspace. Each class upgrade adds an additional 3 light years to the Trader Vessel's maximum jump.

Warship: The Warship is a smaller version of the Battle Cruiser. They are more maneuverable, but not as powerful as the larger Battle Cruisers. A class 1 Warship is typically crewed by 10 and can carry up to six passengers (usually ground troops.) For each class upgrade the ship goes through, the amount is increased by a crew of 5 and by 3 passengers. A class 1 Warship usually has a combination of 2 cannons (laser or plasma) and 1 missile launcher. Each class upgrade adds 1 more weapon of the character's choice.

A class 1 Warship uses 2 six-sided dice in an attack. Each class upgrade adds one more six sided die.

A class 1 Warship uses 2 six-sided dice on their defense rolls. Each class upgrade adds one more six sided die.

When a Warship is built, they're outfitted with either level 1 Ablative Shielding, or a level 1 Force Shield. See the descriptions of these items in Ship Augmentation for full details. With each class upgrade, the ship's shields should be raised by one level.

The Warship's sensors have a range of 5 AU. For every class upgrade, the sensor range increases by one AU.

A level 1 Warship is capable of making a 10 light year trip through Hyperspace. With each level of upgrade, a Warship is able to add an additional 5 light years to their maximum jump.

Ship Augmentations

This final section of the Goods chapter details items that can be added to a ship. Some are included when a ship is upgraded, and others are items that a character (or group of characters) could choose to add to their ship outside of a full upgrade. It's important to note that some ships are limited in what can be added to them. For example, a Fighter can not add more weapons.

There is no table for this section. Instead, each listing gives the price for that upgrade on a specific type of ship.

Ablative Hull: These hulls are designed to absorb some of the energies from a laser or plasma attack. Each level of hull is capable of absorbing up to 10 points of damage from each hit, thus a 3rd level Ablative Hull would be able to absorb up to 30 points in damage from each hit. As an example, if 2 plasma cannons score hits against a Trader Vessel's hull, one blast doing 8 points of damage and the other doing 12 points of damage, a level one Ablative Hull would absorb all of the damage from the first hit, and all but 2 points of damage from the second hit.

It's important to note that an Ablative Hull only works against laser or plasma attacks. A missile attack would do full damage.

Battle Cruiser: 100,000

Cargo Ship: 75,000

Carrier: 80,000

Explorer Ship: 100,000

Fighter: 20,000

Luxury Yacht: 50,000

Mining Craft: 25,000

Passenger Ship: 60,000

Personal Cruiser: 40,000

Shuttle Craft: 30,000

Trader Vessel: 30,000

Warship: 75,000

Force Shields: This is an energy shield that surrounds a ship. For each level of shielding, the shield can absorb up to 5 points of damage from each hit, thus a 3rd level Force Shield would be able to absorb up to 15 points of damage from each successful hit on a ship.

Force Shields work against all forms of attack.

Battle Cruiser: 100,000

Cargo Ship: 75,000

Carrier: 80,000

Explorer Ship: 100,000

Fighter: 20,000

Luxury Yacht: 50,000

Mining Craft: 25,000

Passenger Ship: 60,000

Personal Cruiser: 40,000

Shuttle Craft: 30,000

Trader Vessel: 30,000

Warship: 75,000

Hyperspatial Shielding: This type of shielding helps keep out some of the damaging energies associated with hyperspace. For each level of shielding, a character is able to add a +1 bonus to their sanity check for travel through hyperspace.

Battle Cruiser: 200,000

Cargo Ship: 150,000

Carrier: 160,000

Explorer Ship: 200,000

Fighter: n/a

Luxury Yacht: 100,000

Mining Craft: 50,000

Passenger Ship: 120,000

Personal Cruiser: 80,000

Shuttle Craft: n/a

Trader Vessel: 60,000

Warship: 150,000

Laser Cannons: These cannons force a tremendous amount of energy into a very concentrated beam which is then propelled towards an opposing ship. *The damage factor for a Laser Cannon is 5.* A Laser Cannon holds 150 charges, and can be recharged.

Battle Cruiser: 50,000

Cargo Ship: 50,000

Carrier: 50,000

Explorer Ship: 50,000

Fighter: n/a

Luxury Yacht: 50,000

Mining Craft: n/a

Passenger Ship: 50,000

Personal Cruiser: n/a

Shuttle Craft: 50,000

Trader Vessel: n/a

Warship: 50,000

Laser Recharge: Laser Cannons only last for so long, and eventually they need to be recharged. The price to recharge a Laser Cannon is 5000 credits. A Laser Cannon can be recharged at any time, but the price is always 5000 credits, no matter how many charges are left. If a recharge is done before the Laser Cannon is depleted, the unused charges are not added to the recharge...meaning that a recharged Laser Cannon will have 150 charges, no matter how many charges it had left before the recharge.

Missiles: Any ship with a Missile Launcher has a limited number of missiles, and when it comes time to refill those launchers, the characters will need to buy missiles. The price for each missile is 200 credits, and the characters can buy as many or as few as they might need. The Missile Launcher can be refilled at any time.

Missile Launchers: Missiles are often viewed as crude weapons as opposed to Laser or Plasma Cannons, but they can be very deadly weapons as well. *The damage factor for a Missile Launcher is 3.* A Missile Launcher holds 50 missiles, and more missiles can be loaded at any time.

Battle Cruiser: 40,000

Cargo Ship: 40,000

Carrier: 40,000

Explorer Ship: 40,000

Fighter: n/a

Luxury Yacht: 40,000

Mining Craft: n/a

Passenger Ship: 40,000

Personal Cruiser: n/a

Shuttle Craft: n/a

Trader Vessel: n/a

Warship: 40,000

Plasma Cannons: These cannons superheat gas into a plasma, which is then propelled towards an opposing craft. *The damage factor for a Plasma Cannon is 6.* A Plasma Cannon holds 100 charges, and it can be recharged.

Battle Cruiser: 60,000

Cargo Ship: 60,000

Carrier: 60,000

Explorer Ship: 60,000

Fighter: n/a

Luxury Yacht: 60,000

Mining Craft: n/a

Passenger Ship: 60,000

Personal Cruiser: n/a

Shuttle Craft: n/a

Trader Vessel: n/a

Warship: 60,000

Plasma Recharge: Plasma Cannons only last for so long, and eventually they need to be recharged. The price to recharge a Plasma Cannon is 6000 credits. A Plasma Cannon can be recharged at any time, but the price is always 6000 credits, no matter how many charges are left. If a recharge is done before the Plasma Cannon is depleted, the unused charges are not added to the recharge...meaning that a recharged Plasma Cannon will have 100 charges, no matter how many charges it had left before the recharge.

Ranges of Ships' Weapons: Just like ranged handheld weapons, the weapons of a ship also have ranges, and they suffer penalties to their attack dice when attempting to fire at longer ranges. Those penalties are as follows:

Medium -3

Long -6

Extremely Long -10

All ranges are given in kilometers:

Type of weapon	Short	Medium	Long	Extremely Long
Laser Cannon	5000	10000	15000	20000
Missile Launcher	2000	4000	6000	8000
Plasma Cannon	3000	6000	9000	12000

Ship Repairs: It's almost inevitable that a ship will be damaged, and thus will need repairs. The table below lists the cost (in credits) per health point to repair a ship. It's important to keep in mind that a ship's health can not be raised passed its maximum.

An example:

Chris has been playing a human Trader. His ship sustained 30 points of damage in a recent battle. He puts in at a space dock and immediately commissions a repair. In order to repair all of the damage, Chris' Trader will have to pay 900 credits...because it costs 30 credits to repair each point of health damage, and $30 \times 30 = 900$.

Battle Cruiser: 100

Cargo Ship: 75

Carrier: 120

Explorer Ship: 200

Fighter: 25

Luxury Yacht: 125

Mining Craft: 35

Passenger Ship: 50

Personal Cruiser: 40

Shuttle Craft: 25

Trader Vessel: 30

Warship: 80

Starting Equipment for Ships

If a character manages to buy a ship at some point, it's important to keep in mind that each ship comes equipped with items from this list. In other words, the character doesn't get just the ship. If the characters are able to salvage a ship that they've found, or that they've defeated in battle, some of this equipment should be there for the taking...but the game master must make sure that he or she maintains game balance by not letting the characters get their hands on everything, thus making them unbeatable for opponents of similar level.

This section gives a complete list of what the game master should include with the purchase of a ship. As with many of the *Ephemeris* rules, the game master is free to change these lists as he or she sees fit.

Battle Cruiser

10 laser pistols, 10 plasma pistols, 4 laser rifles, 4 plasma rifles, 10 suits of body armor, 20 air tanks, 2 alien environment suits, 20 ammo belts, 5 pairs of binoculars, 60 blankets, 15 breathers, 20 breaching charges, 30 canteens, 20 communicators, 10 compasses, computer system, 5 cutting lasers, 100 rolls of duct tape, 20 electronic torches, 2 emergency beacons, 10 emergency blankets, 10 EVA suits, 10 filtration masks, 10 first aid kits, 2 generators, 20 sets of goggles, grappling equipment, grav lifter, holo recorder, 20 holsters, ID scanner, 2 sets of infra-red goggles, 100 laser clips, laser drill, laser torch, laser welder, 100 parachutes, perimeter sensors, 100 plasma caps, 2 pressurized tents, radiation counter, 20 sets of restraints, 20 ropes, 2 scanners, 2 spotlights, 2 surgical kits, 2 sets of survival gear, 10 tents, toolkit-armor, toolkit-computer, toolkit-electronic, toolkit-engines, toolkit-hyperspace engines, toolkit-weaponry-personal, toolkit-weaponry-ship, 2 translators, 2 water purification kits

Cargo Ship

2 laser pistols, 2 plasma pistols, acetylene Torch, 10 air tanks, 4 ammo belts, arc welder, 20 blankets, 10 breathers, bullhorn, 10 canteens, 2 chronometers, 5 communicators, compass, computer system, cutting laser, 20 rolls of duct tape, 10 electronic torches, emergency beacon, 10 emergency blankets, 2 EVA suits, 10 filtration masks, 2 first aid kits, 2 grav lifters, 5 holsters, ID scanner, 2 sets of infra-red goggles, 5 laser clips, laser torch, laser welder, ore sampler, 5 plasma caps, powered hoist, radiation counter, 20 ropes, scanner, surgical kit, toolkit-computer, toolkit-electronics, toolkit-engines, toolkit-hyperspace engines, toolkit-weaponry-ship, translator, video recorder

Carrier

5 laser pistols, 5 plasma pistols, 10 air tanks, alien environment suit, 60 blankets, 30 breathers, 15 communicators, computer system, 50 rolls of duct tape, 5 electronic torches, emergency beacon, 30 emergency blankets, 4 EVA suits, 10 filtration masks, 4 first aid kits, 4 grav lifters, ID scanner, 20 laser clips, laser torch, laser welder, 20 parachutes, 20 plasma caps, 2 radiation counters, 4 sets of restraints, 20 ropes, 4 scanners, 2 spotlights, 2 surgical kits, toolkit-computer, toolkit-electronics, 2 toolkits-engines, toolkit-hyperspace engines, 2 toolkits-weaponry-ship, translator

Explorer Ship

10 laser pistols, 2 laser rifles, 10 plasma pistols, 2 plasma rifles, acetylene torch, 25 air tanks, 10 alien environment suits, 50 ammo belts, arc welder, 20 pairs of binoculars, 100 blankets, 25 breathers, 2 sets of area camouflage, 100 canteens, 2 chemsniffers, 20 chronometers, communications beacon (planetary), 50 communicators,, 50 compasses, computer system, 2 cutting lasers, 200 rolls of duct tape, 20 electronic torches, 5 emergency beacons, 50 emergency blankets, 5 EVA suits, 5 sets of excavating tools, 50 filtration masks, 20 first aid kits, 100 flares, 10 flare guns, 2 generators, 50 pairs of goggles, 2 sets of grappling equipment, 2 grav lifters, holo recorder, ID scanner, 20 sets of infra-red goggles, 20 laser clips, 2 laser drills, 2 laser torches, 2 laser welders, 2 micro recorders, mining equipment, 2 ore samplers, 10 parachutes, perimeter sensors, pestguard, 20 plasma caps, 2 powered hoists, pre-fab expanding shelter, 5 pressurized tents, 2 radiation counters, 2 scanners, solar vaporator, 2 spotlights, 2 surgical kits, 5 sets of survival gear, 20 tents, toolkit-computer, toolkit-electronics, toolkit-engines, toolkit-hyperspace engines, 2 translators, 5 under water suits, 2 video recorders, 20 water purification kits, 2 sets of water survival gear

Fighter

A fighter is not equipped with any extra gear...aside from the computer.

Luxury Yacht

10 air tanks, 2 pairs of binoculars, 100 blankets, 20 breathers, 2 bullhorns, 20 communicators, computer system, 20 rolls of duct tape, emergency beacon, 20 emergency blankets, 2 EVA suits, 20 filtration masks, 10 first aid kits, grav lifter, 2 ID scanners, laser torch, laser welder, radiation counter, 2 sets of restraints, 2 scanners, 2 surgical kits, 10 sets of survival gear, toolkit-computer, toolkit-electronics, toolkit-engines, toolkit-hyperspace engines, 2 translators, video recorder

Mining Craft

A mining craft is not equipped with any extra gear...aside from the computer.

Passenger Ships

2 laser or plasma pistols, 50 air tanks, 2 alien environment suits, 300 blankets, 100 breathers, 2 bullhorns, 20 communicators, computer system, 200 rolls of duct tape, 20 electronic torches, 5 emergency beacons, 150 emergency blankets, 5 EVA suits, 100 filtration masks, 20 first aid kits, 2 grav lifters, 2 holo recorders, 5 ID scanners, laser torch, laser welder, 2 radiation counters, 5 sets of restraints, 5 scanners, 2 spotlights, 5 surgical kits, toolkit-computer, toolkit-electronics, toolkit-engines, toolkit-hyperspace engines, 5 translators, 5 video recorders

Personal Cruiser

6 air tanks, 12 blankets, 6 breathers, 2 communicators, computer system, 10 rolls of duct tape, 2 electronic torches, emergency beacon, 6 emergency blankets, 2 EVA suits, 6 filtration masks, first aid kit, laser torch, laser welder, pestguard, radiation counter, 2 ropes, scanner, surgical kit, toolkit-elctronics, toolkit-engines, 2 water purification kits

Shuttle Craft

2 laser or plasma pistols, 6 air tanks, binoculars, 12 blankets, 6 breathers, 1 area camouflage, compass, computer system, cutting laser, 5 rolls of duct tape, 3 electronic torches, emergency beacon, 6 filtration masks, first aid kit, 6 flares, flare gun, 6 parachutes, 5 ropes, scanner, spotlight, 2 tents, water purification kit

Trader Vessel

2 laser or plasma pistols, 5 air tanks, alien environment suit, 2 pairs of binoculars, 20 blankets, 6 breathers, bug detector, 6 communicators, compass, computer system, 20 rolls of duct tape, 3 electronic torches, 2 emergency beacons, 10 emergency blankets, 2 EVA suits, 6 filtration masks, 2 first aid kits, 5 flares, flare gun, grav lifter, ID scanner, 2 sets of infra-red goggles, 5 laser clips or plasma caps, laser torch, laser welder, electronic lock (CS 10), micro recorder, ore sampler, radiation counter, 4 ropes, scanner, spotlight, surgical kit, survival gear, 2 tents, toolkit-computer, toolkit-electronics, toolkit-engines, toolkit-hyperspace engines, translator, video recorder, water purification kit

Warship

6 laser pistols, 6 plasma pistols, 2 laser rifles, 2 plasma rifles, 6 suits of body armor, 10 air tanks, alien environment suit, 10 ammo belts, 3 pairs of binoculars, 30 blankets, 8 breathers, 10 breaching charges, 15 canteens, 10 communicators, 6 compasses, computer system, 3 cutting lasers, 50 rolls of duct tape, 10 electronic torches, emergency beacon, 6 emergency blankets, 6 EVA suits, 6 filtration masks, 6 first aid kits, generator, 10 sets of goggles, grappling equipment, grav lifter, holo recorder, 10 holsters, ID scanner, infra-red goggles, 50 laser clips, laser drill, laser torch, laser welder, 50 parachutes, perimeter sensors, 50 plasma caps, pressurized tent, radiation counter, 10 sets of restraints, 10 ropes, scanner, spotlight, surgical kit, survival gear, 6 tents, toolkit-armor, toolkit-computer, toolkit-electronic, toolkit-engines, toolkit-hyperspace engines, toolkit-weaponry-personal, toolkit-weaponry- ship, translator, water purification kit