

Appendix B - Quick Reference

IMPORTANT FORMULAS

1. Combat Round: Initiative Phase, Declaration Phase. Action Phase
2. Discharge Combat: (Weapon attack number + [skill level x 4] + Man. Dex attack bonus +/- Situational modifiers = Adjusted Attack Number)
3. HTH Combat: (Weapon attack number + [skill level x 4] + Agility bonus - Defensive Modifier +/- Situational modifiers = Adjusted Attack Number)
4. Initiative: (d10 + Encumbrance penalty + Wounded modifier - initiative modifier +/- Situational modifiers = Initiative)
5. Parrying Modifier: The UAN is reduced by the defender's total parry negation modifier which equals: (weapon parry number + [skill level x 4] + Agility bonus)

HAND-TO-HAND COMBAT

- A. Determine initiative based on initiative modifier and circumstance.
- B. PCs and NPCs secretly declare actions (whether they are attacking, parrying, playing the bagpipes or whatever).
- C. Determine results. If you are attacking when you should have been

HAND-TO-HAND SKILL

LEVEL	HIT BONUS	DAM ADJ	PERCENT TO DISARM	NUMBER OF ATTACKS
1	+04	0	05	+0
2	+08	+1	10	
3	+12	+1	15	
4	+16	+1	20	+1
5	+20	+2	25	
6	+24	+2	30	
7	+28	+2	35	+2
8	+32	+3	40	
9	+36	+3	45	
10	+40	+3	50	+3
11	+44	+4	55	
12	+48	+4	60	
13	+52	+4	65	+4
14	+56	+5	70	
15	+60	+5	75	
16	+64	+5	80	+5
17	+68	+6	85	
18	+72	+6	90	
19	+76	+6	95	+5
20	+80	+7	100	
21	+84	+7	105	
22	+88	+7	110	+5
23	+92	+8	115	
24	+96	+8	120	
25	+100	+8	125	

COMBAT MODIFIERS

CIRCUMSTANCE	MOD	CIRCUMSTANCE	MOD
Stationary Target	+10	Smoke	-30
Prostrate Target	+30	Darkness	-20
Speed (m/sec) 1-10	+00	Silhouetted in Dark	-10
11-20	-10	Size Class 1	-20
21-30	-20	Size Class 2	-10
31-40	-30	Size Class 3	-05
41-50	-50	Size Class 4	+00
51-100	-70	Size Class 5	+05
101-200 (vehicle only)	-90	Size Class 6	+10
201-500 (vehicle only)	-120	Size Class 7	+15
501-1,000 (vehicle only)	-140	Size Class 8	+20
1,001-2,000 ("")	-175	Moderate Wind	-10
2,001-5,000 ("")	-200	Severe Wind	-30
Braced Shot	+10	Hurricane Force Wind	-90
Snap Shot	-40	Range Stakes/Finder	+05
Suppressive Fire	-20	Cover 25%	-10
CALLED SHOTS		Cover 50%	-25
Head	-50	Cover 75%	-40
Arm	-50	Cover 90%	-50
Leg	-20	Concealment 25%	-08
Chest	-15	Concealment 50%	-17
Abdomen	-20	Concealment 75%	-25
Groin	-75	Concealment 90%	-30
Hand	-60	ATTACKING WITH 2 WEAPONS	
Foot	-60	First Weapon	-10
Throat	-75	Secondary Weapon	-25
Eye	-90		

parrying, then you are in a world of trouble.

- D. If persons are entitled to multiple attacks per round, use the Hand Attack Matrix to determine what segment each attack occurs in.
- E. If PCs switch weapons, remind them that it takes time.
- F. Matrices take seconds if not minutes to generate. Make sure you take this into account when Fredd goes up against Henry the Mutzachan. Fredd will attack within the first half-action, while Henry must take a minimum of a full action.
- G. If weapons discharge is occurring at the same time as Hand to Hand combat, discharge will go first until the Hand to Hand combatant has 4 attacks, allowing him to act in the first half-action. Remember that the discharge ROF equals shots per segment for full auto, or shots per half-action for normal fire.
- H. All damage done in hand to hand combat (unless inflicted by a Cizerack, Python, or Ram Python) is considered to be temporary. Temporary damage equals 1/10 real damage. Temporary damage heals at a rate of 1 point every 5 minutes.

ARCHAIC HAND WEAPONS COMBAT

- A. Parrying Modifier: The UAN is reduced by the defender's total parry negation modifier which equals: (weapon parry number + [skill level x 4] + Agility bonus)
- B. Feint: (Attacker's Hand Attack bonus + Attacker's Intuition) - Defender's Intuition = %chance to Feint.

HAND WEAPONS

- 1 half action to establish aim at range bracket 2-3 without a scope. One additional half action needed per range bracket up to range bracket 7. Aimed shots are not possible at range bracket 8 without a scope.
- 1 full action to establish aim with a scope at range bracket 4. 1 additional for bracket 5-6, 1 additional for bracket 6-8.
- Fire segment (half action) equals 1 second.
- It takes 1 half action to draw a non-heavy weapon. Pulse cannons, Omega Cannons and disintegrators require a full action to draw.
- Archaic powder weapons incur a -40 penalty for automatic fire.
- Lasers suffer no penalty for auto fire because there's no kick.
- Pulse cannons suffer a -50 penalty on automatic.

INTEGRITY REDUCTION

WEAPON	INTEGRITY REDUCTION
Omega cannon	0
Crossbow bolt or arrow	1
Standard bullet	1
Grenade fragment	1
Laser	1
Heavy laser (max. dam. > 12)	2
Phosphorus	2
Incendiary round	2
Machine gun	3
Acid	3
Plasma fragment	4
Explosive bolt or arrow	4
Super Plasma fragment	5
Pulse cannon	8
Plasma Seduction fragment	8
Arm Rockets	10
Reflex missiles	25
Anti-Tank (Tech 2-3)	50
Anti-Tank (Tech 4-6)	100
Archaic Hand Weapons	By weapon type
Disruptors, Disintegrators	Equal to damage done
Metal guns	5 times the threshold reduction

RANGE BRACKETS

HAND AND DISCHARGE WEAPON RANGE BRACKETS								
RANGE BRACKET	1	2	3	4	5	6	7	8
Distance (m)	00-05	06-15	16-25	26-50	51-150	151-300	301-750	751+
MISSILE RANGE BRACKETS								
Distance (m)	01-50	51-150	151-250	251-500	501-1000	1001-2000	2001-3500	3501+

8. Omega cannons suffer a -60 penalty on automatic.
9. Snap shots incur -40 penalty to hit.
10. No snap shot penalty within 5 meters.
11. Changing targets requires one half action.
12. Reloading takes 2 half actions for clips and 2 full actions for back-packs.

ARMOR

1. Armor Integrity equals the total amount of penetrating weapons hits that the armor can take before it is rendered useless.
2. Damage penetration = (Amount of damage done minus threshold) Excluding translational damage.
3. Absorption equals the armor's body points.
4. Heavy armor (threshold: 7+) is not affected by archaic powder hits (excluding machine guns) and lasers do only half damage. This bonus no longer applies if the armor's threshold is reduced below 7 by certain attack forms.
5. While wearing armor: -30 smell (impossible with environmental containment), -75 vibration sense, -30 hearing.
6. Phentari arm armor (integrity and absorption) is halved for each arm. Threshold remains the same.

GRENADES

1. Normal grenades can be thrown 1/2 strength in meters.
2. Plasma grenades can be thrown 1/3 strength in meters.
3. Super plasma grenades can be thrown 1/4 strength in meters.
4. Plasma seduction can be thrown 1/6 strength in meters.
5. Omegaton grenades can be thrown 1/4 strength in meters.
6. Divide the amount rolled over the UAN by 5 to determine the distance in range from the target.
7. Attack % decreases at a rate of -10 per 5m after 40.

GRENADE THROWING

RANGE BRACKET	1	2	3	4	5	6	7	8
DISTANCE (M)	05	10	15	20	25	30	35	40
ATTACK %	80	70	50	30	20	10	00	-10

COMBAT

1. Falling does 1-3 points of damage per 3m over the first 2m. Damage is concussive divided among 3 sections. Heavy armor is affected.
2. Phentari or Mazians can use 2 weapons without a penalty to hit. A third weapon has a -10 penalty, a fourth a -25.
3. Machine guns have no burst or automatic fire penalty.
4. When an arm hit is rolled on a Phentari, roll a 4 to determine which is hit: 1-2 upper, 3-4 lower.

CRITICAL HITS

–Left Leg–

- 01 Left foot shattered (-35 agility)
- 02-03 Left calf, clean (-15 agility)
- 04-05 Left shin bone shattered (-45 agility)
- 06 Left knee shattered (-60 agility, -10 permanent)
- 07 Left calf, artery (-25 agility, Bleeds 2 BP/min)
- 08-10 Left thigh, clean (-25 agility)
- 11-13 Left thigh bone shattered (-60 agility)
- 14-15 Left thigh, artery struck (-25 agility, Bleeds 2 BP/min)
- 16-17 Left hip bone chipped (-30 agility)
- 18 Left hip bone shattered (-60 agility)

–Right Leg–

- 19 Right foot shattered (-35 agility)
- 20-21 Right calf, clean (-15 agility)
- 22-23 Right shin bone shattered (-45 agility)
- 24 Right knee shattered (-60 agility, -10 permanent)
- 25 Right calf, artery (-25 agility, -2 BP/min)
- 26-28 Right thigh, clean (-25 agility)
- 29-31 Right thigh bone shattered (-60 agility)
- 32-33 Right thigh, artery struck (-25 agility, -2 BP/min)
- 34-35 Right hip bone chipped (-30 agility)
- 36 Right hip bone shattered (-60 agility)

–Abdomen–

- 37 Groin, clean (-70 agility, -20 system shock, -3 BP/min)
- 38 Groin, removed (-100 agility, -60 system shock, -4 BP/min)
- 39-44 Lower abdomen, clean (-35 agility, -10 system shock)
- 45-46 Stomach ruptured (-35 agility, -25 system shock, SMR vs poisoning or die in 2-8 minutes, -3 BP/min)
- 47 Stomach ruptured (-35 agility, -25 system shock, SMR vs poisoning or die in 1-4 minutes)
- 48-49 Liver (-4 BP/min)
- 50-51 Liver. You are spilling blood everywhere and making quite a puddle (-6 BP/min)
- 52 Intestines (-35 agility, SMR vs poisoning, -4 BP/min)
- 53 Multiple organs (-80 agility, -80 SS, die in 1-4 min)
- 54 Lower spine. Forget walking or doing the wild thing. (-120 Agility, -50 system shock, 50% paralysis)

–Chest–

- 55-59 Lung punctured (-50 agility, -65 system shock, 4 BP/min)
- Asphyxiation from drowning in blood in 1-4 minutes

- 60-61 Struck spinal cord, (-120 agility, -50 system shock, 50% chance of paralysis)
- 62 Spinal cord is now in two distinct sections (instant death)
- 63 Heart (unconscious, -10 BP/min)
- 64 Blows heart apart (instant death)
- 65 Multiple organs struck. Internals reduced to a jelly-like mixture. (instant death)
- 66-68 Ribs (-40 agility). You got lucky!
- 69-71 Ribs shattered (-50 agility, -30 system shock). Move and the chips have a 50% chance of puncturing a lung or two.
- 72 Collar bone broken (-30 agility)

–Left Arm–

- 73 Left hand shattered (-10 agility, -60 man dex, -10 perm)
- 74-76 Left arm (-10 agility, -40 manual dexterity)
- 77-78 Left arm, messy (-30 agility, -45 man dex, -2 BP/min)
- 79 Left elbow shatters (-20 agility, -60 man dex, -20 perm)
- 80 Left shoulder, clean (-30 agility, -40 manual dexterity)
- 81 Left shoulder broken (-40 agility, -60 manual dexterity)

–Right Arm–

- 82 Right hand shattered (-10 agility, -60 man dex, -10 perm)
- 83-85 Right arm (-10 agility, -40 manual dexterity)
- 86-87 Right arm, messy (-30 agility, -45 man dex, -2 BP/min)
- 88 Right elbow shattered (-20 agility, -60 man dex, -20 perm)
- 89 Right shoulder, clean (-30 agility, -40 manual dexterity)
- 90 Right shoulder broken (-40 agility, -60 manual dexterity)

–Head–

- 91 Larynx (-25 agility, -30 SS, can't speak for 2 weeks)
- 92 Neck (-25 agility, -60 system shock, -3 BP/min)
- 93 Mouth (-1 BP per min, -10 charisma permanent)
- 94 Face partially removed, (unconscious, -3 BP/min, -20 charisma permanently)
- 95 Jaw shattered (-20 agility, -40 system shock, -3 BP/min)
- 96 Enters eyes and exits back of skull. (instant death)
- 97 Forehead (unconscious, -5 BP/min, -10 points of I.Q. and intuition permanently).
- 98 Temple (concussion, -80 system shock, disoriented 2 days)
- 99 Top of head blown off (You're history pal!). There is all kinds of neat stuff oozing everywhere.
- 100 Head removed from the shoulders and you don't walk around like a chicken with its head cut off. (roll up new character)

MEDICAL

1. All injuries must be properly administered to before injecting a person with a BRI, or they heal all screwed up.
2. BRI heals 1-8 points of damage at 1 point every 2 minutes.
3. Catastrophic damage: Three times the victim's Death Door.
4. An MBRI heals 3-18 points at 1 point per minute.
5. A person must rest for one day per point of damage that their body points fall below zero.
6. A person must rest for two days per point of damage that their body points fall below -5.
7. A person must rest for three days per point of damage that their body points fall below -10.
8. Persons may not use more than 1 BRI per day without risking addiction.
9. There is a 10% chance per each additional BRI administered that

HIT LOCATION

ROLL	LOCATION
01-18	Left Leg
19-36	Right Leg
37-54	Abdomen
55-72	Chest
73-81	Left Arm
82-90	Right Arm
91-100	Head

the person becomes addicted.

10. CRAs and BRAs increase the SMR by 20 points.
11. A first aid kit increases Basic medical checks by +10
12. A paramedic kit increases resurrection percentages by 20%
14. Any time a person suffers damage equal to 25% or more of his cur-

- rent body points, they have suffered a critical hit.
15. Losing CON due to blood loss will change your Death's Door number. Be sure to update stats if you are wounded.
 16. A single limb that takes half of the characters original total body points, is considered severed.

VITAL STATISTICS

1. Manual Dexterity affects discharge combat.
2. Agility affects Hand to Hand combat as well as Archaic Hand combat.
3. Every time a character suffers a critical hit, he must roll under his System Shock number or pass out.
4. Each time a person dies, Constitution is decreased by 10 points permanently.
5. A person dies when his body points drop below his Death's Door.
6. A person who dies must roll beneath his resurrection number to be revived.
7. The base chance for a person to go berserk equals 1 percent per point of aggression above 80.
8. The base chance for a person to become suicidal equals 1 percent per point of aggression above 105.
9. To determine the Terrestrial Knowledge score, roll percentile dice and divide the number by three. Add the racial modifier.
10. To determine an individual's military leadership qualifications, add intelligence, aggression, and intuition scores, then and divide by 4.
11. Military leadership increases at a rate of +03 per mission completed for the leader.
12. Subordinates have their military leadership scores increase by +01 per mission completed.
13. Persuasion equals I.Q. + Charisma divided by three. Modifiers are then applied.
14. Bargaining equals Persuasion -15 points. Modifiers are then applied.
15. Perception Checks. The BM assigns a base chance to perceive something (vision, smell, hearing) and modifiers are added. The average is a base 50.

OCCUPATIONAL SKILLS

1. Maximum of 3 levels of any starting skill above any levels that the

- race begins the game with (Human: 5 max).
2. 25 points to obtain occupational proficiency.
 3. 15 points to obtain secondary proficiency.
 4. 40 points to obtain expertise in a field (minus 1 point cost).
 5. 100 points to obtain mastery in a field (minus 2 point cost).

STARTING PROFICIENCY POINTS

RACE	POINTS	RACE	POINTS
Chatilian	35	Mutzachan	35
Cizerack	50	Orion Rogue	60
Eridani	40	Phentari	40
Gen-Human	55	Python Lizard	50
Human	70	Ram Python	50
Mazian	50	Zen Rigeln	40

SAMPLE DIFFICULTY LEVELS

LEVEL	SAMPLE
-2	Picking a lock you have already picked (Pick Locks)
	Shape changing into a rock (Shape Changing)
	Bandaging a scrape (Basic Med)
	Bribing a desperate drug addict (Bribery)
	Tracking a large group in the snow or mud (Tracking)
1	Turning on a simple computer (Computer Operation)
	Cleaning minor wounds (Basic Med)
	Rapelling down a smooth surface such as a building (Rapelling)
	Accessing unprotected files on a simple computer (Computer Operation)
	Treating 1st degree burns (Basic Med)
2	Running simple functions on an unfamiliar computer system (Computer Operation)
	Treating 2nd degree burns (Basic Med)
	Tracking across rock or an old trail (Tracking)
	Minor exploratory surgery (Surgery)
	Treating simple fractures (Basic Med)
3	Rapelling down a cliff with loose rocks and ledges (Rapelling)
	Driving a skimmer through heavy, fast-moving traffic
	Australian Rappel: face first, with one hand free for shooting, down a smooth surface (Rapelling)
	Major exploratory or organ surgery (Surgery)
	Tracking after a heavy rain (Tracking)
4	Treating compound fractures (Basic Med)
	Organ replacement, or limb reattachment surgery (Surgery)
	Running complex programs on an unfamiliar computer (Computer Operation)
	Trying to jury-rig a missile to act as a mine (Demolitions)
	Brain surgery (Surgery)
5	Brain surgery (Surgery)
	Treating compound spinal fractures (Basic Med)
	Brain replacement surgery (Surgery)
	Using a bio/med computer to run a weapons pod on auto with little or no, reprogramming (Reroute/Computer Operation)

LEVELS OF DIFFICULTY

LEVEL	MODIFIER	EXAMPLE
1	-10	Simple tasks like turning the machine on.
3	-30	Routine operations
5	-50	Average difficulty.
7	-70	Difficult work. Tricky stuff here.
10	-100	Real challenge. Better be good.
12	-120	How much did you say I was getting paid?
15	-150	Wow am I good!
17	-170	You can brag about this stuff.
18	-180	Easy stuff like hacking into NORAD.
20	-200	Going to try for the Nobel Prize?
22	-220	World record type stuff.
24	-240	The ultimate challenge.
25	-250	Impossible for a mere mortal.

FICKLE FINGER OF FATE TABLES

1. Characters may roll three times on Just Growing Up Table 1.
2. Characters may roll twice on I was Just Growing Up Table 2. (If they rolled on Table 1).
3. Characters have the option of rolling once or twice on the Fickle Finger of Fate Tables and must notify the BM of how many times before they roll.
4. Characters may roll once on the appropriate Fortune Table.

MATRICES

1. Begin with 2-5 1st level powers and 1 second level power.
2. Chance to find Mentor: (70% + 05% level of controller - 20% per level of energy bracket).
3. Experience points are divided in half when determining advancement.
4. Latent extraction costs 15 points to become a Healer, 25 to become an empath, and 35 to become an Energy Controller.

COMPUTER TERMS & INFO

CC: Computing Capacity. Refers to the portion of the computer where data is stored and tasks are performed.

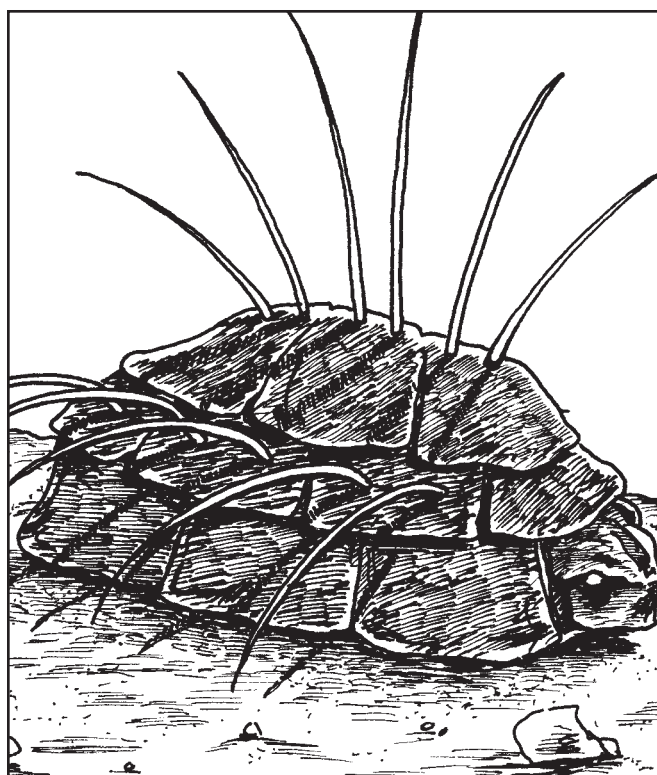
PCD: Personal Computing Device

SC: Storage Capacity.

ON: Operation Number. Base chance of a computer to complete a task. TL 5 systems' ON is 75; TL6 systems' ON is 90.

MQ: Module Quality.

1. Data wafers, strips, and cubes have an SC of 100.
2. A construct will take 1 hour per level to write, minus 1 hour per level of programming skill. A construct will take a minimum of its level in minutes to write.



3. For every module or construct a computer is running it must allocate CC equal to the level of the module/construct times ten.
4. For every 10CC extra you allocate to a task you gain a +1 bonus.
5. For every 5 levels of a module/construct the operator must make a level 1 Operations check to activate it correctly.
6. All computers operate in Galactic Standard unless otherwise noted by the BM. Computer Operations (Operate by Race) defaults to Galactic Standard.
7. Chance to succeed in a computer check: ON + (skill level of module/construct x 10) - (MQ). Ignore MQ if running a construct.

SAMPLE SITUATIONAL MODIFIERS

SITUATION	MODIFIER
Preferred Race	+5
Tolerant Race	No Modifier
Mistrust Race	-5
Dislike Race	-10
Enmity Race	-20
Reaction Check Result	-50 to +50
NPC Considers Information Sought Minor	-10
NPC Considers Information Sought Major	-25
NPC Considers Information Sought Crucial	-60
NPC Slightly Intoxicated	+15
NPC Drunk/Drugged	+30
NPC Afraid	+50
NPC Captured	+90
NPC Tortured	+125
Poor Roleplaying	-20
Fair Roleplaying	00
Good Roleplaying	+10
Excellent Roleplaying	+25

SAMPLE BASE CHANCES

SITUATION	CHANCE
Spotting moving trooper at 500m	05%
Spotting lighter-sized object in cluttered office	10%
Spotting person in crowd	15%
Smelling Ram Chunga at 10m	80%
Smelling rotting corpse down alley	30%
Smelling campfire at 50m	20%
Hearing creeping Death Monster around corner while trying to convince Ram the area is perfectly safe	05%
Hearing conversation through door	35%
Hearing twig snap at 25m while on watch	40%