Game Masters Section

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The first section of the Galactic Frontier Game set is dedicated to the players and the character creation process. The second section of the rulebook is for the Game Master. In this section are rules on skill checks, combat, and star ship creation. There is also a section on some of the non-player character races and alien creature creation.

It is the duty of the Game Master to create the settings in which the characters will play. It is also his or her duty to play the part of the people that the characters will meet in their adventures.

Using Skills During Game Play

In the course of an adventure characters will be required to make skill checks in order to accomplish certain tasks. This chapter outlines how skills are used and the possible consequences associated with using skills not known.

Skill Checks

All skill checks are made on a 3D10 against the statistic that the skill is attached to. For example, a character with an intelligence of 12 and a skill level of 1 making a check for a skill attached to intelligence would need a 13 or less on a 3D10. A roll of 3 always succeeds and a roll of 30 always fails. Skill points are always added to the statistic when attempting a skill check. In the above example, if the character had a skill level of 2, the roll needed for success would be 14 or less.

Skill checks must be made to perform certain tasks. If a character has a skill level of one, menial tasks such as monitoring and operations do not require a skill check. However, if a Star Drive were to fail, a skill check would have to be made against maintenance or repair. Unskilled individuals would have to make a skill check for non-combat tasks modified by –10 unless they have a skill in a related field that has crossover in the skill being checked for. Furthermore, an unskilled task modifies the failure roll by 5 so it's probably not a good idea to have a doctor work on a robot. If they have skill in a related field then an unmodified unskilled roll would need to be made. It is up to the Game Master to decide whether a skill is related. One example of a related skill would be computer programming and robotics mission profile. Both skills involve programming.

The Game Master is encouraged to use his or her own judgment in deciding when a skill check should be made. Situations such as downloading a virus into a computer may require a check to override any security software applications. A skill check however would not need to be made when taking off, landing a star ship or driving a vehicle under normal conditions. A piloting check would need to be made to successfully navigate through an asteroid field.

Attempting Skills Not Known "Figuring It Out"

  Characters may attempt to repair broken machinery, perform medical tasks, or any other skill that they do not have by attempting to "Figure it out". Unlike when a skilled person is attempting a menial task an unskilled individual will have to make a skill check any time they attempt to "Figure it Out". For example, a character with no pilot skill attempting to "Figure out" how to fly a ship would need to make a skill check in order to get off the ground and again when landing.

  Whenever a roll is made to "Figure it out" a character suffers a penalty of –10 to the skill roll against the statistic that the skill falls under. Any mishaps that occur suffer a negative modifier of 5.

Task Level

  Whenever a skill is being used the game master must determine the task level of the task that is being performed. Task levels modify a skill check either positively or negatively depending on the factors associated with accomplishing the task. Task levels are broken down into five categories. The task difficulty categories are; routine, easy, moderate, difficult, and extremely difficult. The definitions below outline the modifiers associated with accomplishing tasks under these conditions and an example of what would constitute that difficulty level.

Routine: A routine task does not require a skill check. An example of a routine task is piloting a vehicle under normal conditions, operating a computer, and various other simple tasks.

Easy: An easy task modifies a skill check by a positive modifier of two. An example of an easy task could be rebuilding a motor or programming a computer with all of the proper tools and manuals available for doing so.

Moderate: A moderate task results in no modifier. Examples of moderate tasks include rebuilding mechanical items or programming devices without the proper manuals or guides available while having the proper tools for completing the task.

Difficult: Difficult tasks result in a negative modifier of two. An example of a difficult task would be attempting to repair an item without the proper tools or manuals. Repairing a star drive with mechanical tools rather then engineering tools would be a difficult task.

Extremely Difficult: An extremely difficult task results in a negative modifier of four. An example of an extremely difficult task would be navigating a ship through an asteroid field or attempting a repair without the proper tools while under duress.

Skill Rolls That Always Succeed or Fail

A roll of 3 always succeeds and a roll of 30 always fails.

Mishaps

A mishap occurs whenever a skill check is failed by four or more. Mishaps can be general, technical, or medical. General mishaps happen most often.

General Mishaps

General mishaps occur whenever a standard roll is failed by four or more. General mishaps generally do not result in injury. A general mishap is rolled on a 1D4.

1. Character thinks task was successful.
2. Character looses 1 turn recovering from mishap.
3. Character looses 2 turns recovering from mishap.
4. Character looses 2D4 turns recovering from mishap.

Technical Mishap Rolls

A technical mishap roll is made when a situation occurs where either a skill check is failed by four or more or a technical malfunction of equipment, computers, or robotics occurs. A technical mishap roll is always made on a 1D10.

1. No malfunction/ roll additional skill check next turn
2. Minor Malfunction/additional 3 turns to repair
3. Minor Malfunction/Additional 5 turns to repair
4. Multiple Minor Malfunctions/Additional 10 turns to repair
5. Multiple Minor Malfunctions/Additional 20 turns to repair
6. Medium Grade Malfunction/additional day to repair
7. Medium Grade Malfunction/Parts needed to complete repair
8. Major Malfunction/Additional Parts plus 1-4 days to repair
9. Major Malfunction/Irreparable
10. Roll on special

Special Table
1. Affect additional 1-4 systems if connected to other systems
2. Affect additional 2-8 systems if connected to other systems
3. Minor explosion, take 1-4 damage plus roll on mishap table again
4. Minor explosion, take 1-4 damage plus roll on mishap table twice
5. Minor explosion, take 2-8 damage and roll on mishap table again
6. Major explosion, take 2-20 damage and damage 1-4 additional systems

7. Major explosion, all within five meters take 2-8 damage and affect 1-4 additional systems
8. Major explosion, all characters within five meters take 2-20 damage plus roll on mishap table for 1-4 additional systems/items within range.
9. Item rendered irreparable plus take 2-20 electrical damage
10. Item irreparable take 3-30 electrical damage and roll on mishap table for 1-4 additional systems.

Medical Mishaps

Medical mishaps occur when the tools needed for a task are not readily available. A doctor with a med kit attempting a major surgery would need to roll on the medical mishap table. A medical mishap also occurs when a roll is failed by four or more. A roll on the mishap table would also need to be made for a person with First Aid Skill trying to perform a minor surgery or greater.

1. No mishap/ re-roll
2. Minor mishap, take additional 1-4 turns to complete task
3. Minor mishap, take additional 2-8 turns to complete task
4. Minor mishap, patient suffers additional 1 damage
5. Minor mishap, patient suffers additional 1-4 damage
6. Serious mishap, patient suffers additional 2-8 damage
7. Serious mishap, patient suffers 1-10 damage.
8. Critical mishap, patient suffers additional 10 points of damage
9. Critical mishap, patient suffers 10 points of damage plus additional roll on this table
10. Patient dies.

Game Play Turns

During combat a game play turn equals one second. One action may be taken each turn of combat. A character may fire a weapon, draw a weapon, reload a clip, and dive for cover, or any other task that can take one second or less.

In non-combat situations a turn is one minute of game play. If Stim-Dose or Neural Dose is administered during combat the character that received the Stim-Dose or Neural Dose reverts from combat turns to non-combat turns. (See Stim Dose Exceptions and Rules).

Combat

Combat General Description
In order to simulate realism, combat is intended to be very deadly. Combat turns last 1 second due to the fact that most gun battles occur within a minute. The Saint Valentines Day massacre for example was the result of several hundred rounds being fired in less than thirty seconds. Several people were killed in this short exchange. Generally, unless an individual is very lucky a bullet to the head is 100% deadly. This game simulates that environment.

Combat Step #1, Determining Initiative
Initiative is rolled to determine who goes first in combat. A 2D10 is rolled modified by dexterity for each individual. The lowest number goes first. As a result, several characters will go at different times in the combat round.

The Combat Sequence
After both sides have rolled initiative a roll is made for hit location. After a hit location roll is made then the characters must make the target number to hit that location of the opponent. Target numbers can vary if armor is being worn. For example, a character using a ranged weapon with a dexterity of 15 would need a target number of 15 to hit an opponent that is unarmored. If that opponent is wearing a riot helmet and a 1 is rolled on the location die indicating a head shot the target number would be lower than a body or leg shot due to the higher armor value of the head. After a hit is determined damage is rolled. If the opponent is still standing they may retaliate if they have not acted in the current game turn. Once a hit location is rolled the shot is considered fired and cannot be taken back or held.

Rolls that Always Succeed or Fail
A roll of a three is always successful and a roll of a thirty always fails.

Unarmed Combat Specific Exceptions
When individuals enter into unarmed combat no damage roll is made. Damage is always 1 with a successful hit modified for strength. Only ¼ of the damage sustained is real damage. An opponent is knocked out when total head damage is equal to ¼ of the total constitution score. Strength bonuses do apply, however the real damage is still only ¼. A Fortitude Roll may be made to avoid knockout, however an additional fortitude roll must be made for each additional attack that does damage to remain standing.

General Exceptions to Combat
When a character is using a weapon such as a gun or other ranged weapon that is easy to aim an unmodified roll may be made against dexterity to determine a hit. This is made without penalty due to the fact that it is reasonable to assume that anyone could pick up a gun and fire it accurately by just pointing it in the direction of the target

Hand-to-Hand Combat

Hand to hand combat attacks are always rolled against strength. Hand to hand combat includes using weapons such as clubs, fists, knives, or any weapon that is not thrown. For example, a punch against an unarmored opponent when the puncher is unskilled in hand-to-hand combat is always an unmodified strength roll. A character with a strength of 15 would roll a 3D10 against an unarmored opponent with a 15 or less being successful. A roll of a 30 is always a failed roll and a roll of a 3 is always a successful roll. Dexterity bonuses to target numbers apply to hand to hand combat so a high dexterity will improve a chance to hit an opponent.

Missile and Ranged Weapon Combat

Any attack with a weapon other than a melee weapon is rolled on a 3D10 against dexterity to determine success. If a character attempts to throw a knife and is unskilled with a dexterity of 15 that individual has a target number of 15 modified by –10 to the target number against an unarmored opponent. In this example, assuming there is no bonus to the target number or modifiers of any kind, a 5 or less on 3D10 is successful with a 6 or more indicating failure. A role of 3 is always successful and a roll of 30 always fails.

If the weapon being used fires more than once during a combat turn then a hit location is rolled for each shot fired followed by a to hit roll for each location.

If the weapon is an area of effect weapon such as a grenade or artillery shell then three hit locations are rolled. It is possible to be caught in an explosion and just have a severely broken arm. If maximum damage is applied to a limb, the limb is gone or completely unusable, depending on the weapon causing the damage. A rock obviously would not take off a limb but could crush it. Although a weapon can do 18 points of damage to a limb, if that limb only has 5 constitution points the maximum damage a character takes is 5 points.

Combat Table
1. Left arm
2. Right arm
3. Left leg
4. Right leg
5. Lower torso (Stomach/Liver/Kidney)
6. Mid torso (Lungs/Heart)
7. Upper torso (Shoulders/Lower Neck)
8. Head

If a location is rolled twice and the location is no longer available then the attack is a miss.

Combat Table Variations

Some creatures are not shaped like humans. As a result the combat table must vary according to the creature. In this example a standard Githerak warrior will be used.

These squid like creatures would receive damage in a different way. Their attack is also different as they have physical weapons so they can attack more than once in a turn up to eight times or the number of appendages they have. Githerak have no head but have a torso and eight appendages.

A Standard Githerak Warrior Has a Constitution of 3D10. For a Githerak with a Constitution of 20 the Break down on its constitution statistics is as follows.

Torso = ¾ rounded up or 15 constitution points
Appendages = 8 at 1/8 total constitution or 2 per appendage.
Their talons do 1-4 damage

Locations Roll
1. Torso
2. Torso
3. Appendage
4. Appendage
5. Appendage
6 Appendage
7 Appendage
8. Appendage
9 Appendage
10. Appendage

For a multiple armed creature such as a Githerak the chance to hit the torso increases with each appendage that has been rendered useless. So a Githerak with Only 3 appendages left would be hit in the torso on a roll of 1-7 with an appendage being hit on all other rolls. All Githerak fight until killed, only a queen would attempt to escape.

If a creature has no discernible appendages then a straight constitution is used for purposes of killing the creature.

Knockdown

Knockdown is rolled any time a character is hit or hits an opponent with an unmodified unarmored combat roll. An opponent could be wearing Titanium armor and still be knocked down by a blast that did not penetrate the armor. For example, your character is wearing tritanium combat armor and your opponent needs a 15 to hit you if you are unarmored. Your opponent would still need only a fifteen to force you to roll against your dexterity for knockdown less any modifiers despite that fact that you would take no damage from the blast. Since Tritanium body armor gives you a bonus of 12 to avoid being hit, your opponent would need a 3 or less to penetrate. If your opponent rolled a 3 you would suffer damage and have to roll against being knocked down.

Whenever a character is hit with any item, explosion, or missile fire, they must make a dexterity check negatively modified by the knockdown bonus to stay on their feet. Chances are that a shotgun blast to the chest will knock most people down. If a character is knocked down they may spend the next two combat turns regaining their feet,

spend one round getting to a sitting position, or fire from a prone position with a negative modifier of 2 to hit and a bonus of 2 to their armor value unless dead or unconscious.

Surprise

A character or group of characters may choose to surprise an opponent or an opposing group of individuals. When attempting surprise a roll on a D6 should be made on the following table.

1. Total Surprise, character may take one free action before initiative is rolled.
2. Moderate Surprise, Bonus Modifier of 4 to character or characters initiative roll.
3. Some Surprise, bonus modifier of 2 to character or characters initiative roll.
4. Slight surprise, bonus modifier of 1 to character or characters initiative roll.
5. No surprise, combat occurs each character must make an initiative roll.
6. Target expected attack, character or characters suffer –2 to initiative rolls.

Panic Fire

A character may choose panic fire in a combat round. Panic fire applies only to semi automatic weapons. Automatic weapons are set up to mechanically fire only a certain number of rounds in combat turn. Panic fire triples the number of shots fired from a weapon. For example, a handgun that fires once in a round can be fired three times if the character chooses panic fire. Panic fire results in a negative modifier of 2 for the first shot, 4 for the second and 6 for the third shot fired. If multiple targets are selected an additional negative modifier of one is added to each shot fired. Weapons that hold only one round cannot be used for panic fire.

Multiple targets/Automatic Weapons

An automatic weapon can target as many targets as the weapon can fire rounds in one combat turn. The targets must be within three meters of one another and must be adjacent to each-other. A negative modifier of 1 is applied to hit the second target and a negative modifier of 2 is applied to the third target. If only two targets are selected the first target is hit as normal and the second two shots suffer the negative modifier of 1.

Using Two Weapons or Firing with off Hand

If a character chooses to use two weapons, one weapon in each hand, a modifier of – 6 is applied to the weapon in the off hand and a modifier of – 5 is applies to the weapon in the primary hand. Ambidexterity can negate these penalties by one for each level of this skill a character has. Weapons fired from a characters off hand only are fired with a penalty of –2. Ambidexterity can negate the penalty for firing with an off hand by 1 for every level in ambidexterity skill a character has. If a character is attempting to use a weapon other than a handgun such as a rifle or larger weapon in each hand then the penalty is increased by an additional negative modifier of 2.

Explosives, Buck Shot, Grenades

Explosives

Plastic explosives may be shaped to detonate only in one direction. A shaped charge will hit only one location. Charges that are not shaped follow the same guidelines as grenades. For explosives that have been set, the chance to hit is the same as the vital statistic plus the skill modifier of the individual who set the explosive. Set explosives strike every target in the area of effect.

Buck Shot

Buckshot receives a bonus of +1 to hit and a negative modifier of 1 on damage for every ten meters away a target is. An additional hit location is added for every ten meters distant a target is after the first ten meters. The additional hit location must be directly adjacent to the primary hit location or all of the added hit locations are considered misses. Damage is divided evenly between hit locations. For example, a shot gun is fired and hits a target in the left leg at more then ten meters distance so the right leg may also be hit as could the lower torso. However if the second location is the head the second hit location is missed and the scatter from the buckshot missed the secondary target.   If three locations are hit the target could be hit in the head, upper torso, and either arm. The target could not be hit in the lower torso. If a shotgun is fired into a hand-to-hand combat, the GM, at his discretion, may force the character firing the shotgun to role to hit both targets.

Grenades

Weapons such as grenades and rocket launchers either were designed to hit multiple targets or will hit multiple targets by default. When a character is being confronted by multiple targets a target number to hit can be rolled to hit each opponent individually in the area of effect. In addition, some explosives have positive or negative modifiers to hit armored opponents. Area-of-effect weapons inflict three wounds on an individual. Each wound takes the full number of dice in damage.

Evading, Cover, Firing From Prone Position

Characters may choose to evade in combat in order to decrease their chances of being hit. A character that is evading receives a bonus of 3 to their armor value and suffers a negative modifier of 2 to their attack rolls.

Cover may also increase the armor value of a character. The following is a list of types of cover and the bonus to their armor value.

Hard Cover: Includes hiding behind walls or other solid objects. Characters participating
    In combat from behind hard cover receive a bonus modifier of 8 to their armor
    Value. Characters not participating in combat that are behind hard cover cannot
    Be hit in combat. To be considered hard cover 75% of the characters body must
    be protected from enemy fire. In the case of hard cover only a successful hit to
    An exposed head, upper torso, or arm would cause damage. Successful hits to
    Parts of the body not exposed are considered misses.

Soft Cover: Includes bushes and other types of cover that leaves 25% or more of the body Exposed to fire. Characters behind soft cover receive a bonus of 4 to their armor value. Hits that occur on parts of the characters body that are under cover are also considered misses.

Firing From Prone Position: When firing from a prone position a character adds a bonus of 2 to their armor value and suffers a negative modifier of 1 when firing a weapon. Prone targets may not be knocked down.

Special Combat Situations

Partial Darkness: Unless a character has IR or night vision a negative modifier of four is applied to all attack rolls made in partial darkness. Partial darkness is any condition from full moonlight to late dusk.

Total Darkness: Unless a character has IR or night vision a negative modifier of six is applied to all attack rolls. Total darkness is any condition with less than full moonlight to total darkness.

Movement Through Liquids: A character in more than ¾ his or her height in any liquid may swim at 1/3 their maximum movement or walk at ¼ their movement. A character that is ¾ to ½ submerged may swim or move at 1/3 their maximum movement. Characters that are less than ½ submerged may move at ¾ their maximum movement.

Zero G Environment: Characters in 0 G may move at ½ their movement by pushing along any surface of greater mass than themselves. Characters may not stop unless they either hit a solid object of greater mass or stop themselves. Characters wearing magnetic boots may move at ½ their maximum movement.

Non-Mobile Targets

A character firing on a non-mobile target receives a positive modifier of four to their target number. A non-mobile target is one that cannot evade or move. Non-mobile targets within 1 meter, or point blank range do not require a to hit roll. Armored non-mobile targets still receive any protection from armor however. Non-mobile targets only receive their armor bonus.

Armor Value and how it Applies to Combat

Armor value is subtracted from the target number needed to hit an opponent on a 3D10. For example, a character with a skill level of 1 in small arms with a dexterity of 14 would need a 15 to hit an opponent. However if that opponent is wearing a Kevlar vest with an armor value of 4 the target number would drop by four to 11. Knockdown could still be scored on a successful 15 however no damage would be taken. Even if the

weapon fired is able to puncture the body armor the damage is reduced due to the armor absorbing the energy of the weapon that punched through the armor. If a successful penetration roll is made, armor will absorb damage in a declining percentage depending on how far bellow the penetration roll was for the armor. For example, an individual is wearing Kevlar Body armor as listed above and the roll is a nine. The individual is now knocked down and will take a percentage of damage. Since penetration is now at eleven and the penetration roll has been beat by two the armor absorbs 80% of the damage. Fractions are always rounded up to the nearest whole number and can never be less than 1 point of damage.

Constitution Damage and how it applies to Combat

Any limb suffering ¼ of the characters total constitution in damage is considered useless and bleeding. An additional point of constitution is lost every round from blood loss if a limb is rendered useless. A bleeding wound may be bandaged to stop the bleeding. If more than ½ of the total constitution of a character is applied to a limb that limb is considered severed or crushed depending on the weapon used, although the character will still only reduce his or her constitution score by ¼. Wounds do affect the characters ability to resist sickness and poison.

If real damage is sustained to the head and the total is more than 1/8 of the total constitution the character is unconscious. Any damage to the head greater than ¼ of the total constitution rounded up means the character is dead. In this example an individual with a constitution of 10 could sustain 3 points of head damage or $10/4 = 2.5$ rounded up $= 3$. The exception to the head damage rule is during unarmed combat or if an opponent is attempting to knock a character out. Rules for unarmed combat are provided above under the combat rules. Cybernetic implants can be used, as can genetic regenerative methods to repair a brain if the character is given Stim-Dose or Neural Dose within 1 turn of dying. After receiving damage a character will recover 1 point of constitution for every two day's that he or she rests.

General Damage

General damage occurs whenever a character is wounded in a non-specific way. Non-specific damage can occur from electrical discharges, radiation exposure, poisons, disease, chemical weapons, and various other forms of attack. When a character receives non-specific damage the characters total constitution is lowered while no specific portion of the characters body is wounded. A character suffering more than ¾ of their total constitution in non-specific damage must make a successful fortitude roll or be rendered unconscious. Non-specific damage does not lessen the amount of specific damage characters can suffer to their limbs.

Movement in Combat

A character may move a number of meters equal to their physical dexterity in one combat round. A character may fire a weapon without penalty if moving ½ or less their movement. Between ½ and ¾ movement a character suffers a –1 on combat rolls. Above ¾ to their full movement a character will suffer negative modifier of 2.

Applying Fortitude to Combat When Damage is taken

A Fortitude roll is made any time a character takes damage for ½ or more of their total constitution. Failure to make Fortitude roll in the event of physical trauma means a character has been knocked unconscious. Unconsciousness lasts for 1-10 combat game turns before a character "comes to".

Reviving or Saving A Dead Character

Stimulant Dose, abbreviated Stim Dose may be injected directly into the heart of a dead character within one turn of death. Stim Dose will start heart function unless the heart is damaged. It will not restore consciousness and will only last 2D4 turns. The character will have to have major surgery within 2D4 turns to survive. If a heart is too badly damaged than Neural Dose may be injected at the base of the skull to preserve brain function. As with Stim Does Neural Dose will only last 2D4 turns and major surgery must be performed. In addition, both forms of preservation require a Fortitude Check to see if the character survives.

Called Shots

A character may attempt to hit a specific part of the body with the following penalties to their target roll.

Head	-5
Hand	-8
Torso (upper)	-3
Torso (lower)	-3
Arm	-4
Leg	-4
Foot	-8

Taking Aim

A character may choose to take aim in order to improve his or her chances of hitting a target. For every combat round (1 second) the character aims a bonus of one is added to that characters chances of hitting. A character may take aim up to a maximum of three combat rounds or a bonus of 3. If a character takes damage or is knocked down while taking aim the character looses all bonuses and will have to take aim again.

Structural Points and Armor in Combat

Structural points is an optional rule for personal body armor. Although it adds additional complication to the combat round it also adds to realism. Structural points must be used for vehicles and vehicle combat.

Personal body armor, vehicles, and objects have structural point values. Structural points are a measure of the amount of damage an item can take before it is destroyed.

Only weapons that do structural damage can destroy armor or objects with structural points. Weapons that do not do struc tural damage can still penetrate armor with structural values without destroying the overall effectiveness of the armor. Weapons that do structural damage not only can penetrate armor but eliminate its effectiveness by causing damage to such an extent that it renders the armor useless or destroyed. For weapons that cause no structural damage one point of structural damage is caused whenever that weapon penetrates. Unless a weapon does structural damage, any non-penetrating shot does no structural damage. Armored vehicles generally have 100 structural points or factor 1 armor. Factor 1 armor suffers no damage from weapons that do not do structural damage.

The following chart is a list of body armor and the structural values that they have.

Personal Body Armor

Armor	Armor Factor	Structural
Kevlar Vest	5	5
Riot Helmet	6	10
Flack Jacket	6	10
Dura Plast Riot Shield	7	10
Full Ballistic Cloth	8	15
Full Kevlar Body Suit	9	20
Kevlar Helmet	9	20
Dura Plast Body Armor	10	25
Advanced Dura Plast	11	30
Sealed Adv. Dura Plast	12	30
Tritanium Body Armor	13	40
Adv. Tritanium Armor	14	45
Powered Tritanium	15	50
Vacuum Suit	9	25

When Structural Damage Occurs

Structural damage occurs whenever a weapon that does structural damage hits body armor. Body armor does not need to be penetrated to take structural damage. For example, a character wearing powered tritanium armor is hit with a stream rifle on setting

one. The target number to penetrate the armor in this example would be 4 but knockdown is still scored on the target number to hit an unarmored opponent with a 15. If a 15 is rolled, structural damage occurs but the armor is not penetrated. If the armor is negated but not pierced with the shot fired than only structural damage would occur and the armor would be negated. The next time that area is hit it would be as if no armor is being worn and a target roll of 15 would cause damage and possibly score knockdown.

If that same character was hit by a laser rifle which does no structural damage and the roll was a 8 the character would take no damage and no structural damage would occur since a 4 or better needs to be rolled to penetrate. If the same character was hit by the laser rifle on a successful penetration roll of a 3 or 4 however a single point of structural damage would also occur even though the laser rifle typically does no structural damage. Any roll that penetrates does 1 point of structural damage.

Armor Negation Factors

Some weapons negate armor values due to the velocity or amount of energy the weapons dispenses when fired. Armor negation factors reduce the armor value of the armor being fired on by the same amount as the weapons negation factor. A negation factor can never improve a characters chance to hit, it can only improve the chance to penetrate. For example, a weapon with a negation factor of six is used against an armor value of four, the weapon would completely negate the armor but would not improve the chance to hit by two. Armor that has been negated will not absorb a percentage of damage when penetrated. Weapons that can override armor completely render the armor useless.

Some weapons have negative negation factors. A negative negation factor adds to the overall effectiveness of the armor by increasing the armor value by the amount of the negative value thereby lessening its chance to penetrate. A negative value does not lessen the chance to hit the armor without penetration and score knockdown.

Poisons, Drugs, Radiation and Disease

Poisons

There are three types of poisons and each type of poison has four classifications. The first types of poisons are contact poisons. Contact poisons are either inhaled or absorbed. Contact poisons can be in either liquid, solid or gas form. The second type of poison is injected and the third is ingested. Injected poisons must be injected directly into the bloodstream of an individual to take effect. Ingested poisons must be swallowed. In every case, a dose of Antitox injected 1 hour or less prior to exposure to a poison can negate the effects of any poison.

Poisons classification is a measure of how deadly the poison is. All poisons will fall into one of the following categories. Damage occurs from poison on the first turn it takes effect. Sickness occurs the turn prior to damage.

Category	Effect	Time to Effect
A	Death	Immediate
B	Sickness/Death	2 turns
C	Sickness/10 Con	3 turns
D	Sickness/5 Con	5 turns

Drugs

Drugs come in three classifications. The three classifications of drug are euphoric, sedative, and hallucinogenic. A character may make a fortitude roll to negate some of the effects of a drug. A successful fortitude roll will still result in negative consequences for the subject of the drug. The following chart outlines the negative effects to skill checks and the amount of time a drug is in effect per dose. Any character given more than eight doses of a drug must make an additional fortitude roll to stay conscious for each dose above eight. Any character given more then ten doses of any drug must make an additional fortitude roll or overdose and die. A fortitude roll must be made for every dose over ten.

Drug Type	Effect	Effect with Fortitude Save	Time of effect
Euphoric	-1 to skill checks per dose	-1 to skill checks per 2 doses	1 hour/dose
Sedative	unconsciousness	-2 to skill checks per dose	1 hour/dose
Hallucinogenic	cannot attempt skills	-5 to all skill checks	2 hours/dose

Radiation

There are three levels of radiation exposure. Radiation damage can be treated through the use of immune response probes in the affected subject to repair damage caused by the radiation. The following chart outlines what effects each level of radiation has on a subject. Characters recover lost abilities at the rate of 1 point a week.

Level	Effect
1	Loose 2 strength and constitution for 2 weeks.
2	Sickness/loose 5 strength and constitution, bedridden for three weeks and must make a fortitude save after three weeks or become ill again. After a second three weeks another fortitude save must be made or the character will begin dying from radiation sickness and loose 1 strength and 1 constitution per day until either reaches 0 and death occurs.
3	Death within 1-10 days unless fortitude save is made. If fortitude save is made the character will become sick as if stricken by level 2 exposure.

Disease

Sickness occurs in three levels. The three levels of sickness are minor, moderate, and virulent. The effects of sickness are listed on the chart below as is the time a character is sick. Superbiotic injected directly into a sick character will cure a minor infection within hours, a moderate one within a day, and will reduce a virulent sickness to a moderate one.

Level	Time	Effects
Minor	1-10 days	-1 to all skill checks
Moderate	2-20 days	-2 to all skill checks. Fortitude roll must be made on day three or the sickness will become virulent.
Virulent	2-20 +1 days or death	-5 to all skill checks and ability rolls. A fortitude save must be made every three days starting on the first day of sickness or the character will die. .

Technological Age Levels

The following is a listing of the ages of human kind and a very brief list of some of the accomplishments of the corresponding age.

- Stone Age   Simple Tools, fire, Stone Working
- Bronze age   Bronze tools, geometry, masonry
- Iron Age   Iron tools, Engineering
- Renaissance   Advanced mathematical concepts, gunpowder,
- Pre-Industrial age   Printing press, telegraph, electricity
- Lower Industrial age   Advanced manufacturing, automobiles, airplanes
- Upper Industrial age   Computers, space flight, nuclear power
- Communications age   Internet, advanced voice and data communications, artificial intelligence.
- Genetic Age   Sub stellar colonies, sub-light space flight, genetic manipulation, unified physics.
- Diamond Age   Interstellar travel, Advanced fuel cells, fusion
- Interstellar Age   Interstellar settlements, gravity manipulation
- Galactic Age   Matter Anti-matter containment/power
- Platinum Age   Zero Point Energy, Mind/Mechanical Interface.

Platinum Age Races/Cultures: Grey
Galactic Age Races/Cultures: Unified Human Republic, Vuldeem
Interstellar Age Races/cultures: Deynocim, Veragin, All other human societies.

Planet Types

Planets have different types of environments. The following is a general list of the types of environments characters may encounter when traveling to other worlds.

H	Hostile environment	(Vacuum suit required for breathing)
NA	No atmosphere	(Vacuum Suit required for breathing)
P	Polluted	(Supplemental oxygen needed)
C	Corrosive Atmosphere	(Hazardous environment Vacuum suit needed)
W	Water covered world	
I	Ice covered world	
D	Desert World	
DW	Desert World/No Water	

The Human Republic Controlled Star Systems

The following is a list of the systems controlled by the human republic, the number of worlds with civilian populations in these systems, and population estimates for these systems. The government type for these systems is also listed. Smaller populations in each system may be present on the moons of planets orbiting stars in each system. Orbital Cities also add to the total population of each system. Distance is expressed in light years from the sun. Planets inhabited around the following sun like stars have a climate and geology similar to Earth.

Star	#of Worlds	Population	Government Type	Distance
Sol (Sun)	3	128 billion	Republic	0
Xi Ursea Majoris B	2	7.5 Billion	Republic	24
Glies 86 A	1	5.4 Billion	Republic	36
55 Cancri	2	8.8 Billion	Dictatorship	41
Upsilon Andromedae	3	14 Billion	Monarchy	44
47 Ursae Majoris	2	4 Billion	Republic	46
51 Pegasi	2	5.1 Billion	Republic	50
Tau Bootis Aa	1	1 Billion	Theocracy	51
Iota Horologii	3	11 Billion	Socialist	56
Rho Cor. Borealis	1	3 Billion	Dictatorship	57
14 Herculis	3	3.7 Billion	Dictatorship	59
70 Virginis	1	2 Billion	Socialist	59
Phi2 Pavonis	2	5 Billion	Socialist	79
HD 89707	1	1.2 Billion	Republic	82
HD 29587	1	.5 Billion	Democracy	93
HD 130322	2	2.3 Billion	Democracy	97
HD 187123	1	500 thousand	Monarchy	156

Colonies of the Human Republic

The human republic has posts in distant parts of the galaxy. Some are mining and supply stations with valuable resource while others are military installations. Worlds located in these systems are usually hostile and at times hostile to life. Each star listed has a population count, type of colony, and a climate listed for the planet occupied. The Distance expressed in light years is also listed. Refer to the following codes when determining what type of planet the colony is located on.

H	Hostile environment	(Vacuum suit required for breathing)
NA	No atmosphere	(Vacuum Suit required for breathing)
P	Polluted	(Supplemental oxygen needed)
C	Corrosive Atmosphere	(Hazardous environment Vacuum suit needed)
W	Water covered world	
I	Ice covered world	
D	Desert World	
DW	Desert World/No Water	

Star	Population	Colony Type	World Type	Government	Distance
Rigel	10 Thousand	Mining	P	N/A	772.5
Mimosa	75 Thousand	Military	I	N/A	352.7
Deneb	15 Thousand	Mining	D	N/A	3227.7
Hadar	2 Thousand	Mining	NA	N/A	525
Antares	135 Thousand	Mining	D	Monarchy	603
Alnilan	7 Thousand	Scientific	H	N/A	1341.6
Canopus	1 Hundred	Scientific	C	N/A	312.6
Wezen	3 hundred	Scientific	DW	N/A	1791.2
Mirzam	34 Thousand	Military	W	N/A	499.2
Polaris	18 Thousand	Mining	NA	N/A	431.2

<u>**Criminal Organizations and Terrorist Groups in the Human Republic**</u>

As a possible back drop for adventures some of the statistics and facts on the most active criminal organizations in the human republic have been provided. Criminal organizations generally run legitimate business fronts as a cover for illegal activities. Most of the criminal organizations have government officials, police, judges, and even military personnel on their payroll.

The Spulizzi Crime Family

The Spulizzi Crime Family is based on Earth in old city Chicago. They own several legitimate business interest including Old Earth Intergalactic Transport Co, Orbital Resorts Casino's and Republic Systems Starship Scrap Yards. This crime family's influence extends into the Senate of the Unified World Republic including diplomatic officials in the Human Republic Senate.

The main illegal activities that the Spullizzi organization is involved in include weapons smuggling, illegal narcotics, prostitution rings, and chop shops for everything from robotics to stolen starships. They have also been known to influence the results in elections and the political appointment process. Every effort to bring this organization down has either failed outright or bogged down in the legal system. Prosecutors and judges that refuse to "play ball" have also been known to disappear. The Influence and activities of the Spulizzi crime family extend beyond the human republic into the Procyon Empire and the United Rigel Federation of states. Some independent worlds are wholly controlled by this organization.

The current head of the Spulizzi family is Don Appetino. On the outside he seems to be a legitimate well mannered business man, however he is one of the most feared men in the galaxy. He is reclusive by nature and paranoid in the extreme. Meetings are generally aboard his starship or arranged in secret locations. Don Appetino lives on his starship with his most trusted henchman, fearing that extended stays on Earth or any other civilized world could result in his unfortunate end. Some members of his own organization see his demise as a means to becoming head of the Spullizzi family. Other criminal organizations would like to see him removed so they could move in and pick up the pieces.

When Don Appetino does appear in public he is always guarded by his four most trusted henchman. His first bodyguard is a former Deynocim assassin that goes by the name Syaarggth who's past is unknown. Syaarggth serves as Don Appetino's personal driver and pilot when the need to meet a business associate on world occurs. The second of Don's guards, ATK Gambler, or just "Gambler" is an AI human appearing Cyborg who's neural interface was infected with a virus that simply instituted a program called "Roll the Dice" into its thought process. Scyran Etrat is a Veragin who serves as Don's personal business consultant who is also his attorney. The fourth Henchman is an insane human-Cyborg invetro that served in the human republic special services.

Don Appetino generally conducts business from his ship through use of courier vessels. His ship is stationed outside human republic controlled space but has been known to refuel at distant star ports inside civilized space. His starship is actually a 250 year old military dreadnaught that was "acquired through legal means" from the Republic

Systems Starship decommission yards, a subsidiary of the Spulizzi crime families legitimate interests. Although his ship lacks a military grade star drive it is an upgraded fusion unit that powers the ship to a drive rating of 6.0. His ships official designation is "The Brooklyn." Although this former military dreadnaught is far smaller than the newer Unification Dreadnaughts at a mere 675 meters by 220 meters wide at its widest point, it's modifications have made it possible to compete with ships larger and more advanced. Although The Brooklyn is armed with what appear to be 30 civilian grade class three lasers. Ten of these weapons have been hardwired directly into the power core, boosting the total power level of these weapons to a rating of seven. An illegal EMP weapon has also been installed on the ship to eliminate threat from fighters and electronically guided missile weapons. The Brooklyn also sports an upgraded shield array with a rating of 75 and upgraded armor with a rating of 70. The Brooklyn also sports a one hundred and seventy meter launch bay where Don keeps his model LU 950 Luxury Class Space Yacht and three highly modified TY 10 cargo class ships for courier duty.

Don Appetino's lieutenant Vito Taliani runs the Spulizzi family from corporate headquarters in Old City Chicago, carrying out the will of his boss. Communications are made on a weekly basis via courier ship. Police chiefs, prosecutors, judges, and administrative and government officials in old city Chicago are all on the Spulizzi crime families payroll. Officials who attempt to put pressure on the crime family usually turn up dead or missing within weeks. The republican senator, Nathan Salaglio, a Unified World Republic senator from Chicago is also rumored to be on the crime families' payroll.

Spulizzi Industrial, the parent corporation for all of the Spulizzi families legitimate business interest is the tallest building in old City Chicago. It is a technological fortress of security robots and armed personnel.

Spuluzzi Organization Key Members Statistics

Don Appetino

Strength 10   Age: 52
Dexterity 9   Race: Human
Constitution 11
Intelligence 19
Fortitude 20

Skills/Skill Level: Alibi – 5, Money Laundering – 4, Extortion – 4, Intimidation –5,
        Bribery – 3, Underworld Contact – 5, Legal Subversion – 5, Blackmail –3,
        Small Arms – 1, Swimming –1, Etiquette –1.

Ronald "The Machine Man" Harold

Strength: 14/ 22 (Cybernetic right arm)   Race: Human (Invetro)
Dexterity: 11/22 (Cybernetic right arm)   Age: 34
Constitution: 15
Intelligence: 12
Fortitude: 8

Special: Cybernetic right arm treated as Tritanium for Penetration

Skills: Intimidation –6, Small Arms –2, Swimming –1, Blackmail –4, Martial Arts –2, Beam Weapons-2, Vehicle Operations/General –1.

Scyran Etrat

Strength: 7   Race: Veragin
Dexterity: 19   Age: 38
Constitution: 9
Intelligence: 16
Fortitude: 9

Skills: Law General –4, Law Criminal –5, Law Corporate –3, Business General –4, Politics –3, Persuasion –3

Syaarggth

Strength: 21   Race: Deynocim
Dexterity: 18   Age: 29
Constitution: 16
Intelligence: 12
Fortitude: 13

Skills/Skill Level: Pilot General – 4, Melee Weapons – 2, Small Arms –3, Interrogation – 2, Martial Arts –2, Demolitions – 2, Beam Weapons – 3, Vehicle Operations General – 1, Swimming –1, Security Systems Bypassing – 2.

ATK Gambler

Strength 25   Age: 39
Dexterity 22   Race: AI Cybernetic Organism
Intelligence 10
Constitution 50

Fortitude 10

Special: Treat as Tritanium armor for penetration. Unaffected by poison/aging.

Skills: Martial Arts – 3, Melee Weapons –3, Climbing –3, Demolitions –3, Small Arms – 3, Heavy Weapons –3.

Society For Human Domination

Little is known about this terrorist organization or where they are located. It is rumored that some of their activities are quietly supported by extremist in the religious and republican branches of the Unified Human Republic. Their goal is to either eliminate or dominate the other intelligent races in the known galaxy. They have claimed responsibility for two bombings of Deynocim embassies in New London. Other known acts of terrorism have included the sabotaging of cargo transports and Veragin merchant ships outside of Human Republic controlled territories.

Ecological Guardian Front

This group is composed of extreme environmentalist and animal rights activists. They have sabotaged thirty mining operations in outer territories as well as sabotaged a number of corporate projects. There is some sympathy for this organization in the extreme left of the Socialist and Democratic parties of the Senate.

Corporate Sector Authority

The corporate sector authority is an apparently legitimate organization of corporate bodyguards and personnel. Corporate sector Authority guards/police is a generic term for any large companies private military or police force. Beneath their legitimate facade they are an organization of well trained spy's, assassins, and saboteurs, as well as well armed troops in the employ of many of the largest companies. They are responsible for the assassinations of no less than seven communist and four socialist senators and countless lesser governmental officials. Permits for military grade weapons are easy to obtain by corporations with the finances to lobby members of the Senate. Corporate sector authority spies and assassins often are employed against competing companies in addition to politicians with policies unfriendly to business.

Cybernetic League

The Cybernetic league is a group of humans that believe in the implantation of cybernetic enhancements to improve on the human species. They survive by pirating trade routes in the outer territories of the known systems. They are believed to number in the thousands, generally living in drifter colonies outside of civilized space.

Marthrokov Trade Federation

While Don Appetino makes an effort to appear legitimate Vlad Marthrokov makes no such concessions. He is the head of the most powerful interstellar drug ring in known space. His routes include not only human controlled systems but also Veragin and Deynocim controlled worlds. His organization's size is unknown but is rumored to number more than twenty thousand. The location of his base of operations is also unknown. What is known is that this organization has authorized the assassination of several law enforcement officials and has succeeded in killing at least eleven judges and two prosecutors.

The Militant Front

The Militant Front was originally considered a fringe group of religious terrorist that continually raided Human Republic convoys and destroyed diplomatic vessels. There existence had been known for nearly two centuries, however the size of this organization was not. It was not until recently that Human Republic spy's learned the true size of the Militant Front. Encounters with this organization are often brutal and leave few if any survivors. All attempts to capture members of the Militant front have resulted in the immediate suicide of captured members and the self-destruction of their vessels.

This group of religious extremists is currently based on a planet 9,400 light years from Earth. The Militant Front is such a large organization that it could be called a society. Their home world orbits a sun-like star named Cepheus Theta. The planet that they have inhabited is called "Divine Earth." The Cepheus Theta system contains four planets. The farthest Planet from the star is a Neptune sized gas giant called Horizons Light. The second Planet is also a gas giant that is approximately two Jupiter masses orbiting at the same distance as Saturn does from the sun. Divine Earth is a planet 1.1 times the mass of the Earth orbiting at 1.3 times the distance from Cepheus Theta as Earth does the sun. The smallest planet in the system is named Abyss and nearly hugs Cepheus Theta. It is locked in an orbital Period of just thirty-seven days. Cepheus Theta is masked from Earth because of a dark nebula located between it and the Earth system. The Nebula is approximately four light years wide. The nebula begins at approximately 1.3 light years distance from the Militant Front's Home world.

Divine Earth is a hostile planet compared to Earth. It is a planet of glacial ice with its only temperate zone located around the equator. The original settlers would have perished if not for the remnants of a long extinct civilization found beneath the ice. The original inhabitants of the world had apparently destroyed themselves in a nuclear war. Radioactive half-life dating techniques placed the war at roughly two thousand years prior to man's arrival on the planet. Although most of the cities and larger structures were

destroyed a basic framework for the Militant Front's society was already in place. Based on the study of the remnants of the extinct society they were at least as advanced as mankind was in the 20th century.

The militant front was founded by an extremist named Muham Al' Muhamad in the year 2256. Because of terrorist acts he was forced to leave Earth or face trial and possibly execution. Along with nearly 5,000 followers in patched together fission powered transport vessels they set out to find a new home. After twelve years of wandering the galaxy they passed through the dark nebula and found "Divine Earth" as prophesied by Muham Al' Muhamad. A new society was founded on strict religious beliefs and the promise that they would one day re-take the Earth. Over the centuries they attacked supply convoys and small military vessels and brought them back to their planet for disassembly and study.

The total population of the Militant Front is 5.9 Billion. Children are immediately placed in schools where they learn a combination of extremist religious beliefs, military strategy, and scientific knowledge. They are taught from a young age that humans are superior to all other life forms as well as that one day they will re-take the Earth from the infidel. Cloned humans are grown in Vats with the express purpose of creating holy warriors. Since they are released from their growth tubes as babies rather than adults as human Invetros are and given immediate care they do not suffer from a lower fortitude like clones in the Human Republic do. Shipyards in orbit around the planet are constantly building warships; some of these ships rival Unification Dreadnaughts in sheer power. As a society they have mastered the control of matter/antimatter power plants that are more efficient than those built in the human republic. It is also the Militant Front that is responsible for the sudden incursions of the mysterious Vuldeem into Human Republic and Deynocim controlled space.

The Unified Human Republic is aware of the presence of these radicals and has determined that it would take a minimum of eight full battle fleets to subdue the Militant Front. Because eight battle fleets would be nearly a third of the Human Republics attack force they have forgone this option while other solutions are reviewed.

Other Intelligent Races

The Vuldeem

The Vuldeem are a race of reptilian appearing humanoids that have recently begun attacking distant human and Deynocim settlements. Vuldeem space starts approximately 100 light years outside of the outermost Unified Human Republic settlements and spans an unknown distance. Very little is known about the Vuldeem except that they have left no survivors in the wake of their attacks. Their fighter craft seem to be equipped with advanced cloaking technology that renders their ships invisible to the best sensor technology available to the human republic. Although most of the information has been suppressed by military intelligence at least four human and three Deynocim settlements have been completely wiped out.

The military Dreadnaught "Accelerator" was the first ship to survive an encounter with the Vuldeem. Reports indicate that an advance force of twelve human republic fighters on a survey mission detected abnormal neutrino emissions and were shortly thereafter attacked. Although none of the pilots survived, the mission tapes that were recovered revealed that no less than fifty Vuldeem craft passed through the gravity well of a nearby black hole at a high angle of attack before destroying the craft. The "Accelerator" responded by entering the gravity well of the black hole while actively scanning for unusual neutrino emissions. As expected, a group of Vuldeem fighter craft and at two capital sized starships closed in on the Unification Dreadnaught. The Accelerator responded to the fighter craft with an EMP blast, disabling most of the Vuldeem craft and followed up the attack with its laser weapons. Although it suffered significant damage it was able to capture two of the Vuldeem fighter craft before the remainder of the Vuldeem force retreated.

After the systematic reverse engineering of the Vuldeem craft it was revealed that they are equipped with an advanced matter/anti-matter power plant. Engineers have been unable to reverse engineer the Vuldeem cloaking device however incoming Vuldeem craft can be detected by measuring neutrino emissions emanating from their power plant. Vuldeem weaponry consists of a plasma bolt weapon that is equal to a class four laser. Although it was revealed that Vuldeem fighter craft are faster than Unified Human Republic fighter craft they are less maneuverable. Their advanced anti-gravity technology does allow them to operate in gravity wells without strain on the engines or exhausting their fuel supplies. The standard plasma bolt weaponry is more powerful than weaponry on Human Republic ships of the same size but Vuldeem weapon range is less than two thirds that of a standard Human Republic laser weapon. After careful consideration by engineers, cloaking technology aside, Vuldeem craft are an even match for the most advance fighter craft in the Unified Human Republic. With their cloaking technology, the edge in combat is in favor of the Vuldeem.

The Vuldeem that were captured immediately committed suicide. No information on the size of Vuldeem controlled space is available nor of the full capability of their society. Autopsies of the Vuldeem showed that they were cold blooded human like creatures. They are shorter than the average human and less massive. The skin of the captured Vuldeem is a light green and is covered by fine scales. Their teeth are flat and

shovel like and not suited to eating meat. Contents of the Vuldeem stomachs consisted of plant matter. The Vuldeem have three stomachs where food is digested. Their two arms and legs end in three digits that are fully opposable.

The Unified Human Republic is currently building up military forces along the Vuldeem border in conjunction with Deynocim War fleets. Several small satellites have also been placed at strategic points across the border along with scout ships to send advanced warning to Earth. Information on the Vuldeem has not been released and most public knowledge is conjecture and rumor.

The Irenichi

The Irenichi were once a very advance but peaceful race. The Deynocim, through a succession of wars, subjugated and enslaved this race. The Irenichi are a tall race, standing at nearly two meters in height. Despite their height they are a very slender race and fragile when compared to the Deynocim. The Irenichi are also hairless and seldom wear clothing save thin robes made from a silk like substance. They have four large eyes in the front forward part of their face and small mouths that lack teeth which instead have two bony protrusions that serve the same purpose. They are pale white creatures with four eye's and no nose. They can sense smell through their skin however which also serves as their breathing organ. They have four appendages of equal length ending in four digits. They once inhabited three worlds, all of which are now under Deynocim control. The Irenichi are a peaceful race that has accepted the subjugation the Deynocim have imposed on them however a few small colonies of this race has escaped to human controlled space and now resides in small peaceful communities. Although the Irenichi are well behind the other star fairing races in war related technologies their medical skills are far beyond that which has been developed in human controlled space.

Rothnachatid

Even the mighty Deynocim fear the deadly Rothnachatid. The Rothnachatid are a violent race that occupies six worlds approximately thirty light years from the farthest Deynocim Settlement. While the Deynocim seek to dominate and control territory, the Rothnachatid seek only to exploit resources. They are conquerors of the most ruthless sort. Each of the six worlds that they have occupied have been "Sterilized" completely. Three of the worlds they exploited had active stone age cultures with two having active pre-industrial cultures. Rothnachatid sterilization means destroying all plant and animal life on a world and replacing it with native life from their home world of Nachatid.

The Rothnachatid are evolved from arachnids. They have eight appendages ending in four small fully opposable digits. They are covered by an exoskeleton that is equal to a Kevlar vest in strength. They wear no clothing. Their faces are part of an upper thorax and contain many eye's and sharp mandibles that are approximately 1 inch in length. These mandibles are equal to knives in strength and contain four doses of class B injected poison. The Rothnachatid are covered with course hairs. Rothnachatid stand about 1.3 meters in height and are as massive as Deynocim. They are also physically far stronger than the Deynocim. Fortunately they are only a Diamond Age culture and lack

the technology to overpower more advanced civilizations.. Despite their lack of technology, their tenacity and sheer ruthlessness has allowed the m to overcome even a well-defended high population Deynocim world. There are rumors that the Deynocim Empire is gathering war fleets to eliminate the Rothnachatid and that the Regalus Confederation is offering military aid. This would be the first time in history that human and Deynocim forces would face a common enemy. In a technological environment the human and Deynocim forces have an edge however when the invasion of Rothnachatid worlds begin and conventional combat ensues it will be an entirely different war.

<p style="text-align:center">Githerak</p>

It is noted that the Githerak appear in the players section of the handbook. It is however appropriate to re-print the information on the Githerak race here.

A million years before man began his eventual ascendance to intelligence the Peaceful Grey were assaulted by an ancient star fairing race of which only traces remain. The Grey were not adept at war and found themselves being defeated at every turn. In order to avoid extinction, the Grey genetically altered a creature native to one of the many worlds in the core of the galaxy. The creature was called a Githerak. At the time it was little more than an intelligent squid like creature. The Githerak however were able to digest any material, live in nearly any environment, and reproduced rapidly. The Grey captured a hive queen and genetically altered the creature. The end result was a Githerak that was highly intelligent, was hardier then the creature it was developed from, and highly destructive. The Grey then seeded the worlds of their enemy with these altered hive queens, where they reproduced and eventually overran the worlds on which they were placed. The Grey had succeeded in destroying their enemies in totality. What the Grey did not suspect was that the Githerak queen on their own planet would escape and recede into one of the oceans on their home world. By the time the Grey discovered their error, their world, and their race was doomed.

A Githerak queen produces nearly a thousand eggs monthly. A new queen is born every three days. Maturity is reached in little over a month. Each of these queens then begins to reproduce. The offspring of the Githerak include almost mindless workers and warriors as well as larger and more intelligent warriors called "Commanders". Once on a world, the Githerak continue to reproduce until their numbers are great enough to completely overrun any native inhabitants. Once a world is overrun, and all the resources have been digested, a small number of Githerak hive queens and commanders construct a spacecraft that is a combination of biological and mechanical components in order to continue the process in the next habitable system.

Githerak communicate through pheromones much as ants do. Workers on average are two meters in length and have eight appendage s that end in a single steel like claw. Warriors are twice the size of workers and commanders are five meters long. A queen is a bloated disgusting mass of eight appendages and a bloated body whose sole purpose is to reproduce and control the colony. Queens on average are eight meters in length. Commanders and queens have some limited form of telepathic communication. The only technology that Githerak employ is their biological-mechanical colonization ships.

Whole worlds have been laid to waste to halt the spread of these creatures. The nearest known world inhabited by these creatures is one hundred and seventy light years away from the farthest human settlement. The Githerak on this world have been the test subjects of a genetic weapon that renders them sterile. It is rumored that the Unified Human Republic developed this weapon with the help of the Grey.

Myoton

The war-like Myoton are a purely human creation. A creation that lead to the eventual outlaw of self-replicating cognizant artificial intelligence. The human republic created these robots as warriors during the fourth Deynocim War. Myoton function as one being, interconnected by wireless transmitters that are tied into a mother brain. After the second war with the Deynocim ended, the human republic attempted to turn the machines and mother brains off. The machines resisted violently. After several combats they fled to an airless system many thousands of light years outside of human controlled space. There, the Myoton created a completely robotic world. Since there flight from human space they have subjugated and destroyed all sentient biological life in the systems surrounding their home world. They Myoton see all biological life as a threat to their existence. Since it was biological beings who created and then attempted to destroy them. The Myoton will eventually wage ware on all biological life. The intertwined sentient mother brains on the Myoton home world calculate that this will require many more years of advances and a much larger force than they currently have. For now the Myoton lay in wait for the day that they can strike in force.

The Myoton lack the creativity of biological beings and therefore are at a disadvantage when fighting against biological beings. Standard war-bots can only attain maximum skill levels of four in one area and two in five others. The more advanced commander class Myoton may attain skill levels of four in all seven areas of expertise. The Myoton are divided into several classes of robots and computer systems. The lowest level is general labor, followed by standard war-bots, then commanders, master computers, and at the top are mother brains. Myoton are always in contact with one another when within 50,000 KM of each other and always in contact with a mother brain that is within 200,000 KM of any unit. Myoton who loose contact can function independently. Myoton coordinate attacks as one continuous unit. When in communication with one another, what one Myoton sees, they all see. Communications jammers severely inhibit their ability to act in a coordinated military way. Myoton technology has surpassed that of the human republic.