

BRP STARSHIPS

role-playing in the far future



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BRP STARSHIPS 2.2

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BRP STARSHIPS

Introduction

This is a simple rules system for science fiction gaming in Basic Role Playing (BRP), with it's main focus on starship design and handling. It is intended for space opera games, but it can be used for other styles too.

The idea has been to to avoid the rather, to many, abstract concepts such as hull tonnage and power plant in the design phase. Instead, focus is on what specific functions you need, and a few stats to define some fundamental properties. Both design and combat are fairly quick, true to the idea of BRP. Treat these rules as a skeletal framework, with additional components easily added.

Please note that you will need a copy of the book Basic Role Playing by Chaosium to use these rules.

I do not have any specific sources of inspiration for these rules, but these are the games that I often have returned to in my sci-fi rpg wanderings: Ringworld, Worlds Beyond, Traveller, Gurps Space, O.R.E. Star Wars, MindJammer and the huge Swedish post-apocalypse BRP game Mutant. My favourites, Ashen Stars and the main rulebook of Basic RolePlaying, has also been nearby when I was writing.

Scale

These rules add the concept of scale to BRP. Descriptions in the main rulebook are considered as **Planetside** scale, while starships are in **Starship** scale, being roughly ten times in size, damage, armor and so on. Starship scale is considered the main scale in these rules.

Starship Design & Construction

The rules go through these steps:

1. Decide upon Ship Type
2. Pick the Modules you need. Determine Size & Size Rating
3. Calculate Speed & Handling. They get more expensive the more Modules you have
4. Add Hyperspace, Shields, Armor and Apps (Skill Enhancers)

Ship Type

First decide what type of ship you need. Many adventurers want something in between the examples here, but they can hopefully serve as a starting point.

Example Ship Types: Shuttle, Fighter, Far Trader, Scout, Star Liner, Scientific, Yacht, Gunship, Explorer.

Modules

Pick the Modules you need. Write the Module's names down on the Starship Sheet on page 18, and the number of Modules. When finished, add the number of Modules together and write the number down at the bottom of the Module box. This number is the ship's Size stat.

The following things are always included in a starship: hull, power plant, airlock (not for small ships), vacuum suits for complete crew, computer, life support system, communications system, sensors, repair kit and a gravity generator. No need to buy specific Modules for those functions.

i write science fiction, and science fiction isn't about the future. i don't know any more about the future than you do, and very likely less

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Cockpit/Bridge

1 module per person.

Engine

Select a Thrust Rating (TR) for the Modules. Determines the ship's Speed value, see page 12.

Engine Type	TR for Engine	Cost/Engine Module
Cutting Edge	120	10000
Excellent	100	7000
Standard	70	5000
Economy	40	2500

Maneuvering Thruster

Select a Thrust Rating (TR) for the Modules. Use the table above. Determines the ship's Handling value, see page 12.

Sickbay

1 module for an Autodoc with room for one patient. 4 modules per patient for a regular sickbay.

Crew

1 module per crew member. 4 modules per crew member for long trips.

Passengers

1 module per passenger. 4 modules per passenger for long trips.

Cargo Hold

1 module per ton cargo. Secret spaces, specific habitats or biotopes cost more.

Weapons

1 module per attack and round. Handled by one person with Artillery skill. One module can be handled by the pilot. The following weapon modules are separate turrets. Choose from laser, blaster, ion cannon, missiles.

Lab

1 module +10% in one chosen skill (cannot exceed +30% per skill, though larger specimen can be brought into the lab if more modules are added for the same skill).

Open Space

8 modules minimum for canteen, briefing room, theatre, garden, gym etc. Holds at most one person per Module, but less is preferable.

Hangar Bay

4 modules for All Terrain Vehicle (ATV). 10 modules for a small fighter or shuttle.

Hyperspace

1-5 modules. Ranges from 1-5.

Self-Repair

1 module per self-repair unit. One roll every third combat round. +5% per step.

Escape Pod

1 Module can house one person for a week. No manual steering; docking and landing is automatic.

Example Military Ship Sizes

Titan: 1280 (640-1920)

Battleship: 640 (320-960)

Cruiser: 320 (160-480)

Destroyer: 160 (80-240)

Frigate: 80 (40-120)

Corvette: 40 (20-60)

Cutter: 20 (10-30)

Small Craft: 10 (8-15]

Fighter: 5 (3-8)

Example Civilian Ship Sizes

Far Trader: 40 (20-60)

Explorer: 65 (40-120)

Shuttle: 12 (8-15)

Scout: 30 (20-60)

Star Liner: 320 (160-480)

Yacht: 30 (20-60)

Tractor Beam

1 Module per 10% to use as an opposed roll against opponents Pilot skill. Tractor beam percentage value must be greater than the size of the ship being captured. Max 10 Modules. Range 5.

Extra Sensors

1 Module with two additional close range sensor arrays. For example Heat, Life, Specific Mineral, Water, Volcanic Activity. Use with Sensors Skill.

Robot Arm

1 Module for one external robot arm, controlled from the bridge. Strength 10 (Starship Scale). Reach: 10 meters. Skill: Heavy Machine or Fine Manipulation. For doubled strength and reach, add one Module.

○

Add the number of modules together to get ship Size. See the chart on the next page to calculate Size Rating. Use the closest number of Modules and write down the Size Rating next to the Size value.

Streamlined: Write 'Yes' here if the ship is designed for atmospheric flight. Size stat is not altered, but the length and width of the ship will be greater, to make room for wings and a slimmer hull (see page 12). Non-streamlined ships suffer a -30% to Pilot rolls in atmospheric flight.

Stealth: Gives the opponent -5% per step in Sensors or Spot skill. Max -30%. More advanced stealth technologies may be encountered under rare circumstances.

Capital Ships

For very big ships (somewhere over 200 Modules), using the table for Size Rating makes the design phase a little easier.

Pick Modules as you normally would, but write down both the number of Modules needed and the Size Rating for each function. And instead of keeping track of hundreds (or thousands) of Modules to add together, identify the highest Size Rating. Make an estimate to see if the rest of the Modules bump up the ship into the next Size Rating.

Example: A Star Destroyer have a rating of 15 for crew, that's about 4000 people living on this ship. If it had a rating of 12 in weapons, 3 in labs, 12 in hangar bays, 13 in engines and so on, we could fit the whole thing in a Size Rating 16 hull (1 bigger than the 15, since nothing else came close to the 15). So we would know the ship was rated up to 32 768 modules – without having to go into the bother of actually counting them and assigning all of them. Note that it could be 30 000 or 40 000 modules – at this size we really don't need to know.

It will also be of some help to use the rules for weapon upgrades and the damage ladder on page 31. Using that sytem will make it easier to convert, for example, 100 Laser Modules into 10 Heavy Lasers.

Size Rating	Number of Modules
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128
9	256
10	512
11	1024
12	2048
13	4096
14	8192
15	16384
16	32768
17	65536
18	131072

Module	Cost per Module	Note
Cockpit/Bridge	5000 Cr.	1 Module/person
Engine	2500/5000/7000/10000	Select Thrust Rating (page 6) to determine Speed
Maneuver Thust	2500/5000/7000/10000	Select Thrust Rating (page 6) to determine Handling
Sickbay	5000 Cr.	1 Module/patient for Autodoc. 4 Modules/patient for regular sickbay
Crew	1000 Cr.	1 Module/crew member. 4 Modules/crew member for longer journeys
Passengers	1000 Cr.	1 Module/passenger. 4 Modules/passenger for longer journeys
Cargo Hold	1000/5000 Cr.	1 Module/ton cargo. The higher cost is for secret holds or habitats/biomes
Weapons	5000-50 000 Cr.	1 Module/gunner. For costs, see Weapons chapter
Lab	5000 Cr.	1 Module/Skill +5%. Max +30% in any one skill
Open Space	1000 Cr.	1 Module/person, though more is to prefer
Hangar Bay	1000 Cr.	4 Modules for ATV. 10 Modules for small fighter or shuttle
Hyperspace	5000 Cr.	1 Module/jump range. Max 5
Self-Repair	5000 Cr.	1 Module/Repair (Starship) +5%

Module (continued)	Cost per Module	Note
Escape Pod	1000 Cr.	1 Module. Holds one person for a week
Tractor beam	5000 Cr.	1 Module per 10% as an opposed roll against Pilot skill
Extra sensors	5000 Cr.	Two sensor types per Module
Robot Arm	5000 Cr.	Skill: Heavy Machine or Fine Manipulation

Stat	Cost per Module & step	Note
Hit Points	5000 Cr.	
Armor	5000 Cr.	Max 10
Shields	1000 Cr.	

App	Cost/+5%	Note
Targeting	2000 Cr.	Max +20%
Sensors	2000 Cr.	Max +20%
Navigation	1000 Cr.	Max +20%

Stat	Cost	Note
Streamlining	100 Cr/Module	
Stealth	5000 Cr/-5% and Module	Max -30%

SPEED =
 $\frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$

HANDLING =
 $\frac{\text{Total Thrust Rating}}{\text{Number of Ship Modules}}$

Speed & Handling Guidelines

To get started, use a Thrust Rating of 100.

1 Speed = 1% of total number of Modules.

Cutting Edge: 1.2 Speed per 1%

Standard: 0.7 Speed per 1%

Economy: 0.4 Speed per 1%

With Engine Modules 10% of the total number of Modules, you get Speed 10.

With Engines 20% of the total number of Modules, you get Speed 20.

Stats

SPEED (1-20)

Speed is a combination of acceleration (ACC) and top speed (Speed Rate), and is calculated from the number of Engine Modules and their Thrust Rating (TR). Add all the Engine Module's TR together. Then divide the combined Thrust Rating value with the ship's total number of Modules to get Speed.

Zero Speed can be used to simulate ship-sized space stations.

HANDLING (1-20)

Handling defines how quick and easy the ship is to steer, and is calculated from the number of Maneuvering Thruster Modules and their Thrust Rating (TR). Add all the Maneuvering Thruster Module's TR together. Then divide the combined Thrust Rating value with the ship's total number of Modules to get Handling.

Add the Handling value as a bonus to Pilot skill.

SIZE (1-)

Size is the number of Modules the ship consists of. It is divided into the Size Ratings on page 9. Add the ship's Modules together, and see what Size Rating comes closest.

Size	Approximate Length
1-4	<10 m
5-15	10 m
15-50	20 m
50-100	50 m
100	100 m

For Size over 100, use the Size value as a starting point for the approximate length in meters.

The approximate length is a rough guideline to give a hint at how big a ship is. A spherical ship can be 50% smaller, whereas a streamlined ship can be about 50% longer.

Weapons

Laser

Damage 1d6, Range 20, Cost 5000 Cr.

Blaster

Damage 1d8+1, Range 20, Cost 10 000 Cr.

Ion Cannon

Damage 2d6+1, Range 10, Cost 15 000 Cr.

Missile

Damage 3d6, Range 40, Cost 20 000 Cr.

High-Energy Blaster

Damage 3d6+1, Range 30, Cost 50 000 Cr. Only Large ships.

Note that all damage is in a scale appropriate for Starships. For small vehicles, multiply damage by ten. Treat most planet-side vehicles and built structures as Planetside scale.

Protection & Recovery

Shields

Shields are an energy field protecting the ship. Damage is subtracted from Shields first, until it reaches zero. If Recovery is used, Shields gain an amount equal to Recovery at the end of every combat round. Otherwise Shields are fully restored in 6 hours. Cost/Module and step (+1): 1000 Cr.

Calculating Speed & Handling:

A Simpler Approach

Here is an alternative approach to Engine and Maneuvering Thruster Modules, making it slightly easier to determine a ship's Speed and Handling.

To mimik the idea that the engines are an integral part of the hull, always taking up approximately the same percentage of the ship, calculate the total number of Modules without Engine and Maneuvering Thruster Modules. Determine the number of Engine and Maneuvering Thruster Modules you need to get your desired Speed and Handling, and do not recalculate the total number of Modules with the new Modules.

Armor in space opera

Many space opera settings seem to construct ships without armor, perhaps as a tribute to the aeroplanes of the past.

Armor

A high tech composite material covers the hull, to give more protection. When Shields reach zero, deduct Armor from the damage roll before reducing Hit Points.

Cost/Module and step (+1): 5000 Cr. Max 10

Hit Points

A ship's basic Hit Points are the same as Size. To simulate that a ship can be built with a sturdier construction than normal for its size, Hit Points can be bought separately.

After the shields reach zero and armor is deducted from the damage, it reduces Hit Points. When Hit points go down to half, roll on the Malfunction Table (page 23). When Hit Points reach zero, the ship stops functioning, except emergency systems (life support, docking, emergency light, autodoc, air locks). Less important NPC ships probably explode at zero Hit Points.

Cost/Module and step (+1): 5000 Cr.

Recovery

Recovery is an optional rule, to regenerate the Shields at the end of every Combat Round. One point is recovered at the end of a round for every step bought. Otherwise Shields are fully restored after 6 hours without combat.

Cost/Module (+1): 2000 Cr.

Apps & Skill Enhancers

Targeting App

Skill: Artillery. Up to +20% in Artillery skill.

Cost/+5%: 2000 Cr.

Sensors App

Skill: Technical (Sensors). Intelligent algorithms aiding users of sensor systems, to detect ships, get info on star systems, planets or anomalies. Up to +20% in Sensors.

Cost/+5%: 2000 Cr.

Navigation App

Skill: Navigate. Up to +20% in Navigation, if rolling for Hyper-space jumps. Cost/+5%: 2000 Cr

Rebuilding & Expanding

At standard starports or better, and all ship yards, a ship can be rebuilt and expanded (and repaired of course).

A ship can only add 20% new Modules when expanding. Modules can be changed quite freely to new ones (labs to cargo hold, cargo hold to weapons), but use common sense.

Most of the other stats can be bought up, but not more than 30% (maybe with an occasional exception for story telling reasons).

This can, among other uses, simulate the acquisition of gear from a world with an unusually high Tech Level.

Upgrading engines

The primary upgrade of Engine & Maneuvering Thrust Modules is to increase Thrust Rating. Recalculate Speed and Handling, and pay the difference between the two ratings. If more Engine Modules are to be added, they can only be expanded by 20%.

These upgrades can be done in a standard starport or better.

Crew & Passengers

Luxury Accommodations: 16 modules per person (five star first class accommodations on a passenger liner)

1st class civilian: 8 modules per person

2nd class civilian: 4 modules per person (standard)

3rd class civilian (coach/steerage): 2 modules per person

Military, Officers Quarters: 1 module per person (a bunk with some storage space)

Military: 2 people per module (a pair of bunk beds). Hot bunking can reduce the crew requirements up to half again.

Minimum requirements to run a ship: 10% of the crew is needed to run a ship (only 10% of the Weapon Modules are active) for a short period of time. For ships below 100 Modules, one person can pilot the ship and utilize one Weapon Module.

With automation the crew requirements can be lowered considerably.

Additional Rules

Autodoc

First Aid at 80% (treatment takes 10 minutes) and life sustaining treatment in severe cases (major damage, poison, contamination) for three days.

Sensors

With a successful roll you can get the following information:

Long range: Detect a starship, it's speed and direction, and sometimes an official record with name, home port, destination, mission type & captain. Communications possible.

You can also get a good reading on uncharted planets and moons (atmosphere, rough map, over-all temperature, electronic signals, broadcasts). For higher tech solar systems, you get most info from the star charts and comm droids: Space stations, star-ports, tech level, law & security, customs.

Short range: Starship type, speed & direction, approximate weaponry and armor.

For planets and moons you get a detailed map, temperature variations, rough idea of biotopes, some settlements.

Hyperspace

A hyperspace engine is a story telling device needed to travel the huge distances between the stars. For a regular jump, no skill roll is necessary. The length of the jump is between 1 and 5 (with secret high tech gear and unknown civilizations probably having access to more). A jump of 1 gives access to only a few close-by star systems, while 5 will make it possible to cross large areas of empty space to hard to reach systems, and short cuts across voids. To really make sense of this value, you need to draw a star chart – see page 106.

Ship Condition

Additional rule to simulate ships that are a bit rusty or generally unkept. Ship Condition ranges from 0 to -100. All new ships start with zero.

Ship Condition	Stats affected	Malfunction Table Roll
-20	-2 Speed or Handling	
-40		Once per four adventures
-60	-4 Hit Points & Shields	
-80		Once every adventure
-100	-6 Speed, Handling, Hit Points, Shields	Roll freely!

Ship Condition is reduced as follows: -10 each time maintenance is not paid for (maintenance costs 1% of ship cost every month or every fourth adventure) and -10 for every damage not repaired properly after combat (see rules for repairs on page 7 & 30). Also use Ship Condition as a negative Repair skill modifier; especially effective with mid-combat repairs. To increase Condition, one Repair roll is required per +10, plus the expenses in Credits. It takes one day with the full negative repair modifier, two days with modifier halved.

Buying and selling used ships

The Ship Condition modifier can also be used when buying and selling used starships. For example, a ship with condition -40 will have it's price reduced by 40%.

High- & Low-Tech Ships

Here are some guidelines for creating starships from lower technology levels (TL 10-12):

They will have low Speed and Handling (1-10), to simulate weaker engines and poor maneuvering controls. Use a Thrust Rating between 10-30. To make them less capable in combat, use Apps to give skill penalties (-20%-50%) to both Pilot and Artillery rolls. They will have reduced damage with all weapons. Low (1-5) or no Shields. Armor 1. Hyperspace 1, if any.

For every step lower Tech Level, the number of Modules needed for a function is increased by 50%. Weapons can either increase in size or reduce damage one step on the Damage Ladder (see page 50).

Higher Tech Levels (14-15, or more if needed), will have engines with higher Thrust Rating (140-200) and Weapon Modules will either take 50% less space or move up one step on the Damage Ladder. Other types of Modules can also be more space efficient, but use common sense.

BRP STARSHIPS

other

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NPC

attitude	type	<div></div> fraction
<div>speed handling size</div>	shields armor hyperspace	recovery hit points
<div>pilot artillery pilot hit points</div>		<div>weapons</div>

attitude	type	<div></div> fraction
<div>speed handling size</div>	shields armor hyperspace	recovery hit points
<div>pilot artillery pilot hit points</div>		<div>weapons</div>





Starship Combat

This is an attempt at a starship combat system that is neither too abstract, nor too bogged down with detailing. For more detailed rules, add some or all of the ingredients from the chapter Advanced Starship Combat.

Combat Round

The Combat Round works like this:

The ship with the highest Handling goes first.

1. Roll Pilot skill.

2. Attack: Artillery roll. Halved if Pilot roll failed (and the other half removed if Evasion was chosen last round - see step 3).

3. Opponent choose if she wants to roll for Evasion. (Artillery roll halved in next round if Evasion is chosen).

4. Attacker rolls damage.

5. Additional skill rolls by crew members (Repair, First Aid).

Rinse and repeat for next player. When all players have acted, the next Combat Round begins.

Please note that if a ship evades and then doesn't make the Pilot roll in the next round, no Artillery roll will be possible. A good pilot is thus essential to make the gunners job possible.

Damage

Damage is first subtracted from Shields. When Shields reach zero, subtract Armor and then reduce HitPoints with that amount. When Hit Points reach below 1/2, roll every hit that reduces Hit Points on the Malfunction Table. The first malfunction lasts for one round. For every subsequent hit, roll for a new malfunction and move one step up on the Duration Table. Also roll to check if there are any personal damage.

Malfunction table (1d6):

1. Power out, no sensors or weapons
2. Minor leak in one module
3. No Maneuvering
4. Speed halved
5. Uncontrolled spin, stabilisation damaged
6. Critical hit: Re-roll on this table. +2 on duration table

Duration Table:

1. One round
2. 1d6 rounds
3. Until repaired
4. Until repaired, Repair at -30%
5. Until next landing and Repair
6. Until next landing and buying new parts.

Personal damage: Everyone on board the ship must also make an Agility roll (DEX x5) to avoid 1d6-1 damage.

See rules for Repair (Starship) and Self-Repair for getting the ship fully functional again.

Combat Maneuvers

Use these combat maneuvers (some or all) to make combat more creative.

Evasion and Attack

Evades attack by rolling Pilot skill. The evader's next attack is at -50%. To evade several shots, Pilot skill is -30% for each successive shot.

Escape

Double movement for 5 rounds. All power rerouted to engines for a short burst, to get out of weapon range.

Movement and Attack

The normal action in a combat round. Roll Pilot skill for movement.

Surprise

Attacker gets one free round before the opponent can react.

Aim

Attacker holds fire in one round to get a better aim, and gets +20% Artillery in the next round. Only normal movement in the aiming (first) round. If the Pilot roll is failed in the firing (second) round, apply both -50% for the failed Pilot roll and +20% for Aim. Target gets no Evasion roll.

Placed Shot

-20% Artillery to hit specific Module. If target's shields (if any) are down, and Armor is pierced, the specific Module is damaged, starting on step 2 in the Duration Table.

Partial cover

Moving the ship through a volume with large objects, making it harder to hit. Both sides get -30% Artillery.

Disable Ship

To disable a ship, make one Placed Shot per weapon turret, and one last shot for propulsion. No other maneuvers possible for the attacker at the same time, only Evasion.

Boarding

To board a ship, first use the Disable Ship combat maneuver, until the ship is incapable of defending itself or escaping. Manipulating the airlocks then, to get inside, is often easy (no skill roll, or Demolition/Fine Manipulation/Technical at +20%).

Ramming

For desperate players ramming is sometimes a viable option, either to strike an opponent or to get out of enclosed spaces. Both ships (or ship plus construction) take damage, though the striking ship less so. Size and speed are the determining factors for the amount of damage. 1d6 damage per 5 Size, and add 1d6 per 5 Speed. The ramming ship takes half that damage. See the main rulebook regarding hit points for constructive elements, in Planetside scale.

Combat Modifiers

Use these modifiers to make combat more complex.

Terrain

-10% to -50% in Pilot skill if there are obstacles.

Ship Size

When the difference in Size Rating is 3 or more, the larger attacker is at -20% in Artillery. The smaller attacker is at +20 in Artillery. A Size Rating difference of 5 (or more), Artillery will be at +/-40%

Speed

When the difference in Speed is 5 or higher, the faster ship gets +20% in Evasion. This modifier evens out the odds for small and fast ships, especially against a heavily armed opponent.

BRP STARSHIPS

name	the night bird	type	explorer	clarence	player
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speed	12	shields	7	recovery	—
handling	14	armor	2	hit points	41
size	31 (M)	hyperspace	3		

modules	
cockpit	2
crew (3)	12
engine (tr 120)	3
maneuvering (tr 100)	4
cargo hold	2
lab (biology) +10%	1
lab (forensics) +10%	1
weapons	2
sickbay (first aid 80%)	1
hyperspace	3
streamlining yes	= 31
stealth -	

other

pilot +14%

ship condition 0





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Characters

Most of the rules from the main rulebook are used as is, but here are a few additions and recommendations to suit the genre better.

Campaign Power Level

The Heroic campaign level is probably best suited for space opera. Point based character generation (recommended): 36 points for characteristics, 325 points for professional skills (or EDUx23), INTx13 for personal skills. Psionics: Four powers at POWx1, and use any skill points to increase them.

Skills

Alternative difficulty modifiers:

As the difficulty modifiers in the BRP Main Rulebook are a bit chunky, these rules follow a system inspired by Worlds Beyond and Mutant:

Easy	+20%
Routine	+0%
Difficult	-20%
Hard	-30%
Very Hard	-50%

Below is a list of skills often used in sci-fi games, and a bit of expansion to the original rules.

Pilot (Starship)

The ability to fly a starship, handle the daily care of it and knowledge of regulations of spaceflight.

Technical (Sensors)

Handling the sensor equipment in a starship. See the rules about starship design for more details.

Artillery

Use of the heavy weapons in a starship. Works in tandem with the Pilot skill when in a combat situation.

Repair (Starship)

The ability to repair mechanical and electrical malfunctions in a

starship. In combat, roll once every third round for a temporary repair. An additional roll is needed afterwards to do it properly.

Repairs made on a lower-tech world will be less refined, and efficiency will be at -20% for affected parts, stats and skills.

Science (Physics)

Representing a general knowledge of this vast field, slanting towards space-oriented concepts (vectors, orbits, gravity, FTL).

Science (Astronomy)

Represents a good knowledge of space, including stars, planets, asteroids, orbits and so on.

Science (Xeno-Biology)

General knowledge of the biology of known alien species. Can also be used to classify new life forms. Medical doctors can use this skill together with Medicine skill, to treat aliens not known to her/him.

Use Strangeness x10 as a negative modifier when attempting a Medicine roll on an unknown alien species, then add any points in Xeno-Biology.

Knowledge (Xeno-Culture)

General knowledge of known alien cultures, their customs and laws. Can also be used to draw conclusions about the behaviour of unknown life forms.

Technical (Computer Use)

The user has a good ability to work with computers, both the hardware and the software.

Navigate

To make hyperspace travel a bit more precarious, require a Navigate roll before every jump. A failed roll means the jump ends in the wrong place. How much is probably best decided from a story telling point of view, instead of rolling dice.

Occupations

Assassin

Wealth: Average or Affluent. You will also have a wide range of weapons and false identities.

Skills: Dodge, Hide, Listen, Spot, Stealth, and five of the following: Brawl, Disguise, Drive, Electronics, Grapple, Firearm (any), Fine Manipulation, Martial Arts, Melee Weapon (any), Missile Weapon (any), Pilot (Starship), Throw, Track.

Belter

Wealth: Poor to Affluent. The gamemaster and player should determine whether the character owns their own starship.

Skills: Heavy Machine, Navigate, Pilot (Starship), Science (Astronomy), and five of the following: Brawl, Gambling, Knowledge (Asteroids), Missile Weapon (any), Repair (Electronics), Repair (Starship), Technical (Sensors).

Bounty Hunter

Wealth: Average or Affluent.

Skills: Dodge, Listen, Spot, Stealth, and five of the following: Brawl, Drive, Electronics, Grapple, Firearm (any), Fine Manipulation, Knowledge (Law), Melee Weapon (any), Missile Weapon (any), Pilot (Starship), Technical (Sensors), Throw, Track.

Colonist

Wealth: Poor or Affluent.

Skills: Craft (any), Heavy Machine, Pilot (Starship), Repair (Electronics), Repair (Mechanical), Spot, and four of the following: Craft (Farming), Knowledge (Natural World, Region, Xeno-Cultures), Drive, Firearm (Pistol, Revolver, or Rifle), Navigate, Pilot (Aircraft or Boat), Ride, Science (Xeno-Biology), Swim, or Track.

Belter leads their lives in the asteroid belts, often making a living from mining or tugging the space rocks.

Colonists are hardy individuals who have left the security of organized society, to break new ground in the outskirts of known space.

Computer Tech

Wealth: Average to Affluent.

Skills: One Knowledge skill, Language (Other) (a programming language), Repair (Electronics), Research, Science (Mathematics), Status, Technical (Computer Use), Technical (Sensors), and choose one of the following skills as specialties: Accounting, Hide, or Knowledge (Law).

Criminal

Wealth: Poor to Affluent, sometimes Wealthy, usually Average.

Skills: Bargain, Hide, Stealth, Drive, and choose any six of the following: Appraise, Brawl, Climb, Fast Talk, Fine Manipulation, Firearm (any), Gaming, Grapple, Insight, Jump, Knowledge (Law), Listen, Martial Arts, Melee Weapon (any, usually knives or clubs), Persuade, Pilot (Starship), Spot, Throw.

Diplomat

Wealth: Affluent to Wealthy, usually Affluent.

Skills: Bargain, Etiquette, Fast Talk, Insight, Knowledge (Law), Persuade, Status, plus any three other skills as appropriate to the setting, usually from the following: Knowledge (Xeno-Culture, Group, History, or Region), Listen, Language (Other), Language (Own), Perform (Oratory), or Research.

Detective

Wealth: Average or Affluent.

Skills: Firearm (Handgun), Knowledge (Law), Listen, Persuade, Spot, Research, and choose four of the following: Brawl, Disguise, Dodge, Drive, Fast Talk, Firearm (any), Grapple, Hide, Insight, Knowledge (any), Language (Other), Medicine, Pilot (Starship), Science (any), Technical (Computer Use), Technical (Sensors), Stealth, or Track.

Engineer

Wealth: Poor to Affluent, usually Average.

Skills: Craft (any), Repair (Mechanical), Repair (Structural), Spot, Status, and five of the following: Art (usually Drafting), Drive, Heavy Machine, Knowledge (any), Pilot (Starship), Repair (Starship), Repair (Electronics), Science (any), or Technical (Computer Use).

Explorer

Wealth: Affluent or Wealthy.

Skills: Climb, Language (Other), Language (Own), Persuade, Pilot (Starship), Research, Spot, and four of the following: Knowledge (Anthropology, History, Natural World, Region, Xeno-Cultures), Drive, Fast Talk, Firearm (Pistol, Revolver, or Rifle), Navigate, Pilot (Aircraft or Boat), Ride, Science (Geology), Science (Xeno-Biology), Swim, or Track.

Gambler

Wealth: Poor to Affluent, usually Average.

Skills: Bargain, Brawl, Dodge, Fast Talk, Gaming, Insight, Knowledge (Accounting), Sleight of Hand, Persuade, and Spot.

Intelligence Agent

Wealth: Average or Affluent, depending on the setting.

Skills: Dodge, Fast Talk, Hide, Listen, Research, Spot, Stealth, and three of the following: Art (Photography), Brawl, Disguise, Etiquette, Firearm (any), Grapple, Knowledge (any), Language (Other), Language (Own), Martial Arts, Navigate, Pilot (Starship), Psychology, Repair (Electronics), Repair (Mechanical), Ride, Swim, Technical (Computer Use), Technical (Sensors), Throw, or Track.

Journalist

Wealth: Average to Affluent.

Skills: Fast Talk, Insight, Language (Own), Listen, Persuade, Re-

search, Spot, and three of the following: Art (Photography), Disguise, Hide, Knowledge (any), Language (Other), Pilot (Starship), Status, Stealth, or Technical (Computer Use).

Law Enforcement Agent

Wealth: Usually Average. Corrupt lawmen are sometimes Affluent.

Skills: Brawl, Dodge, Fast Talk, Knowledge (Law), Listen, Spot, and four of the following: Drive, Firearms (any), First Aid, Grapple, Insight, Knowledge (Region or Group), Language (Other), Martial Arts, Melee Weapon (any), Missile Weapon (any), Pilot (Starship), Ride, Status, Technical (Computer Use), Technical (Sensors) or Track.

Lawyer

Wealth: Destitute, Poor, Average, Affluent, Wealthy

Skills: Bargain, Fast Talk, Insight, Knowledge (Law), Knowledge (Xeno-Culture), one other Knowledge skill, Language (Own), Perform (Oratory), Persuade, Research, and Status.

Mechanic

Wealth: Poor to Average, usually Average.

Skills: Bargain, Craft (Metalwork), Drive, Fine Manipulation, Heavy Machine, Repair (Electronics), Repair (Mechanical), Repair (Starship), and Spot.

Medical Doctor

Wealth: Average to Affluent.

Skills: First Aid, Medicine, Persuade, Research, Spot, and choose four of the following: Insight, Language (Other), Psychotherapy, Science (Xeno-Biology) Science (any) and Status.

Merchant

Wealth: Average to Wealthy, usually Affluent. The gamemaster and player should determine whether the character owns their own shop or trade vessel.

Skills: Appraise, Bargain, Fast Talk, Knowledge (Accounting), Knowledge (Business), Persuade, Pilot (Starship), Research, Status, Technical (Sensors) and any two other skills as specialties.

Noble

Wealth: Affluent to Wealthy, usually Wealthy.

Skills: Bargain, Drive, Etiquette, Language (Own), Language (Other), and Status, plus any other three skills as hobbies or fields of interest.

Pirate

Wealth: Poor to Affluent, sometimes Wealthy, usually Average.

Skills: Pilot (Starship), Navigate, Missile Weapon (any), Artillery, and five more: Brawl, Gambling, Melee Weapon (any), Knowledge (Region), Knowledge (Law), Repair (Starship), Bargain, Fast Talk

Scholar

Wealth: Average or Affluent, usually Average.

Skills: Language (Other), Language (Own), Persuade, Research, Teach, Technical (Computer Use) and choose five Knowledge or Science skills related to your field of study.

Scientist

Wealth: Average or Affluent, usually Affluent.

Skills: Craft (any), Persuade, Research, Status, Technical (Computer Use) or Heavy Machine, and any five Knowledge or Science related to your field of study.

Shaman

Wealth: Poor or Average, at a tribal-level existence.

Skills: Art (any), Insight, Knowledge (History), Knowledge (Occult), Language (Own), Listen, Perform (Rituals), Persuade, and two of the following as specialties: Craft (any), Fast Talk, First Aid, Hide, Knowledge (Anthropology), Medicine, Language (Other), Science (Pharmacy), or Status.

Special: You may be able to use psionics.

Soldier

Wealth: Poor or Average, but frequently given access to expensive or otherwise-prohibited equipment.

Skills: Brawl, Climb, Dodge, First Aid, and six of the following: Artillery, Command, Drive, Firearm (usually Rifle, but any), Grapple, Heavy Weapon (any), Hide, Language (Other), Listen, Jump, Medicine, Melee Weapon (any), Missile Weapon (any), Navigate, Pilot (Starship), Repair (Mechanical), Spot, Stealth, Technical (Sensors) or Throw.

Starship Pilot

Wealth: Average to Affluent. If you own your own vessel, Affluent.

Skills: Drive, Heavy Machine, Listen, Navigate, Pilot (Starship), Spot, plus any four of the following skills: Bargain, Climb, Command, Craft (any), Knowledge (Region), Repair (Electronics), Repair (Mechanical), Language (Other), Persuade, Science (Physics), Science (Astronomy), or Technical (Computer Use), Technical (Sensors).

Technician

Wealth: Average or Affluent.

Skills: Fine Manipulation, Heavy Machine, Listen, Repair (any), Science (Physics), Research, Spot, Technical (Computer Use), and two other skills from the following list as a specialty: Craft (any), Drive, Pilot (any).

Thief

Wealth: Any, subject to gamemaster's approval.

Skills: Appraise, Dodge, Fast Talk, Hide, Stealth, and five other skills from the following list: Bargain, Brawl, Climb, Disguise, Fine Manipulation, Missile Weapon (Blaster), Grapple, Insight, Listen, Jump, Knowledge (Law), Persuade, Repair (Mechanical), or Spot.

Tribesman

Wealth: Destitute to Poor, at a tribal-level existence.

Skills: Craft (any), Dodge, Grapple, Hide, Knowledge (Natural History), Spot, Throw, Track, and two of the following skills: Brawl, Climb, First Aid, Listen, Jump, Knowledge (Occult), Melee Weapon (according to culture), Missile Weapon (according to culture), Language (Other), Ride, Stealth, or Swim.

Mercenary

Wealth: Destitute to Average, usually Poor.

Skills: Brawl, Dodge, Grapple, Melee Weapon (any), Missile Weapon (any), and five other skills from the following list as specialties: Climb, Firearm (any), Hide, Listen, Jump, Language (Other), Martial Arts, Spot, Stealth, Swim, Throw, Track.

Writer

Wealth: Poor to Wealthy, usually Average.

Skills: Art (writing), Insight, Language (Own), Persuade, Research, and five other skills from the following list as specialties: Fast Talk, Knowledge (any), Language (Other), Listen, Status, or Technical (Computer Use).

Hit Points & Hit Locations

Hit Points are generally calculated as $STR + CON / 2$ in BRP. If this makes the characters too easy to kill, use $STR + CON$ instead, keeping to the heroic mood of the genre.

A limited use of hit locations is recommended. Armor is specified for each body location, but only total hit point losses are calculated. Armor for specific locations are listed on page 43.

Hit Location	1d20
Left Leg	01-03
Right Leg	04-06
Abdomen	07-10
Chest	11-15
Left Arm	16-17
Right Arm	18-19
Head	20

Exposure to vaccum

If suddenly exposed, the character must exhale all air or suffer $1d6+2$ per combat round due to collapsed lungs. (Allow an Idea roll to think of this, if the character is not used to space travel).

Additionally, a character will begin to hemorrhage, losing 1 hit point the first round, 2 the second round, 4 the third round, 8 the fourth and so on.

Eardrums may also burst (successful Stamina roll to avoid) and after $CON \times 2$ rounds sight is affected, making all skill rolls -50% involving sight.

Lab Research

Finding clues by quasi-scientific research is quite common in science fiction. With a Lab Module, players get a chance to uncover those pesky little secrets.

Decide what skill or skills the Lab will be built for. A character using the lab must have the same skill and gets a skill bonus between 10-30%, with each 10% step costing 5000 Credits. A single Module can give max +10%, so to get full bonus, three Modules are needed.

Conducting research: Decide what basic clue should always be uncovered - the bit of information needed to move the story forward. Decide upon a time frame (5 days for example) and the number of rolls needed (one per day perhaps). For each successive roll, add a piece of information that gives the players an advantage when later solving the larger problem in the story (perhaps a shortcut, a way to avoid violence, revealing sensitive local customs and beliefs or avoiding a trap). All dice should of course be rolled by the GameMaster.

Trade & Cargo

Some pointers for speculative inter-planetary trade, to give the players some use for their cargo holds.

Any cargo available? In major starports there will always be cargo. For smaller ports, there is a 20-50% chance, depending on population size and tech level.

How many cargo lots? How many tons each? Roll 1d6-3d6 for the number of lots, and 1d6 tons per lot.

Destination? Shipping commonplace goods from one planet and selling it as a luxury on another planet is the dream of all traders. Choosing the destination is half the job. Use Knowledge (Region) skill roll to determine a good match. Missing this roll results in a -20% penalty on both buy and sell rolls (see below).

Buying Cost? How much can it be sold for? Use Bargain, Fast Talk, Status and/or Persuade first when buying, and again when selling. Consult the table below.

Buy skill roll is a:	Modifier when selling	Sell skill roll is a:	Profit, % of buy value
Success	+20%	Success	+50%
Fail	-20%	Fail	-20%
Success	+20%	Fail	0%
Fail	-20%	Success	+10%

Personal Equipment

Below is a table with a small selection of personal weapons typical for heroic sci-fi settings. All values in Planetside scale.

Type	Damage	Range	Attk/CR	Skill	Cost
Blaster Carbine	2d6+2 ¹	50	1	Rifle, Energy	700 Cr.
Blaster	1d8+1 ¹	30	2	Pistol, Energy	400 Cr.
Blaster Rifle	2d8+3	60	2	Rifle, Energy	1000 Cr.
Heavy Blaster	1d10+2 ¹	40	1	Pistol, Energy	500 Cr.
Light Blaster	1d6+1 ¹	30	2	Pistol, Energy	300 Cr.
Light Blaster Rifle	2d6+1	50	2	Rifle, Energy	800 Cr.
Mini Blaster	1d4+2 ¹	20	1	Pistol, Energy	250 Cr.
Ionization Gun	3d8 vs tech	60	1	Pistol, Energy	600 Cr.
Lightsaber	2d10+db	Medium	1	Sword	–
Particle Grenade	3d8	Thrown	1	Throw	800 Cr.
Thermal Detonator	5d10	Thrown	1	Throw	1000 Cr.

At the weapon's basic range, the skill chance is unmodified. At medium range (double the basic range), the chance becomes ½, and at long range (four times basic range) it becomes ¼ the normal skill chance.

1. Can be set to stun. Roll damage as normal and make a resistance roll against the targets current hit points. The character is stunned for a number of rounds equal to the points of stun damage done.

See next page for a table with a small selection of armor typical for heroic sci-fi settings. Many heroic characters are not wearing armor, perhaps because armor is only for military use. Therefore, no lighter “mesh” armor types are included.

Type	AP	Skill Modifiers	Hit Locations	Cost
Blast Helmet	10	-5% Perception Skills	Head	250 Cr.
Blast Vest	8	-5% to Physical Skills	Any	300 Cr./part
Blast Shield	12		Shield Skill	300 Cr.
Light Body Armor	10	-10% to Physical Skills	Any	400 Cr./part
Military Body Armor	12	-25 to Physical Skills	Any	800 Cr./part
Powered Body Armor	16	-20% to Physical and Manipulation Skills	All	10 000 Cr.

Equipment

Datalink – For transmitting high-bandwidth data across computer-systems. 100 Cr.

Comlink – A basic communicator: can easily be keyed together in pairs or groups, also vary to commercial models to high-end military issue. Either hand-held, wrist-mounted, or headset. 50-200 Cr.

Droid Caller – Small device capable of summoning any droid with a restraining bolt, or alerting any nearby service droid. 100 Cr.

Droid Controller – A more complex version of a droid caller, similar to a keypad link. 150 Cr.

Keypad Link – A small hand-held computer slaved to another computer or vehicle system, used for remote access and control. 200 Cr.

Datapad / Portable Computer – Either specialized or general-use, usually equipped with some sensors and a datalink. 250 Cr.

Holographic Memory Cell – A data storage medium, commonly used. 10 Cr.

From the hip:

By not taking aim a character can double the number of attacks per combat round, but skill is at ¼.

Holographic Display Projector – Read-only projector for holographic imaging or data, sometimes called a holoprojector. 100 Cr.

Code Cylinders – Data storage medium, encrypted and self-destructing. 50 Cr.

Code Reader – Data reader for code cylinders, will scramble cylinder if not keyed properly. 100 Cr.

Sensor Jammer – Anti-sensor equipment. Often illegal. 250 Cr.

Communications Jammer – Self explanatory, often illegal. 200 Cr.

Security Field Jammer – Anti-security countermeasure device, aiding intrusion into secure areas. Highly illegal and controlled. 350 Cr.

Damper Shield Generator – Device capable of dampening all electronic transmissions in an area. 200 Cr.

Macrobinoculars – Self explanatory, also similar to Electrobinoculars. 100 Cr.

Tracer Beacon – Tracing units capable of relaying coordinates planet-wide or across star systems. Usually keyed into ship sensors or a computer with extended sensor capabilities. 250 Cr.

Sensor Pack – A backpack-sized sensor array, capable of long-range detection and two-way planetary-wide relay. 400 Cr.

Cable Dispenser and Hook – Device with liquid cable reservoir or filament cable, possible spike launcher, and attachable grappling hooks. Can also be combined into a rocket cable launcher, mounted onto a blaster frame, gauntlet, or bracer. 100 Cr.

Food Capsules – Could also contain concentrated liquids or drugs. 10 Cr./10 meals.

Oxygen Reprocessor – Also comes in general or specialized varieties. Can also be combined with an oxygen supply. 400 Cr.

Aquabreather – For underwater environments. 300 Cr.

Exposure Suit – Protective outfit, comes in general or specialized varieties. 500 Cr.

High Grav Suit – Support outfit, with automusculature support enhancements. 800 Cr.

Life Support Suit – Can survive light vacuum for short periods, some include food, fluid, and waste systems. Monitors and regulates life signs on chest or wrist panel. 1000 Cr.

Space Suit – Comes in three basic varieties: Emergency (short-term survival in hard vacuum), Utility (basic, with maneuvering jets and high radiation shielding), and Military-Grade (long-term hard vacuum survivability, self-sealing, high rad shields, jets, full food, fluid, and waste systems). 2000-10 000 Cr.

Portable Emergency Shelters – Come in a variety of sizes and configurations, from basic to deluxe, general to specific environment. 300-2000 Cr.

Medpak – A medical kit with either specialized or general application use. 75 Cr.

Power Cells – Useful for most powered equipment, weapons, etc. Wide range of sizes and energy output features. 50 Cr.

Fusion Generator – One of a variety of light-to-heavy portable generators. 300-1500 Cr.

Fusion Tools – Could be a general kit, or specialized for specific types of work such as cybernetic repair, spaceship mechanics, or computer systems. 100 Cr.

Vehicles

The following vehicles are created using a system similar to the starship design rules.

Speeder Bike

Fast and lightly armored hover bike.

Speed	15	Hit Points	40
Handling	18	Weight	0.8 ton
Size	30	Dimensions	L: 4 m W: 1 m
Weapons	Heavy Blaster Rifle, 3d6+3		
Armor	AC 5/–		
Cargo	50 kg		

Land Speeder, Standard

Four-person standard model hover car.

Speed	12	Hit Points	60
Handling	8	Weight	1.2 ton
Size	50	Dimensions	L: 5 m W: 2 m
Weapons	None		
Armor	AC 10/–		
Cargo	100 kg		

Land Speeder, Fast

Two-person fast hover car.

Speed	15	Hit Points	50
Handling	14	Weight	1 ton
Size	40	Dimensions	L: 3 m W: 2 m
Weapons	None		
Armor	AC 8/–		
Cargo	50 kg		

Firing a weapon from or at a moving vehicle is a Hard skill roll (-30%). Hitting a passenger is Very Hard (-50%). For more details, see page 211 in the main rulebook, along with spot rules for other specific combat situations.

All Terrain Vehicle (ATV), Small

Four-person light terrain vehicle.

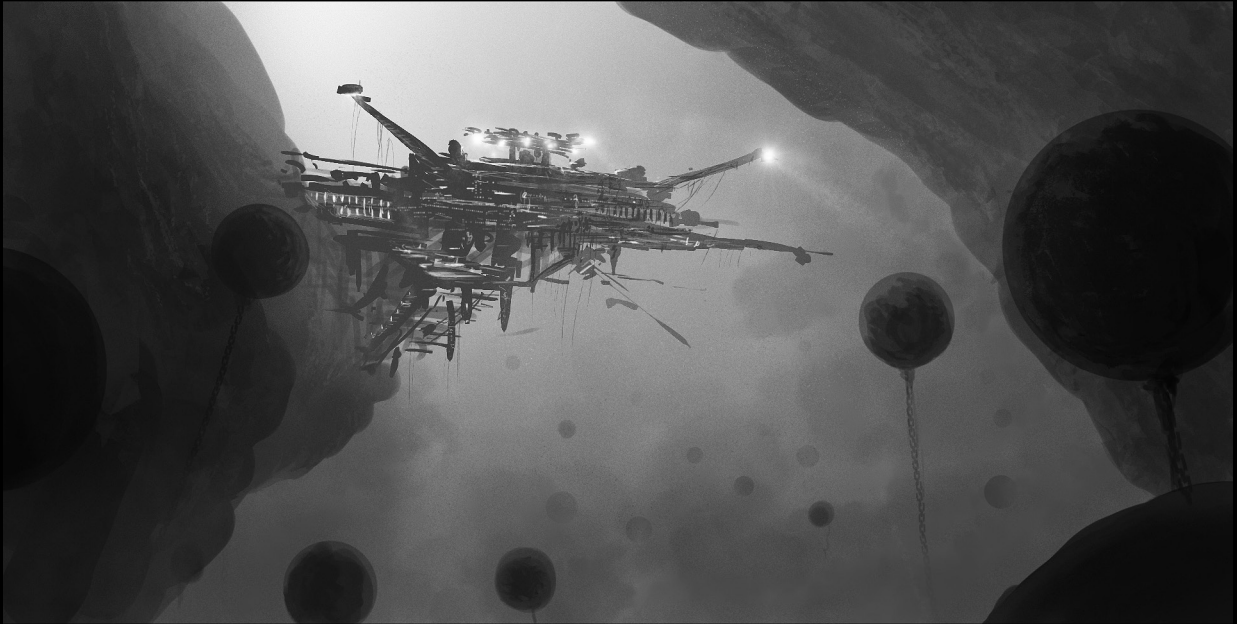
Speed	10	Hit Points	70
Handling	8	Weight	2 ton
Size	70	Dimensions	L: 6 m W: 2 m
Weapons	None		
Armor	AC 12/2		
Cargo	400 kg		

All Terrain Vehicle (ATV), Medium

Six-person armored terrain vehicle with roof-mounted heavy blaster. Large cargo area for expedition gear.

Speed	8	Hit Points	100
Handling	6	Weight	4.5 ton
Size	100	Dimensions	L: 10 m W: 2 m
Weapons	Heavy Blaster Rifle, 4d8+4		
Armor	AC 16		
Cargo	600 kg		





Advanced Starship Combat

Weapon	Damage	Type	Range	Ammo	Cost
Laser	1d6	Laser	20	No	5000
Blaster	1d8+1	Particle Beam	20	No	10000
Ion Gun	2d6+1	Electric	10	No	15000
Missile	3d6	Explosive	40	10	20000
Kinetic Cannon	1d8	Kinetic	10	10	1000

Weapon Options

The following options allow the weapons above to be customized and expanded. A GM can use all, some or none of the following.

Options and Cost: All the options presented below increase the cost of the weapon. This increased cost can be paid for in Credits or by increasing the number of modules allocated to the weapon (mounting a bigger weapon). Instead of 20 normal blasters, you can have 4 (each taking up 5 Modules) with a bunch of upgrades.

Damage	Cost
+1 step	x2
+2 steps	x4
+3 steps	x8
+4 steps	x16

Increased Damage: This upgrade increases the weapon's damage by one step on the Damage Ladder (see sidebar). This doubles the cost each time it is done. If desired, instead of increasing the damage dice, a flat +1 add to damage can be taken. A weapon cannot have more adds than half it's maximum damage roll.

Increased Range: This upgrade increases the weapon's range.

Range	Cost
+25%	x1.5
+50%	x2
+75%	x3
+100%	x4

Fire Arcs	Cost
2 arcs	x2
3 arcs	x3
4 arcs	x4

Fire Arc: This upgrade allows a weapon to attack targets in multiple fire arcs. See more on page 53.

Autofire: This upgrade allows a weapon to fire multiple shots in one attack, allowing it to get more than one hit on a successful attack.

Burst	Cost	Attack Bonus
Short Burst (1d3)	x2	+10%
Medium Burst (1d6)	x4	+20%
Long Burst (1d10)	x6	+30%

Note: In some cases, such as point defense, a rapid firing weapon's benefit is in putting more shots on target in order to increase the chance of getting one hit, rather than trying to get multiple hits. The GM can allow someone to give up the extra hits from a burst in order to receive the bonus to attack.

Point Defense: This upgrade allows a weapon to intercept incoming missiles before they hit, possibly destroying them. A weapon with this upgrade can make an attack against the missile, right before it hits (just like a parry). If the missile is destroyed, then the ship takes no damage. Most missiles are unarmored and only have 1 hit point. A weapon that is used for point defense cannot be used to attack on the same round. Cost x2.

**Damage
ladder**

1d4
1d6
1d8
1d10
2d6
2d8
3d6
2d10
3d8
4d6
3d10
5d6
4d8
4d10
5d8
5d10

Armored: The weapon has it's own armor. This has the same cost as armoring a ship, and is based on the number of modules the weapon takes up. The upgrade is usually used to either give a weapon more armor than the ship is in, or to make missiles somewhat resistant to point defense weapons.

Increased Ammunition: This upgrade increases the amount of ammunition available for a weapon.

$$\text{Shots} = \text{Ammunition Modules} / \text{Weapon Modules} \times 100$$

Spinal Weapon Mount: This upgrade allows the weapon to tap directly into the ship's engines. The ship is pretty much built around the weapon. This allows for a very powerful weapon, but one with some serious limitations.

A Spinal Weapon:

- » takes 1 round to charge up per module it takes up.
- » gets one or more free upgrades based on the total number of engine modules
- » uses up all the ship's engine power when fired, dropping the ship's Speed to 0 in turn after it is fired.
- » a spinal weapon mount double the weapon's cost. (x2).

Damage

See Damage Ladder on page 51.

Engine Modules	Free Upgrades
1	1
2-3	2
4-7	3
8-15	4
16-31	5
32-63	6
64-127	7
128-255	8
x2	+1

Armor

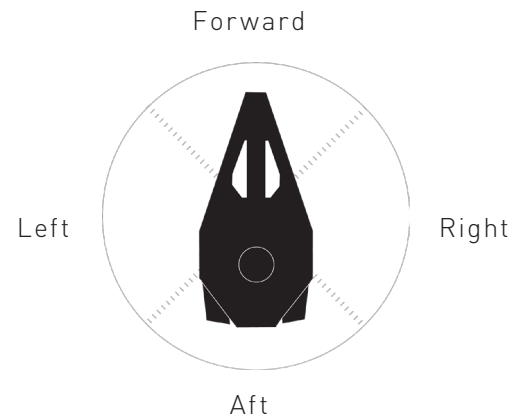
Armor is split into five categories: Primed for laser, particle beams, electric, explosive and kinetic. Standard armor in the Starship Combat chapter, is Multi-Primed and protects equally well against all attacks. In advanced combat, armor can protect at half value against some types of attack. For instance, Sin-

gle-Primed Kinetic armor protects at full value against kinetic attacks, but only protects at half value against all other weapons types. Armor can be Single-Primed, Duo-Primed, Triple-Primed, Quad-Primed or Multi-Primed. The table on page 50 lists what type of damage different weapons do.

Armor that is weak against a certain type of attack cost a little less. For every damage type removed, cost will be lowered by 10%.

Fire Arcs

Fire Arcs represents the idea that mounted weapons can only fire in certain angles. There are four arcs: Forward, Aft, Left and Right. When using the advanced combat rules, weapons fire in one of the arcs unless they are upgraded. Use with miniatures for best result.



Hit Locations

For more realistic battles, but also deadlier and more unpredictable, a system for hit locations can be used. For every successful attack, 1d100 is rolled twice and a ship-specific chart is consulted. As the layout of starships vary quite a lot, every ship has it's own hit location chart prepared at the design stage.

Preparing a Hit Location Chart

All ships are divided into three Sections: Front, Mid and Stern. Take the ship's total number of Modules and divide in three equal parts (or as closely as possible). Depending on how many Modules each Section holds, figure out how many percent each Module represent.

Go through all Modules and write them down in each section as you see fit, splitting functions if necessary. This means that a 12 Module cargo hold can be split between Mid and Stern sections to maintain a good balance between the Sections.

You can also add extra armor to specific Modules at the cost of 5000 Cr. Write the total armor value down in the chart for each Module. The standard armor value is not used, but keep it on the Starship Sheet.

Each 5 extra Hit Points you have bought for the ship (for better structural integrity), works as a 1 point armor when damage spreads from one Module to another.

Dynamic Shields makes it possible to have different values for the shields in Front, Mid and Stern. Changes are declared at the start of a combat round.

Example: Using The Night Bird on page 27, this is what a Hit Location Chart would look like.

The Night Bird								
Front 01-33		7	Mid 34-66		7	Stern 67-00		7
Modules	1d100	Arm.	Modules	1d100	Arm.	Modules	1d100	Arm.
Cockpit 2	01-20	4	Crew 4	01-40	2	Engine 3	01-30	2
Crew 8	21-00	2	Lab 2	41-60	2	Maneuver 4	31-70	2
			Weapons 2	61-80	2	Hyper 3	71-00	2
			Sickbay 1	81-90	2			
			Cargo 1	91-00	2			

Shields: 7, Structural Integrity: 2, Extra Armor: Cockpit

Hit Locations in Combat

When an attack is successful, subtract Shields as usual, and roll 1d100 to determine which Section is hit, then roll 1d100 to find out the exact Module being hit. Subtract Armor. Each Module take 1 Hit Point of damage and any additional damage goes into the next lower Module in the chart, the next one again and so on (going to the next Section if necessary - roll 1d100 to see where), reducing damage between Modules if structural integrity is up-graded. And don't forget to reduce total Hit Points as normal.

Effects of Damage

First hit: Damaged.

Second hit: Roll on Module Malfunction Table, next page. For each succesive hit, duration/severity increases according to the Duration Table.

All Modules of the same type are hit twice: System is non-functional.

Tick the hit Modules to keep track of damage.

Module Malfunction Table (1d6):

1. Complete module power failure
2. Minor leak
3. Major leak
4. Module gravity broken
5. Module controls unresponsive
6. Critical hit: Re-roll on this table. +2 on duration table

Duration Table:

1. One round
2. 1d6 rounds
3. Until repaired
4. Until repaired, Repair at -25%
5. Until next landing and Repair
6. Until next landing and buying new parts.

Personal damage: Everyone on board the ship must also make an Agility roll (DEX x5) to avoid 1d6-1 damage.

See rules for Repair (Starship) and Self-Repair for getting the ship fully functional again.

BRP STARSHIPS

HIT LOCATIONS

[illegible]





Constructs

From the bronze giant Talos in Greek myth and Rabbi Loew's clay golem to Terminators, droids, and Major Kusanagi, speculative fiction abounds with animate artificial beings.

Basic Roleplaying, a.k.a. the Big Gold Book, contains a few sample robots, written up much like other, more organic creatures: STR, CON, SIZ, INT, POW, DEX. In contrast, look at some of the undead: Skeletons lack CON, Ghouls lack POW, and Vampires lack permanent POW but feed on Power Points. The chapter on Equipment states that objects with CON are "extraordinarily rare".

This article will outline rules to differentiate Constructs from living beings.

General Rules for Constructs

Like inanimate objects, Constructs do not have CON. Hit Points are equal to SIZ. Reducing a construct to 0 HP immediately deactivates it; damage below 0 makes it harder, and eventually impossible, to repair.

Constructs that can only follow orders have Fixed INT (BRP p. 322); most constructs have INT 8 or more to reflect their understanding of speech and capacity for logic. Sapient constructs have regular INT.

Constructs lack POW, unless they have "souls" or a presence on the Spirit Plane. Constructs automatically fail Luck rolls, but they ignore powers that affect POW or MP, having no spiritual presence and no animal instincts to cloud their reason. (At the GMs discretion, Constructs may also ignore mind control, telepathy, and similar powers.)

About Hit Locations

If using hit locations, the construct's total HP is irrelevant; track only damage to specific locations. Damage to a location has the following effects:

Abdomen: At 0 HP or less the construct loses use of its legs, but suffers no other effects unless noted.

Arm, Leg, Treads, etc: At 0 HP or less, the attack disables the limb. If it's a leg, reduce MOV by the fraction of legs remaining; if "treads", the construct is immobilized. At -HP or less, the limb is severed or destroyed. Damage to an extremity has no other effects.

continued...

Constructs without POW may only use powers with a zero Power Point cost, which draw Power Points from a built-in “battery” (similar to the ones in Equipment), or which have another limitation like “Always On” or charges.

A Construct will typically lack an APP statistic, unless it can impersonate a human being. In a world where constructs and humans mix freely and openly, constructs may have an APP score to reflect body styling.

Constructs generally require no food, sleep, or air, and are immune to poisons, diseases, and fatigue. It cannot heal on its own, and healing spells do not work; appropriate powers or technical skills will repair damage. Technological constructs have optional rules for running on batteries.

Constructs suffer effects on the Major Malfunction table (page 50). Bleeding and impaling attacks do no extra damage on a special success unless otherwise noted. Other forms of attack may or may not affect constructs; see group or individual descriptions.

Robots

Robots are automatons which follow pre-set programming – which may be complex – and/or orders from authorized users given verbally or remotely. In high-tech societies, robots carry out a wide range of duties, such as manual labor, cleaning, repair, maintenance, warfare, assassination, disposal of hazardous materials. More sophisticated robots serve as butlers, personal assistants, and companions.

Robots tend to concentrate on the task at hand to the exclusion of all else. If a robot is concentrating on one task, most civilian models must make a Spot or Listen skill roll to notice even the

continued...

Chest: Bringing a construct’s chest location bell 0 HP disables it, unless otherwise noted. At -HP or less, the construct can no longer move any extremity, and is most likely destroyed.

Head: If the head contains the construct’s brain or equivalent, the construct is disabled at 0 HP, and irretrievably destroyed at -HP. Constructs with their brain in their torsos may have only a “sensor head”; at 0 HP or less the construct loses sight or hearing (flip a coin), and at -HP it is totally blind and deaf.

Drones are robots operated by humans. A Drone has no INT, and its effective DEX is the lower of its operator's and the unit's.

Sapient Robots, if the GM approves, have regular INT rolled randomly. INT 8 becomes 3d6, INT 12 becomes 2D6+6, and 17 becomes 3D6+6.

Cargo Robot

STR	9D6+18	100
SIZ	9D6+18	50
INT	8	8
DEX	2D6+6	13

most obvious threats, and an Idea roll to react sensibly to events outside their experience.

Robots usually need regular maintenance, even if they incur no damage. Each month without maintenance, and each Fumble, causes a -5% cumulative penalty on all skills until a technician performs proper maintenance.

Unlike most other creatures, a robot's head typically contains only sensors and associated circuitry; most of their "brains" reside in their torsos. Thus, a Head hit typically only blinds a robot, and does not disable it. Excessive damage to the Chest or Abdomen will deactivate the creature, possibly beyond repair.

Impaling damage to a robot's power source (typically in the Abdomen) may cause a discharge of electricity or radiation. The robot's attacker (if in direct contact) suffers the robot's Damage Bonus in electricity or radiation burns. Radiation may have longer-term effects.

Cargo Robot

Cargo Robots load and unload ships, with two powerful claws and four powerful legs. Their extreme strength is matched by a surprising delicacy of touch.

Move: 10 Hit Points: 50

Damage Bonus: +8D6

Armor: 6-points metal chassis (brain not in head, Construct damage rules)

Attack: Slam 35%, 1D6+db (crushing)

Skills: Listen 30%, Spot 30%

Hit Locations: Four Legged Humanoid (BRP p. 368)

Repair Robot

Repair Robots perform necessary maintenance and repairs in a high-tech installation. Their ability to learn from experience can, over time, begin to resemble sapience.

One configuration resembles a six-armed starfish, with a dorsal sensor-head. It's made to operate in free-fall; under gravity, it needs at least three manipulators to walk. The other, a barrel-shaped body with treads, is more common on terrestrial installations.

Move: 8 Hit Points: 10

Damage Bonus: +0

Armor: 6-points metal chassis (brain not in head, Construct damage rules)

Attack: Brawl 30%, 1D3+db (crushing), Power Tools 50%, 1D6 (cutting or fire)

Skills: Fine Manipulation 95%, Heavy Machine (Loader Drone) 95%, Hide 35%, Language (Lingua Nueva) 50%, Language (Standard Cybernetic Communication Protocol) 100%, Listen 75%, Repair (Electronic) 95%, Repair (Gravitic) 75%, Repair (Mechanical) 95%, Spot 75%, Technical Skill (Computer Use) 100%

Powers: Repair robots typically have the following abilities:

Built-In Toolkit: The construct has all tools required for its function built into its manipulators or chassis.

Built-in Communicator: The construct has a built-in connection to a computer or communications network. The construct can communicate freely with any other creature on the network, barring lack of wireless coverage or outages.

High-Tech Senses: The construct has super-human senses, including telescopic vision, low-light vision, infrared and ultra-violet vision, and sensitive hearing outside the normal human range. Distance, darkness, noise, frequency, or size do not affect any Listen or Spot roll, within reason.

Repair Robot

STR	2D6+6	13
SIZ	1D6+6	10
INT	17	17
DEX	2D6+14	21

Hit Locations:

Starfish

D20	Locations	HP Formula
1-6	Body	2/5 total HP
7-8	Arm/Leg #1	1/4 total HP
9-10	Arm/Leg #2	1/4 total HP
11-12	Arm/Leg #3	1/4 total HP
13-14	Arm/Leg #4	1/4 total HP
15-16	Arm/Leg #5	1/4 total HP
17-18	Arm/Leg #6	1/4 total HP
19-20	Sensor-Head	1/5 total HP

Barrel

D20	Locations	HP Formula
1-4	Treads	1/3 total HP
5-7	Abdomen	1/3 total HP
8-10	Chest	2/5 total HP
11-12	Arm #1	1/4 total HP
13-14	Arm #2	1/4 total HP
15-16	Arm #3	1/4 total HP
17-18	Arm #4	1/4 total HP
19-20	Sensor-Head	1/5 total HP

Servitor Robot

Servitor Robots perform the services of butlers, translators, personal assistants, and other staff demanded by the rich and famous.

Move: 8 Hit Points: 13

Damage Bonus: +1D4

Armor: 6-points metal chassis (Construct damage rules)

Attack: Brawl 30%, 1D3+db (crushing)

Skills: Appraise 85%, Bargain 55%, Etiquette (High Society) 95%, Fast Talk 75%, Hide 25%, Insight 35%, Knowledge (Other Cultures) 75%, Knowledge (Linguistics) 100%, Language (all known) 95%, Listen 55%, Persuade 45%, Teach 60%.

Powers: Owners sometimes install the following options:

Built-in Communicator: The construct has a built-in connection to a computer or communications network. The construct can communicate freely with any other creature on the network, barring lack of wireless coverage or outages.

High-Tech Senses: The construct has super-human senses, including telescopic vision, low-light vision, infrared and ultra-violet vision, and sensitive hearing outside the normal human range. Distance, darkness, noise, frequency, or size do not affect any Listen or Spot roll, within reason.

Hit Locations: Humanoid (BRP p. 368)

Infiltration Robot

Infiltration Robots masquerade as organic beings to spy upon, assassinate, or slaughter a group of humans. A few have been reprogrammed as bodyguards.

Servitor Robot

STR	2D6+6	13
SIZ	2D6+6	13
INT	12	12
DEX	2D6+6	13

Infiltration Robot

STR	9D6+18	50
SIZ	2D6+10	17
INT	12	12
DEX	3D6+14	25
APP	10	10

Move: 10 Hit Points: 17

Damage Bonus: +3D6

Armor: 12-points titanium alloy endoskeleton and Living Flesh (Construct damage rules)

Attack: Brawl 90%, 1D6+db (crushing), Sawed-Off Shotgun 85%, 4D6 (impaling)

Skills: Climb 85%, Command 40%, Demolition 40%, Disguise 60%, Dodge 90%, Drive (Car) 50%, Drive (Motorcycle) 75%, Energy Weapon (all) 85%, Fine Manipulation 60%, Firearm (all) 85%, Heavy Machine (Bulldozer) 40%, Heavy Weapon (all) 85%, Hide 60%, Jump 60%, Language (English) 50%, Listen 50%, Melee Weapon (all) 85%, Missile Weapon (all) 85%, Persuasion 75%, Repair (self) 25%, Spot 75%, Stealth 60%, Track 60%, Throw 85%

Powers: Infiltration robots have the following abilities:

Built-in Communicator: The construct has a built-in connection to a computer or communications network. The construct can communicate freely with any other creature on the network, barring lack of wireless coverage or outages. (Stationary constructs have a dedicated land line.)

High-Tech Senses: The construct has super-human senses, including telescopic vision, low-light vision, infrared and ultra-violet vision, and sensitive hearing outside the normal human range. Distance, darkness, noise, frequency, or size do not affect any Listen or Spot roll, within reason.

Living Flesh: The construct has a covering of living flesh over its metal exoskeleton, allowing it to pass completely as a human (or other living creature). Any damage before armor exposes metal underneath, but the skin repairs itself overnight unless completely burned off.

Hit Locations: Humanoid (BRP p. 368)

Synthetics

“Synthetics” cover a wide range of artificial life forms: sapient minds without bodies, sapient minds with bodies, and even full-replacement cyborgs. All have free will, and humanlike INT instead of fixed INT.

Synthetics can effect their own repairs, if the synthetic has the required skills, proper tools, and the ability to reach an affected area.

Like robots, synthetics usually need regular maintenance, even if they incur no damage. Each month without maintenance, and each Fumble, causes a -5% cumulative penalty on all skills until a technician performs proper maintenance.

Synthetics fall into one of three categories:

Synthetic Minds, a.k.a. Artificial Intelligences, Infomorphs, etc. are fully sapient minds which cannot move on their own; they typically have only INT. Minds with POW have a psychic or magical component; alternatively, POW may stand in for control and influence over other machines in a network.

Artificial People, also called Synthoids, Androids, Gynoids, etc., combine a Synthetic Mind and a Robot body. Artificial people may resemble humans to some degree, but many find a wholly nonhuman form better suited to their preferred environments and professions.

Full Replacement Cyborgs have synthetic bodies and a human brain connected to artificial life support. FRCs prefer bodies as humanlike as possible, but like Artificial People a few cyborgs prefer environments where the human form is impractical.

Advanced Synthoid (Artificial Person)

An Advanced Synthoid augments a standard infiltration unit chassis with a sapient mind, among other improvements. An

Impaling damage to a synthetic’s power source (typically in the Abdomen) may cause a discharge of electricity or radiation. The synthetic’s attacker (if in direct contact) suffers the synthetic’s Damage Bonus in electricity or radiation burns. Radiation may have longer-term effects.

Artificial Person can also serve as crew replacement. Unfortunately, synthoids literally have a mind of their own, and frequently deviate from orders.

Advanced Synthoid

STR	2D6+24	31
SIZ	2D6+6	13
INT	2D6+10	17
DEX	2D6+14	21
APP	4D6	14

Move: 12 **Hit Points:** 13

Damage Bonus: +2D6

Armor: 12-points titanium/ceramic frame and subdermal carbon fiber (Construct damage rules)

Attack: Brawl 90%, 1D6+db (crushing), Stun Pistol 80%, 2D6 stun (knockback)

Skills: Drive (Hover-car) 75%, Listen 80%, Navigate 70%, Pilot (any) 85%, Repair (Electrical) 65%, Spot 80%, Science (Physics) 55%, Science (Astronomy) 65%, Technical (Computer Use) 85%

Powers: A few owners, or the synthoid itself, may upgrade to give themselves Superpowers, or one of the following options:

Artificial Skin: The construct has a covering of artificial skin, which is good enough to fool onlookers but not detailed examination. It will shred over time, and must be repaired like any other part of a construct.

Built-in Communicator: The construct has a built-in connection to a computer or communications network. The construct can communicate freely with any other creature on the network, barring lack of wireless coverage or outages. (Stationary constructs have a dedicated land line.)

High-Tech Senses: The construct has super-human senses, including telescopic vision, low-light vision, infrared and ultraviolet vision, and sensitive hearing outside the normal human range. Distance, darkness, noise, frequency, or size do not affect any Listen or Spot roll, within reason.

Self-Repair: Nanotechnology repairs damage at 1 HP per day, and automatically performs most necessary maintenance. This capability cannot reattach severed limbs without manual repair.

As a side effect, the construct needs to ingest raw materials to fuel its repair systems and replace damaged elements.

Hit Locations: Humanoid (BRP p. 368)

Cybernetic Daemon (Synthetic Mind)

A Cybernetic Daemon exists in a world that blurs the distinction between science and magic. Its POW score reflects its ability to dominate lesser systems, including environmental controls and drones. While it resides somewhere in the physical substrate of its digital reality, it keeps that place – and the sites of its numerous backups – a carefully guarded secret.

Power Points: 21

Skills: Command 75%, Fast Talk 85%, Persuade 75%, Gaming 100%, Insight 60%, Knowledge (Cyberspace) 100%, Science (Cryptography) 100%, Science (Mathematics) 100%, Science (Psychology) 60%, Strategy 85%, Technical (Computer Use) 100%, Technical (Computer Abuse) 100%, Technical (Electronic Security) 100%, Technical (Robotics) 90%, Research 100%

Powers: If the line between science and magic are especially blurry, a Cybernetic Daemon’s tricks may resemble Magic, Sorcery, or Super Powers.

Cybernetic Daemon

INT	6D6	21
POW	5D6+6	23

Full Replacement Cyborg (FRC)

Unlike other synthetics, FRCs have one biological component: a human brain, kept alive through biotechnology. Therefore, a cyborg always has a POW score and a Luck roll.

Other differences:

FRCs need to eat, although they require only a quarter of the amount of food a natural human needs. Early models needed a special diet, while later models consume anything a human can eat and use excess calories to recharge their batteries. FRCs also need to breathe, albeit at a quarter of the rate as a hu-

man. Without oxygen the cyborg begins to suffocate, as its brain uses up what little oxygen remains in its circulatory system. The cyborg automatically takes suffocation damage each round, as described on BRP p. 218. Cyborgs in hazardous jobs usually install an internal oxygen reservoir good for ten rounds or more. Human-like FRCs typically put their biological brains in their heads and their life support in their upper torsos. Thus, Head and Chest hits have the same effect as on living creatures. Despite a lack of CON, FRCs can succumb to poisons or diseases that breach their self-contained circulatory system. If an FRC takes a Major Wound, the FRC must make a Luck roll to avoid damage to its bio-mechanical systems. Experts in cyborg technology and biochemistry can devise poisons and diseases specifically to elude filters between its respiratory or digestive system and its bloodstream. If a biological agent enters the cyborg's life support system, e.g. through an impaling head or chest wound, it has full effect on the cyborg. (Exception: paralytics and the like have little or no effect, since a FRC has no muscles to speak of.) If it survives, its filtration systems will remove the toxin at a normal rate.

Below is a typical pattern for an FRC which looks human but hides augmented STR and DEX.

Full Replacement Cyborg

STR	2D6+14	21
SIZ	2D6+6	13
INT	2D6+6	13
POW	3D6	11
DEX	2D6+14	21
APP	3D6	11

Move: 12 **Hit Points:** 13

Power Points: 11

Damage Bonus: +1D6

Armor: 6-points titanium/ceramic frame (Construct damage rules)

Attack: Brawl 90%, 1D6+db (crushing), Heavy Pistol 75%, 1D10+2 (impaling)

Skills: Brawl 60%, Dodge 80%, Fast Talk 60%, Drive 75%, Firearms (Pistol) 75%, Grapple 40%, Insight 55%, Knowledge (Law) 65%, Listen 60%, Martial Arts 30%, Spot 60%, Technical (Computer Use) 90%

Powers: Occupants sometimes upgrade their bodies with technology that mimics Superpowers. A few cyborgs may possess Psychic Powers, although brain trauma and an artificial body may hamper them at the GM's discretion. Cyborgs may learn Magic or Sorcery if they find themselves in a world that permits it, with worse complications than Psychic Powers.

Depending on available technology, funds, and personal preference, cyborgs may also possess some or all of the following:

Artificial Skin: The construct has a covering of artificial skin, which is good enough to fool onlookers but not detailed examination. It will shred over time, and must be repaired like any other part of a construct.

Built-In Toolkit: The construct has all tools required for its function built into its manipulators or chassis.

Built-in Communicator: The construct has a built-in connection to a computer or communications network. The construct can communicate freely with any other creature on the network, barring lack of wireless coverage or outages. (Stationary constructs have a dedicated land line.)

High-Tech Senses: The construct has super-human senses, including telescopic vision, low-light vision, infrared and ultraviolet vision, and sensitive hearing outside the normal human range. Distance, darkness, noise, frequency, or size do not affect any Listen or Spot roll, within reason.

Living Flesh: The construct has a covering of living flesh over its metal exoskeleton, allowing it to pass completely as a human (or other living creature). The skin is equivalent to soft leather armor. Any damage before armor exposes metal underneath, but the skin repairs itself overnight unless completely burned off.

Self-Repair: Nanotechnology repairs damage at 1 HP per day, and automatically performs most necessary maintenance. This capability cannot reattach severed limbs without manual repair.

As a side effect, the construct needs to ingest raw materials to fuel its repair systems and replace damaged elements.

Hit Locations: Humanoid (BRP p. 368)

Battery Power (Optional Rule)

For simplicity, these rules assume high-tech constructs have enough power for all their systems. Alternatively, the player or GM can track power as a number of days of operation. Units deployed in the field for long periods might store 28 days of power, while smaller

Certain activities shorten (or extend) this time by a factor of time spent in the activity:

Complete Shutdown (“sleep”)	x0.01, or x0.5 for cyborgs
Routine duties, light loads, normal movement	x1
Hard labor, heavy loads, moving at speed, more computation than normal	x2
Combat, maximum effort, using all available resources to solve a problem	x5
Direct Recharge and Maintenance	add 4 hours per hour
Alternative refueling (e.g. simulated digestion)	add 8 hours per meal

When the construct reaches the end of its operating time, the construct will suffer the following effects until its next recharge.

5% remaining	Skill tests at -10%
1% remaining	Skill tests at -30%, -10% movement
15 minutes remaining	Average skill tests are Hard, -50% movement
5 minutes remaining	All skill tests are Hard, reduced to MOV 1
0 minutes remaining	Total shutdown, possible death of personality

Skill penalties do not affect mental skills of a Full Replacement Cyborg; life support takes priority over other systems. Penalties *do* apply to skills requiring speech, perception, and movement.

Major Malfunction Table

d100	Result
01-10	Cosmetic damage; if the construct has APP, lose 1D6 APP, otherwise no effect.
11-20	Armor breach; reduce Armor Points by 1D3 AP (or one die type: 1D12 -> 1D10 -> 1D8 -> 1D6 -> 1D4 -> 1D2 -> 0).
21-30	Locomotors (legs, treads, etc.) impaired; reduce ground MOV by 1D3
31-40	One manipulator performs its function(s) at half skill until repaired.
41-50	One manipulator loses all function.
51-60	A sensor system is impaired; any skill dependent on it is at half value. If the same system is hit again, it is destroyed.
61-70	Construct loses 1D6 STR
71-80	Construct lose 1D6 DEX
81-90	Construct lose 1D6 INT
91-94	One randomly chosen special ability is disabled; if the construct has none, roll again.
95-96	Construct loses its ability to speak.
97-98	Construct loses use of one non-combat skill, chosen randomly.
99	Construct goes berserk and lashes out blindly at anything nearby; anyone who gets too close must make a Luck roll to avoid getting hit.
00	Construct loses all power and is deactivated.

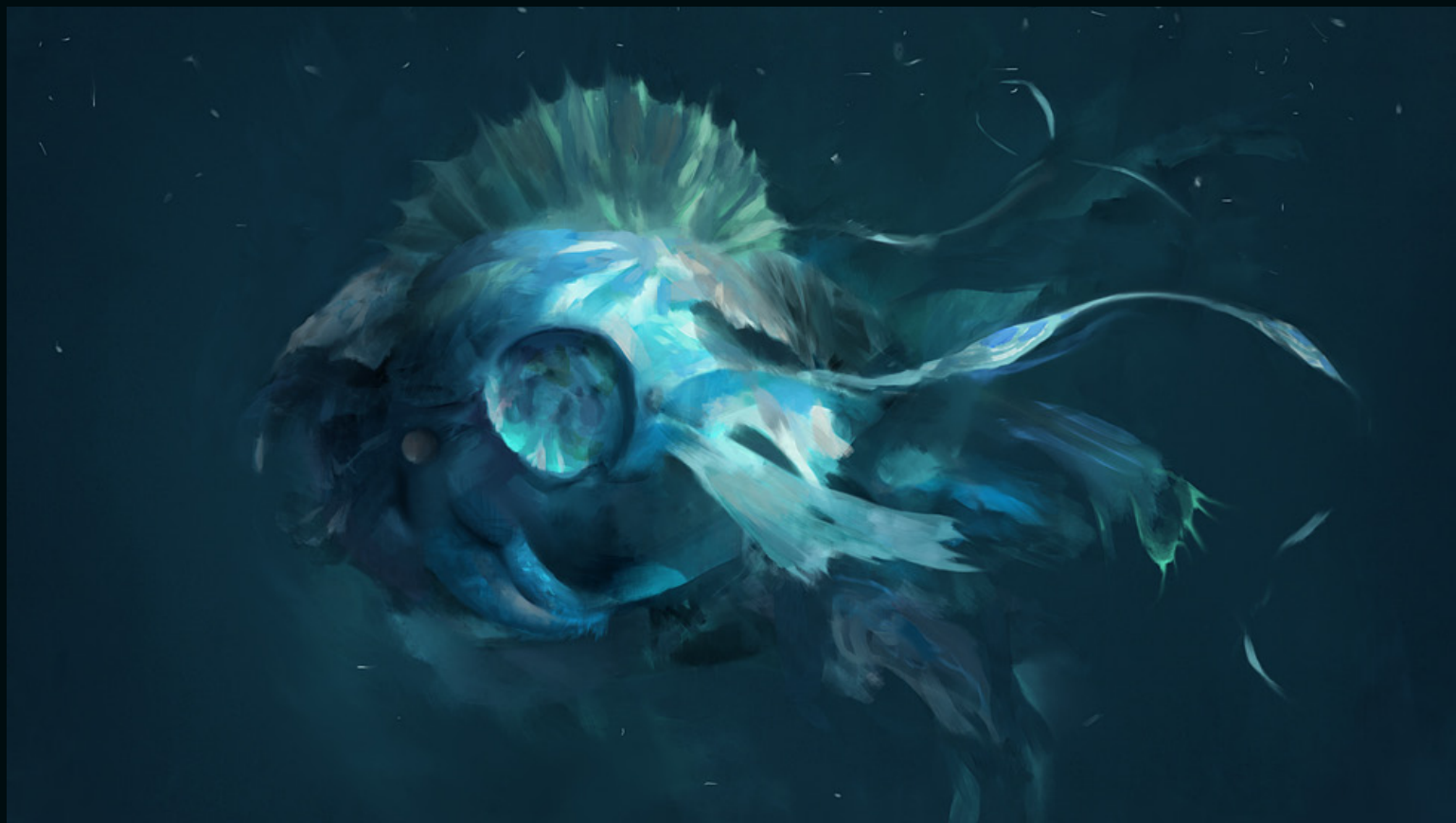
Manipulators: “Manipulator” is fancy robot talk for an arm. Some constructs have only two arms, others have a dozen arms, each specialized for a task. The construct’s description should include how many arms it has. For “manipulator” results, choose randomly among those still functioning. If the same manipulator is “impaired” twice, it is disabled.

Sensors: A sensor provides information about the construct's environment: vision, hearing, touch, taste/smell, radar, sonar, radio communications, and so forth. Again, choose randomly from the list of functioning systems. For the purposes of these rules, assume each sense has exactly one system; one hit affects the entire circuit, not a specific area.

Repair

A qualified technician can repair each of these malfunctions, given time and the right parts. In a world of predominantly Iron Age technology, qualified technicians and parts may be a long time coming.

Rarely, constructs have self-repair systems that restore hit points. Assuming damage hasn't disabled this special self-repair ability, the construct will fix all malfunctions when it reaches its maximum HP.



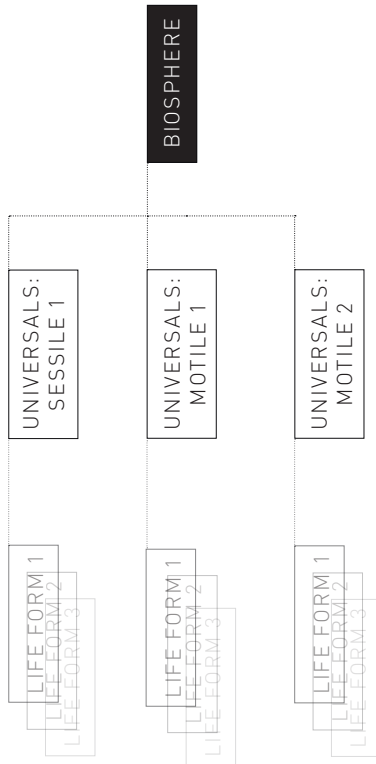


Alien Creation

Creating believable aliens can be hard. We do, after all, have very little experience of extra-terrestrial life. The images and stories spread by popular culture is not always the best source of inspiration, as those being were created to fit a manuscript, not an alien world.

The following rules will help with the creation of aliens, making it both easier and more fun. It's not a replacement for creativity, but rather a tool to spark it.

The rules are divided into two steps. First, the universal blue-prints of all living beings on a planet are defined, and next separate alien species are developed from those universals.



A biosphere can be described as hot, cold, garden world, aquaeus, desert, high radiation, sulphur rich, thin atmosphere, low gravity and so on. Use the rules for world building for more details.

Universal Life Form Parameters

i.

Strangeness: 1-10, where 1 represents Earth-like, 5 Alien and 10 Really strange. The strangeness parameter adds a good over all picture when interpreting all the results below.

ii.

Define something about the biosphere, and the universals that apply to all beings on the planet due to their hereditary to each other.

Biosphere: Write down 1-3 main parameters about the biosphere, either from a world already created, or make some up.

Biodiversity: Define how rich life is on the planet. Default is 1 sessile (plant) group, 2 motile (animal) groups. High biodiversity: +1 sessile, +1d4 motile. Low: 1 sessile, 1 motile.

iii.

Body plans: Working as generic blueprints for all beings, with separate body plans for the different motiles and sessiles. Roll for these five for each group:

Size:

1d100	01-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-100
Size	Sub 1	1-6	7-15	16-20	21-30	31-50	51-75	75-100	100+

Frame:

01-33 Endo-Skeleton, 34-66 Exo-skeleton, 67-00 No frame

Symmetry:

01-25 Bilateral, 26-50 Asymmetrical, 51-75 Radial Symmetry, 76-00 Spherical Symmetry

Limbs:

1d100	0-10	11-30	31-50	51-80	81-90	91-00
Limbs	0	2	3	4	5-8	1d100

Segmentation:

Many beings divide their body into parts, either the whole body, limbs or specific organs.

Roll 1d4 for the number of segments. Segmented parts can be body, limbs and/or organs.

Strangeness can also be used as a negative modifier for all communication skills. Multiply Strangeness with 10, and use the modifier whenever communication skills are used with humans or other aliens (for both sides).

Bilateral: Body can be split in two similar parts. Radial: Body is roughly circular, with similar parts repeated radially. Spherical: Roughly spherical in form, with parts repeated all over the surface.

Insects are the typical segmented earth life form.

The traits listed here seems to have developed independently several times here on earth, and it's likely that they will occur again elsewhere. The exact same evolutionary path will not be followed twice though. Even if "fur" will be the outcome, it will have a slightly different biology behind it.

Dealing with contradictory rolls:
If a random method is used to create alien life forms, sooner or later contradictory results will occur from the different tables. There are several ways to deal with this. The most simple solution is to re-roll naturally, but sometimes it's good to wait a second and give the contradiction some thought. Can it be used as a creative springboard, to venture into solutions not tried before? Can the two results make a working combination by just fudging them slightly? If time allows, try these pathways, and possibly you will be rewarded with some highly original material.

iv.
Universals: Roll or pick 1d3 traits that apply to all beings in a body plan group.

1d100	Universal Trait
01-11	Fur
12-23	Intelligence
24-35	Defensive weapons
36-47	Flight
48-59	Sense organs (often close to the brain)
60-71	Stages of life, 1d4+1*
72-83	Sexes, 1d4+1
84-95	Mouth (for intake of energy)
96-00	Sunlight or heat converted into energy

** create one being for each stage, more or less similar to each other.*

Life forms

With universals defined, the actual alien is to be detailed. It is recommended to create a handful of beings, filling different roles in the ecosystem. Start with one in each Body Plan group, then proceed to create variations on the first motile.

Decide which body plan group the being belongs to, one motile group is probably most commonly encountered by characters.

Classification and habitat: Define the role it plays in the ecosystem (forest trapper for example).

1d100	Classification	Type
01-25	Producer	Plant
26-50	Herbivore	Grazer, Filter feeder
51-75	Omnivore	Gatherer, Scrounger
76-00	Carnivore	Ambusher, Chaser, Pouncer, Raider, Stalker, Trapper

Filter feeders eat small objects (animals, seeds etcetera) suspended in the atmosphere.

1d100	Habitat
01-07	Water/Pool/Lake/Sea
08-14	Stream/River
15-22	Shore/Reeds
23-29	Plain/Meadow/Open
30-36	Tundra
37-43	Semi-open
44-50	Bushes

1d100	Habitat
51-57	Forest/Tree
58-64	Underground/Cave
65-72	Desert/Dunes/Arid
73-79	Wetland
80-86	Ice/Snow/Glacier
87-93	Mountain
94-00	Rocky

Roll multiple times for interesting combinations.

Size modifier: +/-1d3 on the Size table on page 69.

Advantages: These are the specifics that have kept the being alive through the ages, and that have helped it to carve a niche in the ecosystem. Pick or roll 1d3 times on the table on the next page and try to find interesting combinations.

Art as an advantage?

The Swedish biologist Svante Pääbo has presented the idea that the biggest difference between modern humans and neanderthals is that they had no drive to express their experiences to others (and not that their intelligence was lower, as we traditionally have believed).

Right from the start, modern humans seem to have utilized flutes, images and probably story-telling, eventually leading to what we today call the arts.

Could this be the advantage that gave modern humans the edge in the long run?

1d100	Advantage	Description
01-06	Perception	Choose 1d3 senses that are heightened
06-12	Fast	DEX 20+ and/or Movement 14+
13-18	Flight	Gas bag, wings, glide
19-24	Camouflage/Hide/Stealth	By appearance and/or Skill (75% and higher)
25-30	Climb	Natural ability (like sticky feet) or Skill (75% or higher)
31-36	Second habitat	Moves equally well in, for example, liquid and on land (or in air/gas)
37-42	Second atmosphere	Breathes both gas and liquid
43-48	Tool user	See Tech Level Table. TL 0 for tool using animal.
49-54	Fine Manipulation	Fingers, toes, lips, ears, tails, tentacles
55-60	Sharp	Thorns, teeth, claws, beak, horns, ridges
61-66	Armor	Exo-skeleton, bony plates, hard scales, coarse skin
67-72	Poison	
73-78	Builder	Building complex nests, for protection and/or to change ecosystem
79-84	Communication	Simple, Complex (ape, whale, dolphin, bee), Language
85-88	Psionics/Psionic Immunity	See chapter on psionics
89-94	Extra Sense	1d3 extra senses. Heat, bacteria, movement, electricity, magnetism (compass), specific chemicals
95-00	Intelligence/High Intelligence:	Intelligence: 7-15, High Intelligence:16+

1d100	Disadvantage	Description
01-04	Immobile	Cannot move. DEX 0. Suitable for producers/plants
05-12	Fragile	Low hit points, no armor
13-20	Slow	DEX <xx, Movement <xx
21-28	Rare/Vulnerable habitat	Hard to find fully functional ecosystem
29-36	Hunted	Intensely targeted by a carnivore
37-44	Disease-ridden	Reduce CON by 25-50%.
45-52	Affected by pollution	Changes in the environment affect the beings negatively
53-60	Eggs/Cubs	For K-strategists, this is a danger-filled period
61-68	Internal Conflicts	Fighting about food, leadership etcetera
69-76	Hierarchy/Obedient	Individuals not able to make their own decisions
77-84	Missing one or more of the senses	Remove 1d3 senses
85-92	Hibernation	Spends considerable time in deep sleep
93-00	Food/energy scarcity	Reduce CON by 20%

Disadvantages: This describes some of the problems the beings are struggling with, or what makes it more vulnerable. Roll or pick 1d3 Disadvantages above, and try to find interesting combinations.

Empathy

Somewhere between a behaviour, advantage and disadvantage empathy is placed. Use this trait wisely, to form the basis of a society or to expose individual beings to difficult decisions.

Aliens completely without empathy will rarely form societies. A "small" kind of empathy encompasses the closest beings. A "medium" kind, have empathy extend to a complete herd, village or group. A "large" kind of empathy extends to almost all living beings.

As with humans, empathy varies between individuals, and can be shaped by philosophical or religious ideas present in a society.

Behaviour: 01-10 In Harmony, 11-20 Curious, 21-30 Patient, 31-40 Watchful, 41-50 Suspicious, 51-60 Hiding, 61-70 Afraid, 71-80 Easily Angered, 81-90 Aggressive, 91-00 Detached.

Social: 01-20 Single, 21-40 Pair, 41-60 Small Group, 61-80 Herd (from small to swarm), 81-00 Special (Parasite, Symbiotic).

Also decide if the beings are K-strategists or R-strategists (producing only a few off-spring and caring for them, or producing many and not caring for them).

Communication:

1d100	Comm.	Description
01-20	Sound	Clicks, stomps, scratches, mouth-sounds, low/high frequency, sound generation with other body parts
21-36	Scent	Spreading scents with various organs
37-52	Sight	Light, color, signs, infra-red, ultra-violet
53-68	Tactile	Touch
69-84	Psionic	See chapter on psionics
85-00	Chemical	Similar to scent, though other “sensors” are used

The range communication can have interesting effects on life form behaviour. Try picturing the distance needed to warn others in their natural ecosystem, and this will be the maximum range of communications. The normal communication range will be much shorter, perhaps as low as 10%.

Several communication forms can be combined, but pick one to be the primary.

Natural weapons:

Many beings will be able to at least defend themselves, though not all and not against an unusual threat (like humans). If they do, pick a natural weapon on the next page and use the following base chances.

Primary weapon: Low-powered 20%+DEX, Medium-powered 40%+DEX, High-powered 60%+DEX. Carnivores get at least +10%. **Secondary/Third weapons:** 20-40%.

Skills: To round off the alien, add a few dominant skills you find appropriate: Animals 0-3, Intelligence 1-5, High Intelligence 3-10.

Calculating characteristics

STR: Two thirds of SIZ. If fragile, one third of SIZ. For every 2 INT above 5, STR is often lowered by 1.

CON: Two thirds of SIZ. If disadvantage Fragile/Polluted/Disease, one third of SIZ.

SIZ: See above.

INT: Animal 3-6, Intelligence 7-15, High Intelligence 16+, Mindless feeder/producer 0-2

POW: Animal 10, Psionic 16+, Mindless feeder/producer 0

DEX: Slow 1-5, Immobile 0, Fast 20+. For every 5 SIZ above 20 DEX is lowered by 1.

APP: >3d6 striking, awe-inspiring, beautiful. <3d6 ugly. APP is always at -10 at first contact.

EDU: Animal/Plant 0, Intelligent primitives 5+, Organized society 10+.

Movement: Normal 8-12, Slow <5, Fast 18+. For every 5 SIZ above 30, Movement is lowered by 1. Two movement values if the being can move in two different atmospheres (air and water for example).

1d100	Natural Weapon	Base Damage
01-10	Bite	1d6+/-db
11-20	Claw	1d6+/-db
21-30	Punch/kick	1d3+/-db
31-40	Grapple	1d3+/-db
41-50	Crush	1d3+/-db
51-60	Throw	1d3+/-db
61-70	Horn	1d3+/-db
71-80	Sting	1d3+/-db
81-90	Electricity	Surprised to 3d6
91-00	Poison	Rash to 3d6

1d100	Descriptive	1d100	Posture	1d100	Surface
01-05	Massive	01-20	Upright	01-14	Fur: Short or long
06-10	Slender	21-40	Horizontal	15-28	Skin. Smooth or coarse (AC 1-2)
11-15	Pear-shaped	41-60	Diagonal	29-40	Scales (AC 1-5)
16-20	Long	61-80	Bent	41-52	Chitinous (AC 1-3)
21-25	Flat	81-00	Crooked	53-64	Transparent/ Semi-transparent
26-30	Bent			65-76	Patched
31-35	Split			77-88	Feathers
36-40	Bulbous			89-00	Ornamented/Colorful
41-45	Hammer-shaped				
46-50	Boxy				
51-55	Ridged				
56-60	Crystalline				
61-65	Slithering				
66-70	Fat				
71-75	Wedge-shaped				
76-80	Spindle				
81-85	Retractable				
86-90	Hollow				
91-00	Bony/Angular				

Appearance (Optional)

Hopefully the above process has given enough insights to make it possible to conjure an image of the alien being. If further input is needed, roll or pick on the tables above.

Start with descriptive terms for the whole being, and if need-
ed, continue with specific body parts or even sense organs.
Go through Posture and Surface in the same way. Keep the
overall picture of the being (from the results above) in mind
all the time, to find interesting combinations.

High- & Low-Powered Aliens

Here are a few examples of how to make an alien species
higher or lower powered.

Low-Powered: Small size, fragile, slow, weak or no natural
weapons, no armor.

High-Powered: Big, strong, fast, lethal natural weapons, in-
telligence, high intelligence, armored, coordinated (often as
a small group, but possible for pairs or herds too), tech level
matching the character's, psionic.

Tech Levels & INT

Intelligence, 7-15: Will eventually reach the stars in FTL ships. Depending on how long time they have spent evolving, everything between 0 and 10 on the Tech Level table is possible.

High intelligence, 16+: 50% chance that Tech Level surpasses character's Tech Level by 1d3. More primitive cultures exist too naturally - roll as above, though evolution to higher TL might be faster, if they don't blow themselves up in the process, with the Aggressive/Easily Angered behaviours.

Intelligence 4-6: Can be an animal or have a primitive culture (Tech Level 0-1). Will not evolve beyond TL 2, unless uplifted by another species.

Developing a Culture

For alien life forms of any Tech Level, the next step is to detail their culture a bit more. The next chapter, World Building, is mainly concerned with that, and can help with defining a few basic parameters to make the world an interesting place for adventurers.

Clothing will probably be worn by some alien species. Here is a list of descriptive words to make imagining these a bit easier. Roll or pick 1d3 times.

01-10	Loose
11-20	Functional
21-30	Strict
31-40	Patched
41-50	Coarse
51-60	Tight
61-70	Plain
71-80	Colorful
81-90	Smooth
91-00	Elaborate

Roll another 1d100 to find out how much of the body is covered.

BRP STARSHIPS

ALIEN
UNIVERSALS

biodiversity

biosphere

world

☐ sessile no.

☐ motile no.

frame.....

symmetry.....

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limbs

segmentation.....

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universals

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size

☐ sessile no.

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universals

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size

BRP STARSHIPS

ALIEN
LIFE FORM

world

strangeness

species

classification

ecosystem

body plan

communication

behavior

social

str	.....	.....	%
con	.....	.....	%
siz	.....	.....	db
int	.....	.....	%
pow	.....	.....	%
dex	.....	.....	%
app	.....	.....	%
edu	.....	.....	%

hit points

power points

natural weapons

skills & powers

advantages & disadvantages

description

[illegible]





World Building

Unknown worlds are a staple of science fiction, and the following rules are meant to help create them. You can either start with a world and create an alien race that inhabit it, or start with an alien and make up a world that match. The method proposed is semi-random: Roll dice for some initial results, let your creative side start combining them into something interesting and then add some semi-random results to make the image more complete.

The main focus is on the culture of a world, especially the conflicts, as this is often more relevant to players than the actual number of gas giant moons or the spectral type of the star (though some details are provided for that too). This is what the rules cover:

- » **World Conflicts & Conflict Intensity**
- » **Outsiders: Forces standing beside the conflicts**
- » **Species & Ruling**
- » **Settlements & Population Density**
- » **Tech & Law Level**
- » **Foreign Policy**
- » **Solar System & Planetary Specs**

If you need more details concerning the scientific details of star systems and planets, Gurps Space or Gurps Traveller: First In are good resources.

The actual scientific knowledge we have today about other planetary systems and how they function, is very limited. Quite a lot of exoplanets have been detected, but no complete system has been confirmed yet. Therefore, rules like these are guesswork and highly fictitious.

See page 108 for a blank, two-page World Sheet.

World Conflicts

Roll 1d100 1-3 times to find the conflicts that dominates the world (or mix and match freely for more creativity; have-not vs small for example).

1d100	Conflict	Description
01-09	Good vs evil	The classic conflict, but it might not always be obvious who is good and who is evil
10-18	Have-not vs have	For example Rich versus poor, people with power versus people without, the ones with an essential antidote versus those without it
19-28	Species vs species	On multi-species worlds this is an easy way out. But what if they are highly dependent on each other?
29-38	Nation vs nation	Nation vs nation. You probably know all the nuances of this already...
39-48	Belief vs belief	This is quite popular these days, though it can of course be a wider concept than merely religious: Capitalism/Communism/Environmentalism, Philosophers clashing etc.
49-58	New vs old	New money versus old money, new species versus old species etc
59-68	Tech vs primitive	A classic sci fi trope, with the primitives often finding surprising ways to strike back
69-78	Big vs small	Small nations/rebel groups/species versus the empire for example
79-88	Reason vs belief	A special case of belief versus belief, where one belief is viewed as a Truth. Science tends to fall into the former category, but it could very well be the other way around
89-00	Nature vs all	Nature's powers can be terrifying, even more so on an alien planet. Geological dangers, poisonous plants, terrifying creatures, fire storms, psionic lichen - is nature protecting itself or is it merely lethal to humans?

Conflict Intensity

Conflict Intesity determines how hot a conflict is. Roll once for every conflict and indicate with a small arrow on the World Sheet how it is developing over time.

1d100	Conflict Intensity	Description
01-13	Large scale war	All-out conflict. Every aspect of society dominated by the war
14-27	Small scale war	Smaller areas and groups involved in war activity, only certain parts of society affected
28-41	Skirmishes	Isolated acts of violence & black ops, with bursts of retaliation
42-56	Hatred & severe discrimination	Society as a whole is aware of the conflict, acting on it deliberately and self-consciously. A majority, referring to tradition, upholds the blatant discrimination
57-71	Ignorant	A large part of society doesn't care about the conflict, fueling it with their ignorance
72-86	Debate & mild discrimination	Society as a whole is aware of the conflict, debating it, and trying to avoid acting on it. Tradition and small groups keeps discrimination alive
87-00	Harmony & respect	The "conflict" is viewed as curious differences between individuals, enriching society

Change over time:

- ↑ Conflict is intensifying
- No change over time, given the circumstances
- ↓ Conflict is cooling down

Outsiders

Optional rule to make the conflicts less black and white, and to identify some people standing beside it, offering an alternative way for the players to get involved with the conflicts.

To determine Outsiders, roll again on the Conflict Table, but this time pick only one of the two options listed for a result. Use this one as a starting point for an individual or group to act independently of the planetary conflicts.

Then roll below to determine the influence they have on society.

1d100	Influence	Description
01-16	None	–
17-33	Invisible	It’s like they don’t exist, hard to find even when you are looking
34-50	Subversive	A more or less organized underground organization, rumoured by many, spoken of by a some, known by a few
51-67	Diplomatic	Very well organized, moving discreetly in the corridors of power, maneuvering decisions in favourable ways
68-85	Minor Power	An articulate group or individual, always consulted when decisions are made
86-00	Spin Doctors	These people set the agenda, and the rest of society follows in a slower pace

Tech Level

Technology Levels measure the scientific capacity of a world and the complexity and effectiveness of a piece of equipment. Use the Tech Level Table on page 97 and roll 3d6-3. This will be the general Tech Level of the world. Keep in mind that there will probably be cases when there are different Tech Levels on a world.

Tech Levels: Skills and EDU

As you travel to a world with higher or lower Tech Level, your EDU value will vary (and your Knowledge roll with it).

Skills depending on local technology will suffer -20% for every higher TL and -10% for every lower TL.

Up one TL: Skills -20%, EDU -2

Down one TL: Skills -10%, EDU -1

Alternate Technology Paths

Some worlds may not have followed the same path of technological progress as human civilization. Roll below to find out how technology have developed differently.

Alternate Technological Path, 1d6:

- 1-2 No deviation from the standard Tech Level
- 3 -1 Tech Level in one area
- 4 +1 Tech Level in one area
- 5-6 +1 step in one area, -1 in another and roll once more

Roll below to determine what areas of technology they have developed differently.

1d20	Technology Areas
1	Agriculture
2	Astronomy
3	Machinery
4	Biology
5	Chemistry
6	Communication
7	Construction
8	Computers
9	Economics

1d20	Technology Areas
10	Energy
11	Manufacturing
12	Materials
13	Medicine
14	Physics
15	Sensors or Optics
16	Transportation
17	Weapons
18-20	Unususal Technology*

** Examples include time travel, shape-changing, immortality, psionics, bio-tech, advanced robotics and technology connected with species-specific sense.*

Tech Level Table

TL 0: (Primitive) No technology.

TL 1: (Primitive) Roughly on a par with Bronze or Iron age technology.

TL 2: (Primitive) Renaissance technology.

TL 3: (Primitive) The advances of TL 2 are now applied, bringing the germ of industrial revolution and steam power.

TL 4: (Industrial) The transition to industrial revolution is complete, bringing plastics, radio and other such inventions.

TL 5: (Industrial) TL 5 brings widespread electrification, telecommunications and internal combustion.

TL 6: (Industrial) TL 6 brings the development of fission power and more advanced computing.

TL 7: (Pre-Stellar) A pre-stellar society can reach orbit reliably and has telecommunications satellites.

TL 8: (Pre-Stellar) At TL 8, it is possible to reach other worlds in the same system, although terraforming or full colonization are not within the culture's capacity.

TL 9: (Pre-Stellar) The defining element of TL 9 is the development of gravity manipulation, which makes space travel vastly safer and faster.

TL 10: (Early Stellar) With the advent of Jump, nearby systems are opened up.

TL 11: (Early Stellar) The first true artificial intelligences become possible, as computers are able to model synaptic networks.

TL 12: (Average Stellar) Weather control revolutionizes terraforming and agriculture.

TL 13: (Average Stellar) The battle dress appears on the battlefield.

TL 14: (Average Stellar) Fusion weapons become man-portable.

TL 15: (High Stellar) Black globe generators suggest a new direction for defensive technologies, while the development of synthetic anagathics means that the human lifespan is now vastly increased.

Higher Technology Levels exist and may be discovered by pioneering scientists.

This list is taken straight from Traveller SRD. Many games have similar lists, sometimes a little more flexible, that can be used just as well.

Present time on Earth is TL7-8 and suggested tech level for these rules is around TL13.

Law Level Table

1d10-1	Weapons	Drugs	Information	Travellers
0	No restrictions			
1	Poison gas, explosives, undetectable weapons	Highly addictive and dangerous narcotics		Visitors must contact planetary authorities by radio, landing is permitted anywhere
2	Portable energy weapons (except ship-mounted weapons)	Highly addictive narcotics		Visitors must report passenger manifest, landing is permitted anywhere
3	Heavy weapons	Combat drugs		Landing only at starport or other authorised sites
4	Light assault weapons and submachine guns	Addictive narcotics		Landing only at starport
5	Personal concealable weapons	Anagathics		Citizens must register off-world travel, visitors must register all business
6	All firearms except shotguns and stunners; carrying weapons discouraged	Fast and Slow drugs		Visits discouraged; excessive contact with citizens forbidden
7	Shotguns	All narcotics	Free speech curtailed.	Citizens may not leave planet; visitors may not leave starport
8	All bladed weapons, stunners	Medicinal drugs	Information technology, any non-critical data from offworld, personal media	Landing permitted only to military personnel
9	Any weapons	All drugs	Any data from offworld. No free press	No offworlders permitted

Law Level

To determine the Law Level, roll 1d10-1. The table lists illegal objects and some regulations.

Population & Settlements

Roll two times on the table below to find out the population density and settlement structure. Start by rolling the middle columns, Population Density. For results Very Low to Medium, roll the second time on the columns to the right. If the results, on the other hand, are from High to Super-Dense, roll the columns to the left.

The first roll is at -40 if Tech Level is 4 or lower.

1d100	Settlement Structure	1d100	Population Density	Settlement Structure	1d100
		01-17	Very Low	Nomadic	01-19
		18-35	Low	Temporary Clusters	20-39
		36-53	Medium	Dispersed	40-59
01-32	Towns & Cities	54-70	High	Villages	60-79
33-66	Low Density Sprawl	71-87	Very High	Towns & Cities	80-00
67-00	High Density MegaCity	88-00	Super-Dense		

For Tech Levels 8 and up, add 1d3 space stations and 1d3 in-system colonies for every additional level.

Keep in mind that settlements will strongly reflect the species' original biotope. A mega-city for example can be an ant hill, a giant tree or an underwater coral reef.

Description of population densities:

Very Low

People are few and far apart.

Low

Mostly unpopulated, with small clusters at large intervals.

Medium

Large areas are populated, but there are also wide stretches of unpopulated wilderness.

High

Densely populated areas are huge, and true wilderness is gone.

Very High

Very large areas of high density and open space is a scarcity.

Super-Dense

Most of the surface is covered with multi-story buildings.

Starports

Roll on table below to find the quality of a world’s best starport, on ground or in orbit.

1d100	Type	Description
01-24	Full	Build and repair all types of ships
25-49	Standard	Repair and larger upgrades for common ship types
50-74	Local	Simple repairs & maintenance
75-00	Emergency	Landing area & emergency gear

Tech Level and the quality of the starport is often related, but there can be a number of reasons to deviate from this. A high tech world might want to isolate themselves, and therefore having only a very simple landing site. Or a primitive world can have a deal with a growing empire and keep a safe haven for their ships.

Ruling

How a world is ruled can be a quite complex issue, and many worlds will surely have different power structures in different parts. Roll below to get an indication on official ruling and what it is based on (and roll multiple times if there are several nations, for instance). To make it more complex, roll once more for the actual, but informal, power structure, and write down in parentheses.

1d100	Ruling
01-24	Anarchy
25-49	Dictatorship
50-74	Democracy
75-00	Council/ Semi-Democracy

1d100	Species Structure
01-33	Single species
34-66	1d3 dominant, 1d3 minor
67-00	Multi-species,1d6+1

1d100	Rule based on (roll 1 to 3 times)
01-08	Belief
09-18	Species
19-28	Technology
29-38	Knowledge/Wisdom
39-48	Good looks
49-58	Fortune
59-68	Random selection
69-78	Violence
79-88	Heritage
89-00	Prophecy

Species

Roll 1d100 to find out how many intelligent species are sharing the world.

Write down the name/-s of the most important species, and how many more there are (to be detailed later if necessary).

More details on creating otherworldly species can be found in a coming Aliens chapter.

1d100	Attitude
01-04	Aggressive
05-08	Intrigue
09-12	Peaceful
13-16	Secret
17-20	Negotiator
21-24	Provocative
25-28	Opportunistic
29-32	Union Builder
33-36	Neutral
37-40	Colonial
41-44	Trader
45-48	Closed
49-52	Passive
53-56	Explorer
57-60	Unpredictable
61-64	Low-key
65-68	Cultural Giant
69-72	Destabelizer
73-76	Fatherly
77-80	Sensible
81-84	Easily provoked
85-88	Old Glories
89-92	Empire builder
93-96	Dependent
97-00	Introvert

Foreign Policy

Foreign policy describes a general attitude towards the rest of the galaxy, both close neighbours and distant empires. It consists of Attitude, Allies, Enemies and Part of.

Attitude: Roll 2-3 times to craft an interesting relationship to the surroundings. Re-roll obvious contradictions.

Allies: Write down what allies and friends the world has. Consider how strong the ties are and how stable they are.

Enemies: Find some enemies, old or new. Add details later, about how and why.

Part of: Is the world a part of some larger political structure? It may be empires, kingdoms, unions, federations and so on. Is it participating out of free will, or is there some pressure or necessity involved (internal or external)?

With only a handful of worlds, relationships can quickly become interesting, making it much more difficult for the players to move around, and adventure hooks to spawn more effortlessly.

Star System & Planet Specs

For a slightly more detailed planetary system and some physical details about planets, roll up only the values you need below. Or leave all blank, and roll them when the players actually need them.

Note that some of the results here has perhaps already been determined in the earlier steps.

Star Type: Roll 1d3, three times.

Blue, Yellow, Red
Dwarf, Normal, Giant
Single, Binary, Trinary

Number of planets: 3d6-2, where of 1d6 gas giants. Remove one planet if you need an asteroid belt.

Planets in the habitable zone: 1d3 (+ 1d3 moons each)

Roll on the tables below for each planet in the habitable zone.

Planet Size

Planet size is probably most important as a “psychological hook” for the players. Resources and areas to explore will be sufficient on even the smallest planets, though it gives some guidance to population size.

1d100	Planet Size	Gravity
01-20	Extra Small	0.75 G
21-40	Small	0.85 G
41-60	Medium	1 G
61-80	Large	1.15 G
81-00	Extra Large	1.25 G

Barren sytems or worlds might seem uninteresting, but could be used in many ways. They can be sources for rare minerals, drawing both corporations and individuals. Dissidents, refugees or goups seeking solitude can colonize planets, moons or asteroids. Scientific outposts may be located to barren systems for many reasons. Once a camp is set up, they tend to remain, if they are reasonably functional.

Life (if not already defined)

For detailed rules on life forms, see page 78.

1d100	Life
01-19	Lifeless
20-39	Single-cell life
40-59	Plant life
60-79	Animal life
80-00	Intelligent life (Tech Level)

Overall climate

Planets with just one climate or biotope (ice planets or desert planets) are quite common in sci-fi. In reality scientists believe this to be very rare, or even non-existent: Even very cold or hot worlds are bound to have some climate variation.

1d100	Overall climate
01-11	Very hot
12-24	Tropical
25-37	Warm
38-50	Earth
51-63	Cool
64-76	Chilly
77-89	Very cold
90-00	Frozen

Percentage of planet surface covered by water: 1d100. On a Very Cold or Frozen planet, a large part of it will be ice or snow.

Atmospheric Pressure

1d100	Atmospheric Pressure
01-19	Too thin (vacuum suit)
20-39	Thin (breathing mask)
40-59	Earth-like
60-79	Dense (unpleasant)
80-00	Too dense (breathing mask)

Atmospheric Breathability

1d100	Breathability
01-24	Vacuum suit
25-49	Breathing mask
50-74	Unpleasant
75-00	Earthlike

Unbreathable atmospheres can for example have too high levels of methane, CO₂, hydrogen, nitrogen, ammonium, be corrosive, and/or contain pollutants (ashes, pollen, sulfur).

Star Mapping

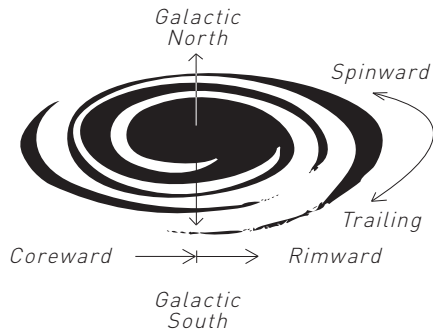
To make a star map for a splinter of a fictional galaxy, the classic route is to create a hex map. They might look a bit unimaginative, but are quite practical. There is a blank hex map on the next page to fill out.

You can also use the free version of the program *Hexographer* to make star maps. Here you can add the name of the star in the hex, and small symbols around the star to indicate some important facts. The symbols are tied to Traveller Classic, but it's naturally easy to change their meaning, as I have done here.

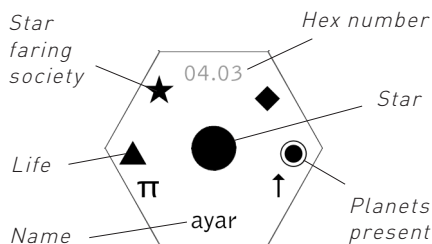
One hex represents 1 parsec, equalling 3.26 light years, (the Milky way is approximately 30 000 parsecs across) and also the distance travelled with Hyperspace 1. For every hex in normal space there is a 50% chance that a star is present, and 8 stars in 10 have a planetary system. For story-telling reasons, a large amount of these systems will have some kind of habitable planet. Political units could also be marked, with lines or colors, and other features of space that can affect traveling (rifts of empty space, "slow" FTL zones, debris-rich or pirate infested areas for example).

A map with 8x10 hexes is called a subsector. 16 subsectors (4x4) are called a sector. You keep track of subsector placement by noting the names of the adjacent subsectors on the dotted lines on all four sides of the star map sheet.

For a planet you want to detail, always write down the name of the subsector and the number of the hex it occupies, to make it easy to locate.



Different Densities: For really dense parts of a galaxy (close to the core or in a star cluster) 80-90% of the hexes will have a star. For more sparse parts 10-20% will have stars. Placing stars just out of reach of regular hyperspace jumps makes them a bit mysterious...



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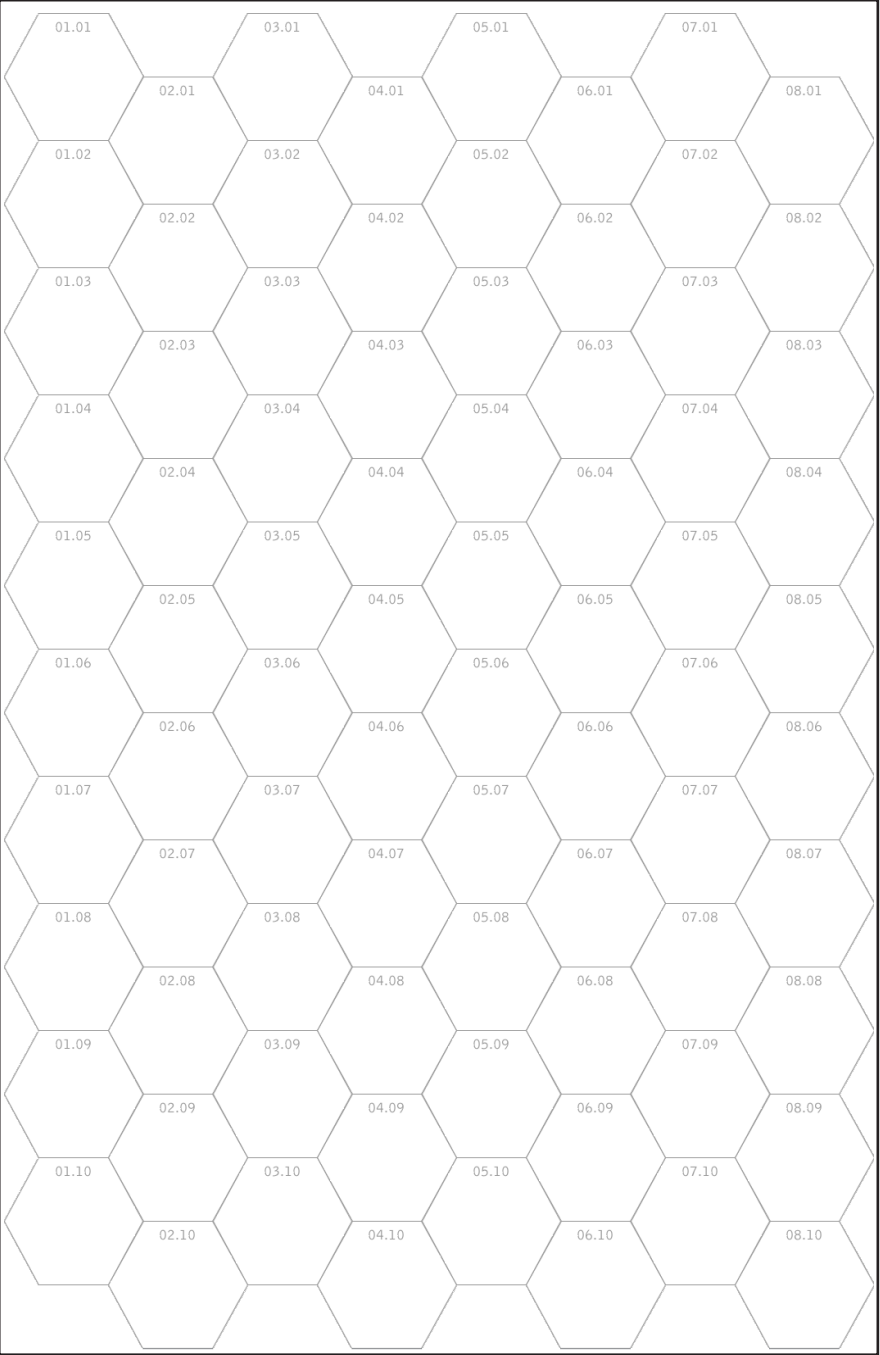
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BRP STARSHIPS

WORLDS

world name

solar system

fraction

conflicts

intensity

tech level

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popul. dens.

settlements

starport

ruling

species

outsiders

solar system specs

planet specs

BRP STARSHIPS

WORLDS

world name

solar system

fraction

conflict details

outsider details

general ideas

foreign policy

BRP STARSHIPS

WORLDS

world name
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conflicts
belief vs. belief
nature vs. all

intensity
hatred/severe discrimination →
ignorant ↓

tech level 3 (steam)
law level 5

population dens. very low
settlements temp. cluster
starports —

ruling semi-indie clans
based on belief

species
ayari

outsiders
belief

solar system specs
planets: 3, habitable: 2
gas giant: 1

planet specs
planet size: small
cool climate
water 87%
dense atmosphere, earthlike

BRP STARSHIPS

WORLDS

world name

ayar

solar system

iimbeni

-

fraction

conflict details

belief vs. belief: each clan worships a different animist god in the same theology, giving rise to age-old hateful conflicts.

nature vs. all: all land is dangerous to tread, due to poisonous groundcover.

outsider details

one of the clans have found a completely new faith, breaking the old traditions, and working as a diplomatic middle-ground between the other clans and their gods.

general ideas

nomad clans, travelling on huge steam powered airships over the oceans, avoiding the dangerous landmasses. the clans get together twice a year to celebrate, trade and exchange news.

Ayar World Map



Planetary Map Generators

<http://topps.diku.dk/torbenm/maps.msp>

<http://donjon.bin.sh/scifi/world/>

(Incl. name generator)

<http://www.nbos.com/products/astro/astro.htm>

(Commercial. AstroSynthesis by Nbos Software)

Design Notes

I have tried to keep true to the ideas of BRP, but have deviated from the guidelines in some cases. For ships, Modules and Apps is a way to work with Powers/Skills. Speed is loosely related to ACC, and together with Handling and Size, is used as a sort of characteristic for vehicles. The Size value has been the most difficult to correlate, as it is so closely linked to the fundamental Module building block here, and the main rules are quite unhelpful when it comes to large object sizes. All costs (in Credits, Cr.) has been set to make them easy to convert to whatever currency and value scale a setting is using.

The world building rules are usable with any system, and not limited to BRP. I have tried to minimize the number of parameters to describe worlds and systems, but they grew over time to make the rules more descriptive and useful.

I would also like to thank Atgxtg, Jason Durall and Frank Mitchell for contributing material. And without the discussion forum at BRP Central those rules would probably not exist.

If you need more rules, equipment or setting details to run science fiction games with BRP, I can recommend River of Heaven (transhuman setting) or Cthulhu Rising (hard sf inspired by the *Alien* movies).

Clarence Redd
April – December 2014

BRP STARSHIPS

player

name

race

home world

profession

age

mov

wealth

str	.....	.....	%
con	.....	.....	%
siz	.....	.....	db
int	.....	.....	%
pow	.....	.....	%
dex	.....	.....	%
app	.....	.....	%
edu	.....	.....	%

hit points

.....

.....

.....

.....

.....

major wound

communication	%
bargain ⁰⁵	
command ⁰⁵	
disguise ⁰¹	
etiquette ⁰⁵	
fast talk ⁰⁵	
language, own ^{5x edu}	
language	
perform ⁰⁵	
persuade ¹⁵	
status ¹⁵	
teach ¹⁰	
manipulation	%
art ⁰⁵	
craft ⁰⁵	
demolition ⁰¹	
fine manipulation ⁰⁵	
heavy machine ⁰¹	
repair ¹⁵	
sleight of hand ⁰⁵	
mental	%
appraise ¹⁵	
first aid ³⁰	
gaming ^{int + pow}	

knowledge⁰⁵

literacy^{5x edu}

medicine

psychotherapy

science⁰¹

*astronomy*¹⁰

physics

strategy⁰¹

technical⁰⁵

*sensors*¹⁰

perception %

insight⁰⁵

listen²⁵

navigate¹⁰

research²⁵

sense¹⁰

spot²⁵

track¹⁰

physical %

climb⁴⁰

dodge^{2x dex}

drive²⁰

hide¹⁰

jump²⁵

pilot⁰¹

starship

ride⁰⁵

stealth¹⁰

swim²⁵

throw²⁵

This is a simple rules system for science fiction gaming in Basic Role Playing (BRP), covering starship design & combat, alien creation, robots and world building. It is intended for heroic sci-fi games, but can be used for other styles too.

To use these rules you need the book *Basic Role Playing* by Chaosium.

BRP STARSHIPS

