

ECLIPSE PHASE



SYSTEM CHEAT SHEET

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BASIC MECHANICS

Success Test: $d\% \leq \text{Skill Rating} + \text{Modifiers}$

Opposed Test: Higher success wins; if both fail deadlock results

(crit success trumps normal success)

MODIFIERS

Maximum Modifier: +/- 60

Default to Aptitude: No penalty

Default to Related Skill: -30 penalty

Teamwork: +10 per helper, max +30

Trying Again: -10 per attempt

Simple Success Test:

Strong Success: $d\% \leq \text{Target}$

Weak Success: $d\% > \text{Target}$

Extra Time

Quick/Complex: +1 minute = +10

Task Actions: +50% time = +10

Complementary Skill

01-30 = +10

31-60 = +20

61+ = +30

00 = auto success / 99 = auto failure

Critical: Both dice have same digit

Margin of Success = # rolled

Margin of Failure = # rolled – target

Excellent Success = MoS > 30

Exceptional Success = MoS > 60

Severe Failure = MoF > 30

Horrific Failure = MoF > 60

TYPES OF ACTIONS

Automatic = “Always on”

Quick = Multiple per turn

Complex = 1 per action phase

Task = Specified timeframe, reduced by 10% for each 10 points of MoS

TEST DIFFICULTY

DIFFICULTY LEVEL	MODIFIER
Effortless	+30
Simple	+20
Easy	+10
Average	+0
Difficult	-10
Challenging	-20
Hard	-30

MODIFIER SEVERITY

SEVERITY	MODIFIER
Minor	+/- 10
Moderate	+/- 20
Major	+/- 30

SPENDING 1 MOXIE

- Before the roll, ignore all negative modifiers on a single test.
- Flip-flop d100 result (83 becomes 38).
- Upgrade success to critical success.
- Treat critical failure as regular failure.
- Go first in an Action Phase.

YOUR MUSE AND YOU

Your muse can:

- Make Research tests to find information for you.
- Falsify or fluctuate your mesh ID.
- Scan newsfeeds and mesh updates for keyword alerts.
- Monitor your mesh inserts/ecto/PAN and slaved devices for intrusion.
- Teleoperate and command robots.
- Launch countermeasures against intruders.
- Monitor your rep scores and alert you to drastic changes.
- Automatically provide feedback for other people's rep scores.
- Run audio input through an online, real-time language translation system.
- Put you in privacy mode and/or proactively stealth your wireless signal.
- Track people for you.
- Anticipate your needs and act accordingly, pre-empting your requests.

COMMON AI

Standard Muse: Aptitudes: 10, INT 20. Skills: Academics: Psychology 60, Hardware: Electronics 30, Infosec 30, Interface 40, Professional: Accounting 60, Programming 20, Research 30, Perception 30 + 3 Knowledge skills at 40

Bot/Vehicle AI: Aptitudes: 10, REF 20. Skills: Hardware: Electronics 20, Infosec 20, Interests: [Bot/Vehicle] Specs 80, Interface 40, Research 20, Perception 40, Pilot: [appropriate field] 40.

Kaos AI: Aptitudes: 10, REF 20. Skills: Hardware: Electronics 40, Infosec 40, Interface 40, Professional: Security Systems 80, Programming 40, Research 20, Perception 30 + 1 weapon skill at 40

Security AI: Aptitudes: 10. Skills: Hardware: Electronics 30, Infosec 40, Interface 40, Professional: Security Systems 80, Programming 40, Research 20, Perception 30 + 1 weapon skill at 40

APTITUDES

Cognition (COG) – Problem-solving, logical analysis, understanding, memory, recall.
Coordination (COO) – Manual dexterity, fine motor control, nimbleness, balance.
Intuition (INT) – Gut instincts and on-the-fly evaluation. Physical awareness, cleverness, cunning.
Reflexes (REF) – Reaction time, gut-level response, thinking fast.
Savvy (SAV) – Mental adaptability, social intuition, social awareness and manipulation.
Somatics (SOM) – Pushing morph to best of its physical ability. Use of strength, endurance, motion.
Willpower (WIL) – Self-control, ability to command your own destiny.

LEARNED SKILL RANGES

SKILL	EQUIVALENCE
00	No exposure or familiarity, completely unskilled.
10	Very rudimentary knowledge.
20	Basic operator's proficiency (driver's license, gun permit, high school diploma)
30	Hands-on experience, some professional training.
40	Basic professional certification (police driving, army rifle certified, advanced training)
50	Experience from professional-level work, some advanced training.
60	Expert competence.
70	Experience from expert-level work. Has unique insights/innovations.
80	Worthy of being system-renowned authority on the subject.
90	Nobel/Olympic/grandmaster.

SKILLS

Academics: [Field]	COG	Knowledge
<i>Archaeology, Astrobiology, Astronomy, Astrophysics, Astrosociology, Biochemistry, Biology, Botany, Computer Science, Cryptography, Economics, Engineering, Genetics, Geology, Linguistics, Mathematics, Memetics, Nanotechnology, Old Earth History, Physics, Political Science, Psychology, Sociology, Xenoarchaeology, Xenolinguistics, Zoology</i>		
Animal Handling	SAV	Active, Social
Art: [Field]	INT	Knowledge
<i>Architecture, Criticism, Dance, Drama, Drawing, Painting, Performance, Sculpture, Simulspace Design, Singing, Speech, Writing</i>		
Beam Weapons	COO	Active, Combat
Blades	SOM	Active, Combat
Climbing	SOM	Active, Physical
Clubs	SOM	Active, Combat
Control	WIL*	Active, Mental, Psi
Deception	SAV	Active, Social
Demolitions	COG*	Active, Technical
Disguise	INT	Active, Physical
Exotic Melee Wpn: [Field]	SOM	Active, Combat
Exotic Ranged Wpn: [Field]	COO	Active, Combat
Flight	SOM	Active, Physical
Fray	REF	Active, Combat
Free Fall	REF	Active, Physical
Freerunning	SOM	Active, Physical
Gunnery	INT	Active, Combat

Hardware: [Field]	COG	Active, Technical
<i>Aerospace, Armorer, Electronics, Groundcraft, Implants, Industrial, Nautical, Robotics</i>		
Impersonation	SAV	Active, Social
Infiltration	COO	Active, Physical
Infosec	COG*	Active, Technical
Interest: [Field]	COG	Knowledge
<i>Ancient Sports, Celebrity Gossip, Conspiracies, Factor Trivia, Gambling, Hypercorp Politics, Lunar Habitats, Martian Beers, Old Earth Nation-States, Reclaimer Blogs, Science Fiction, Scum Drug Dealers, Spaceship Models, Triad Economics, Underground XP</i>		
Interfacing	COG	Active, Technical
Intimidation	SAV	Active, Social
Kinesics	SAV	Active, Social
Kinetic Weapons	COO	Active, Combat
Language: [Field]	INT	Knowledge
<i>Arabic, Cantonese, English, French, Hindi, Japanese, Mandarin, Portugese, Russian, Spanish</i>		
Medicine: [Field]	COG	Active, Technical
<i>Biosculpting, Exotic Biomorphs, Gene Therapy, General Practice, Implant Surgery, Nanomedicine, Paramedic, Pods, Psychiatry, Remote Surgery, Trauma Surgery, Uplifts (by type), Veterinary</i>		
Navigation	INT	Active, Mental
Networking: [Field]	SAV	Active, Social
<i>Autonomists (@-rep), Criminals (g-rep), Ecologists (e-rep), Firewall (i-rep), Hypercorps (c-rep), Media (f-rep), Scientists (r-rep)</i>		

Palming	COO	Active, Physical
Perception	INT	Active, Mental
Persuasion	SAV	Active, Social
Pilot: [Field]	REF	Active, Vehicle
<i>Aircraft, Anthroform (Walkers), Exotic Vehicle, Groundcraft, Spacecraft, Watercraft</i>		
Profession: [Field]	COG	Knowledge
<i>Accounting, Appraisal, Asteroid Prospecting, Banking, Cool Hunting, Con Schemes, Distribution, Forensics, Lab Technician, Mining, Police Procedures, Psychotherapy, Security Ops, Smuggling Tricks, Social Engineering, Squad Tactics, Viral Marketing, XP Production</i>		
Programming	COG*	Active, Technical
Protocol	SAV	Active, Social
Psi Assault	WIL*	Active, Mental, Psi
Psychosurgery	INT	Active, Technical
Research	COG	Active, Technical
Scrounging	INT	Active, Mental
Seeker Weapons	COO	Active, Combat
Sense	INT*	Active, Mental, Psi
Spray Weapons	COO	Active, Combat
Swimming	SOM	Active, Physical
Throwing Weapons	COO	Active, Combat
Unarmed Combat	SOM	Active, Combat

* No defaulting.

COMBAT

ACTION TURN

- Step 1:** Roll Initiative. (1d10 + Initiative) (INT + REF ÷ 5)
Step 2: Begin First Action Phase (Speed 1)
Step 3: Declare and Resolve Actions (Highest Initiative First)
Step 4: Start Next Action Phase (Speed 2-4)

MOVEMENT

(Quick Action, divided between all action phases)

Walk: 4 meters per turn

Run: 20 meters per turn, -20 to physical actions

ATTACKS

ATTACK CHECK:

Attack skill + modifiers vs. Defense check + modifiers

Excellent Success: DV +5

Exceptional Success: DV +10

Critical Success: Armor does not apply

DEFENSE

Melee (Automatic Action): Fray skill

Ranged (Automatic Action): ½ Fray skill

Psi (Automatic Action): WIL x 2

Full Defense (Complex Action): +30 modifier, can use Freerunning or Fray

SURPRISE

Infiltration vs. Perception test
(-20 penalty to Perception unless actively on guard)

Failure: Attackers receive free Action Phase.
Success: Roll initiative normally. Ambushed characters suffer -3 penalty to initiative.

COMBAT STATS

DV: Damage Value

AV: Armor Value

AP: Armor Penetration

WT: Wound Threshold

TT: Trauma Threshold

ARMOR

ARMOR VALUE: Energy/Kinetic

(Armor 5/10 is AV 5 vs. energy-based attacks, AV 10 vs. kinetic attacks)

Layered Armor: Add armor ratings together to maximum value of Durability. -20 modifier to physical actions per layer (although armor accessories and armor inherent to morph do not count).

PHYSICAL DAMAGE

(DV + modifiers) - (AV - AP)

Thrown/Melee Weapon: Add SOM ÷ 10 to DV.

UNCONSCIOUS: Damage > Durability

BIOMORPH DEATH: Damage > Durability x 1.5

SYNTHMORPH DEATH: Damage > Durability x 2

Damage > WT = 1 Wound

Damage > WT x 2 = 2 Wounds, etc.

MENTAL DAMAGE

CATATONIC: Stress > Lucidity

INSANITY: Stress > Lucidity x 2

Damage > TT = 1 Trauma

Damage > TT x 2 = 2 Trauma, etc.

WOUNDS

-10 modifier to actions, -1 Init per wound

KNOCKDOWN: When taking a wound, SOM x 3 test or knocked down.

- Quick Action to stand up.
- Bots / Vehicles make Pilot test to avoid crash.

UNCONSCIOUSNESS: When taking 2+ wounds, SOM x 3 test or knocked out.

- Bots/Vehicles automatically crash.

BIOMORPH BLEEDING: If Damage > Durability and biomorph has a wound, they incur 1 damage per turn until they receive medical care or die.

TRAUMA

-10 modifier to actions, -1 Init per trauma

DISORIENTATION: When taking a trauma, WIL x 3 test or become disoriented.

- Complex Action to reorient.

DERANGEMENTS (pg. 210): Suffer new minor derangement or upgrade previous derangement (minor to moderate; moderate to major; major to disorder) for each trauma suffered.

COMBAT MODIFIERS

GENERAL

	MODIFIER
Character using off-hand	-20
Character has superior position	+20
Target: Small (child-sized)	-10
Target: Very Small (mouse or insect)	-30
Target: Large (car-sized)	+10
Target: Very Large (side of a barn)	+30
Visibility Impaired: Minor (glare, light smoke, dim light)	-10
Visibility Impaired: Major (heavy smoke, dark)	-20
Visibility Impaired: Blind Attack	-30

RANGED

	MODIFIER
Attacker using smartlink / laser sight	+10
Attacker behind cover	-10
Attacker in melee combat	-30
Defender has minor cover	-10
Defender has moderate cover	-20
Defender has major cover	-30
Defender prone and far (10+ meters)	-10
Defender hidden	-60
Point-Blank Range (2 meters or less)	+10
Short Range	n/a
Medium Range	-10
Long Range	-20
Extreme Range	-30

MOVEMENT OPTIONS

Charging: Run and melee attack in same round.

- *Effect of Charge:* -10 modifier for running, +1d10 damage
- *Receiving Charge:* Delay action to receive +20 modifier to hit someone charging you.

Climb (Task Action) : Climbing check, 1 meter per turn.

Jump (Complex Action) : Round all results up.

- *Running Jump:* SOM ÷ 5 meters
- *Standing Jump:* SOM ÷ 20 meters
- *Vertical Jump:* 1 meter
- *Freerunning:* +1 meter (running) or +0.25 meters (standing) per 10 points of MoS.

Rappelling (Task Action) : Climbing check, 50 meters per turn

Sprint (Complex Action): Freerunning check, +1 meter per 10 points of MoS (max +5)

Swimming: ¼ speed, -20 penalty to physical skills

Gravity:

- *Microgravity:* Climb, pull, or push at ½ movement.
- *Low Gravity:* Jump twice as far. Run at x1.5.
- *High Gravity:* Treat as 1 wound per 0.2g about 1g.

COMBAT OPTIONS

COMBAT OPTIONS

FIRING MODES

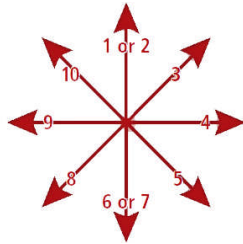
- **SINGLE SHOT (SS):** 1 shot per Complex Action
- **SEMI-AUTOMATIC (SA):** 2 shots per Complex Action
- **BURST FIRE (BF):** Uses 3 shots of ammunition.
 - 1 Target: +1d10 DV or +10 attack modifier
 - 2 Targets: Within 1 meter of each other.
- **FULL AUTOMATIC (FA):** Uses 10 shots of ammunition
 - Single Target: +3d10 or +30 attack modifier
 - 2-3 Targets: Within 1 meter of each other.
- **SUPPRESSIVE FIRE (FA):** Uses 20 shots of ammunition
 - Cone with widest diameter up to 20 meters.
 - 1 free attack against any character not behind cover or immediately seeking cover.

RELOAD

Complex Action

SCATTER

Direction: Roll d10.



Distance: 1d10 meters.

Severe Failure = x2
Horrible Failure = x3

SHOCK

Target makes DUR + Energy Armor test

Failure: Fall down and incapacitated for 1 round per 10 MoF. After recovery, -30 penalty to all actions. (Reduce penalty by 10 per minute).

Success: Suffer ½ DV and -30 penalty until next action turn. (Reduce penalty by 10 per turn.)

ATTACK OPTIONS

AIMED SHOT:

- *Sacrifice All Quick Actions:* +10 modifier on attack.
- *Sacrifice Complex Action:* +30 bonus on next attack.

AREA EFFECT:

- **Blast Effect:** -2 damage per meter from blast center.
- **Uniform Blast:** Full damage within blast sphere. -2 damage per meter outside sphere.
- **Cone Effect**
 - Short Range: 1 target, +1d10 damage.
 - Medium Range: 2 targets
 - Long/Extreme Range: 3 targets, -1d10 damage

BEAM EFFECT:

- **Sweeping Fire:** Missed shot with semi-auto beam weapon is treated as a free aim action (+10 modifier) on second attack against same target.
- **Concentrated Fire:** After successful hit, sacrifice second attack to increase DV x 1.5 (round up).

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BLIND ATTACK: Resolves as a Moxie test (no modifiers).

- **Secondary Sense:** Make Perception test to attack normally with -30 modifier.
- **Indirect Fire:** With a potter, make attack normally with -30 modifier.
- **Laser Targeting:** As Complex Action, spotter paints target with a laser sigh. Attack can be made with a seeker weapon at no penalty.

CALLED SHOT: -10 modifier on attack. With excellent success, achieve called effect.

- **Bypass Armor:** Target's armor does not apply.
- **Disarming:** ½ damage. SOM x 3 test (-30 modifier) or drop held item.
- **Specific Targeting:** GM-determined result.

GRAVITY: Divide maximum weapon ranges by gravity.

ATTACK OPTIONS

GRENADES/SEEKERS: Subject to scatter on a miss.

- **Jumping On** (Complex Action): REF + COO + WIL test. Suffer +1d10 damage; reduces damage to other characters by armor + 10.
- **Throwing Back** (Complex Action): REF + COO + WIL
- **Triggers**
 - *Airburst/Impact:* Resolve immediately.
 - *Signal:* Detonate when signal is received.
 - *Timer:* Detonates on user's Initiative score. 1 action phase per second (minimum 1 second).

KNOCKDOWN / KNOCKBACK:

- 1 meter per 10 MoS.
- Knockdown requires MoS 30+.
- Normal damage on critical success.

MULTIPLE TARGETS: -20 penalty per additional target.

REACH: +10 modifier to attacking/defending in melee.

SUBDUAL: If MoS ≥ target's DUR, target is subdued. Cannot take most physical actions.

- **Breaking Free** (Complex Action): Opposed Unarmed Combat test or opposed SOM x 3 test. Subdued character suffers -30 penalty.
- **Minor Physical Actions:** -30 penalty

TOUCH-ONLY: +20 bonus to melee attack

TWO-HANDED ATTACKS:

- **Extra Melee Weapons:** +1d10 DV per weapon (max. +3d10), +10 defense per weapon (maximum +30).
- **Extra Ranged Weapons:** -20 penalty per additional weapon.
- **Off-Hand:** -20 penalty
- **Two-Handed Weapons:** -20 penalty if wielded in one hand

BIOMORPH HEALING

MEDICAL CARE: Medicine: [field appropriate] test.

- *Success:* Heal 1d10 damage and 1 wound
- Each injury can be treated only once.

SURGERY: At GM discretion, serious wounds may require Medicine: [field appropriate] test.

- Task action (1-8 hours)
- *Success:* Heal 1d10 damage and 1 wound, continue healing normally thereafter.

NATURAL HEALING: Character must heal all damage before healing wounds.

SYNTHMORPH REPAIR

PHYSICAL REPAIR: Hardware: [field appropriate] test.

- Task action (2 hours per 10 points of damage, 8 hours per wound)
- -10 modifier per wound

MENTAL HEALING

TRAUMA: Trauma cannot be healed by any means until stress has been removed.

PSYCHOTHERAPY CARE: Medicine: [field appropriate] test.

- Task action (1 hour per stress, 8 hours per trauma, 40 hours per disorder)
- -10 penalty per disorder
- +30 successful psychosurgery
- *Success:* Remove stress or trauma. When trauma is removed, associated derangement is eliminated or downgraded.

NATURAL HEALING: WIL x 3 test once per month.

- *Success:* Heal 1d10 stress or 1 trauma.

DISORDER RECOVERY: WIL test after 3 months without stress or trauma.

PSYCHOSURGERY: Psychosurgery vs. patient's WIL x 3

- Task action (variable)
- *Both Succeed (Psychosurgeon Higher):* Temporary. 1 week per 10 points of MoS.
- *Procedures:* See pg. 231-232.

HEALING EQUIPMENT

HEALING VATS (pg. 327): See *Healing Vat* chart.

MEDICINES (pg. 308): See *Healing* chart.

- Ignore effects of 1 wound.
- Filter most diseases, drugs, toxins (not nanodrugs or nanotoxins).
- If character suffers 5+ wounds at once or 6+ wounds within an hour, medicines will place them in medical stasis and send emergency call.
- Grants synthmorphs natural healing.

NANO-BANDAGES (pg. 333): See *Healing* chart.

REPAIR SPRAY: Repairs synthmorphs, vehicles, or other common objects.

- 1d10 damage per 2 hours

HEALING

CHARACTER SITUATION	DAMAGE HEALING RATE	WOUND HEALING RATE
Character without basic biomods	1d10 (5) per day	1 per week
Character with basic biomods	1d10 (5) per 12 hours	1 per 3 days
Character using nanobandage	1d10 (5) per 2 hours	1 per day
Character with medicines	1d10 (5) per 1 hour	1 per 12 hours
Poor conditions (bad food, not enough rest/heavy activity, poor shelter and/or sanitation)	double timeframe	double timeframe
Harsh conditions (insufficient food, no rest/strenuous activity, little or no shelter and/or sanitation)	triple timeframe	no wound healing

HEALING VAT

INJURY	HEALING TIME
Healing normal damage to a character who has taken 3 or fewer wounds.	2 hours per wound (min. 1 hour for 0 wounds)
Restoring major lost body parts like arms or legs, or healing dying or nearly dead character who has taken 4 wounds.	12 hours per wound
Restoring recently dead character who was placed in medical stasis to avoid death, but who is mostly intact.	1 day per wound
Restoring recently dead character who is placed in medical stasis to avoid death, and who is missing most of their body.	3 days per wound
Augmentation	
Minor implants and bioware, minor cosmetic changes like alterations in skin color, eye color or shape, or hair color, texture or distribution, minor alterations to face shape or body fat distribution.	1 hour
Major brain and neural implants, nanoware or bioware, sex changes, changing height by no more than 5% or weight by no more than 20%.	12 hours
Major physical modifications like adding limbs or radical changes to height and weight.	3 days

MESH

Eclipse Phase, pg. 249

INTERFACE:

- Augmented Reality (AR), Virtual Reality (VR), Experience Playback (XP)
- **Haptics:** -10 modifier, increase timeframe for task actions by +25%

ONLINE RESEARCH:

- **COMMON INFO:** Easily retrieved (often automatically retrieved by muses)
- **DETAILED INFO:** Task action (1 minute), Research test
- **ANALYSIS:** Task action (variable), Research test
- **HIDDEN DATA:** May need to access specific people or networks to gain certain information.
- **REAL-TIME SEARCHES:** Ongoing mesh scans that alert you if relevant information comes up.

SCANNING / TRACKING / MONITORING

- **PHYSICAL TRACKING**
 - *Biometrics:* Task action (variable), opposed Research test (can also be real-time search)
 - *Mesh ID:* Task action (variable), Research test
- **DIGITAL ACTIVITY TRACKING**
 - *Public Activity:* Handled as online research.
 - *Mesh ID:* Task action (1 hour), Research test
- **SMELLING:** Requires sniffer program. (EP, pg. 331)
 - *Mesh ID:* Research test
 - *Wireless Monitoring:* Infosec test
 - *Stealthed Signal:* Complex Action, Interfacing test (-30) to locate
 - *Active Countermeasures:* Opposed Interfacing tests (-30)

MISC

- **ANONYMIZATION:**
- **AR MIST:** -10 to -30 penalty depending on level of distraction. Interfacing test filters it out.
- **ISSUING COMMANDS:** Quick Action
- **PRIVACY MODE:** -30 penalty to attempts to monitor or track you
- **QUANTUM CODEBREAKING:** Task action (1 week), Infosec test (-30), cannot break quantum-encryption

MESH GEAR MODIFIERS

MODIFIER	SOFTWARE/HARDWARE
-30	Bashed-up devices, no-longer-supported software, relics from Earth or the early expansion into space
-20	Malfunctioning/inferior devices, buggy software, pre-Fall technology
-10	Outdated and low quality systems
0	Standard ectos, mesh inserts, and software
+10	High-quality goods, standard security-grade products
+20	Next-generation devices, advanced software
+30	Newly developed, state-of-the-art, top-of-the-line technology
>+30	TITANS and/or alien technology

BOTS / SYNTHMORPHS / VEHICLES

Eclipse Phase, pg. 195

SHELL STATS: Durability, Wound Threshold, Death Rating

- **HANDLING:** Modifies all physical tests.
- **MAX VELOCITY:** Maximum speed, listed in km / hour.

CONTROLLING: Each instruction is Quick Action.

- **AUTONOMOUS CONTROL:** Generalized instructions carried out by shell's AI.
- **REMOTE CONTROL:**
 - Shell uses operator's aptitudes and initiative.
 - Tests made at -10 penalty.
 - Multiple drones can be controlled simultaneously.
- **JAMMING:** Complex action to engage and disengage.
 - Control shell as if it were controller's morph.

WOUNDS: -10 modifier to actions, -1 Initiative

- **CRASHING:** Pilot test when suffering wound or crash. Automatically crash if 2+ wounds taken simultaneously.

COLLISIONS: Damage dealt to both shell and object/character struck.

- **DV:** $(1d10 + DUR) \div 2$
 - **RUNNING:** $DV \times 2$
 - **CHASE SPEED:** $DV \times (\text{velocity} \div 10)$
 - **SOFT OBJECT:** $DV \div 2$
- **HEAD-ON:** Inflict damage from both shells.
- **SAME DIRECTION:** Count only difference in velocity.

PASSENGERS:

- **COLLISION:** Suffer $\frac{1}{2}$ DV applied to their vehicle.
- **TARGETING:** Benefit from cover and vehicle's AV.

RADIO AND SENSOR RANGES

SIZE CATEGORY	URBAN RANGE	OPEN RANGE	EXAMPLES
Nano	20 meters	100 meters	Smart Dust, Nanobot/Microbot Swarms
Micro	50 meters	500 meters	Microbugs
Mini	1 kilometer	20 kilometers	Mesh Inserts
Small	5 kilometers	50 kilometers	Ectos, Miniature Radio Farcasters, Portable Sensors
Medium	25 kilometers	250 kilometers	Radio Boosters, Vehicle Sensors
Large	500 kilometers	5,000 kilometers	

SECURITY ALERTS

(pg. 257)

ACCOUNT TYPES:

- **PUBLIC:** No authentication or login, just mesh ID.
- **USER:** Require authentication. Specific access privileges assigned to each user account.
- **SECURITY:** Require authentication. (Reading logs, commanding security features, adding/deleting user accounts, altering data of other users, etc.)
- **ADMIN:** Complete control over the system.

AUTHENTICATION

- **ACCOUNT:** Access to an account on one system may give automatic access to related systems.
- **MESH ID:** Allow access to specific mesh ID or simply log activity by mesh ID.
- **PASSCODE:** Alphanumeric or logographic symbols submitted in encrypted format.
- **BIOMETRIC SCAN:** User must possess a specific biometric signature (fingerprint, palm print, retinal scan, DNA sample, etc.)
- **PASKEY:** Encrypted code hardwired into a physical device or extracted from specialized software.
- **EGO SCAN:** Authenticate's user's ego ID (verifiable from brain patterns); often hardcoded into an ego's current morph (digital ID and nanotat ID)

CIRCUMVENING AUTHENTICATION

- **SPOOFING PASSCODE:** Requires sniffer and spoofing software. Infosec check to sniff traffic between legitimate user and system. (-20 for security account; -30 for admin account)
 - *Using Spoofed Passcode:* Infosec test (modified by firewall)
- **FORGING BIOMETRIC/PASKEY:** Requires access to original.

INTRUSION

1. **DEFEAT FIREWALL:** Task action (10 minutes), Infosec test (-20 for security account; -30 for admin account)
2. **BYPASS ACTIVE SECURITY:** Variable opposed Infosec vs. Infosec test
 - a. *Hacker Excellent Success / Defender Fails:* Hidden Status / Admin Privileges
 - b. *Hacker Success / Defender Fails:* Covert Status
 - c. *Hacker Success / Defender Success:* Spotted Status / Passive Alert
 - d. *Hacker Fails / Defender Succeeds:* Locked Status / Active Alert

INTRUDER STATUS

- **HIDDEN:** System is unaware and cannot act against them. +30 on Subversion tests.
- **COVERT:** Appear to be a legitimate user.
- **SPOTTED:** Passive alert. System is aware of an anomaly, has not located intruder.
- **LOCKED:** Active alert. Intruder's datatrail pinned down and flagged as interloper.
- **UPGRADING STATUS:** Complex action, Infosec test (opposed if Spotted or Locked)
 - Excellent Success: Upgrade status by one level

PASSIVE ALERT: -10 to Subversion tests

- *Locate Intruder:* Complex action, opposed Infosec test (downgrade status to Locked)
- *Reauthenticate:* Beginning of next turn, all users must log in or Infosec test (-10).
- *Reduce Privileges:* Reduce access privileges for all user accounts (possibly including security accounts).

ACTIVE ALERT: -20 to Subversion tests

- *Counterintrusion:* Trace hacker's system and then hack it.
- *Lockout:* Opposed Infosec test. On success, intruder is ejected from the system and account quarantined.
- *Reboot/Shutdown:* Complex action to initiate; may take from 1 turn to 1 minute to shutdown.
- *Trace:* Track hacker's physical location (alerting local security or sending own security).
- *Wireless Termination:* Complex action, all wireless connections severed at the start of next turn.

HACKING – MISCELLANEOUS

CYBERBRAIN HACKING: -30 to all attempts to hack cyberbrain

- *Entrapment:* Complex action, opposed Infosec test. On success, ego cannot transfer out of the cyberbrain. Both ego and muse must be locked out from controlling the cyberbrain to prevent them from freeing the ego.
- *Memory Hacking:* Research or Interfacing test. On success, edit the digital memories contained in cyberbrain.
- *Puppeteering:* Complex action, opposed Infosec test. On success, take control of morph. (Ego can reassert control unless it's been entrapped and locked out.)
- *Scorching:* Requires scorch program. Complex action, opposed Infosec test.
- *Shutdown:* Complex action, opposed Infosec test. On success, cyberbrain shuts down. Reboot in 3 action turns.
- *Terminate Cortical Stack Feed:* Complex action, opposed Infosec test. On success, cortical stack is no longer updated. (Feed to cortical stack is one-way; it cannot be hacked.)

RADIO JAMMING: Complex action, Interfacing test

- *Selective:* Specific device(s) targeted lose wireless connection.
- *Universal:* All devices within range lose wireless connection.
- *Jammed Radar:* Imposes -30 penalty on sensor-related tests.
- *Overcoming:* Complex action, opposed Interfacing test
 - *Jammer wins:* All communications blocked
 - *Defender wins:* Defender unaffected
 - *Both win:* Communications impacted, but not cut off

SUBVERSION ACTIONS

(pg. 259)

Any action for which you do not have access rights requires an Infosec test.

Modifier Task

- | | |
|-----|--|
| -0 | Execute commands, view restricted information, run restricted software, open/close connections to other systems, read/write/copy/delete files, access slaved devices |
| -10 | Change system settings, alter logs/restricted files |
| -20 | Interfere with system operations, alter sensor/AR input |
| -30 | Shut system down, lockout user/muse, launch countermeasures at others |

AUGMENTED REALITY ILLUSIONS (pg. 259)

- *Prefabbed Imagery:* -10 to -30 on Perception test
- *Improvised Illusions:* +10 to +30 on Perception test
- *Distraction:* -10 to -30 penalty even if disbelieved (see AR mist)

BACKDOORS (pg. 260)

- *Instalk:* Programming (-20 for security account; -30 for admin account) and Infosec test (opposed if system is monitored)
- *Detecting:* Security audit, Task action (24 hours), Infosec test opposed by original Programming test

CRASHING SOFTWARE

- *Software:* Complex action, Infosec test
- *AI:* Complex action, 2 consecutive opposed Infosec tests
- *AGI / Infomorph:* Complex action, 3 consecutive opposed Infosec tests
- *Reboot:* 3 turns for an AI/AGI/Infomorph, 1 turn to 1 minute for some programs

ELIMINATING INTRUSION TRACES

- Complex action, Infosec test (opposed if system is monitored)

SCRIPT

- Max. # of steps =< character's Programming skill ÷ 10
- *Loading:* Complex action, Infosec test (opposed if system is monitored)

PHYSICAL SECURITY

(pg. 291)

BUG ZAPPERS: Create minute EMP pulses. Harmless to most equipment, but wreak havoc on nanobot swarms, microbugs, and specks. Applied to surfaces or pulsed through entire rooms.

ELECTRONIC LOCKS: Log all events. Connected to security system (remote control and alarms).

- *Authentication:* Biometric, Keypad, Physical Token, Wireless Code
- *Covert Operations Tool:* Immediately logged and alarms triggered. Some e-locks are equipped with guardian nanoswarms to thwart COTs (pg. 329).
- *Hack:* Can mean intruding the security system remotely monitoring the e-lock.
- *Physical Tampering:* Task action (1 minute), Hardware: Electronics to open the case. Second check to trigger the lock mechanism. Most locks will trigger an alarm without Excellent Success.

ADVANCED LOCKS:

- *Lockbots:* Heavily integrated into the portal/barrier. Can include AI / indentured informorph, self-healing materials, and guardian nanobots (pg. 329). Monitors surroundings (Perception 40). Can shut the key orifice for unrecognized users; guardian nanobots target COTs; and external tools are targeted with fractally-extended appendages (range 1 meter, attack skill 40, DV 1d10+2)
- *Portal Denial System:* Laser trap device. Nonlethal (DV 1d10 + shock) or lethal (DV 2d10+5).

SELF-HEALING BARRIERS: 1 action turn to heal any single source of 5 damage or less. Heal 1d10 damage per 2 hours. Wounds repaired at 1 per day. Damage of 3 wounds or more cannot be repaired.

SLIPPERY WALLS: Coated with slip chemical. Walking/running requires COO test to avoid falling. Gripping requires SOM test. -30 penalty to Climbing tests.

SOFTWARE

(pg. 331)

AR ILLUSIONS: See *Hacking: Subversion Actions*.

ENCRYPTION: Encrypts and decrypts messages. (see *Mesh: Quantum Codebreaking*).

EXPLOIT: Required for intrusion attempts.

FACIAL / IMAGE RECOGNITION: Runs pattern-matching searches through public archives.

FIREWALL: See *Hacking: Defeat Firewall*.

SNIFFER: See *Mesh: Sniffing*.

SPOOF: See *Hacking: Circumventing Authentication*.

TACTICAL NETWORKS: Allows the sharing of tactical networks. Sample functionality on EP, pg. 205.

TRACKING: See *Hacking: Scanning / Tracking / Monitoring*.

XP: Experience playback recordings.

SUBVERSION EXAMPLES

In addition to the tasks noted under the Subversion Difficulties table, these modifiers present some additional example actions.

MODIFIER	TASK
Hacking Bots/Vehicles	
-0	Give orders to drones
-10	Alter sensor system parameters, disable sensors or weapon systems
-20	Alter smartlink input, send false data to AI or teleoperator
-30	Lockout AI or teleoperator, seize control via puppet sock
Hacking Ectos/Mesh Inserts	
-0	Interact with entoptics, befriend everyone in range, make online purchases using user's credit, intercept communications, log activity
-10	Alter social network profile/status, adjust AR filters, tweak sensory interface, change AR skin, change avatar, access VPN
-20	Block or shuffle senses, inject AR illusions, spoof commands to drones/slaved devices
-30	Boot user out of AR
Hacking Habitat Systems	
-0	Open/close doors, stop/start elevators, operate intercom
-10	Adjust temperature/lighting, disable safety warnings, replace entoptic skin, lock doors, switch traffic timers
-20	Disable subsystems (plumbing, recycling, etc.), disable wireless links, dispatch repair crews
-30	Override safety cutoffs
Hacking Security Systems	
-0	Move/manipulate cameras/sensors, locate security systems/guards/bots
-10	Adjust patterns of sensor sweeps, view security logs, disable weapon systems
-20	Delete security logs, dispatch security teams
-30	Disable alerts
Hacking Simulspace Systems	
-0	View current status of simulspace, simulmorphs, and accessing egos
-10	Change domain rules, add cheats, alter parameters of story, alter simulmorphs, change time dilation
-20	Eject simulmorph, alter/erase character AIs
-30	Abort simulation
Hacking Spimes	
-0	Get status report, use device functions
-10	Adjust AI/voice personality settings, adjust timed operation schedule
-20	Disable sensors, disable device functions

REPUTATION / SOCIAL NETWORKS

Eclipse Phase, pg. 285

NETWORKING TEST

- **SPEND FAVOR:** If the test is a success, you spend a favor of the appropriate or higher level.
- **REFRESH:** Favors refresh at rate indicated.
- **BURN REP:** Burn rep to gain a favor that hasn't refreshed. Or gain bonus to Networking test equal to rep burned.
- **KEEPING QUIET:** Apply negative modifier to your Networking test to apply equal modifier on anyone trying to trace your activities.

FAVORS			
FAVOR LEVEL	TIMEFRAME	BURNING REP COST	REFRESH RATE
1 (Trivial)	1 minute	0	1 hour
2 (Low)	30 minutes	1	1 day
3 (Moderate)	1 hour	5	1 week
4 (High)	1 day	10	1 month
5 (Scarce)	3 days	20	3 months

NETWORKING MODIFIERS	
SITUATION	MODIFIER
Favor level exceeds Rep level	−10 per level
Rep level exceeds favor level	+10 per level
Keeping quiet	−Variable (p. 288)
Burning Rep	+Rep amount burned
Paying extra	+10 per level

LEVEL	ACQUIRE INFORMATION	ACQUIRE SERVICES	ACQUIRE/UNLOAD GOODS
1 (Trivial)	Common: Where to eat, what a hypercorp's business is. Who's in charge.	Trivial: Simple service for 15 minutes. Move a chair. Browbeat someone. Catch a ride. Borrow 50 credits.	Trivial Expense
2 (Low)	Public: Gray market connections. Where the "bad neighborhood" is. Obscure database info. Who's the local crime syndicate. Public hypercorp news.	Minor: Perform service for 1 hour. Move to a new cubicle. Rough someone up. Loan a vehicle. Minor hacking or legal assistance. Borrow 250 credits.	Low Expense
3 (Moderate)	Private: Black market connections. Location of unlisted hypercorp facility. Who's a cop / syndicate member. Where someone hangs out. Internal hypercorp news. Who's sleeping with whom.	Moderate: Perform service for 1 day. Move to habitat in same cluster. Serious beating. Lookout. Short distance egocast or shuttle trip. Uploading or minor psychosurgery. Borrow 1,000 credits.	Moderate Expense
4 (High)	Secret: Exotic black market connections. Where a secret corp facility is. Where someone's hiding out. Secret corp projects. Who's cheating on whom.	Major: Perform service for 1 month. Move a body. Homicide. Getaway shuttle pilot. Industrial sabotage. Bulk freight. Medium-distance egocast or shuttle trip. Borrow 5,000 credits.	High Expense
5 (Scarce)	Top Secret: Where a black-budget lab is. Illegal corp projects. Scandalous data. Blackmail material.	Partnership: Perform service for 1 year. Move dismembered body. Mass murder. Major embezzlement. Acts of terrorism. Long-range egocast or shuttle trip. Borrow 20,000 credits.	Expensive

REPUTATION NETWORKS			
NETWORK NAME	REP NAME	NETWORKING FIELD	FACTIONS AND OTHERS
The Circle-A List	@-Rep	Autonomists	anarchists, Barsoomians, Extropians, Titanian, and scum
CivicNet	c-Rep	Hypercorps	hypercorps, Jovians, Lunars, Martians, Venusians
EcoWave	e-Rep	Ecologists	nano-ecologists, preservationists, and reclaimers
Fame	f-Rep	Media	socialites (also artists, glitterati, and media)
Guanxi	g-Rep	Criminals	criminals
The Eye	i-Rep	Firewall	Firewall
Research Network Associates	r-Rep	Scientists	argonauts (also technologists, researchers, and scientists)

REPUTATION LEVELS	
REPUTATION SCORE	REPUTATION LEVEL
0–19	Level 1
20–39	Level 2
40–59	Level 3
60–79	Level 4
80–99	Level 5

RESLEEING

Eclipse Phase, pg. 270

RESLEEING TIME:

- **Biomorphs (Ego Bridge):** 1 hour
- **Synthmorphs:** 1 action turn

ADJUSTING

- **Integration Test:** SOM x 3 (no morph bonuses)
- **Alienation Test:** INT x 3
- **Continuity Test:** WIL x 3 (-1 stress per 10 MoS / +1 stress per 10 MoF)

FORKING / MERGING

- **Neural Pruning:** Psychosurgery task action (1 minute), one penalty per 10 MoF.
 - 1 additional skill decreased -20
 - Negative mental trait worth 10 CP
 - 1d10 ÷ 2 mental stress
 - Extra memory loss (beta forks only)
 - Positive trait lost
- **Long-Term Neural Pruning:** +30 bonus to Psychosurgery test
 - **Delta Forks:** Psychosurgery task action (1 week)
 - **Beta Forks:** Psychosurgery task action (1 month)
- **Merging**
 - **Biomorphs:** Psychosurgery task (10 minutes)
 - **Synthmorphs:** Psychosurgery task (1 action turn)

TYPES OF FORKS (pg. 273)

- **ALPHA FORK:** Exact copy of original ego. (Often illegal.)
- **BETA FORK:** Partial copy of an ego deliberately hobbled.
- **DELTA FORK:** Limited copy of an ego more akin to AI templates.
- **GAMMA FORK:** Massively incomplete, corrupted, or heavily damaged egos. Also known as vapors.

INTEGRATION AND ALIENATION MODIFIERS

TEST RESULT	EFFECT
Familiar; character has used this exact morph extensively in the past	+30
Clone of prior morph	+20
Character's original morph type (what they were raised with)	+20
Adaptability trait (Level 2)	+20
Adaptability trait (Level 1)	+10
Character has previously used this type of morph	+10
First time resleeving	-10
Character is an AGI sleeving into a physical body	-10
Character is an uplift resleeving in a non-uplift (of their type) body	-10
Synthetic morph	-10
Sex change (from last morph)	-10
Morph is heavily modified	-10
Morphing Disorder trait (Level 1)	-10
Morphing Disorder trait (Level 2)	-20
Infomorph (does not apply to AGIs) (Alienation Test only)	-20
Fork (Alienation Test only)	-20
Morphing Disorder trait (Level 3)	-30
Exotic morph (octomorph, neo-avian, novacrab, swarmanoid, etc.)	-30

INTEGRATION TEST

TEST RESULT	EFFECT
Critical Failure	Character is unable to acclimate to the new morph—something is just not right. Character suffers a -30 modifier to all physical actions until resleeved.
Severe Failure (MoF 30+)	Character has serious trouble acclimating to the new morph. They suffer a -10 modifier to all actions for 2 days plus 1 day per 10 full points of MoF.
Failure	Character has some trouble acclimating to new morph. They suffer a -10 modifier to all physical actions for 2 days plus 1 day per 10 full points of MoF.
Success	Standard acclimation period. The character suffers a -10 modifier to all physical actions for 1 day.
Excellent Success (MoS 30+)	No ill effects. Character acclimates to new morph in no more than a few minutes.
Critical Success	Lookin' good! This morph is an exceptionally good fit for the character. No ill effects; gain 1 Moxie point for use in that game session only.

CONTINUITY STRESS

SITUATION	STRESS VALUE
Backup from cortical stack	
Character remembers peaceful or not notable death	1d10 ÷ 2 (round down)
Character remembers sudden or violent death	1d10
Backup from archive	
Short memory gap (less than 1 day)	1d10 ÷ 2 (round down)
Memory gap greater than one day	1d10
Not knowing if/how you died	+2
Uploading-to-resleeve with continuity (p. 269)	0
Uploading-to-resleeve without continuity	1d10 ÷ 2 (round down)
Character is a fork	2

ALIENATION TEST

TEST RESULT	EFFECT
Critical Failure	Extreme Dystopia. The character doesn't like their new sleeve at all and suffers 2 stress points per 10 full points of MoF.
Failure	Character is uneasy about the new morph and suffers 1 stress point per 10 full points of MoF.
Success	Character adapts to their new look well. No ill effects.
Critical Success	Best. Morph. Ever. The new morph jives perfectly with the character's sense of self, and even enhances it somewhat. The character actually heals 1d10 ÷ 2 (round up) stress points.

MERGING

TIME APART	MODIFIER	SUCCESS	FAILURE
Under 1 hour	+30	Seamless ego with memories intact from both	Memories intact, (1d10 ÷ 2, round down) - 1 SV
1-4 hours	+20	Solid bond, memories intact	Memories intact, (1d10 ÷ 2, round down) SV
4-12 hours	+10	Memories intact, 1 SV	Minor memory loss, (1d10 ÷ 2, round up) SV
12 hours-1 day	+0	Memories intact, 2 SV	Moderate memory loss, (1d10 ÷ 2, round up) + 2 SV
1 day-3 days	-10	Memories intact, 3 SV	Major memory loss, 1d10 + 2 SV
3 days-1 week	-20	Memories intact, 4 SV	Major memory loss, 1d10 + 4 SV
1 week+	-30	Minor memory loss, 5 SV	Severe memory loss, 1d10 + 6 SV

PSI

Eclipse Phase, pg. 220

PASSIVE PSI: Automatically active and subconscious.

ACTIVE PSI:

- **PSI TEST:** Control, Psi Assault, and/or Sense based on sleight
 - *Critical Success:* x2 sleight potency (DV doubled, mental armor bypassed, etc.) Target may risk exposure to Watts-MacLeod virus (pg. 368).
 - *Critical Failure:* Brain seizure. Incapacitated for 1 round per MoF. After recovery, -30 penalty to all actions. (Reduce penalty by 10 per minute.)
- **DEFENSE TEST:** WIL x 2, opposed by psi test.
 - *Critical Success:* Async locked out of target's mind for period of time determined by GM.
 - Unconscious/sleeping characters cannot defend.
 - Target is not aware of psi use on failed defense roll.
- **FULL DEFENSE:** Complex Action, +30 modifier to defense test until next action phase

STRAIN: $1d10 \div 2$ DV (modified by sleight)

MENTAL ARMOR: Reduces damage inflicted by psi assault.

NON-BIOMOPRH PSI EGOS:

- **Synthmorph/Infomorph:** Morph fever and cannot use psi.
- **Pod Morph:** Morph fever, -30 on all psi sleight tests, x2 strain.
- **Morph Fever:** $1d10 \div 2$ stress per month

PSI TARGETING

- **Synthmorph/Infomorph:** Cannot be targeted.
- **Pod Morph:** +30 modifier on defense.
- **Partial Uplift/Sapient:** -20 modifier, strain +1.
- **Non-Sapient Animals:** -30 modifier, strain +3.
- **Aliens:** May not work. Minimum -20 modifier, strain +1.
- **Multiple Targets:** Async rolls once, but suffers strain per target.

PSI RANGE

- **SELF:** Affects only async.
- **TOUCH:** Requires touch attack (+20 modifier). Attack is made as part of psi use.
- **CLOSE:** 5 meters. -10 per additional meter.
- **PSI vs. PSI:** Against asyncs, touch sleights can be used at close range. Close sleights have their effective range doubled.

PSI DURATION

- **CONSTANT:** Always "on".
- **INSTANT:** Take effect during action phase they are activated.
- **TEMP (ACTION TURNS):** $WIL \div 5$ action turns
- **TEMP (MINUTES):** $WIL \div 5$ minutes
- **SUSTAINED:** Requires concentration. Must stay within range. -10 modifier to all other skill tests.

STRESSFUL SITUATIONS

Eclipse Phase, pg. 214

WILLPOWER STRESS TEST: $WIL \times 3$

HARDENING:

- After 5 successes vs. a particular source, you are immune to stress from that source.
- -1 Moxie

STRESSFUL EXPERIENCES

SITUATION	SV
Failing spectacularly in pursuit of a motivational goal	$1d10 \div 2$ (round down)
Helplessness	$1d10 \div 2$ (round down)
Betrayal by a trusted friend	$1d10 \div 2$ (round down)
Extended isolation	$1d10 \div 2$ (round down)
Extreme violence (viewing)	$1d10 \div 2$ (round down)
Extreme violence (committing)	1d10
Awareness that your death is imminent	1d10
Experiencing someone's death via XP	1d10
Losing a loved one	$1d10 \div 2$ (round down)
Watching a loved one die	$1d10 + 2$
Being responsible for the death of a loved one	$1d10 + 5$
Encountering a gruesome murder scene	1d10
Torture (viewing)	$1d10 + 2$
Torture (moderate suffering)	$2d10 + 3$
Torture (severe suffering)	$3d10 + 5$
Encountering aliens (non-sentient)	$1d10 \div 2$ (round down)
Encountering aliens (sentient)	1d10
Encountering hostile aliens	$1d10 + 3$
Encountering highly advanced technology	$1d10 \div 2$ (round down)
Encountering exsurgent-modified technology	$1d10 \div 2$ (round down)
Encountering exsurgent-infected transhumans	1d10
Encountering exsurgent life forms	$1d10 + 3$
Exsurgent virus infection	Varies; see p. 366
Witnessing psi-epsilon sleights	$1d10 + 2$

MISCELLANEOUS

ASPHYXIATION:

1. **HOLD BREATH:** After 60 seconds, DUR test. Retest every 30 seconds (cumulative -10 modifier per check). On failure, begin asphyxiating.
2. **ASPHYSIXIATING:** 10 points of damage per minute until they can breathe again. (Drowning characters do not automatically recover.)
 - **WIL x 3 test:** On failure, $1d10 \div 2$ mental stress and cannot perform any actions on that turn. On success, they *must* take an action to save themselves unless they make a WIL x 3 test.

ATMOSPHERE:

- **Atmospheric Contamination**
 - *Mild Contamination:* -10 modifier + other effects
 - *Severely Septic:* -30 modifier + other effects
- **Corrosive Atmosphere:** 10 damage per turn + toxic atmosphere. Vehicles/gear take 1 point of damage per minute.
- **Toxic Atmosphere:** REF x 3 test to hold breath. On failure, 10 damage per turn.

DEMOLITIONS: On critical success, blast ignores armor. On excellent success, +5 damage.

- **Disarming:** Opposed Demolitions test.
- **Making Explosives:** 1 hour per $1d10$ points of damage the explosive will inflict.
- **Shaped Charge:** Successful Demolitions test, x3 damage in specific direction.
- **Target Weak Points:** Successful Demolitions test, x2 damage.

FALLING: Kinetic armor mitigates damage at half its normal value.

FALLING DAMAGE	
DISTANCE FALLEN	DAMAGE
1–2 meters	1d10
3–5 meters	2d10
6–8 meters	3d10
Over 8 meters	+1 per meter

NANOFABRICATION: Programming (Nanofabrication) simple success test

- **Raw Materials:** Usually stocked by default in the nanofabricator.
- **Blueprints:** Common blueprints in nanofabricator. Others can be purchased, stolen, researched, or otherwise obtained.
 - **Creating Blueprints:** Programming (Nanofabrication) task action (1 week per cost category)
- **Fabrication Time:** 1 hour per cost category

Nanofabricator AI: Aptitudes: 10. Skills: Infosec 20, Interests: Nanofabricator Specs 80, Interface (Nanofabrication) 30, Programming (Nanofabrication) 30, Research 20, Perception 20.

OBJECTS & STRUCTURES:

- **Ranged Attacks:** $1/3^{\text{rd}}$ damage on large structures.
- **Shooting Through:** -30 penalty for blind fire. Target receives armor bonus of object's Armor rating x 2.
- **Wounds:** Wounds may inflict -10 penalty on characters using the object.

TRAINING ANIMAL: Task action (1 day to 1 month), Animal Handling test

- *Commanding Animal:* Quick action, simple success Animal Handling test
- *Commanding Animal Under Stress:* Quick action, Animal Handling test (+30)

VACUUM:

- *Up to 1 Minute:* No ill effects.
- *After 1 Minute:* Asphyxiation (double damage if they hold breath) + 10 damage per minute from extreme cold.
- **Ranged Weapons:** Maximum beam range is effectively line of sight.