MAXIMUM METAL

HIGH POWERED ORDINANCE FOR CYBERPUNK 2020

CYBERPUNK®

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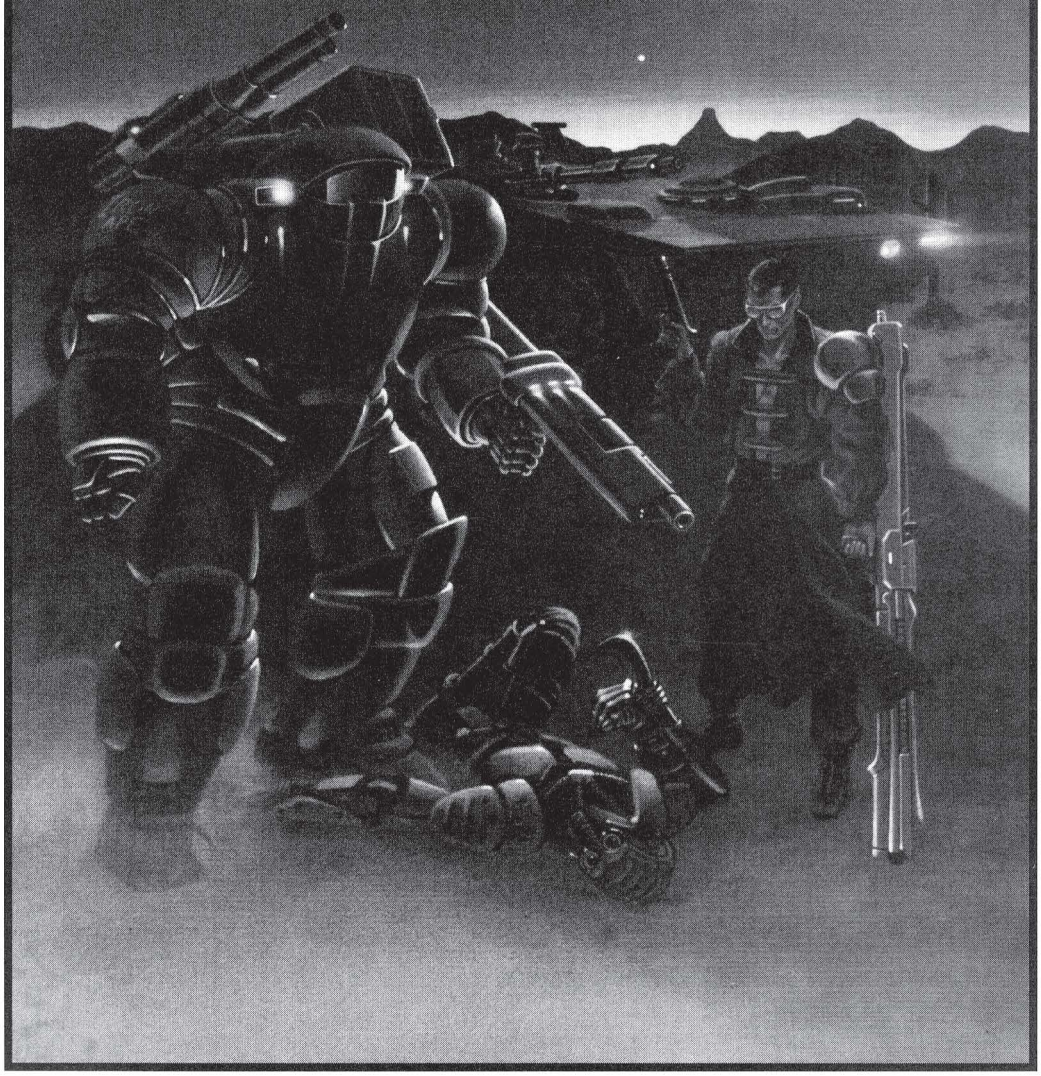
MAXIMUM METAL



A SUPPLEMENT FOR CYBERPUNK®

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INTRODUCTION

A chopper pursues a lone motorcyclist through the rain dark streets of the city; the rider twisting frantically to avoid the searching fingers of the aircraft's spotlight...

In the African countryside an artillery barrage rumbles in the background as groups of tanks and APCs roll across the savanna. On the armored flanks of the approaching column flash not the colors of a local dictator but a familiar commercial logo...

With a deafening crash, the board meeting of a minor corporation is interrupted as huge humanoid forms push through the rubble that was an outside wall. All sit in shocked silence as the table is shattered by the single chop of a single plasteel gauntlet. As a visored head swivels, impersonally scanning the room, a metallic voice delivers a message, "Gentlemen, these proceedings are over."

This supplement is the capstone of several developmental lines in the *Cyberpunk 2020* world and system. Inside you'll find a new vehicle combat and maneuver system that is a revision and an extention of the original in *Solo of Fortune*. Along with it is an organized vehicle creation system, so that all future vehicles will have proportional stats. And because you can't have combat vehicles without battlefield-size guns to put in them, we've introduced a whole new level of heavy weapons, all the way up to artillery cannon and aircraft bombs! This combination of vehicle and weapons rules create a power level previously untouched in a *Cyberpunk* game.

And that doesn't even touch the subject of Powered Armor. Is it the biggest personal armor possible? Or the smallest vehicle capable of carrying heavy weapons? What about the cybernetics aspects? PA is in a rather unique limbo unexplored by any other weapons system. You can smash through a building wall, lift a truck over your head, and outwrestle a full borg; but if someone fires an anti-vehicle weapon at you, you're at risk. And if they fire an anti-*tank* device at you—you're in *trouble*.

How should Powered Armor be deployed/used? The "two-legged IFV" school says right out there with the tanks, mixing it up, depending on their size and maneuverability to avoid the heavy guns, while shrugging off small arms fire from "soft" infantry. The "pinnacle of body armor/linear frame tech" school puts them in the streets where tanks can't go; doing the strength/firepower jobs combat borgs do, but better, relying on their superior protection to handle the close-range punishment that would pulverize anyone else. No matter how you use it, Powered Armor has the potential to mess you up.

And not just your characters, but your *game* as well. This is a device that is as fast and agile as a human, 3-5 times as strong, with triple the protection. It's also carrying, *by itself*, as many heavy guns as 10 "normal" people. This will unbalance an unprepared campaign instantly; so much so, that sometimes its better to relegate PA to its own campaign or series of adventures.

What it boils down to is, this supplement is like all the other fancy software, super cybertech, mindbending drugs, and deadly weapons we've introduced over the life of this game system: it's there to be used *if you want to*. For those who complain that, "**X** has taken over my Game!" I can only say, "You have control. Don't moan to us; you did it to yourselves."

Now you know.
Walk carefully.
Guard your game.
You have been warned.

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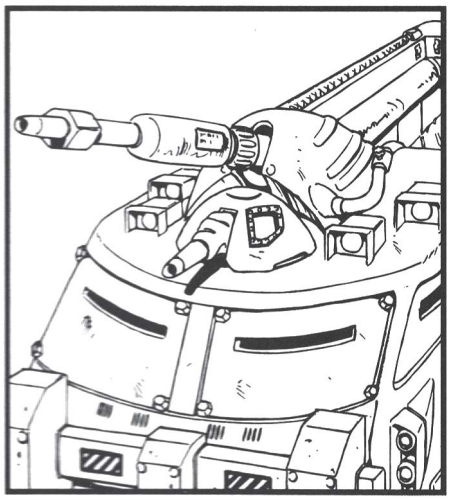

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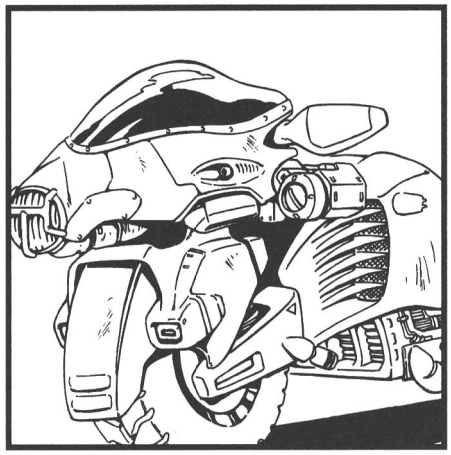

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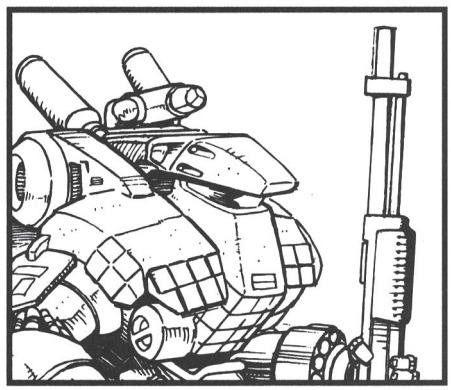

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MILITARY VEHICLES

In the world of 2020, military combat vehicles hold roles very similar to those developed in the late 20th century. Main Battle Tanks rumble across the field, flanked by infantry riding Armored Personnel Carriers and Infantry Fighting Vehicles, screened by light vehicles armed with autocannon and anti-tank missiles. The advent of the aerodyne worked a minor change on the battlefield, supplementing helicopters in rapid troop transport and assault roles, but for the most part the tactical picture hasn't changed much in the last twenty years. ACPAs (Powered Armor) have only recently appeared on the scene, and their place in the order of battle has yet to be clearly defined. Time will tell...

The average U.S. citizen does see more military vehicles than his counterpart did twenty years in the past. Private and corporate security teams openly use wheeled APCs and armored cars to move their troops and patrol their turf. Even police cars have moved from simple conveyances to armed and armored assault vehicles, capable of participating in and surviving a firefight. Armed aerodynes and helicopters hover over the cities, marking the presence of private and public police.

In *Cyberpunk 2.0.2.0.*, armored fighting vehicles are likely to be attached to security forces, so they are more often light vehicles with good inter-city mobility and insufficient armor to withstand full-scale military combat. Vehicles of this sort include armored cars and wheeled APCs, light helicopters and AVs—particularly AVs, the all-purpose light vehicle. Corporations and police don't have much use for the tracked battlefield AFVs—they're too heavy, too expensive, cost too much to maintain, and have poor mobility for urban environments. Only large mercenary companies (such as the Lazarus Military Group) and military manufacturers like Militech maintain units of actual battle tanks, troop carriers and assault aircraft.

The largest buyer and user of military hardware in the western hemisphere is the U.S. military, particularly the Army and the Marine Corps.

Factors and Calculations

These are the formulas used for calculating game statistics for the vehicular combat section.

Penetration Factor: Average Damage/10, round off; times 2 for any type of AP; times 1/2 for small arms (anything using D6 for damage).

Armor Value: SP/20, round off.

"Body" Value: SDP/20, round off.

Rating SP: Each point of SP equals about 2.5mm of steel armor protection. Due to sloping and superior materials, this protection is probably not solid steel protection.

Rating Penetration: Each point of Penetration equals roughly 50mm of armor penetration capability.

Rating SDP: The amount of punishment a vehicle can take.

Combat Procedure

This new vehicular combat system follows the regular *Cyberpunk 2.0.2.0.* combat sequence as much as possible. Initiative, limits on actions, automatic fire and explosions, etc., are all the same. Variations are listed below.

1. Roll normally for to-hit. Remember that vehicles count as Large targets, and are +4 to hit!

Common Vehicle To-Hit Modifiers:

Firing at a Large Target	**+4**
Firing at a Small Target	**-4**
Firing at a Stationary Target	**+4**
Target Moving, per full 20 mph (per full 40 mph if moving directly towards you)	**-1**
Using a Turret-mounted Weapon	**+2**
Targeting Computer	**variable**
Firer Moving, Non-Stabilized Weapon	**-3**
Firer Turning Weapon to Face Target in same action	**-2**
Firer has Vehicle Link/Cybernetic Controls	**+2**
Darkness/Target Obscured	**-3**
Heat-seeking missile fired at AV	**+4**
Rocket Salvo*	**-2**

(*Deviates 1 meter on the Grenade Table for each point missed, times basic To-Hit#/10. Salvo is rocket burst size times rounds. For instance, 3-rocket salvo of 2 in. rockets would have a burst radius of 9m. If the salvo is fired Medium Range and misses by 3, it deviates 3m x 15/10 = 4.5 m on the Grenade Table. With a 9m burst area, people are still going to be hit...)

Note: ACPA have **no** target size modifier and take **no** penalty for turning to face the target in the same action. They are considered to have Vehicle Link/Cyber-controls.

2. Figure penetration. Penetration is listed for each weapon, with the following additions.
   - **A.** Good Shot. For each ten points that the To-Hit roll exceeds the target number, add penetration equal to 1/2 the weapon's base penetration.
   - **B.** Multiple Rounds. For each additional round that hits the target, add

ACPA IN THE VEHICLE COMBAT SYSTEM

Powered Armor can be treated like a small vehicle in this system. The STR of the chassis is used to determine the Body Value (STR/20). All combat is handled identically to other vehicles except hit location and damage application. Because of its unique layout, ACPA does require a new hit location table.

DAMAGE EFFECTS

Surface damage is handled normally. Equipment and weapons are affected by other damage exactly as regular vehicles except ALL systems in a location are affected by the hit. ACPA has no flammable fuel, but it MAY have ammo which can gang-fire if a weapon location is hit (see Other Damage). Crew damage is applied to the torso/head location.

Note: This is a Quick Kill System suits. If you want to increase player Trooper survivability, use the regular combat rules per the Powered Armor section and *CP2020*.

ACPA Hit Location Table (1D10)

DIE ROLL	LOCATION HIT	NOTES
-1,0	Power cell/generator	Roll 1D6, 1-4 cell is destroyed, suit immobilised. On 5-6, the suit is unaffected.
1-3	Legs	Roll 1D6, 1-3 right leg, 4-6, left leg. Immobilises armor if destroyed.
4-6	Arms	Roll 1D6, 1-3 right arm, 4-6, left arm.
7-12	Torso/Head	Roll 1D6, hits the crew on 1-3. Immobilises armor if destroyed.

penetration equal to 1/4 the weapon's base penetration (round off for fractions). For weapons with massive rates of fire, treat each shot hitting as multiple shots. ROF 30 weapons have five rounds hit for each shot that hits; ROF 100 weapons have 10 rounds hit for each shot that hits. For example, a 20mm Gatling cannon rolling three shots hitting (2 points better than the To-Hit#) would actually hit with three blasts of ten rounds apiece, all hitting separate areas (rolled randomly). That adds up to Penetration 12, per hit! To make things worse, multiple rounds that hit the same area add their Penetration together . . .

C. Flank Shots. If hitting the target from the side, use only 75% (round up) of the target's Armor. If hitting the target from the bottom, top or back, use only 50% (round up) of the target's armor. Note that AVs have bottom armor equal to front armor, and ACPA suits have equal armor in all directions.

D. Range. Penetration falls off with range, unless using high-explosive penetrators. Penetration decreases by 25% at Long Range and by 50% at Extreme Range, unless otherwise noted.

3. Subtract Armor Value from Penetration. If the result is 0 or more, go to Step 4. If not, the round didn't penetrate and there is only a chance for surface damage (go to Step 5).

4. Roll 1D10 and add the positive difference between Penetration and Armor Value. Subtract the target's Body Value, and refer to the table below.

DAMAGE TABLE

Die Roll	Result
0 or less	Surface Damage
1-5	Minor Damage
6-9	Major Damage
10+	Catastrophic Damage

5. **Surface Damage**. Roll 1D10. On a 7-10, one random unprotected/exposed piece of equipment has been damaged. If the weapon that damaged it has a base Penetration of 3+, the item is destroyed. If the weapon's Penetration is 2 or less, the item has a 50% chance of surviving in repairable condition.

6. **Other Damage**. Roll on the Vehicle Location chart to determine what was hit.

Minor Damage: If a piece of equipment, weapon, or system is hit, it is damaged, and will not function again until repaired. There is a 20% chance that the equipment/ weapon/system is destroyed and must be replaced. If fuel is hit, it has a 25% chance of catching fire (which does 3D6 damage to each crewmember and gives the vehicle a 25% chance of exploding each turn it is on fire). Fire extinguishers and damage-control systems reduce chance of fire or explosion to 5%. If crew are hit, each applicable crew member sustains 4D6 damage to a random location. Body armor will reduce this damage, of course .

Major Damage: If a piece of equipment, weapon, or system is hit, it is damaged, and will not function again until repaired. There is a 90% chance that the equipment/ weapon/system is destroyed and must be replaced. If the engine/explosive ammo is hit, there is a 50% chance that it will explode, demolishing the target. If fuel is hit, it has a 50% chance of catching fire (which does 3D6 damage to each crewmember and gives the vehicle a 25% chance of exploding each turn it is on fire). Fire extinguishers and damage-control systems reduce chance of fire or explosion to 10%. If crew are hit, each applicable crew member sustains 6D6 damage to a random location. Body armor will reduce this damage .

Catastrophic Damage: If a piece of equipment, weapon, or system is hit, it is destroyed; it must be replaced. If the engine/ explosive ammo is hit, there is a 90% chance that it will explode, demolishing the target. If fuel is hit, it has a 50% chance of catching fire (which does 3D6 damage to each crewmember and gives the vehicle a

25% chance of exploding each turn it is on fire). Fire extinguishers and damage-control systems reduce chance of fire or explosion to 30%. If crew are hit, each applicable crew member sustains 10D6 damage to a random location. Body armor will reduce this damage.

VEHICLE HIT LOCATION TABLE

1D10 Roll (+2 if shooting at the top, -1 if shooting at the side, -2 if shooting at the back or bottom)

DIE ROLL	LOCATION HIT	EFFECT
-1, 0	Fuel	If hit, may burn or explode
1-3	Motive Gear	Immobilizes vehicle If damaged/destroyed
4-7	Hull	Roll on Hull Subtable
8-12	Turret	Roll on Turret Subtable; if no turret, roll on Hull Subtable

Location Subtables—Roll 1D10 (+1 if shooting at the front, -1 if shooting at the back)

DIE ROLL	HULL SUBTABLE	TURRET SUBTABLE
0-2	Cargo/Ammo	Cargo/Ammo
3-4	Engine	Crew
5-7	Crew	Crew
8	Equipment	Equipment
9	Weapon	Weapon
10-11	Empty Space	Weapon

EFFECTS

Cargo: Items in cargo are hit—a Minor hit destroys one, a Major or Catastrophic hit destroys all cargo.

Ammo: As noted above, ammunition hits are prone to exploding. Even if they don't, the magazine for one randomly determined weapon is destroyed.

Engine: As noted above, damaged engines may explode. A damaged or destroyed engine does immobilize the vehicle and reduce it to backup power, if any.

Crew: All crewmembers in this area are hit, as above.

Equipment: A random piece of equipment in the area is hit.

Weapon: A random weapon in the area is hit.

Empty Space: The shot passes through harmlessly.

OPTION: SHOOTING TIRES, TREADS AND TURRETS

Exposed objects on a vehicle can be targeted; specifically suspensions and turrets. Other items (including exposed crew and passengers) are too small to target with vehicle weapons; small arms may shoot at these targets normally.

A wheel is a Small Target, tracks are a Normal target. A turret with a 1/2-space weapon capacity is a Small Target, a turret with a 1-3 space weapon capacity is a Normal target, a turret with a 4+ space weapon capacity is a Large Target.

Tires have 1/3 the vehicle's SDP and SP. Treads have 1/2 the vehicle's SDP and SP. Turrets have full SP, but only partial SDP (Small = 1/4 SDP, Normal = 1/2 SDP, Large = 3/4 SDP). If damage is caused, it is inflicted on the part of the vehicle that was being targeted.

SOME SAMPLE PENETRATION FACTORS:	
Light Pistol	0
Assault Rifle	1
Medium Pistol, Lt SMG	0
Barett-Arasaka Light-20	4
Heavy Pistol; Mdm, Hvy SMG	0
RPG-A	*6
LAW M72	*4
Shotgun (any shot)	0
Slug	0
Saboted Slug	1
Scorpion 16 ML	4
Frag Grenade	1
Militech .300WM	3
13mm Short	2

Notes: *These **are** armor-piercing, due to their Monroe-Effect shaped-charge warheads. The Barret-Arasaka fires AP rounds as per *Corpbook 1*. .300WM is the caliber of Militech's Cyborg Rifle (*Chromebook 2*, pg36); 13mm Short is fired from the S&W Cyborg Assault System (*Chromebook 1*, pg54)

SOME ARMOR/BODY FACTORS	ARMOR/BODY
Bensen Cascade Hovercar	A1/B1
BMW 9018s	A2/B4
Shiva Cycle	A0/B2
Ambunaught	A2/B6
AV-4	A2/B5
"Alpha" class full-body borg	A1/B2
Dragoon Military borg	A2/B3
Arasaka Standard B ACPA	A2/B2

Combat Example: Clawdark and Snicker-snak, street punks with an attitude (and weaponry to back it up), foolishly decide to fire on a Trauma Team AV-4 that is grounded, picking up wounded. Clawdark whips out a Barret-Arasaka 20mm Hypervelocity Smoothbore and fires at the stationary target. His target number To-Hit is a 15 (range 100m). His Reflex is 6, plus his *Rifle* skill of 3, +4 for Immobile target and +4 for Large target. He rolls a 5 for a total of 22. He hit! but not a really good hit; had he rolled an 8+, he would've had a 25, which would have raised the penetration of his 20mm from 4 to 6.

Clawdark shot the AV-4's side, so the vehicle's armor is 75% of 2, rounded up, which is still 2. Penetration 4 minus Armor 2 equals +2. Clawdark's damage die roll is 4, +2, -5 for the AV-4's Body equals 1: Minor Damage. A roll of 7 and then a 2 reveal that Clawdark shot up the Cargo compartment, probably damaging some medical gear.

That doesn't stop the competent and professional Trauma Team. Immediately the Solos start laying down covering fire, quite neatly blowing Clawdark in half. The team backpedals, alert, carrying their wounded charges inside the armored hull.

The AV-4 lurches into the air, and Snicker-snak peeks out, his Scorpion SAM at the ready. He fires at the vehicle and rolls an 8 (+4 for large target, +9 for reflexes, +1 for his *Heavy Weapons* skill, -1 for the weapon accuracy). The To-Hit target is 15 again, and the 21 hits again. The missile hits the bottom armor, which is as thick as the front armor (This AV has beefed up armor on the front and bottom faces). Its Penetration is 4, and the Armor Value is 4, for +0 penetration. The damage roll is 9 (-5 for the Body) = 4, Minor Damage. The location roll is 1 (-2 for shooting at the bottom) = -1, Fuel. Oops. Civilian AVs don't carry extensive military fuel protection and anti-fire systems. The GM rolls a D10 for a 1, and the AV-4 is on fire! The Trauma Team scrambles for their portable fire extinguishers inside while Snicker-snak beats a hasty retreat.

RPVs and Drones

Remotely Piloted Vehicles (RPVs) have come to play a real role in 21st century combat. They are small, fast, agile and have few equals as forward observers and general expendables. Many tanks will have a remote like the Oracle, (*Protect and Serve*, pg.38) to act as a fire spotter for indirect fire and to scout for enemy infantry and boobytraps. Other units use Attack RPVs like the Militech RPV-400 (*Chromebook 2*, pg 31) to soften up difficult areas that would be suicidal to attack with regular aircraft. Even Powered Armor units are sometimes using RPV "hounds" to sniff out dangerous situations before the Troopers go in themselves.

So, if a remote can do the job instead of a man, why ever risk a human life? Well, the sad fact is, humans are often cheaper than RPVs, especially in more backward places. ECM may also preclude RPV use in some areas since countermeasures may interfere with the control signals. Also, RPVs, even under ideal conditions, can't react to changing circumstances as well as most trained soldiers. But military professionals are becoming very aware of the economics of warfare. If using a remote will save a more valuable piece of equipment, like a tank, or, more importantly, themselves, then they will readily employ it. See *Chromebook 2* and *Protect and Serve* for more information on these semi-vehicles.

Personnel versus Anti-vehicle Weapons

1. Roll normally to hit.

2. Victim makes LUCK test +15. This does not use up any LUCK points, unless the victim wants to throw LUCK points into the roll. Success indicates that he was just grazed and suffers 5D6 damage to a random location. Armor helps against this, but only at half strength!

If the LUCK test failed, then go to Step 3.

3. Divide victim's average Armor SP by 20, rounding off (see CP 2020, pg. 101). This is the victim's Armor Value. Subtract this Armor Value from the weapon's Penetration. If the result is 0 or less, the victim takes 2D6 impact damage and loses 10 SP of armor for every point of Penetration stopped. If the result is 1 or more, multiply the result times 10 to find the damage the victim receives. In addition, the victim's armor is destroyed.

Alternatively, roll for the location hit, look up the weapon's damage, roll the dice, and assess damage normally!

Example: A Police Autogyro witnessed Snicker-snak's attack on the AV-4. Wanting to make certain that such idiots don't remain in the gene pool (and experiencing a yen to use his big bang-bangs), the cop hoses the area with his 2" rocket pod. He's at 200m range (Medium), and fires all six rockets just to make sure. He misses by 8, for a gross deviation of 16 meters in direction #9. But the rocket salvo covers an 18m area, so Snicker-snak is in trouble. The punk fails his LUCK test, and takes full damage. He's wearing a Light Armor Jacket and Kevlar T-Shirt, covering 3 locations with SP 19 (using the proportional armor rules, *CP2020*, pg. 101). Unfortunately, that's only half his hit locations! 19/2 = 9.5, rounded to 10, so his AV is 1. Penetration 3 minus AV 1 is 2, for 20 points of damage, Mortal 1 status.

Indirect Fire

Few battlefield weapons are capable of indirect fire; most of the time, the low velocity and high trajectory necessary for indirect fire are not accurate enough for direct battlefield use. However, artillery support is integral to any battle. Those weapons capable of indirect fire are noted under the classification *Artillery Weapons*.

Indirect fire requires a spotter, someone who can see the target, can tell where the target is, and can communicate with the firer. This can be one of the firing crew, or someone communicating from miles away.

Unless the spotter has the firing weapon right next to him, he *must* know where he is, and must know where the target is. This requires a map, and a knowledge of how to use it. Orienting oneself on a map is a Difficulty 15+ *Wilderness Survival* skill roll. Of course, if the spotter has a satellite or computer navigation system, then he already knows where he is.

Once the spotter has located the target, he relays this information to the weapon and the weapon fires. Since artillery weapons are usually far from the target, their shells take time to reach the target—mortars and launched grenades travel at 400m per turn, and artillery shells travel at 600m per turn. At those speeds, some distant indirect fire may take several turns to reach the target! At the end of the turn when the shell reaches the target, after everybody has moved and taken their actions, roll for the artillery to hit. The difficulty is 25+, and the only modifiers to the D10 roll are as follows:

Spotter's (*Heavy Weapons* + INT)/2

Firer's *Heavy Weapons*/2

Visibility Modifiers (spotter blinded, target concealed, darkness, etc.)

+3 per turn (max four turns) of spotted fire at the same target area —*not* at the same target, at the same target *location*. For instance, if a target is fired on and moves away from the targeted location, the artillery To-Hit roll does not gain any bonus for firing at the same target, because it has to shift fire to hit the mobile target. On the other hand, if the artillery weapon wants to hit that same location despite the fact that its target has moved, it does gain the bonus. *This bonus can only be gained after the first shot(s) has hit*, since it simulates the spotter correcting the fire. "Real-time" target-acquisition links between spotter and gun allow the artillery to follow shifting targets (see Remote Targeting Link in the *Equipment* section).

If the shot hits, roll on the Grenade Table to see just where it hits and work out damage as usual. Once a shot hits, the To-Hit# drops to 10 and the weapon(s) can continue to fire at that location for as long as desired without a need for a spotter to correct fire. If the shot misses, it does so by (range/100 meters) x the number of points missed by, in a direction determined by the Grenade Table. For instance, a mortar shell fired from 500m range misses by 12 points. Thus, the round scatters 12 x (500/100 = 5) 60 meters.

There is effectively no limit to the amount of weapons one spotter can spot for, as long as they're all shooting at the same target. A spotter can only spot and correct for one target location at a time. Typically, one spotter spots for 4-12 weapons firing in a battery. Indirect fire weapons may only use indirect fire against targets that the firer can't see. If the firer can see the target, use the normal *Friday Night Fire Fight* rules for direct fire.

Bombing

A bomb scoring a direct hit (very, very, very rare) multiplies its penetration by five—almost no vehicle can survive a direct bomb impact. Bomb penetration is not affected by range.

Bombs fall at 175 meters per turn. You have to target the bomb towards an aiming point when fired; the bomb falls at 175m per turn until it hits the ground. Guided bombs can correct their point of aim 100m per turn, as long as someone's guiding them.

Hitting with a bomb: Bombs have a standard To-Hit of 25+. They deviate 10m on the Grenade Table per point that the To-Hit roll is missed by, *times height/100m*. A bomb dropped from 500m that missed by 1 point would deviate (500/100) x 10 = 50m.

Dive-bombing involves using the aircraft's speed to propel the bomb faster than gravity. The aircraft has to dive at the target for at least one turn; diving at the target for more than one turn counts as *aiming* (+1 WA per turn, max +3). When the bomb is released, it has the aircraft's speed. For instance, an AVX-9 in a power-dive has a speed of 700m per turn. If it dive-bombs a target, the bomb falls at 700m per turn.

Bombs dropped from a dive lose half their speed every turn after the first until they reach 175m per turn falling speed. So the bomb the AVX-9 dropped will fall 700m the first turn, 350m the second turn, and finally 175m per turn on the third turn and from then on.

Missile Combat

In military parlance, a missile is a rocket weapon with guidance. There are two kinds of guidance: Semi-active and active. Semi-active guidance means that there is an operator guiding the missile into the target; active guidance means that the missile aims itself and doesn't need any attention from an operator after it's launched. Missiles have a minimum range equal to 1/10th of their Long Range. Before that range has passed, the weapon hasn't armed itself.

Semi-active missiles have a good positive WA, indicating the ease of hitting the target when you can adjust your round to match the target's movement. They move at aprox 750m per turn, which means that the average S-A missile will take 1-4 turns to reach its target. During this time, the target may move behind cover, try to shoot down the missile or destroy its operator, or conceal itself with countermeasures. At the same time, the operator must continue to guide the missile to the target.

Hitting with an S-A missile is conducted using the normal procedure (except for the "Paint" missiles). However, the target may also take actions if the missile is detected. These actions are listed in *Countermeasures*, below.

Hitting with a "Paint" missile is a matter of hitting with the painting laser/radar. The missile(s) is fired before testing to see if the laser/radar hits. If the laser/radar hits the target, each missile fired at the target hits the target on a D10 roll of 2-10 (a 1 misses).

Semi-active ATGMs come with the following varieties of guidance. Each guidance type modifies the ATGM's base cost:

Optical: -25% cost. Affected by darkness, smoke (normal or IR).

Thermal: Normal cost. Affected by flares, IR smoke.

Radar Paint: +10% cost. Affected by jamming, stealth, chaff. Includes a radar "gun" on the launcher.

Laser Paint: +50% cost. Affected by chaff. Doubles the speed of the missile. Includes a painting laser on the launcher. Hellfires are already laser-guided and are assumed to be double-speed, as well.

Televisual: +100% cost. Affected by darkness, smoke (normal or IR). Puts a TV camera in the missile's nose so the operator can direct the missile from a very remote location. Transforms the missile into a Remotely-Piloted Vehicle. Can be installed on Hellfires.

Combination: The following types of guidance can be combined. Thermal and Televisual. Optical and Televisual. Thermal and Radar Paint.

Active Missiles are faster (1500m per turn; more for Air-to-Air types) and do not use the operator's skill to hit the target. Active missiles track and attack their targets automatically, using their Skill rating in place of the normal operator's skill + Reflexes when rolling to hit. They come in the following guidance varieties:

Thermal: Normal cost for AAMs, SAMs; double cost for ATGMs. Affected by flares, IR smoke. Gives a Skill of +15.

Radar: Normal cost for AAMRAMs, +100% cost for AAMs, SAMs, +150% cost for ATGMs. Affected by jamming, stealth, chaff. Gives a Skill of +20.

Optical: +50% cost for AAMs, SAMs, +100% for ATGMs. Affected by smoke (normal and IR), darkness. Puts a camera and optical tracking brain in the missile so it can track on sight. Gives a Skill of +15.

Combinations: Any of the above tracking methods can be combined. The missile uses the Skill of the tracking method being used when it hits.

Countermeasures

The best way not to be hit is not to be seen. If there's no cover to duck behind, then there are ways to provide "cover" to order.

Detection: Usually a problem has to be detected before deploying countermeasures. Of course, there are exceptions to this rule—like putting one's chaff/flare ejectors on automatic before beginning an attack run known to be hazardous, or jamming while flying through hostile territory. But even the exceptions require that you at least suspect hostile activity! GMs should not allow countermeasures to be deployed without a good reason.

When it happens, trouble can be spotted in one of two ways: electronically or visually. Electronic spotting is covered in the *Electronics* section, where the uses of active and passive electronics are outlined. Visual spotting requires that someone be on the ball to see trouble in the making. This is a *Notice/Awareness* test; *Combat Sense* does add in as usual.

SAMPLE BATTLEFIELD NOTICE/AWARENESS DIFFICULTIES

Single Infantryman	**15+**
Squad (5-10 infantry)	**10+**
Vehicle	**6+**
Very Large Vehicle	**2+**
Recoilless Rifle firing (no firing modifier)	**6+**
Missile firing (no firing modifier)	**10+**
Missile in flight	**20+**

SAMPLE NOTICE/AWARENESS MODIFIERS (THESE ARE CUMULATIVE)

Unit firing	**+4**
Unit moving	**+5**
Unit in cover	**-10**
Unit camouflaged	**-5**
Spotted in vehicle	**-5**
Spotter in AFV (total -10)	**-5**
Spotter doing something else besides spotting	**+10**
Computer-assisted optics	**+5**
Cyberlinked into vehicle	**+2**
Darkness	**-3**
Using IR, thermograph to find IR-baffled target (in essence, IR camouflage)	**-5**

Reaction: As soon as trouble is noticed, countermeasures may be deployed. If the attack will hit in the same turn (missiles at short range, normal weaponry) then the defender can only deploy countermeasures if he wins initiative. Otherwise, the defender is free to deploy countermeasures to counteract an attack.

COUNTERMEASURES EFFECTS

Chaff: Chaff adds +10 Difficulty to hit with radar or laser-guided systems. If the missile misses, it is destroyed, hitting the chaff and detonating.

Flares: Flares add +10 Difficulty to hit with thermal systems. If the missile misses, it hits the flare and explodes.

IR Baffling: AVs and jets add +5 Difficulty to hit with thermal systems, other airplanes and helicopters add +10 Difficulty to hit with thermal systems. Its always active

IR Smoke: IR Smoke adds +15 Difficulty to hit with thermal or optical systems. It cannot be used with vehicles moving at over 50mph, since they would outdistance the smoke!

Jamming: Jamming adds +15 Difficulty to hit with radar-guided systems. .

Smoke: Smoke adds +15 Difficulty to hit with optical systems. It cannot be used with vehicles moving at over 50 mph, since they would outdistance the smoke.

Stealth: Stealth is also an exception to deploying countermeasures; it always counts as "On." It adds +15 Difficulty to hitting with radar-homing missiles.

MANUVERING, CHASING AND EVADING

In most vehicle combats, the combatants are not interested in doing showcase maneuvers and trying to impress people. No, they're interested in one or two of three things: trying to get into a position to fire, trying to catch up with someone, or trying to escape from someone. In order to reflect this, mobility in vehicle combat is handled very simply, based on the system in *Friday Night Fire Fight*.

1. At the beginning of the chase/battle, the GM determines the range and the terrain the battle is being fought in. This is very important, because fighting a running gun battle in Night City is very different than fighting one on the plains of Kansas. Range is likely to be shorter in urban or rough terrain, and there are more things to hide behind (and to run into).

2. Determine each vehicle's maximum speed in meters per combat turn (3 seconds). If the vehicle's maximum speed is given in kilometers per hour, divide the kph speed by 1.2 to arrive at the speed in meters per combat turn. If given in miles (or nautical miles) per hour, multiply the mph/knots speed by 1.33 to arrive at meters per combat turn.

3. Both sides roll for Initiative, adding appropriate vehicle operation skill (*Driving*, *Pilot*, etc.) plus any modifiers to the vehicle operation skill (cyberlinked controls, more maneuverable vehicle), as well as REF and *Combat Sense*. Vehicles that were in an *Advantageous Position* (see below) are at +5 to this reflex roll.

4. All vehicles in action declare their actions, in reverse order of initiative. This means that those with higher intitiative do get to learn what the lower-initiative vehicles are doing, and can compensate for their actions.

5. All vehicles in the action make skill rolls to determine if their actions are successful. The level of success (failure is also a level of success; it's just a negative level) has the following effects:

Roll fails—Roll 1D6 on the table below, adding +1 to the die roll for each full 3 points the action roll was missed by.

FAILURE TABLE

1-4 Vehicle skids/slews sideways. All weapons fire from this vehicle is at -5 this turn. The vehicle may crash if within 2m of an obstacle or another vehicle; succeed at a skill roll at Difficulty 15+ or sustain a sideswipe collision.

5-6 Lose control of vehicle. All weapons fire is at -10 for this turn. The driver/pilot must succeed in a Difficulty 20+ skill roll in order to regain control for next turn; failure to succeed at this roll forces another 1D6 roll on the Failure Table next turn. Ground vehicles skid 1D10 x 3m sideways in direction of travel. Air vehicles stall out, losing 1D10 x 50 feet (15m) altitude. If a vehicle intercepts an obstacle within this distance, it crashes.

7+ Catastrophic control loss. No weapons fire is allowed from this vehicle this turn. Ground vehicles roll 1D10 x 3m in direction of travel. Take a hit at Penetration 1D6, to the thinnest armor. The vehicle rolls for Meters per turn speed/20 turns, taking a hit at Penetration 1D6 on its thinnest armor each turn. When

the vehicle stops rolling, roll 1D10 to determine which side is up (1-2 Top, 3-4 Left Side, 5-6 Right Side, 7-10 Bottom). Air vehicles go into a tail spin, losing 1D10 x 100 feet (30m) per turn until control is regained or aircraft crashes. Aircraft in a spin can be controlled with a successful Difficulty 25+ Pilot roll, otherwise the aircraft continues to spin out.

Roll succeeds within 10 points of the other vehicle's roll—The faster vehicle opens or closes the range (as desired) by 1/2 the amount of movement that was declared. Firing is possible, but only by weapons that are pointed directly towards the target (a weapon fixed to fire backwards could only shoot if the rear of the vehicle was facing the target, for example) or turret weapons.

Roll succeeds and is 10 or more points better than the other vehicle's roll: You've obtained **Advantageous Position**. The vehicle is in a position to empty most of its weapons at the target. Weapons facing up to 90° away from the side facing the target can shoot at a target. Open or close the range by your declared speed, if desired (even if slower than the other vehicle(s)!).

CRASHES

Sideswipes—A sideswipe is a minor crash, directed at the vehicle's side (so the vehicle's armor is only 75% of normal). The amount of Penetration caused is the vehicle's speed/75 (round up), times the Weight Modifier (see below). Determine armor penetration and damage normally.

Crashes—Crashes involve the armor facing appropriate to the situation (if you're hit head-on, your front armor takes the brunt, etc.). The amount of Penetration caused by the crash is the vehicle's speed/60, rounded up. Remember, if you head-on another vehicle, add the two vehicle's speeds to determine collision Penetration. If one vehicle runs into another from behind, subtract the rammed vehicle's speed from the rammer's to determine collision Penetration (3.5 points per D10; 10 points per point of Penetration). As usual, Penetration is multiplied by the Weight Modifier, and armor penetration and damage are determined normally.

WEIGHT MODIFIER TABLE

MULTIPLIER	SIZE
x 1/2	Very Light (less than 25 kg, cardboard, glass)
x 1	Light (man, 25-100 kg, plywood)
x 2	Medium (motorcycle, 101-500 kg, plaster/plastic)
x 3	Heavy (car, 501-5000 kg, concrete)
x 4	Very Heavy (truck, 5000+ kg, reinforced concrete, tank, armored walls/vault doors)

ACTIONS

Actions are mostly maneuvers, although they may include tricks and stunts. After the action is described, the GM decides what difficulty it is and determines its Difficulty. Several maneuvers may be combined into the same action, but Difficulty ratings are cumulative and add up!

Simple (Difficulty 15+) maneuvers include swerves, aerial take-offs and landings, aerial rotations and hovers, mild turns and banks.

Difficult (Difficulty 20+) maneuvers include tight turns, emergency stops (only ground vehicles, AVs and helicopters may make emergency stops), controlled skids, aerial loops, emergency climbs and dives, with direction reverses if desired (Immelmans and Split-S's).

Very Difficult (Difficulty 25+) maneuevers include bootlegger reverse (allowing a ground vehicle to reverse direction at the cost of half its current speed), extremely tight turns, aerial vertical maneuvers (only AVs and other vectored thrust vehicles and helicopters) straight up or straight down.

DIFFICULTY MODIFIERS:

- **+1** Every 10% of a vehicle's speed over 50% of top speed
- **+10** Driver/Pilot can't see and has no sensing instruments
- **+5** Driver/Pilot trying to do something else besides driving (unless cyberlinked to vehicle)
- **+3** Slippery road (ground vehicles only, not hovercraft)
- **+5** Icy road (ground vehicles only, not hovercraft)

REVISED CONTROL MODIFIERS

Standard Car	-0
AV	-0
Limousine, Pickup	-3
Osprey	-0
Cycle.	+1
Light Plane	-0
Truck	-4
Med/Hvy Plane	-3
APC/IFV/MBT*	+2
Small Jet	+1
Hover	-2
Large Jet	-4
Lt. Heli	-0
Airship	+5
Med/Hvy Heli	-2

*Wheeled APCs and IFVs handle at -2; treads are a great benefit to handling.

Warning: This Vehicle Makes Wide Turns

No matter what kind of vehicle you're in or how good a pilot you have, there are laws about conservation of motion and inertia that govern how much distance you cover when you turn.

On the average, a vehicle takes up 1/3 of the actual distance traveled when it makes a mild turn (up to 30°). On a tight turn (over 30°), it takes 1/6 actual distance. An extremely tight turn takes 1/12 the actual distance. Tracked vehicles, PA suits on foot and cycles halve this distance; hovercraft, boats, helicopters, PA suits flying and AVs multiply it by two and airplanes and airships by three. People on foot don't really worry about this.

So what? Well, cyberchum, the next time you have a AV-4 chasing a Shiva through those tight streets ...

The streets are 20m wide. The cycle is hauling along at 90 mph, and the corporate AV is following at 120 mph (altitude 12m). The distance between the two vehicles is 150m. The cycle's rider loses Initiative, and states that he is going to try a tight turn at an intersection to lose the AV. The AV pilot states that he will follow. The cycle's rider goes first, hitting the brakes and slowing to 50 mph. He successfully makes the turn, slewing (1/6 of 66 2/3 m = 11m) 11 meters across the road (hey, chuckles, *you* try a tight turn at 50 mph and see what happens!). Hopefully, there weren't any obstacles (like other vehicles) on the street at the time. The overconfident AV pilot, trying to catch up, boosts through without decelerating, and effortlessly makes the manuever. However, the AV's lateral movement takes it (1/3 of 160m = 53.33m) way past the width of the street and into a tall building at 120 mph. Crunch. Ouch.

Needless to say, the cycle gets away. ■

VEHICLE DESIGN

"Sure, you can mount a larger caliber weapon. No problem. And the fire control computer? Yeah, that, too. The composite armor will affect your handling, though, and the smoke launchers will have to be mounted outside. That may interfere with the AP Grenade panels. The total will be 940,000 euro. Yes, your account does appear to be able to handle it. That should do it. Just one more question—do you mind if I ask where you plan on taking this Ferrari?"

— Phone conversation, Detroit.

Factors and Calculations

The formulas used for calculating game statistics for the vehicles and weapons presented here are as follows:

Penetration Factor: Average Damage/10, round off; times 2 for any type of AP; times 1/2 for small arms (anything using D6 for damage).

Armor Value: SP/20, round off.

"Body" Value: SDP/20, round off.

Rating SP: Each point of SP equals about 2.5mm of steel armor protection. Due to sloping and superior materials, this protection is probably not solid steel protection.

Rating Penetration: Each point of Penetration equals roughly 50mm of armor penetration capability.

Rating SDP: The amount of punishment a vehicle can take.

Constructing Vehicles

Vehicles are constructed by buying them as groups of SDP with options, so to speak. While this may not be as detailed and technical as some other game systems, this is all that is required for use in *Cyberpunk 2020*. Powered Armor is a somewhat specialized case, and the construction rules are covered in its own section. The above calculations can be used, though, for determining ACPA Armor and Body Values (Use Chassis STR for SDP).

Each vehicle type has a number of requirements for purchasing SDP. The basic limit is the SDP Range, which gives a range of SDP available to the vehicle type. This is modified by the SDP Limits, which impose minimum SDP for the number of spaces available in the vehicle. Spaces represent the amount of human-sized volumes available for use (either by passengers, equipment, weapons or cargo) in the vehicle. The number of spaces the vehicle has is determined when the vehicle's SDP is being determined (these spaces are not interchangeable with ACPA spaces). The amount of actual spaces available for use may vary, depending on options listed below.

Once the amounts of spaces and SDP are chosen, the cost of the SDP is determined. This is the base SDP cost of the vehicle, and many options that cost extra SDP revolve around this figure. The vehicle can then have "options" added to it to modify its performance; it may also be armored or have equipment added. Keep in mind that each space represents one passenger, and every vehicle must have at least one space left for the driver!

Defintions

Cycle: Motorcycles and trikes.

Car: An automobile not devoted to cargo-hauling.

Pickup: An automobile devoted to cargo-hauling (pickups, vans, etc.).

Truck: A large cargo-hauler. The big rigs (SDP 75+) haul trailers that weigh about 6 tons empty (same ton/SDP as the rig; costs 250 eb. per SDP).

APC: Armored Personnel Carrier. An armored vehicle for hauling troops.

IFV: Infantry Fighting Vehicle. An AFV with heavier armament and better speed.

MBT: Main Battle Tank. An armored vehicle with large weapons, lots of armor and enough crew to run it.

Hover: Hovercraft.

Helicopters: Rotary-wing vehicles of all sizes.

AV: Aerodyne. A vehicle using directed thrust for lift and propulsion.

Osprey: Tilt-rotor aircraft.

Airplanes: Fixed-wing aircraft, using propellers for propulsion.

Jets: Fixed-wing aircraft. using jets for propulsion.

Vehicle Types

Statistics	Cycle	Car	Pickup	Truck
SDP Range	15-30	25-80	30-90	50-125
SDP Limits	15 SDP Minimum	8 SDP per space	4 SDP Min. per space	12.5 SDP per space
SDP Cost (per SDP)	100eb	250eb	400eb	750eb
Spaces	1	3-10	8-20	4-10
Top Speed	120 mph	100 mph	100 mph	100 mph
Range	400 mi.	300 mi.	300 mi.	800 mi.
Mass	4 kg/SDP	1 ton per 25 SDP	1 ton per 25 SDP	1 ton per 15 SDP
				**Truck Mass Rating:36,000 kg

	APC*	IFV*	MBT	Hover
SDP Range	75-150	75-200	200-600	25-100
SDP Limits	75 SDP Minimum	75 SDP Minimum	4 SDP per space	25 SDP Minimum
SDP Cost (per SDP)	1000eb*	1200eb*	3000eb	2000eb
Spaces	10-15	10-20	50-160	4-20
Top Speed	90 mph	100 mph	40 mph	150 mph
Range	300 mi.	300 mi	200 mi.	400 mi.
Mass	1 ton per 10 SDP	1 ton per 10 SDP	1 ton per 6 SDP	1 ton per 10 SDP

	Light Helicopters	Medium Helicopters	Heavy Helicopters	AV
SDP Range	15-40	25-80	100-250	30-200
SDP Limits	15 SDP Minimum	25 SDP Min.; otherwise 5 SDP/space	100 SDP Min.; otherwise 5 SDP/space	30 SDP Min.; otherwise 4 SDP/space
SDP Cost (per SDP)	1500eb	2500eb	3000eb	3500eb
Spaces	1-4	4-16	20-50	5-50
Top Speed	150 mph	150 mph	150 mph	450 mph
Range	200 mi.	400 mi.	600 mi.	800 mi.
Mass	1-2 tons	1 ton per 10 SDP	1 ton per 25 SDP	1 ton per 25 SDP

	Osprey	Lt. Plane	Med. Plane	Hvy. Plane
SDP Range	75-240	25-100	75-250	150-300
SDP Limits	75 SDP Min.; otherwise 4 SDP/space	25 SDP Min.; otherwise 10 SDP/space	5 SDP per space	2 SDP per space
SDP Cost (per SDP)	3000eb	2000eb	2500eb	4000eb
Spaces	8-60	5-10	15-50	75-150
Top Speed	350 mph	250 mph	400 mph	400 mph
Range	1200 mi.	500 mi.	1000 mi.	1200 mi.
Mass	1 ton per 8 SDP	1 ton per 20 SDP	1 ton per 8 SDP	1 ton per 4 SDP

	Small Jet	Large. Jet	Airship
SDP Range	100-250	100-400	100-3000
SDP Limits	10 SDP per space	2 SDP per space	10 SDP per space
SDP Cost (per SDP)	10,000eb	20,000eb	300eb
Spaces	10-25	50-200	10-300
Top Speed	800 mph	600 mph	80 mph
Range	1600 mi.	3000 mi.	1500 mi.
Mass	1 ton per 12.5 SDP	1 ton per 2.5 SDP	1 ton per 20 SDP

Notes:

*APCs and IFVs are bought wheeled; pay double SDP cost and halve Top Speed for tracked ones. Both tracked and wheeled APC/IFVs are automatically Off-Road capable.

Tanks are automatically tracked and Off-Road capable.

Airships have a cargo capacity of 100% of their weight. ** Mass Rating definition in Cargo section of Dptions text.

Airship: Dirigible, using lighter-than-air gas for lift and propellers for propulsion.

Acceleration and Deceleration

Vehicles can't go from a dead stop to full speed immediately, and vice versa. They have to accelerate and decelerate each combat turn. The amount each vehicle type can accelerate and decelerate each combat turn is listed below, and can be modified by options.

	Acceleration	Deceleration
Cycle:	Acc 18 mph	Dec 30 mph
Car:	Acc 15 mph	Dec 40 mph
Pickup:	Acc 15 mph	Dec 40 mph
Truck:	Acc 10 mph	Dec 30mph
APC*:	Acc 10 mph	Dec 50 mph
IFV*:	Acc 13 mph	Dec 50 mph
MBT:	Acc 10 mph	Dec 50 mph
Hover:	Acc 15 mph	Dec 10 mph
AV:	Acc 50 mph	Dec 50 mph
Osprey:	Acc 10 mph	Dec 20 mph
Light Airplane:	Acc 15 mph	Dec 20 mph
Jet:	Acc 20 mph	Dec 25 mph
Med/Hvy Airplanes:	Acc 10 mph	Dec 25 mph
Airship:	Acc 5 mph	Dec 30 mph
Lht/Med Helicopters:	Acc 15 mph	Dec 15 mph

*Wheeled APCs and IFVs accelerate and decelerate as Trucks.

A ground vehicle can try to decelerate up to twice as much as its listed deceleration. This is considered an Emergency Stop, as noted in the maneuvers section of the rules.

Costs and Statistics

It may be noted that the statistics and costs generated by this system are not exactly compatible with those listed in *Cyberpunk 2020, Chromebook 1, Chromebook 2,* and the Corporation report books. This is due to manufacturer deceptions; if statistics are over-rated (like the Dragon helicopter), this was done to overawe the competition and make the product look good. If the statistics were under-rated, this was done to lull the competition into a state of false security. Likewise, if the price was too high, it was sheer price-gouging; if too low, it was a special price to build up the market (then watch the price zoom!).

The prices and statistics generated by this system take precedence over those listed in other sources. Actual manufacturing costs range from 25% to 50% of the calculated price; the corps have to make money too, you know.

Options

Armor: Maximum armor SP total is 1/2 of SDP total. Each 10% (or part thereof) of a vehicle's SDP in SP lowers vehicle's speed by 10% (this lowers an Osprey's or helicopter's speed by 20% per 10% SP). Armor costs are determined by the amount of armor desired—vehicles armored from 1-20 SP pay 500eb per SP. Vehicles armored from 21-40 SP pay 1,000eb per SP. Vehicles with 41-60 SP armor pay 5,000eb per SP.

Vehicles with over 60 SP armor pay 7,000eb per SP. For instance, 50 SP of vehicle armor costs (50 x 5000) = 250,000 eb. Ospreys and airplanes can have a maximum SP armor of 1/4 their SDP. Airships can't be armored; an airship's gondola can, but the gasbag can't ; and the gasbag is hit 90% of the time, unless specifically aiming for the gondola.

A vehicle without armor actually weighs half the listed mass. The mass calculations above are retained for purposes of mounting pod weapons and collisions.

Added Structure: Vehicles with superior construction (heavier materials, roll cages, etc.) may have up to 25% more SDP than the maximum for their vehicle type. Each extra point of SDP costs double the normal SDP cost.

Weaker Structure: Cheap vehicles may have only half of their required SDP. This makes them more liable to combat damage, and has the additional detriment of making them break down often during play.

Added Speed: Each 10% of original Top Speed added to vehicle's Top Speed raises base SDP cost of vehicle by 25% and takes up 5% of vehicle's spaces. Maximum boost +100% speed.

Lowered Speed: Each 10% Top Speed under normal Top Speed adds 10% more spaces to a vehicle and lowers the vehicle's SDP cost by 10%.

Boosted Acceleration: Each 10% acceleration added to a vehicle's acceleration (minimum boost allowed is 5 mph) costs 5% of the vehicle's base SDP cost. Maximum boost 100% acceleration.

Heavy-Duty Brakes: Each 25% of deceleration added to a vehicle's deceleration (minimum addition allowed is 5 mph) costs 5% of the vehicle's base SDP cost. Maximum added deceleration is 50% for air vehicles and 100% for ground vehicles (hovers count as an air vehicle for this option).

Better Handling: Vehicles may be built with enhanced controls and handling characteristics. Each +1 added to Driving/Piloting skill raises SDP cost by 50%; maximum handling addition +3.

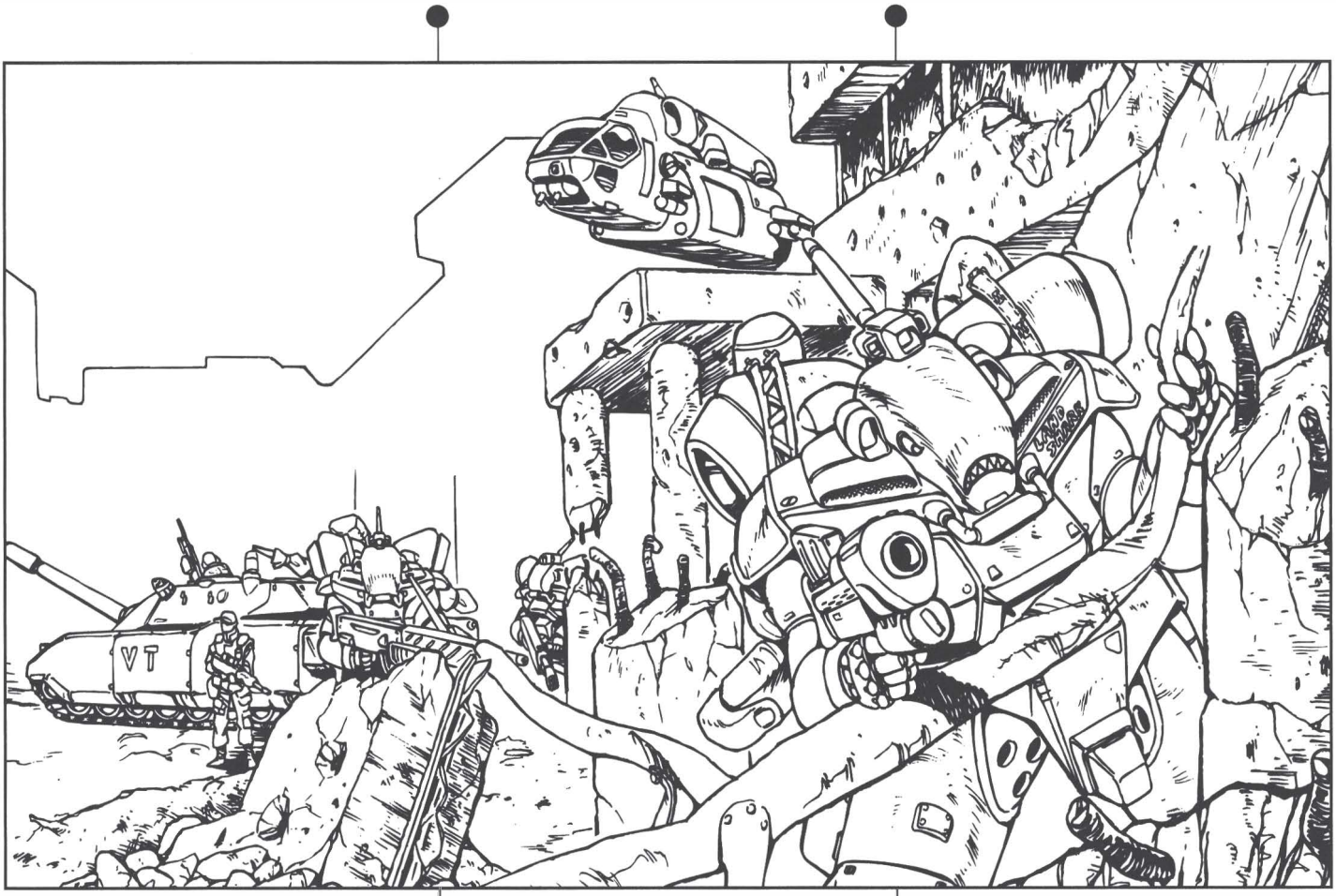
Off-Road Capability: Allows the vehicle to be operated off paved roads, at 1/3 top on-road speed. This raises SDP cost by 15%.

Cargo: Most vehicles (with the exception of AFVs, which are already very heavily laden) have cargo capacity equal to 33% of their mass. Each extra 10% of the vehicle's mass added to cargo capacity subtracts 10% from the vehicle's Top Speed. The maximum cargo capacity that can be added in this fashion is 50% of the vehicle's mass. When adding cargo capacity to airships, each 10% of speed reduction adds 33% to the airship's cargo capacity.

Trucks have a Mass Rating; this is how much they can haul. This Mass Rating can be improved at a rate of each 10% additional mass rating slowing the truck's Top Speed by 20%; maximum Mass Rating improvement +20%.

Additional Range: Each 33% added to a vehicle's range subtracts 10% of a vehicle's spaces.

Shortened Range: Each 33% subtracted from the listed range adds 10% more spaces to a vehicle.



Weapon Mounts

Most vehicles don't mount weapons — weapons mounts are expensive and hard to come by, and any exposed weapons are likely to be stolen unless kept under guard. Normally the only vehicular-mounted weapons that a cyberpunk will ever see belong to the enemy —security wagons, police cars, etc. Occasionally a cycle or car shows up with jury-rigged weapons, but only rarely.

Jury-rigged weapon mounts cost almost nothing. Any weapon so mounted suffers a WA -2, can only be fired one direction, and the weapon is exposed. The weapon can be no larger than one space. Pintle mounts are strengthened posts mounting one weapon, served by a gunner who stands behind the weapon and swivels it to track the target. Any weapon 1 space or smaller can be mounted (small arms—rifles, etc.—count as no space), the mount costs 500.00 euro, counts as no space, Availability C, and gives full WA. The weapon's traverse is limited to space available; for instance, if the mount is fixed to the cab of a pickup and fired from the bed, the weapon couldn't be fired to the rear, because there would be no room for the gunner to crawl out on the cab roof and point it backwards. Both gunner and weapon are exposed. A good example of this mount is the machinegun mount in the back of a jeep.

Fixed mounts place the weapon firing from behind the vehicle's armor, but they can only fire straight out. They are Availability P, can mount any size weapon, cost 10% of weapon cost, fire in one direction only, WA -1, and the weapons mounted take up their full amount of spaces. Jet fighters mount their cannons in fixed mounts, in the nose of the jet.

Articulated mounts are like fixed mounts in that they fire out of one side, but they have servos and can swivel (think of the front machinegun mounts on century-old WWII tanks). They are Availability P, cost 25% of the weapon cost, can mount weapons of 2 spaces or less, at full WA, and the weapons take no spaces. These weapons can fire out from one side only, but are more mobile and can track targets that aren't directly in front of the weapon.

Open mounts place weapons outside of the armor, in the open. They are Availability P, can mount any size weapon, can fire in one direction (cost 5% of weapon cost) or rotate (cost 50% of weapon cost). Either way, open mount weapons take 1/10 of their normal spaces. Open mount weapons are exposed and vulnerable to targeting like a normal turret, except that damage goes straight to the weapon (the Penetration of the weapon hitting an exposed weapon is the chance in 10 that the weapon is damaged. If the half the Penetration is rolled, the openly-mounted weapon is destroyed). Normally, large weapons (#Shots 1) on open mounts are crew-served; an autoloader allows the weapon to be operated from within the hull.

Turrets are 360° armored casements the protect weapons and the crew serving them from damage. Availability P, costs as much as the weapon mounted, and takes up 1/2 the space of the weapon mounted, round down (only the turret takes up spaces; the weapon itself takes up 0 spaces once it's in the turret). A turret may mount more than one weapon, but no more spaces of weapons and equipment than 1/3 of a vehicle's spaces.

Turrets and 360° open mounts can be modified to high-angle traverse, so they can shoot at aircraft without penalty. This doubles the cost of the turret/open mount.

> **"Look, Carstairs, I know that we needed to get the perps out of the building, but having your main gun make a bunch of new exits for them was not what we had in mind ..."**
>
> **— Lt. William Burg, NCPD**

Pod Mounts are self-contained weapons mounts that are fitted on the exterior of a vehicle. They are Availability P and come in two types: Rocket Pods, which hold rocket weapons, and Gun Pods, which hold guns. Rocket Pods generally cost 350 eb. per space of rocket mounted (exceptions are listed in the Rockets section) and provide no armor protection. Gun Pods cost 500 eb. per space of gun mounted and provide SP 20/Armor Value 1 protection. Pod mounts are always fixed to fire in one direction (usually forward) and are exposed. Their main advantages are flexibility — weapons pods can be changed between missions — and the fact that they add extra firepower to a vehicle without taking up interior space. A vehicle can carry its tons in pod weapons spaces, suffering a 10% drop in Top Speed. Aircraft can carry twice this amount, since they have wings to hang them on. Other vehicles can buy pod wings, which cost the same as 2 points of SDP and double the amount of pod weapons spaces that can be carried. Ground vehicles with pod wings have a -2 to all maneuvering and control rolls (they're unwieldy) and look pretty strange ...

Totalling Up

When all of a vehicle's costs have been added up (SDP, options, armor, equipment, weapons and mounts, etc.), the cost will probably be rounded off. Use the formula below:

Vehicle Cost	Round Up To Next
Under 20,000 eb.	Keep cost as is
20,001-50,000 eb.	1000 eb.
50,001-250,000 eb.	5000 eb.
250,001-500,000 eb.	10,000 eb.
500,001-5,000,000 eb.	50,000 eb.
5,000,001 or more eb.	100,000 eb.

For instance, a vehicle costing 14,950 eb. would have its cost unaltered. On the other hand, a vehicle costing 519,780 eb. would be rounded up to 550,000 eb.

Example of Vehicle Construction

The AV-8 is a military attack AV, devoted to hauling ordnance rather than troops. Because of this, it has to be robust, well-armored, and carry a large amount of weapons.

I. **Selecting SDP:** The AV-8 is an aerodyne vectored thrust vehicle, so the correct vehicle column to use is the AV column. It's got to be tougher than the AV-4, so 120 SDP is selected. At 4 SDP per space, this makes it a 30 space AV. At 3,500 eb. per SDP, this gives a base SDP cost of 420,000 eb.

II. Adding Armor: The AV-8 doesn't have to be too heavily armored. After all, it's supposed to be a gunship, not slug it out with tanks. The SP 40 standard to the AV-4/6 line sounds good. This costs 1,000eb. per SP for 40,000eb. It also drops the Top Speed by 40% (from 450 mph to 270 mph).

III. Adding Options: That Top Speed is too low. Adding 50% costs 125% of the base SDP cost (525,000eb.) and boosts the Top Speed to 495 mph. It also takes out 25% of the AV's spaces due to bigger engines (-7.5 spaces). As a combat gunship, it should handle better, so a +1 Handling is added (costing 50% of base SDP cost or 210,000eb.). It needs more range, so 6 spaces (20%) are sacrificed for 520 more miles of range (total 1,320 miles, or a 670-mile radius of action). This leaves 16.5 spaces left for crew, internal weapons and electronics.

IV. Equipment: The two-man crew takes up 2 spaces (14.5 left) and costs nothing. (As far as the vehicle is concerned!) They are not neglected, though. Ejection seats (2,000eb.) and 12 man-hours of Life Support (1,500eb., 3 spaces; 11.5 left) are bought for them. For the ship, full Damage Control systems (3 spaces, 420,000eb.) are provided, giving it extra ability to absorb damage. To further protect the gunship, an anti-laser aerosol (1,000eb., 1 space), chaff and flare dispensers (2,000eb., 2 spaces) and ECM (500,000eb., 1 space) are added. 4.5 spaces left. A laser detector is linked to the aerosols (1,000eb.), and military radar and microwave detectors (6,000eb.) are installed. Military radar with terrain-following capability is linked into the navigation and auto-pilot system (12,250eb.); light amplification, image enhancement and thermal imaging are included to assist spotting (5,000eb.). Cybernetic controls cost 168,000eb. A microwave rangefinder costs 15,000eb. Communications consists of a military radio and a laser communicator (9,500eb.).

V. Weapons: The main weapons are a 30mm cannon and a 40mm Auto-GL in a turret (10,000eb., .75 spaces). Both weapons are stabilized (5,000eb., .75 spaces), and both have +3 targeting computers (20,000eb.). The 30mm cannon has an extra magazine (400eb., .25 spaces) and the 40mm Auto-GL has two extra magazines (200eb., .25 spaces). A painting laser is included in its own turret to guide laser-guided weaponry (2,000eb., no space). This leaves 2.5 spaces for other weapons — specifically two AAMs, one fixed forward and one fixed aft (33,000eb., 2 spaces). The rest of the weaponry carried will be pod-mounted.

So, without external pod weapons, the AV-8 costs 2,319,850 eb. Using the rounding formula above, its cost rounds off to 2.4 million eb. A steal. ■

Direct Fire Weapons

Most vehicle-mounted weapons need far more ammunition than that listed in the weapon statistics. These extra magazines are bulky, and in the case of "single-shot" weapons, usually have to be supplied shell by shell. For instance, the Militech Destructor Light Tank has a storage capacity for 50 shells for its 75mm cannon. These shells can be of any kind, but have to be specified when the vehicle is loaded.

Remember:
Extra Ammo must be purchased separately and space alloted in the vehicle for a magazine.

5.56mm Minigun: A standard small-caliber minigun. HVY 0 N P 5D6(5.56mm) 1000 100 ST 2000 euro 1 space

5.56mm Machinegun: A vehicle-mounted version of a variety of LMGs. HVY +1 N P 5D6(5.56mm) 100 10 VR 1200 euro 1/2 space

7.62mm Minigun: The classic electric gatling minigun. HVY 0 N P 6D6+2(7.62mm) 2000 100 VR 4000 euro 1 space

7.62mm Machinegun: A vehicle-mounted version of any of many medium machineguns. HVY 0 N P 6D6+2(7.62mm) 100 10 VR 1200 euro 1/2 space

12.7mm Gatling: A .50 caliber gatling, usually mounted in AVs and helicopters. HVY 0 N R 6D10(12.7mm) 1000 100 ST 6000 euro 1 space

12.7mm Machinegun: Your choice of M2HB Browning or DShK heavy machineguns. Can use armor-piercing rounds (Penetration 4). HVY 0 N P 6D10(12.7mm) 100 10 VR 2000 euro 1 space

14.5mm Machinegun: The classic monster MG, the KPV. Developed from an anti-tank rifle round, this is less a machinegun than it is a not-so-small cannon. HVY 0 N P 7D10(14.5mm) 100 10 VR 2500 euro 1 space

20-25mm Autocannon: Generic autocannon. HVY 0 N R 8D10(20-25mm) 100 10 VR 3000 euro 1 space

27-30mm Autocannon: Generic, slightly larger autocannon. HVY 0 N R 9D10(27-30mm) 100 10 VR 4000 euro 1 space

20mm Gatling: The classic Vulcan electric cannon. HVY 0 N R 8D10(20mm) 1000 100 VR 6000 euro 2 spaces

30mm Gatling: A derivation of the fearsome GAU-8, firing depleted uranium slugs. This requires a massive recoil unit; the most famous use is to build an entire rugged airplane around it. HVY 0 N R 6D10 Armor-Piercing (30mm DPU) 1200 30 VR 25,000 euro 4 spaces

LATG 37mm: A 37mm light anti-tank gun, shooting depleted uranium slugs. Used as sort of a monster sniper rifle. HVY +3 N R 6D10 Armor-Piercing (37mm DPU) 10 1 VR 10,000 euro 2 spaces

40mm GL: A single-shot grenade launcher, usually attached to an assault rifle. It shoots all kinds of grenades, including the High-Explosive Dual Purpose anti-tank round (Penetration 4, Burst 1m). Its rounds are *not* capable of being used as hand grenades, and vice versa. The GL does come in a 8-shot version that is larger than an assault rifle.
40mm GL HVY +1 L P Variable(40mm) 1 VR 500 euro
40mm-8 HVY +1 N P Variable(40mm) 8 1 VR 1000 euro
40mm grenades cost 50 euro apiece.

40mm AutoGL: A tripod-mounted auto-fire grenade launcher, a vicious cross between a machinegun and a light mortar. It shoots all kinds of grenades, including the High-Explosive Dual Purpose anti-tank round (Penetration 4, Burst 1m). Its rounds are *not* capable of being used as hand grenades, and vice versa. Its rounds cannot be used in the 40mm grenade launchers, although it can use 40mm GL rounds one at a time. For extra grenade types see pg.77, in the Powered Armor section of the rules. 40mm AutoGL rounds cost 100 euro apiece. HVY 0 N R Var.(40mm Grenade) 50 20 VR 2500 euro 1/2 space

75mm Cannon: A carousel-fed 3" gun, almost a sort of autocannon. Its recoil is too great for AV/helicopter use. Rounds cost 300 euro apiece. HVY Var. N R Var.(75mm) 10 2 VR 75,000 euro 4 spaces

75mm Recoilless: A recoilless rifle, tripod mounted (a person could carry one, but since it weighs 15kg, it's very bulky). PA suits may mount one on the shoulder, with extra ammo feed. When it is fired, anything in an area 8m long by 2m wide behind the gun sustains 6d6 damage from the backblast. Only totally sealed armor protects against this. The only way a vehicle can mount one of these is on an external mount. For additional types of shell, see pg.76, in the Powered Armor section of the rules. HVY 0 N R 8D10 Armor-Piercing (75mm HEAT) 1 1 VR 15,000 euro 1 space

90mm Cannon: A low-pressure gun usually installed in heavy armored cars. Its recoil is too great for AV/helicopter use. HVY 0 N R Var(90mm) 1 1 VR 150,000 euro 7 spaces

105mm Cannon: A cannon mounted in light MBTs. Even with low-recoil systems, its recoil is too great for use in anything under 10 tons. HVY 0 N P Var(105mm) 1 1 VR 250,000 euro 10 spaces

105mm Recoilless: A heavy tripod-mounted recoilless rifle (far too big for human or PA use). When it is fired, anything in an area 10m long by 3m wide behind the gun sustains 6d6 damage from the backblast. Only totally sealed armor protects against this. The only way a vehicle can mount one of these is on an external mount. HVY 0 N R 10D10 Armor-Piercing (105mm HEAT) 1 1 VR 30,000 euro 5 spaces

120mm Cannon: A 12-12.5cm smoothbore is still the standard cannon armament for Main Battle Tanks. A tracked chassis of at least 50 tons is needed to withstand the recoil. HVY 0 N R Var(120mm) 1 1 VR 500,000 euro 14 spaces

140mm Cannon: 14cm smoothbores are about the maximum size that can be mounted on a land vehicle smaller than a railway car. Artillery weapons are larger, but not as high-velocity. Its recoil is awesome, and requires a tracked chassis of 75+ tons. HVY 0 N R Var(140mm) 1 1 VR 1,000,000 euro 20 spaces

Light Railguns: These weapons throw a 15 gram, 4mm slug at fantastic velocity; good for anti-personnel and light anti-vehicle work. The difference between the guns is that the EMG-85 (*Chromebook 2*, pg.38) is a hand-held or pintle-mounted weapon, while the others are pure powered vehicle mounts deriving their ROF and

Direct-Fire Weapons

Direct-Fire Weapons	WA	Pen	Burst	#Shots	ROF	Rel	Range
5.56 Minigun	0	2	—	1000	100	ST	450m
5.56 MG	+1	2	—	100	10	VR	450m
7.62 Minigun	0	2	—	2000	100	VR	500m
7.62 MG	0	2	—	100	10	VR	500m
12.7mm Minigun	0	3	—	1000	100	ST	500m
12.7mm MG	0	3/4	—	100	10	VR	600m
14.5mm MG	0	4	—	100	10	VR	550m
20-25mm autocannon	0	4	—	100	10	VR	500m
20mm Gatling	0	4	—	1000	100	VR	500m
30mm Gatling	0	6	—	1200	30	VR	600m
27-30mm autocannon	0	5	—	100	10	VR	600m
LATG 37mm	+3	6	—	10	1	VR	800m
40mm GL	+1	2/4*	5m/1m	1	1	VR	250m
40mm AutoGL	0	2/4*	5m/1m	50	20	VR	1600m
75mm cannon	+1	7	—	10	2	VR	750m
Hi-Ex	0	4	5m				
HEAT	-1	8*	2m				400m
75mm recoilless	0	8*	2m	1	1	VR	500m
90mm cannon	0	9	—	1	1	VR	750m
Hi-Ex	0	5	6m				
HEAT	0	10*	2m				400m
105mm cannon	+1	10	—	1	1	VR	1000m
Hi-Ex	0	6	6m				
HEAT	0	11*	2m				800m
105mm recoilless	0	11*	2m	1	1	VR	800m
120mm cannon	0	13	—	1	1	VR	1250m
Hi-Ex	0	7	6m				
HEAT	-1	12*	2m				600m
140mm cannon	0	16	—	1	1	ST	1500m
Hi-Ex	0	7	6m				
HEAT	-2	18*	3m				600m
EMG-85 railgun	+3	7	—	5	1/2	ST	1500m
EMG-83 railgun	+2	7	—	100	1	ST	1200m
EMG-84 railgun	+1	7	—	500	10	UR	1000m
1cm rail cannon	+2	10	—	50	2	ST	1000m
2cm rail cannon	+1	17	—	50	1	ST	1500m
3cm rail cannon	0	22	—	50	1/2	UR	1500m
E-Harpoon	+1	20**	—	1	1	ST	500m

Note: Hi-Ex shell penetration is not affected by range.

*HEAT Penetration not affected by range; Composite Armor halves penetration. ** See description in text.

power from the base vehicle. The EMG-85 can be mounted in vehicles as a sort of sniper rifle.
EMG-85 HVY +3 N R 5D10+10AP 5 1/2 ST 11,370 euro 1/2 space
EMG-83 HVY +2 N R 5D10+10AP 100 1 ST 17,500 euro 1 space
EMG-84 HVY +1 N R 5D10+10AP 500 10 ST 25,000 euro 2 spaces

1cm Rail Cannon: A magnetic cannon firing a 10mm hypervelocity slug. Its power and recoil requirements dictate a tracked chassis of at least 40 tons. HVY +2 N R 10D10 Armor-Piercing (10mm gauss) 50 2 ST 750,000 euro 5 spaces

2cm Rail Gun: A magnetic cannon firing a 20mm hypervelocity slug. Its power and recoil requirements dictate a tracked chassis of at least 60 tons. HVY +1 N R 16D10 Armor-Piercing (20mm gauss) 50 1 ST 1,500,000 euro 9 spaces

3cm Rail Gun: A magnetic cannon firing a 30mm hypervelocity slug. Its power and recoil requirements dictate a tracked chassis of at least 80 tons. It fires every other turn, due to power requirements and capacitor limits. HVY 0 N R 20D10 Armor-Piercing (30mm gauss) 50 1/2 UR 3,000,000 euro 15 spaces

E-Harpoon: This is an electrocution missile. It consists of a missile that is fired at the target, trailing a power line (this projectile can be attacked by anti-missile systems) connected to a capacitor bank in the launching vehicle. When the missile hits, it adheres to the target unit's surface. A massive electrical charge is then shunted through the line, melting both line and missile, but not before conducting this charge to the target. The target is hit with an effective Penetration of 20, *ignoring armor!* Vehicles with composite armor use their armor rating against this attack, as well as their Body rating.

Damage caused by this weapon is often temporary, as backup circuits come online. Each turn after damage is caused, the backup circuits cut in on a D10 roll of 1 or 2, negating the damage caused by the E-Harpoon. (Vehicles with Damage Control Systems recover in this fashion on a roll of 1-8. ACPA with EMP Sponges or Capacitors recover on a 1; but the devices are burned out, and the suit must use its backup Reality Interface (if any), and has its normal operating time cut in half.)

Recharging the capacitor bank takes a good 48 hours on 440 industrial power. There's enough power involved to run a Crowder electric car for months.

Extra Ammunition: Unless stated otherwise, extra rounds (#Shots= 1) cost 5% of the weapon's cost. Extra magazines (#Shots= more than 1) cost 10% of the weapon's cost, per hundred rounds or part thereof (Even launched grenades. The price listed in the description is for retail, small-lot amounts, and doesn't take the practice of massive military buying into account). That's right, the gatling guns hold more than their cost in ammunition. Ammo takes up spaces as follows: MGs, 40mm AGL, rail guns=1/4 space per magazine. Mini-guns, autocannons, 37mm=1/2 space per magazine. Gatling guns, 75mm= 1 space per magazine. 90mm, 105mm= 1/2 space per shot. 120mm, 140mm= 1 space per shot.

Rocket/Missile Weapons

LAW: A throw-away one-shot weapon. It's probably not the classic M72 LAW, but any one-shot throw-away is generically called a LAW. HVY -2 L P 4D10AP 1 1 VR 300 euro.

HLAW: A heavy one-shot throw-away. HVY -2 N P 11D10AP 1 1 VR 800.00 euro.

Militech RPG-A: The old "bazooka" concept of the reloadable rocket launcher made an American comeback with this 67mm rocket-grenade launcher. HVY -2 N R 6D10AP 1 1 VR 1500 euro. Each extra rocket costs 250.00 euro. It can also load H-E rounds (6D10/Pen.3, 6m Burst).

Militech RPG-B: A heavier, 90mm rocket launcher. HVY -2 N R 9D10AP 1 1 VR 1500 euro; each extra rocket costs 400 euro.

Light Anti-Tank Guided Missile: A wire-guided semi-active control missile. Popular brands include the Milan-C, the Militech Hotshot, and the Arasaka AP87. Can be bought as a single-shot (3000 euro) or reloadable (2500 euro, each extra missile costs 1500 euro). 2 spaces, 1/5 space per shot. HVY +2 N P 12D10AP 1 1 VR.

Heavy Anti-Tank Guided Missile: A wire or IR-guided missile. Most common include the Soviet Songbird, the U.S. TOW-III, Militech's Anvil-2, etc. Costs 10,000 euro, each extra missile costs 3500 euro. 5 spaces, 1/3 space per shot. HVY +2 N P 18D10AP 1 1 VR.

Hellfire: Laser-guided, extremely heavy and lethal. To use it, the target is painted with a laser. The missile(s) is fired before testing to see if the laser hits. If the laser hits the target, each missile fired at the target hits the target on a d10 roll of 2-10 (a 1 misses). Hellfire missiles cost 10,000 euro apiece. 1 space apiece. HVY special N P 20D10AP 1 1 VR.

Surface-to-Air Missile (SAM): The Scorpion is representative of these missiles. When tracking an aerial target, they ignore to-hit penalties for target movement. Hitting a non-aerial target is +10 Difficulty. HVY -1 N P 7D10 1 1 VR 1000 euro.

Vehicle-Mounted SAM (VSAM): Essentially vehicle-mounted versions of Air-to-Air missiles, these heavy missiles ignore target movement to-hit penalties when firing at aerial targets. They are Active missiles with a Skill of +15, using either radar or infra-red homing, so the operator's skill doesn't enter into hitting the target. Hitting a non-aerial target is +10 Difficulty. Special special N P 15D10 1 1 VR 10,000 euro. 1 space apiece.

Air-to-Air Missile (AAM): A dogfighting missile, this missile tracks using infra-red or some other active method (Active missile; Skill +15). It ignores target movement to-hit penalties when fired at aerial targets. Hitting a non-aerial target is +20 Difficulty (practically impossible). Its speed is 1400 mph. Special special N P 15D10 1 1 VR 15,000 euro. 1 space apiece.

Air-to-Air Medium Ranged Active-homing Missile (AAMRAM): An active radar-tracking missile (Skill +20), this monster reaches out 50 miles at Mach 2 (1500 mph) to attack its target. It does not use the normal range To-hit Difficulty, having a set To-hit of 10. The modifiers for the target's size and ECM are the only modifiers used to the to-hit die roll. *The firer's skill, reflexes, computers, etc., do not apply to the AAMRAM's to-hit roll. Target movement modifiers are ignored as well.* Special special N P 17D10 1 1 VR 250,000 euro. 3 spaces apiece.

2" Rocket: A small bombardment rocket intended to injure infantry and other light targets. Normally mounted in 1, 3, 6, and 19-shot pods. Any number of rockets can be fired from a pod in one turn. Pods cost 200 euro per rocket space. Rockets cost 100 euro apiece. 1 space per 12 rockets (round off). HVY -2 N P 6D10 1 1 VR.

Rocket/Missile Weapons

Rocket Weapons	WA	Pen	Burst	#Shots	ROF	Rel	Range
LAW	-2	4*	2m	1	1	VR	200m
HLAW	-2	12*	4m	1	1	VR	200m
Militech RPG-A	-2	6*	4m	1	1	VR	750m
Militech RPG-B	-2	10*	4m	1	1	VR	500m
LATGM	+2	12*	4m	1	1	VR	1000m
HATGM	+2	18*	4m	1	1	VR	3000m
Hellfire	**	21*	4m	1	1	VR	3000m
SAM (Scorpion 16)	-1	4	6m	1	1	VR	1000m
VSAM	15A	8	10m	1	1	VR	5000m
AAM, short-ranged	15A	8	12m	1	1	VR	15000m
AAMRAM	20A	9	12m	1	1	VR	80000m
2" Rocket	-2	3	3m	1	1	VR	500m
2.75" Rocket	-2	4	6m	1	1	VR	500m
3.5" Rocket	-2	5	8m	1	1	VR	600m
5" Rocket	-2	7	15m	1	1	VR	2000m

Note: Rocket Weapons are high-explosive; their penetration is not affected by range. Missiles and rockets scatter as per the Rocket Salvo rules if the target is missed.
*HEAT warhead Composite Armor halves penetration. **If the painting laser hits the target that round, then the Hellfire hits.

2.75" Rocket: A medium rocket for medium-hard targets. Normally mounted in 3, 6, and 19-shot pods. Any number of rockets can be fired from a pod (or set of pods) in one turn. Pods cost 500 euro per rocket space. Rockets cost 200 euro apiece. 1 space per 10 rockets (round off). HVY -2 N P 8D10 1 1 VR.

3.5" Rocket: A large rocket intended for hard targets. Normally mounted in 3, 6 and 9-shot pods. Any number of rockets can be fired from a pod (or set of pods) in one turn. Pods cost 750 euro per rocket space. Rockets cost 400 euro apiece. 1 space per 6 rockets. HVY -2 N P 9D10 1 1 VR.

5" Rocket: An artillery shell with a rocket motor. Mounted in singles. Any number of rockets can be fired in one turn. Rockets cost 1000 euro apiece. 1 space per rocket. HVY -2 N P 13D10 1 1 VR.

Artillery

Artillery weapons are usually used in groups of identical weapons, so that they can be fired in salvos. This adds to the size of the burst area. Rockets fired indirectly use indirect fire rules for scatter, and have a burst area equal to the burst area of the rocket times the number of rockets fired. Other artillery weapons have a burst area of one weapon plus 1/2 the burst area per additional weapon fired in the salvo.

40mm Grenade Launcher: See page **17**.

40mm Auto-GL: See page **17**.

60mm Mortar: A relatively small (15 kg) infantry-carried mortar. It requires a two-man crew to achieve its rate-of-fire; with one man, it has an ROF of 1/2. HVY 0 N P 8D10 1 2 VR 750 euro. Shells cost 50 euro apiece.

80mm Mortar: A large (40 kg) mortar firing medium-sized shells. It requires a minimum two-man crew and works best with three men. HVY 0 N P 9D10 1 1 VR 1500 euro, 1 space. Shells cost 150 euro apiece and take up 1 space per 20 shells.

120mm Mortar: A very large mortar usually mounted in vehicles, this requires a three-man crew due to the size of the shells. HVY 0 N P 13D10 1 1 VR 5000 euro, 3 space. Shells cost 250 euro apiece and take up 1 space per 10 shells.

105mm Howitzer: The smallest of field pieces, the standard 105 continues to soldier on. It takes a minimum crew of two men and works best with four. May use an autoloader and rocket-assisted shells. HVY +1 N P 11D10 1 1 VR 100,000 euro, 6 spaces. Shells cost 500 euro and take up 1 space per 5 shells.

150mm Howitzer: This gun may be up to 155mm; it works the same. It takes a crew of four to operate this goliath. May use an autoloader and rocket-assisted shells. HVY +1 N P 13D10 1 1 VR 150,000 euro, 20 spaces. Shells cost 1000 euro and take up 1 space apiece.

200mm Howitzer: The 8" monster cannon; few guns of this size are seen on the mobile battlefields of 2020. This cannon takes a four man crew. May use an autoloader and rocket-assisted shells. HVY 0 N P 28D10 1 1/2 VR

ARTILLERY

ARTILLERY WEAPONS	WA	PEN	BURST	#SHOTS	ROF	REL	RANGE
40mm GL	+1	2/4*	5m/1m	1	1	VR	500m
40mm AutoGL	0	2/4*	5m/1m	50	20	VR	3200m
60mm Mortar	0	4	5m	1	2	VR	2000m
80mm Mortar	0	5	6m	1	1	VR	3500m
120mm Mortar	0	7	6m	1	1	VR	6000m
105mm Howitzer	+1	6	6m	1	1	VR	17000m
150mm Howitzer	+1	7	6m	1	1	VR	24000m
200mm Howitzer	0	15	8m	1	1/2	VR	20000m
2.75" Rocket	-2	4	6m	1	1	VR	2000m
3.5" Rocket	-2	5	8m	1	1	VR	2000m
5" Rocket	-2	7	15m	1	1	VR	2000m
230mm Rocket	0	4*	45m	12	3	VR	28000m

Note: Artillery weapons use high-explosive shells; their penetration is not affected by range.
*Composite Armor halves penetration.
Mortars have a minimum range of 1/100 their maximum range.

250,000 euro, 30 spaces. Shells cost 2000 euro and take up 1 space apiece.

2.75" Rocket: A medium rocket for medium-hard targets. In artillery mode, it's mounted in 6, and 19-shot pods with longer-ranged engines. Any number of rockets can be fired from a pod (or set of pods) in one turn. Pods cost 500 euro per rocket space. Rockets cost 200 euro apiece. 1 space per 10 rockets (round off). HVY -2 N P 8D10 1 1 VR.

3.5" Rocket: This is the same thing as the direct-fire rocket, but with a more powerful motor. It tends to be used in salvos from vehicle-mounted racks. Racks cost 500 euro per rocket and take up 1 space per 6 rockets. HVY -2 N P 9D10 1 1 VR 400 euro.

5" Rocket: Artillery rockets put to their proper use. They are mounted in racks, 1/2 space and 500 euro per rocket, and fired off in salvos.HVY -2 N P 13D10 1 1 VR 1000 euro.

230mm Rocket: This is a massive pod filled with a dozen massive rockets. These rockets are loaded with multiple-bomblet warheads, and can cover a huge area with grenade-equivalent bombs. It is purchased as a single pod; reloading can only be accomplished witha special reloader vehicle that carries extra missiles and a crane. HVY 0 N P 4D10AP 12 12 VR 175,000 euro, 30 spaces. Extra rockets cost 2500 euro apiece (a full reload costs 30,000 euro).

ARTILLERY AMMUNITION

These alternative round fillers can be used by any artillery weapon but the grenade launchers. The 230mm rocket cannot use Armor-Piercing or Cluster-Bomblet rounds (it's both).

Armor-Piercing: For howitzers only. Doubles the cost of the shell and reduces the Burst to 0. Doubles Penetration on the 105mm, triples the Penetration on the 150mm and 200mm.

Chemical: The shell is filled with gas or smoke. Triple the Burst, no Penetration. Smoke shells cost 1/3 normal, hot smoke (blocks IR and thermographs)costs normal, tear gas costs double, knock-out gas costs triple, and nerve gas costs 20 times normal.

Cluster Bomblet: The shell is loaded with bomblets. Double the price, triple the Burst, reduce Penetration to 4.

HEAT: This substitutes a shaped-charge warhead for the normal high-explosive. Double the shell cost, double the Penetration (and halve it again if attacking Composite Armor) and reduce the Burst to 4m. Works best when combined with Laser-Guided.

Laser-Guided: A laser-guided shell follows a painting laser to its target. On the turn when the shell hits, if there is a laser painting the target spot, the shell strikes that spot on a D10 roll of 4-10, otherwise it scatters 2D10 meters on the Grenade Table. Triple the base cost of the shell.

Rocket-Assisted Shells: Artillery shells with rocket boosters. Double the range and number of spaces the shell takes up, triple the base cost of the shell.

White Phosphorous: Anyone hit with WP sustains 3D6 burn damage to that location per turn for at least a half-hour, or until the WP fragments are removed. If the fragment hits body armor, it does its damage to the armor, doing full damage to kevlar and armorjackets (only flak jackets, doorgunner's vests, Metalgear™ and Powered Armor is proof against it). For instance, an area protected by an SP 14 armorjacket takes 11 points of damage from WP. The

jacket is reduced to SP 3 at that location, and will be burned through next turn. If the fragment hits flesh, it burns its way in and will have to be removed surgically (skillful use of a knife or other sharp probe can do the trick if applied on the first three turns of WP burn). WP shells cost four times normal.

Bombs

A bomb scoring a direct hit (very, very, very rare) muliplies its penetration by five — almost no vehicle can survive a direct bomb impact. Bomb penetration is not affected by range.

Option cost multipliers are applied to the base bomb cost. So a guided anti-tank 3000-lb bomb would cost 3000+4500+1500= 9000 euro.

Anti-Personnel: The bomb fragments into smaller fragmentation packages. These normally won't hurt vehicles, but will hurt personnel.

Anti-Tank: A HEAT warhead built into a bomb. If it hits, it destroys whatever it hits ... Penetration is halved by Composite Armor.

Cluster: Dual-purpose bomblets that carpet an area. Any vehicle within the burst radius has a 20% chance (9-10 on 1d10) of sustaining a direct hit, with attendant Penetration (subtract 3 from the bomb's normal Penetration, then multiply the result by 5 to get the direct-hit penetration. Composite Armor halves the final Penetration).

> (...scribble, scribble...) "uh, leg in ditch," (scribble, scribble...), "torso in alley," (...scribble...) "head in enterse..." (rub, rub, rub, scribble), "head in intersex..." (rub, rub, rub, scribble), "head in intersecsh... ...oh, frag!" (rub, rub, BOOT!), "head in ditch" (...scribble, scribble.)
>
> —report being filled out by unidentified Night City paramedic.

Fuel-Air Explosive: This bomb covers its burst area with an explosive gas, which is sparked to cause a gigantic fireball/shockwave. It is the most destructive explosive in the world, short of thermonuclear ordnance. Any target caught in the burst area suffers a Penetration attack of 10. Only sealed armor offers any armor protection or resistance!

Guided: This option allows the bomb to be remote-controlled, as per the bombing rules.

Incendiary: Anything flammable within the bomb's burst area catches fire. Treat as a flamethrower attack that lasts 20 turns or until the burning chemical is removed from contact (2d10 damage/Penetration 1 per turn).

Napalm: Jellied gasoline on fire, this is the most hideous bomb weapon. Anyone or anything caught in the burst area is covered in napalm, and sustains a Penetration 3 hit every turn for 20 turns. The stuff burns in water, too, so immersion is no help. Only sealed armor provides any protection from this attack.

Lasers

Vehicular lasers are primarily restricted to space warefare. Inside the atmosphere, railguns and electrothermal-enhanced weapons have the lion's share of developmental funds. At the moment, the only viable battlefield laser weapon is the Painting Laser, used to guide laser-guided weaponry. It can be blocked by anti-laser aerosols and smoke. HVY or RIF +3 N P No Damage (looking directly into it has a 90% chance of blinding; biological eyes are permanently blinded!) - 1 VR 1,000 euro. ■

BOMBS

Bombs	WA	Pen	Burst	#Shots	ROF	Rel	Cost	Spaces
100-lb	-3	5	10m	1	1	VR	250	1
250-lb	-3	6	16m	1	1	VR	450	1
500-lb	-3	8	48m	1	1	VR	500	2
750-lb	-3	9	64m	1	1	VR	600	3
1000-lb	-3	10	72m	1	1	VR	700	4
2000-lb	-3	11	96m	1	1	VR	1000	5
3000-lb	-3	12	104m	1	1	VR	1500	6

Options	WA	Pen	Burst	Cost
Anti-Personnel		x1/2	x2	x2
Anti-Tank		x2	4m	x3
Cluster		-3	x2	x3
FAE			x3	x10
Guided	+2			x2
Incendiary			x2	x3
Napalm		3	2x long, 1/2x wide	x5

> "Nice shot, Mendez. That one went straight into the jaccuzi. I'd say we just took out fifty percent of Rana Corp's board of directors. Let's bombshell outta here."
>
> —Lt. Laura Ethridge, Militech Extractions.

Equipment and Gear

Personal Gear

Artillery Computer: Availability P, costs 1,500 euro, no space. This can be hand-carried or vehicle-mounted (if hand-carried, it weighs 1 kg). This little device tells artillery spotters the range to the target using a small laser, calculates the hang time and weapon azimuth, etc. — it practically does everything but aim the gun! Heavy Weapons skill is required to use it, and it adds a +10 bonus to any artillery to hit roll when used by a spotter. For an additional 500 euro, it can be outfitted with a painting laser that can guide laser-seeking missiles.

Personal Painting Laser: Availability P, costs 1,000 euro, no space. This hand-carried painting laser is the size of a flashlight, and is used for painting targets to guide in laser-guided ordnance. It can be attached to a rifle, underneath the barrel.

Armor

Composite Armor: Availability R, costs 400% of vehicle base cost. Composite armor has two effects: It halves the penetration of shaped-charge weapons, and adds 25% more SP to the vehicle.

IR Baffling: Availability P, costs 10% of vehicle base cost (25% of vehicle base cost for AVs and jets). Reduces and scatters IR signature to make it difficult to spot and track with IR and thermographs.

Reactive Armor: Availability P, costs 1% of vehicle base cost. Reactive armor is a series of explosive charges that explodes *in opposition* to shaped-charge projectiles, disrupting their attack. When a vehicle with reactive armor is hit by a shaped-charge attack (rocket or missile), roll 1D10. On a 2-10 the armor explodes outward, halving the penetration of the attack. Subtract 1 from the D10 roll for every two shaped-charge or high-explosive hits that the vehicle has taken. For instance, an APC with reactive armor comes under attack by a PA suit armed with a missile launcher and a 20mm cannon. The suit operator, realizing that his missile stands a good chance of "bouncing" if he doesn't do something about the armor, hoses the APC with 20mm HE, scoring 6 hits. Assuming he's still alive on the next turn, he can launch his missile and it only has a 60% chance of being disrupted by the reactive armor (instead of the 90% chance there was before).

Reactive armor can be replaced after battles, at the original cost. Since this involves putting a bunch of small charges on the vehicle, it's a simple job and only takes about 15 minutes. 1 space of cargo holds enough charges to replace almost any vehicle's reactive armor once.

Stealth: Availability R, costs 1,000% of vehicle base cost, 1/8 vehicle spaces (round up). Stealth is ECM through design, reworking a vehicle to deflect or absorb radar and other sensor radiation. It's usually too expensive to apply to ground vehicles.

Environment

Amphibious Modifications: Availability P, costs 50% of the vehicle's base cost, 2 spaces. These modifications allow a vehicle to float in water, as well as propelling itself at 1/10 speed. Cannot be fitted to boats (that'd be silly) or hovercraft (they don't need them). Vehicles over 15 tons can be fitted with this, but will not float. They have "snorkel" systems that can allow the vehicle to crawl along the bottom of water obstacles, as long as the water is not over 5m deep (the snorkel is only 5m long).

Crash Control Systems: Availability E, cost 250 euro per person, no space. Crash bags and restrain systems for crew and passengers provide the equivalent of SP 40 against collision or crash damage.

Damage Control: Availability P, costs 100% of the vehicle's base SDP cost, 1/10 of the vehicle's space (round up). A quadruple-redundancy, computer-controlled system of backups, fire-extinguishers, circuit breakers, etc., this system allows a vehicle to ignore damage results! If a system is damaged, the Damage Control system allows it to continue function as if undamaged on a 1D10 roll of 6-10. Make this roll when the system is damaged; if the roll is 5 or less, the system in question is damaged and unusable until repaired. If the roll is 6+, the system is treated as undamaged, which means it might be damaged again in the future, requiring a new damage control roll.

Damage control also includes powerful fire-fighting capability, so fire extinguishers are not required.

Ejection Seats: Availability C, costs 1000 euro per seat, no space. This allows a crewmember to eject when the vehicle is in danger. The seat has a rocket which boosts the crewmember up to 100m; a parachute then deploys and allows the seat and rider to drift to the ground. "Unwanted Guest" ejection seats (sans parachute) cost 750 eb., and launch is controlled by the driver.

Environment Control: Availability E, costs 2500 euro, 1 space. The ultimate in air-conditioning, allowing exact setting of air temperature, humidity, pressure, etc. This makes the vehicle air-tight and includes filtration systems to filter out any pollution or gas.

Fire Extinguisher: Availability C, costs 500.00 euro, 1 space. A fire extinguisher pervents the vehicle from catching on fire. External fire extinguishers, used for putting out fires away from the vehicle, come in two types: Foam (Availability C, costs 1,000.00 euro, 2 spaces, 30 shots) and Water (Availability C, costs 750.00 euro, 5 spaces, 30 shots). These are cannon, with a 50m range! Anyone hit by a water cannon has to make a Body roll at +15 to remain upright. Anyone hit by a foam cannon is covered in foam, and will have trouble standing, seeing, and holding onto things. But he's not likely to be on fire.

Life Support System: Availability C, costs 500 euro and 1 space per 4 man-hours. This system reconditions the air inside a vehicle for 4 man-hours (that is, four hours of air for one person, two hours for two people, etc.). It also makes the vehicle air and water-tight. Additional man-hours can be bought at the original price and space (i.e., 1,000 euro and 2 spaces buys 8 man-hours, 1,500 euro and 3 spaces buys 12 man-hours, etc.).

Luxury Accomodations: Availability is always E (there are always people willing to sell you useless things at a high price). Some samples include:

Wet Bar: 500 euro, 1 space.

Fold-Down Bed: 250 euro (and up), 1 space. Will hold up to two people. For extra capacity,

add 1/2 space and 100 euro per person.

Jaccuzi: 2,500 euro, 3 spaces. Will hold two people.

Seat Massager: 200 euro apiece, no space.

Mini-Galley: 1,000 euro, 2 spaces.

Countermeasures Dispensers

These dispensers can be set on "automatic," dispensing one use per turn until turned off or empty.

Anti-Laser Aerosol: Availability P, costs 1,000 euro (reloads cost 100 euro per, holds enough gas for 30 uses), 1 space. Aerosol ports around the vehicle dispense laser-blocking gas. An anti-laser aerosol will block any laser-based system (laser rangefinders, painting lasers, weapon lasers, etc.) 90% of the time.

Chaff: Availability P, costs 1,000 euro (reloads cost 250 euro per, holds 20 chaff bundles), 1 space. Chaff ports drop chaff pods that fill the air around the vehicle with reflective metal strips. It helps decoy radar-guided missiles, and blocks radar-based systems 70% of the time, per bundle dropped. A chaff dispenser can only drop one chaff bundle per turn (but there's nothing to say a vehicle can't have multiple chaff dispensers).

Flares: Availability P, costs 1,000 euro (reloads cost 100 euro per, holds 20 flares), 1 space. Flares burn hot, hopefully blocking heat-seeker warheads and obscuring thermographs. Notice/Awareness rolls while using a thermograph against flares are at -5.

Smoke: Availability C, costs 500 euro (reloads cost 10 euro per, holds enough smoke for 30 uses), 1 space. Smokescreens impose a -3 to-hit penalty for shooting through them (unless using a radar/laser-microwave rangefinder), and make Notice/Awareness rolls +10 Difficulty higher. Thermographs can see through smoke. IR smoke costs 300 euro per reload and acts just like smoke, except that thermographs can't see through them.

Smoke Launchers: Availability C, 250.00 euro, no space. This smoke mortar launches smoke rounds 50-100 meters (the exact range is preset) ahead of the vehicle. Can be IR smoke for 300 euro apiece. Reloads cost 25 eb. apiece.

Active Countermeasures

Active Gatling Anti-Missile System (AGAMS): Availability R, Cost 30,000.00 euro, 1 space (can be shoulder-mounted on a PA suit). Based on the .22 minigun design, this system detects missiles with radar and douses them with a hail of slugs to destroy them before they hit. The system includes its own integral radar (additional sonar-based detection system available for 5,000.00 euro).

If a missile or other slow-moving projectile is fired at the vehicle with the AGAMS, the radar detects it 90% of the time (roll a D10; on a 1, the system fails to detect the incoming projectile). For the purpose of detection, the system's sensing threshold is set at an object no smaller than 10cm by 10cm by 20cm, moving at a velocity between 100-500m per second. This means it works on any rocket weapon.

Once the system has detected an incoming missile, it attempts to shoot it down once in range (100m). The system can be confused by multiple projectiles, its concentration diluted as it attempts to handle all available targets. Roll 1D10 for each missile detected, -1 for each missile. On a roll of 4+, the missile is safely destroyed. On a roll of 1-3, the missile is detonated within its burst radius, attacking the target with 1/2 its usual penetration factor. On a roll of 0 or less, the AGAMS fails to destroy the missile and it attacks the target as normal.

Active Explosive Anti-Missile System (AEAMS): Availability R, cost 15,000.00 euro (replacement charges 1,000.00 euro), no spaces. May only be mounted on vehicles. This system uses radar/sonar to detect incoming projectiles and detonate fragmentation charges in an attempt to destroy or deflect the incoming projectiles. Like the AGAMS, if a missile or other slow-moving projectile is fired at the vehicle with the AEAMS, the radar detects it 90% of the time (roll a D10; on a 1, the system fails to detect the incoming projectile). For the purpose of detection, the system's sensing threshold is set at an object no smaller than 10cm by 10cm by 20cm, moving at a velocity between 100-500m per second, which means it works on any rocket weapon.

Once a missile has been detected, the AEAMS "fires" an explosive at it. This explosive discharge has a 90% chance of destroying or diverting the missile. The AEAMS works as well against multiple targets as against one target, since the vehicle has charges mounted at all angles!

These charges can even be used as an anti-personnel system, since each charge is equivalent to a Claymore mine (the vehicle's armor absorbs the backblast. Damage is 5D6 and burst area is 4m line from the center). This requires that a crewmember set them off manually, instead of shooting a regular weapon.

AEAMS charges do run out, and the fewer charges the vehicle has, the less chance of knocking out incoming missiles. For every four charges that the vehicle has used at the beginning of a missile/rocket attack, the chance of successfully destroying an incoming missile drops by 10%. As noted, replacement charges cost 1,000.00 euro (this replaces all the vehicle's AEAMS charges). These replacements can be carried as cargo in a grenade box which weighs 60 kg when loaded. Replacing the AEAMS charges takes 15 minutes.

Anti-Personnel Grenade Charges: Availability P, costs 1000 euro, no space. These are standard fragmentation grenades attached to the hull, used to kill infantry in close quarters. There are 20 grenades (five per side), and they can be fired separately or one side at a time. Reloads cost 35 eb. per grenade.

Communications

Cellular Phone: Availability E, costs 500 euro, no space. A regular cellular phone, but with longer range (can link into urban networks from a distance of 20 km).

Laser Communicator: Availability P, costs 7,000 euro., no space. This allows the vehicle to communicate with another similarly-equipped vehicle within line-of-sight. It cannot be jammed, and can only be "tapped" by interrupting the beam (which interrupts the

communication) with another similarly-equipped vehicle.

Radio: Availability E, costs 200 euro, no space. This allows radio communication over an 80 km distance. Longer-ranged radio (costs 1,000 euro) allows radio communication over a 500 km distance. Military radio (Availability P, costs 2,500 euro) has a range of 500 km and is jammed on a 1D10 roll of 4-10.

Satellite Uplink: Availability C, costs 5,000 euro, 1 space. This allows the vehicle to uplink directly to a communications satellite in orbit.

Scrambler: Availability C, costs 500 euro, no space. A scrambler allows coded communication which can only be understood by another scrambler-equipped vehicle that has the proper scrambler combination. For an additional 500.00 euro, a scrambler can be equipped with a computer decoder that provides the correct scrambler combination 20% of the time (allowing listening in on conversations one shouldn't be able to).

Fire Control

Autoloader: This item is for large guns, providing a robotic loader built into the gun. It reduces the crew of a gun to one man (the gunner). An autoloader costs 50% of the gun's cost (minimum cost 25,000 euro) and takes up 1/4 the spaces of the gun (minimum of 1 space).

Computer Sights: These are computer-aided gunnery-control systems that make weapons more accurate. Each computer sight is installed for a separate weapon.

+1 to hit: Availability C, costs 2,500 euro, no space.

+2 to hit: Availability C, costs 5,000 euro, no space.

+3 to hit: Availability P, costs 10,000 euro, no space.

+4 to hit: Availability P, costs 15,000 euro, no space.

+5 to hit: Availability P, costs 25,000 euro, no space.

Weapon Stabilization: Availability P, costs 50% of the weapons' cost, takes up half the space of the affected weapons. Weapon Stabilization not only stabilizes the weapons to make firing easier while the vehicle is in motion, but also helps track the target. Vehicle weapons with stabilization have a +2 to hit when in motion.

Rangefinders: Visual: Availability C, costs 3,000 euro, no space. Radar: Availability P, costs 10,000 euro, no space. Laser: Availability P, costs 12,000 euro, no space. Microwave: Availability P, costs 15,000 euro, no space. Rangefinders help aim weapons accurately. In the 21st century, they are single-minded, but smart, computers that assist all the weapons aboard a vehicle, not just one. A vehicle with a visual rangefinder adds +1 to hit with all weapons except missiles. The other rangefinder types add +2 to hit with all weapons except missiles. The differences between the other rangefinder types are largely concerned with countermeasures — radar can be jammed or blocked by chaff, lasers can be blocked by chaff or aerosols, and microwaves can be blocked by chaff.

Multi-target: Availability P, costs 50,000 euro, no space. This system allows vehicle sensors to keep track of up to a hundred targets simultaneously, and fire radar-guided or active missiles at up to 10 targets in the same firing action. This requires a crewmember to operate it (designating targets); this crewmember may do nothing else (unless operating it as an additional system via cybernetic linkage).

Remote Targeting: Availability P, costs 1200 euro, no space. this is a "real-time" link for use with a forward observer vehicle or PA suit. The observer must transmit his data (gathered by observation or electronic system) via this link to the unit attempting indirect fire, or launching indirect guided weapons. This allows the indirect artillery gunner to use his **full** Heavy Weapons skill, and gain the sustained fire bonus (+3/turn of fire) vs a shifting *target*, rather than the target *area*. (See Indirect Fire, pg.8 for further details)

Robotic Weapons Control: Availability P, costs 25,000 euro per weapon installed, no space. Robotic weapons control installed on a weapon allows the weapon to be fired by robot control, with a combined weapons skill of +10 (plus full WA). Robots have to be told to fire; a vehicle crewmember can direct one robot weapon controller to fire on a designated target each turn, in addition to another action. For instance, Officer Kinkade is busy driving his squad car in hot pursuit of heavily-armed perps, and he hasn't got time to fire back at a pursuer. While driving the car (his action for the turn), he orders the robotic turret control to fire back at the car following him. Robotic weapons controllers can be linked to a Multi-target system, allowing them to fire under its direction. Each robot weapon so controlled counts as one of the 10 targets that the multi-target system can fire at in a turn.

Electronics

"AI" Robotic Control: Availability R, costs 1,000,000 euro, 1 space. This is a computer brain that controls the vehicle, and can control all functions simultaneously at skill +15 (essentially Reflexes 10 and skill +5. The robotic control has Reflexes 10 for purposes of initiative). It is the ultimate in autopilots, and has limited decision-making capability — which means if presented with a situation beyond its pre-planned plot, it will evaluate the situation according to mission data and proceed with the best available option that it can perceive.

This item has been developed from military robotics programs, and is still not smart enough to replace human control in military vehicles. It can control drones well, but has a bad habit of making choices that seem right at the time but turn out wrong — the system will make a decision based on insufficient data. Furthermore, its actions are extremely predictable, a definate disadvantage for military uses.

The system will follow orders given by designated controllers, and will execute them with literal precision, so watch your words when ordering "AI" Robotic Control units.

Auto-Pilot: Availability C, 250 euro, no space. An auto-pilot allows the driver to program a destination into a vehicle and leave the driving to the vehicle. Auto-pilots are very simple drivers, moving the vehicle along a simple, preprogrammed route to its destination. Navigational directions are provided in two ways. In urban areas, the auto-pilot links into a navdata system via radio (all 2020 vehicles come equipped with this sort of radio/

transponder system), and the city traffic computers help guide the vehicle safely to its destination (note: This system also allows city authorities to monitor and track vehicles within the urban area. Disabling the transponder to prevent this is usually illegal). Alternatively, the auto-pilot can be hooked into an onboard navigation system (see below).

The auto-pilot handles regular road problems (traffic, speed, etc.) very competently, counting as a total Driver +5 skill (meaning that the autopilot rolls 1D10 and adds 5 when making Driver/Piloting rolls). When faced with an unusual situation, such as a detour, the autopilot asks its controller(s) for new orders and directions.

Cybernetic Linkage: Availability C, costs 40% of SOP total cost, no space. This allows an operator with a Vehicle Link to link into a vehicle and control all of its functions without the need for further crew. Part of this option includes sensor gear integrated into the vehicle — cameras for "eyes," sonic receptors for "ears," full tie-ins to all other sensors and communications devices, etc.

Cybernetic Linkage allows more precise vehicle control — all vehicle control rolls, maneuvers, and combat rolls are at +2 skill when using a cybernetic link.

Such linkage also allows a single person to control more than one vehicular function at a time. This is less accurate and precise than concentrating on one action; each vehicle function handled in the same turn gives a cumulative -1 to skill, in addition to the +2 bonus. For instance, a pilot flying an AV while firing the minigun and using the sensors has a -1 to all three actions (-1 for piloting, -1 for firing a weapon, -1 for monitoring the sensors, +2 for cyberntetic linkage).

Each crew position in a cyber-equipped vehicle is usually fitted with a jack for dataplugs. The vehicle's computer may be programmed with ID codes and other security to restrict only certain people to certain functions, or restrict the vehicle from use by any but a select few persons, etc.

ECM: Availability P, costs 500,000 euro, 1 space. Electronic CounterMeasures is a sophisticated electronics system that is used to baffle, jam and mask electronics emissions and operation. In game terms, its use is simplified: ECM is either on or off. When on, the vehicle is attempting to jam the electronics around it. Jamming can extend out to 100m, thereby protecting everything out to a 100m radius. ECM can be extended to greater ranges, at a higher price: 500m, 1 million eb.; 1,000m, 2 million eb., 2 spaces; 10,000m, 5 million eb., 5 spaces; 100 km, 15 million eb., 10 spaces; 250 km, 50 million eb., 20 spaces. There are larger jammers, but they're too big to be mounted in vehicles and are ground-installed.

ECM jamming has the following effects: It jams radar and radio (it automatically jams civilian radar/radio. For military radar/radio, roll 1D10 per turn; on a 4-10, the radar is jammed), and it jams radar-guided missiles, adding +15 Difficulty to hit.

ECCM: Availability P, costs 100,000 euro, 1 space. Electronics Counter-CounterMeasures is a system of fine-tuned electronics used to punch through jamming. On a 1D10 roll of 4-10, it negates the effects of jamming. Only the ECCM-equipped vehicle enjoys these benefits, and only versus its designated target (which might not be the jammer; the ECCM-equipped vehicle might be targeting another vehicle that is within the jamming radius of another vehicle).

Entertainment System: Availability E, costs 500.00 euro (and up), no space. What's a tank without a really killer entertainment system? The basic cost provides a good sound system. For an additional 500 euro, you can have an audiophile's dream system. A video player and screen costs 150 euro, a holosystem costs 750 euro, and a "virtual reality" holosystem that makes the interior of the vehicle seem like there are no walls or roof (or program it with the interior of your choice) costs 10,000 euro and takes up 1 space.

Image Enhancement: Availability C, costs 2500 euro, no space. This ties into a vehicle's sensors to enhance the images thus perceived. It gives the Notice/Awareness bonus for "computer-assisted optics."

Infra-Red Sensors: Availability C, costs 1000 euro, no space (active sensors cost 1500 euro). This equips the vehicle with IR sensors for seeing heat emissions. Passive IR (the normal cost) is not as useful as using a Thermograph; treat it as using a Thermograph, but at -3. Active IR adds an IR spotlight and headlights, so the vehicle can operate in the dark while not showing visible light. IR lights are fully visible to anyone with IR vision gear (including cyberoptics).

Laser Detector: Availability P, costs 1000 euro, no space. This is a set of external sensors that detects laser light that hits it. When a laser is detected, the detector informs the pilot that there is a laser beam currently striking the vehicle. If desired, and if the vehicle is equipped with it, the detector can also trigger anti-laser aerosols and/or chaff dispensers.

Laser Detectors aren't fool-proof. They only detect lasers 90% of the time (roll 1D10 per turn per laser).

Light Amplification: Availability C, costs 500 euro, no space. This negates darkness modifiers to combat and Notice/Awareness rolls. It includes polarizing dampers to compensate for extreme light sources (like being hit by a searchlight).

Magnetometer: Availability P, costs 3,000 euro, 1 space. Otherwise known as a Magnetic Anomaly Detector, a magnetometer detects large masses of metal within 200m. Not very useful in urban situations, but a good way of detecting hidden vehicles in rural terrain.

Magnetometers are excellent for detecting rail guns. The magnetic spike of firing a rail gun can be detected at three times the range of the rail gun firing.

Microwave Detector: Availability P, costs 5,000 euro, no space. This device detects focussed microwave bombardments 90% of the time (like that from a microwave rangefinder). It can be linked to trigger a chaff dispenser.

Navigation Systems: Availability C, costs 1,000 euro, no space. Navigation systems are a standard option on most commercial vehicles, consisting of a sophisticated navigation computer and a satellite uplink to navigation satellite transponders. With this system, you know exactly where you are at all times.

Radar: Availability C, costs 1,000 euro, no space (the military version is Availability P, costs 10,000 euro, no space). Radar detects objects out to a range of 10 km, as long as the distance between the radar and the object is not interrupted by another object. Radars can

be jammed (see ECM, above). Military radars have a range of 50 km and are harder to detect and jam.

Radar Options include:
Look-Down Radar: Added to military radar only. Availability R, costs 10,000 euro, no space. Aerial radar has a problem detecting low-flying targets against background clutter (only 30% chance of detecting a target flying within 200m of the ground when the radar-equipped aircraft is flying higher than 1000m). Look-down radar solves that problem.

Radar ID: Added to military radar only. Availability R, costs 100,000 euro, no space. After two consecutive turns of scanning the target, this computer matches the radar signature with a known signature and tells you what the radar's detecting. Unfamiliar targets can be imaged on the HUD or other screens after four consecutive turns of scanning.

Terrain-Following Radar: Availability C, costs 1000 euro, no space. This radar allows the driver to detect obstacles in total darkness, and gives a computer-generated image of the surroundings. When linked with an autopilot it allows the vehicle to steer around obstacles with ease before returning to preset course.

Radar Detector: Availability E, costs 50 euro, no space. Normally used for spotting radar traps, this will detect civilian radar 90% of the time (it only spots military radar 10% of the time), at 150% of the range of the radar set. Military radar detectors are Availability P, cost 5,000 euro, no space, and detects civilian radars 100% of the time. Military radars are only detected 50% of the time. A radar detector can be linked to trigger a chaff dispenser.

Security Systems: Vehicle security ranges from simple warning systems to active attack computers. They all share a common activation sequence: If someone gets too close to the vehicle when the security system is active, the system goes into action.

Security Options include:
Simple System: Availability E, costs 200 euro, no space. A sonic sensor linked to a simple computer, this alarm sets off a siren, activates a remote beeper, or both, when the vehicle is either physically molested, touched, or when someone gets within 1m of it (the owner sets the sensitivity level). It is an Average (Difficulty +15) Electronic Security check to disarm this system.

Shocker: Availability E, costs 500.00 euro, 1 space. this alarm system not only incorporates the features of the simple security system above, it also provides a mild electric shock when anyone touches the vehicle. This shock is not enough to injure, just enough to annoy. It is a Difficult (Difficulty +20) Electronic Security check to disarm this system (+5 Difficulty if not shielded from the shocks). The system can be set to deliver more lethal shocks (doing 6D6 damage; armor does not protect against this but a rubber suit does), in which case the shock battery has enough power to provide five blasts.

Shooter: Availability P, costs 1000 euro, no space. This system uses radar and sonar to locate people standing within 1m or touching the vehicle (the owner determines which), and attacks them using the vehicle's weaponry (typically anti-personnel grenades). The vehicle must have weaponry installed that can bear on the targets to work. Disarming this system is a Difficult (Difficulty +20) Electronic Security check. The Shooter also comes with a siren sound system that may be used to warn intruders away from the vehicle (according to law, if intruders are not warned before firing, any attacks made are "unprovoked assault" and are the owner's liability).

Searchlight: Availability C, costs 300 euro, no space. This is an external searchlight on a flexible mount. The searchlight can be targeted as a Small target, and has 5 SDP (for an additional 200 euro, a searchlight can be armored for 10 SP and 10 SDP). Searchlights can be used as a sort of weapon, blinding opponents. Aim the searchlight as normal, with a WA +5 and a maximum range of 200m. If the target is hit, there are no darkness modifiers to shoot the target, and it suffers the "blinded" modifier to hit listed in *Friday Night Fire Fight*.

For 150 euro, a vehicle may be mounted with high-power halogen headlights. Other than being mounted straight forward, they have the same effect as a spotlight.

Sonics: Availability P, costs 2,000 euro, 1 space. Sonic sensors give the vehicle sonar, capable of detecting objects within 50m (10 times that distance underwater). Sonar can only be jammed by a huge amount of focussed white noise (a generator big enough to be truck-mounted). If the sonar is not operating, sonics can be used to listen in on normal conversations at up to 200m away. Anyone with sonics can detect another sonic unit using sonar at a range of 200m (2000m underwater).

Telescopic Optics: Availability C, costs 500 euro, no space. This allows televisual scanning at extreme range (-1 to visual Awareness/Notice rolls for every 800m of range).

Thermal Imaging/Thermograph: Availability P, costs 2,000 euro, no space. Thermal imagers negate darkness penalties to combat and Notice/Awareness rolls. In addition, thermal imagers provide a +5 bonus to Notice/Awareness rolls when looking for hot (125+ degree) targets.

At 10m range, thermal imagers can "see" through solid walls, detecting hot targets (such as people, heating ducts, etc.). Well-insulated walls degrade this ability — a high-efficiency wall would prevent enough heat escaping to allow a thermograph to see anything. ■

> "Are you happy now? I knew that you just couldn't wait to try out that new AP Grenade system on someone. We're going to have to get a DNA check for a positive ID, now, you know that. Did you at least note where the remains landed?"
>
> — Sgt. Lloyd Farmer, Military Police, New York

VEHICLE CATALOG

Military vehicles are sold by many manufacturers. The most well-known are sold by the biggest manufacturers: Militech, GMI (General Military Industries), Bell-Boeing (and its subsidiary Fed-Boeing), BMW, McDonnell Douglas, Krupp-Porsche, Rockheed, and now Arasaka (through license with Mitsubishi). Many of these vehicles are not available to anyone not willing to buy them in lots of 5, 10, and so on—what's the use of buying singles? You can't make units out of singles, and if you can afford one, you might as well buy a squad! One of these vehicles on the street will certainly be priced at 2-5 times its list price, and might be, um, sort of used ("Pay no attention to the shell holes, mate; it's a great buy, and a steal at only 2 mill").

WHEELED VEHICLES

The Arasaka line has been characterized by tough, workhorse wheeled vehicles, a step away from the classic tracked APCs and a nod to the fact that most Arasaka vehicles are going to be used for security purposes in cities that have good road networks.

Other companies sell wheeled combat vehicles, too. The low cost of such vehicles is just too tempting to ignore when you're watching the bottom line. They may not be able to go everywhere that a tracked vehicle can go, but they're cheaper, easier to maintain, and don't use as much fuel.

ARASAKA KUMA LAND ROVER

This workmanlike vehicle has been likened to the classic Jeep™, and is becoming about as popular. It's tough, relatively cheap, and small enough to fit in places where a Hummer gets hung up. Arasaka has lots of them, because they get them at manufacturer's prices (15,000 eb.).

TOP SPEED:	90 MPH	**ACC/DEC:**	15/40
CREW:	1	**RANGE:**	400 MILES
PASSENGERS:	3	**CARGO:**	2 SPACES, 650 KG
MANEUVER:	0	**SDP:**	50 (BODY 2)
SP:	20 (ARMOR 1)	**TYPE:**	CAR
MASS:	2 TONS	**COST:**	28,000 EB.

Special Equipment: Pintle Mount, Off-Road Capable.

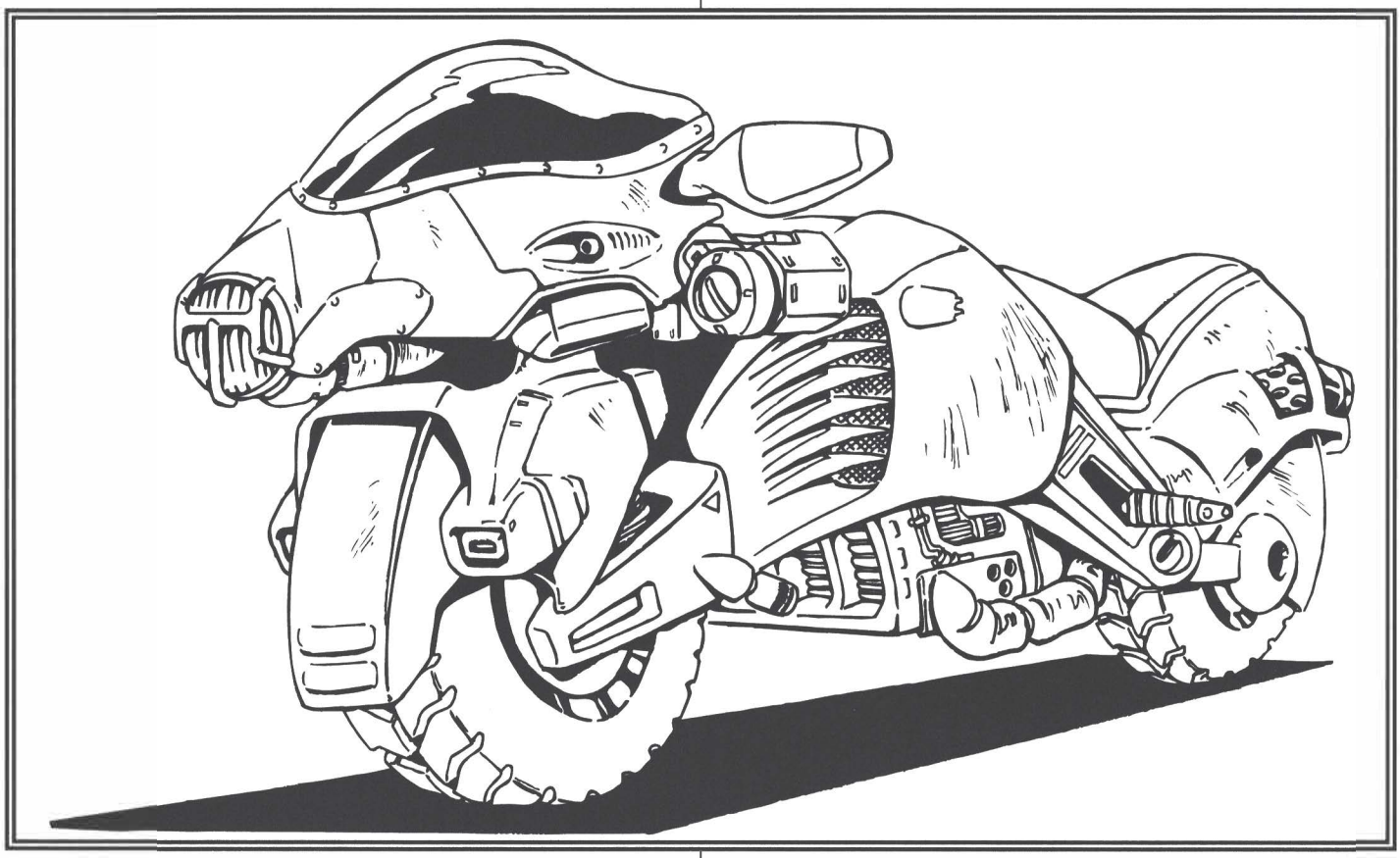
The Kuma is open and only provides SP protection to its personnel 25% of the time. The Pintle Mount gunner gets no protection when using the weapon.

HMMWV "HUMMER"

The third most well-known military wheeled vehicle of all time (behind the Jeep and the Deuce-And-A-Half), the Hummer all-terrain light military truck is made under license by over a dozen manufacturers who all sell to the military as well as to the public. This proliferation accounts for the artificially low price.

TOP SPEED:	100 MPH	**ACC/DEC:**	15/40 MPH
CREW:	1	**RANGE:**	400 MILES
PASSENGERS:	5	**CARGO:**	4 SPACES, 1,250 KG
MANEUVER:	-0	**SDP:**	60 (BODY 3)
SP:	10 (ARMOR 0)	**TYPE:**	PICKUP
MASS:	2.25 TONS	**COST:**	30,000 EB.

Special Equipment: Off-Road capable, pintle mount accessible by hatch in roof over front passenger seat.



▲ Darkwarrior Assault Motorcycle

A military variant of the civilian Darkwing off-road bike, the Darkwarrior sports a pair of light machineguns in addition to improved armor.

Top Speed:	100 MPH	**Acc/Dec:**	18/30 MPH
Crew:	1	**Range:**	400 MILES
Passengers:	0	**Cargo:**	45 KG
Maneuver:	+1	**SDP:**	35 (BODY 2)
SP:	5 (ARMOR 0)	**Type**	CYCLE
Mass:	140 KG	**Cost:**	13,350 EB.

Special Equipment: Off-road capable, radio.

Weapons: 2 5.56mm machineguns in open mounts fixed forward.

2 1/2-Ton Truck

This descendant of the legendary "Deuce-And-A-Half" truck has very little in common with its ancestor. It's a modern machine that'll haul 2500 kg over almost any terrain.

Top Speed:	80 MPH	**Acc/Dec:**	10/30 MPH
Crew:	1	**Range:**	800 MILES
Passengers:	1	**Cargo:**	2,500 KG
Maneuver:	-4	**SDP:**	75 (BODY 4)
SP:	10 (ARMOR 0)	**Type:**	TRUCK*
Mass:	5 TONS	**Cost:**	60,000 EB.

Special Equipment: Amphibious, off-road capable, radio, pintle mount on top of cab accessible from hatch over passenger seat.

*This does not haul the Mass Rating of the big trucks, so it costs only 400 eb. per SDP.

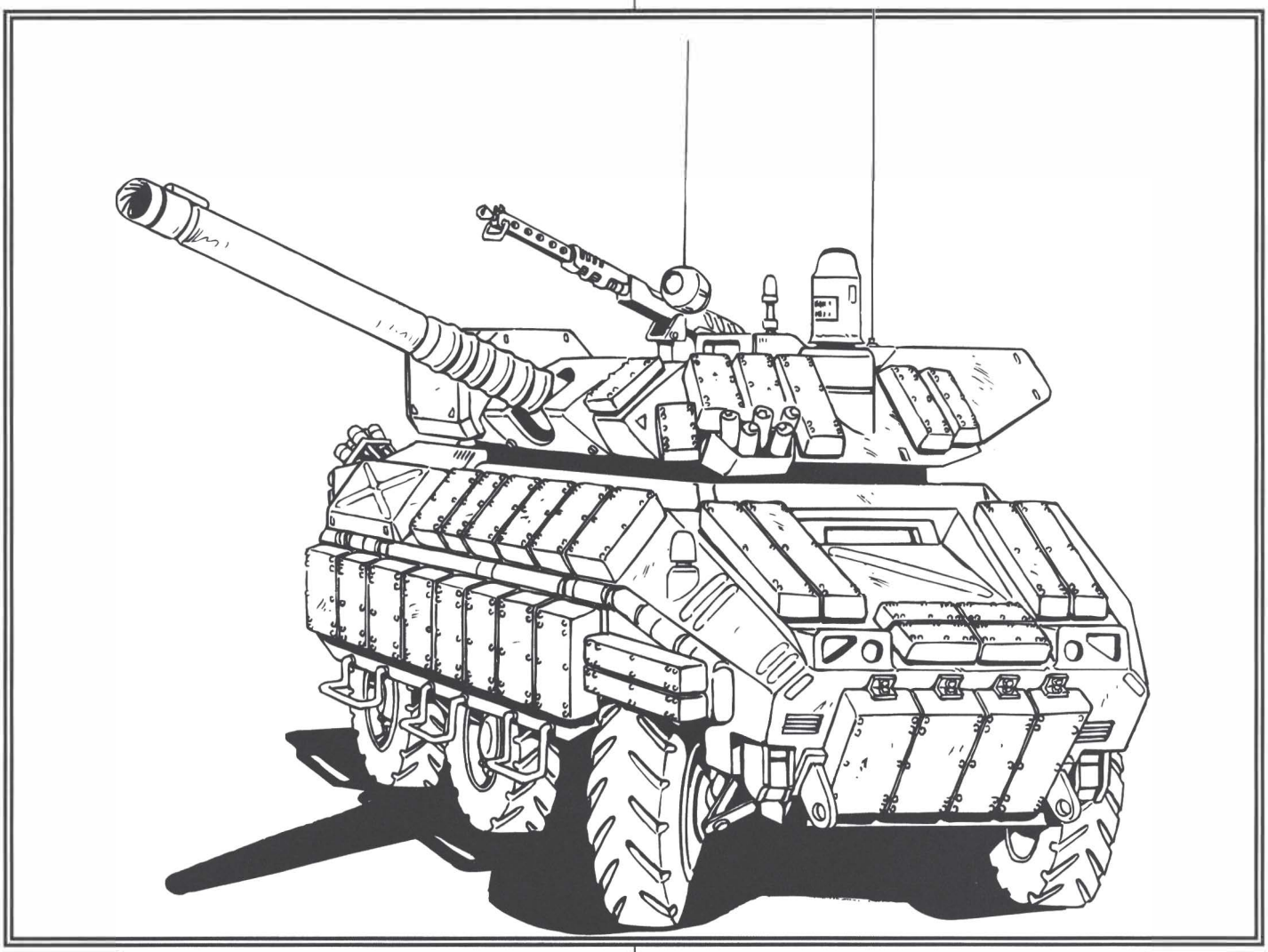
Arasaka Combat 10

The Combat 10 is a sort of battlefield taxi, a wheeled APC that can head into fire and take it. Purchasers should be warned that this is an urban assault vehicle, and should not be deployed in full-scale military situations! One hit from an ATGM or a heavy cannon and it folds up. But if the heavy stuff isn't flying, it's a good deal for the price.

Top Speed:	80 MPH	**Acc/Dec:**	10/30 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	10	**Cargo:**	2 SPACES, 8 TONS
Maneuver:	-2	**SDP:**	250 (BODY 12)
SP:	50 (ARMOR 2)	**Type:**	IFV
Mass:	25 TONS	**Cost:**	865,000 EB.

Special Equipment: Cyber-assisted, smoke dispenser, gas dispenser, satellite uplink, military radio, light amplification, auto-pilot, navigation system, off-road capable.

"Sure the Combat 10 can take you into a tight situation; just don't count on it getting you out..." — "Blades" Veers, Solo



▲ Paneurope Gladiator Armored Car

An EEC creation, this armored car is used by a lot of small countries that can't afford full-fledged MBTs. It does a fair job of making like a tank ... until a real tank rumbles onto the battlefield.

Top Speed:	60 MPH	**Acc/Dec:**	10/30 MPH
Crew:	3	**Range:**	300 MILES
Passengers:	0	**Cargo:**	6,000 KG
Maneuver:	-2	**SDP:**	200 (BODY 10)
SP:	80 (ARMOR 4)	**Type:**	IFV
Mass	20 TONS	**Cost:**	1.1 MILLION EB.

Special Equipment: Off-road capable, reactive armor, fire extinguisher, 8 man-hours of life support, anti-laser aerosol linked to laser detector, four smoke launchers, military radio, radar rangefinder, auto-pilot, navigation system, light amplification, radar, radar detector.

Weapons: Stabilized 75mm cannon in turret with +2 targeting computer and 8 magazines of shells; a 7.62mm machinegun with 2 magazines is mounted alongside the main gun. A 12.7mm machinegun is atop the turret on a pintle-mount.

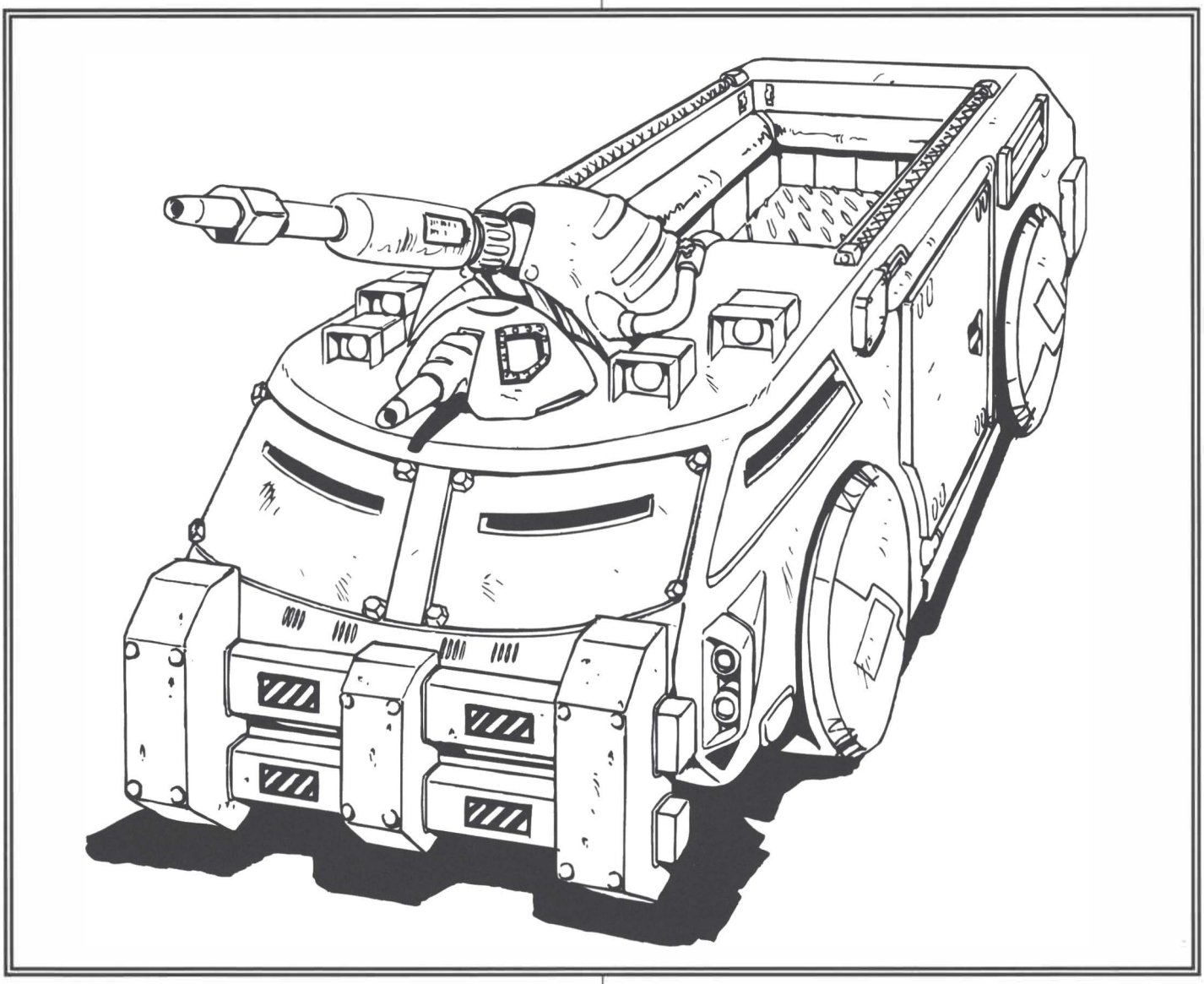
Yakurichi-Ural BTR-15 APC

The BTR-15 is the "Yak-U" entry into the mercenary market. An uprated version of the infamous BTR-70 of last century, it's actually quite popular, used by many third-world countries and SovOil (the main customer). It is not meant to stand up and fight armored vehicles, it's meant to get a squad onto the battlefield safely and cheaply, and get them out again if necessary.

Top Speed:	80 MPH	**Acc/Dec:**	10/30 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	8	**Cargo:**	NO SPACES, 3300 KG
Maneuver:	-0	**SDP:**	100 (BODY 5)
SP:	40 (ARMOR 2)	**Type:**	APC
Mass:	10 TONS	**Cost:**	310,000 EB.

Special Equipment: Amphibious, fire extinguisher, 4 man-hours Life Support, smoke dispenser with IR smoke, 2 smoke launchers, anti-personnel grenade charges, military radio, auto-pilot, navigation system, off-road capable.

Weapons: 14.5mm machinegun and 30mm cannon in turret.



▲ Arasaka Riot 8

A common sight on troubled streets. The Riot 8 is not a full-fledged combat vehicle, but can become a good facsimile in times of trouble.

Top Speed:	120 MPH	**Acc/Dec:**	10/30 MPH
Crew:	2	**Range:**	300 MILES
Passengers:		**Cargo:**	No SPACES, 6,500 KG
Maneuver:	-2	**SDP:**	200 (Body 10)
SP:	30 (Armor 1)	**Type:**	APC
Mass:	20 TONS	**Cost:**	575,000 EB.

Special Equipment: Cyber-assisted, military radio, satellite uplink, auto-pilot, navigation system, off-road capable.

Weapons: Water cannon in 360° open mount, Auto-GL in 180° open mount on cab.

The Riot 8 is open-topped, and troops inside it only receive SP cover 75% of the time.

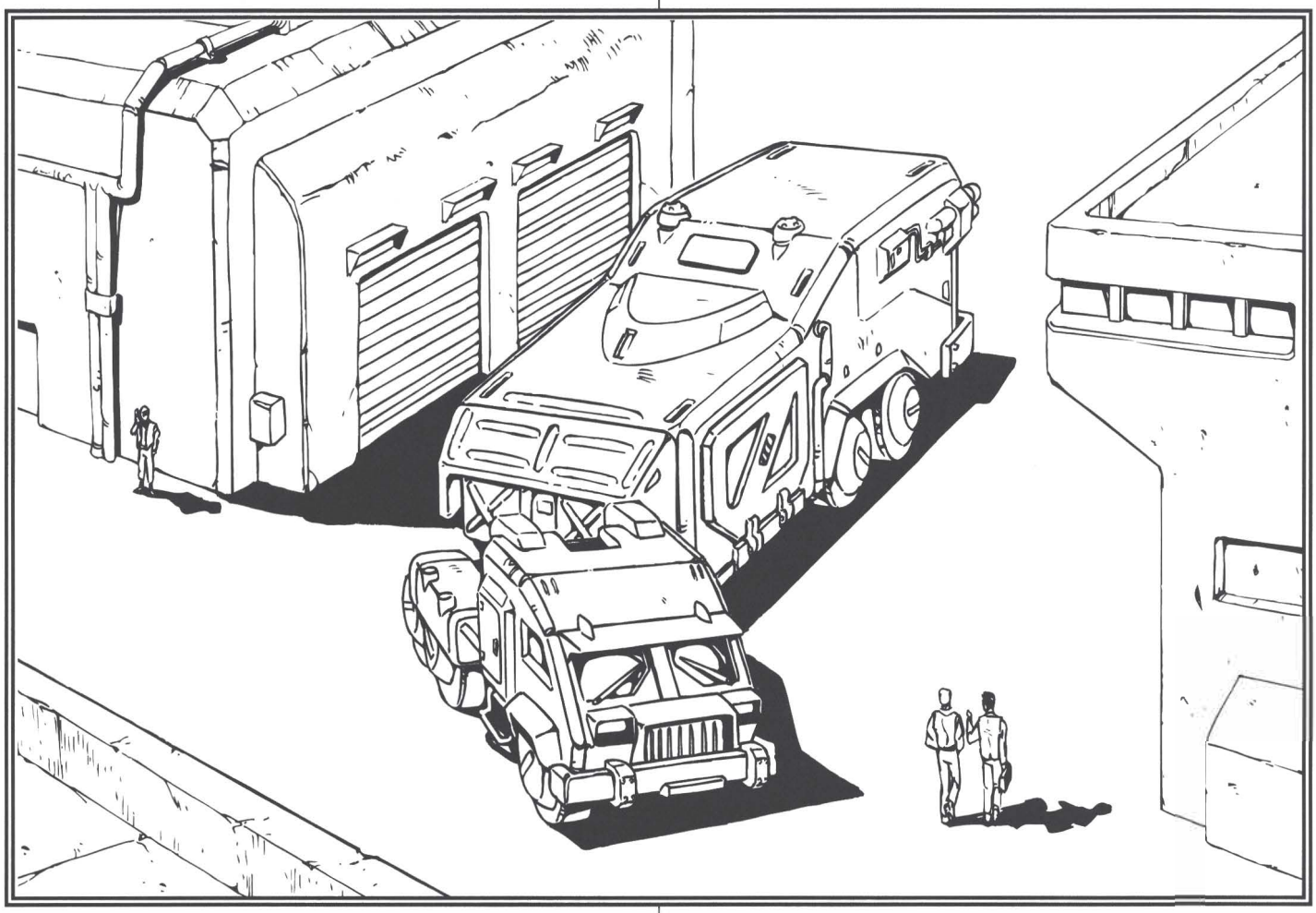
Militech Commando

For the low-budget buyer with anti-personnel security needs, Militech markets the Commando. At home in the city or in the country, if the Commando can't handle it, get a tank!

Top Speed:	80 MPH	**Acc/Dec:**	15/40 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	2	**Cargo:**	1 SPACE, 1,000 KG
Maneuver:	-3	**SDP:**	80 (Body 4)
SP:	20 (Armor 1)	**Type:**	Car
Mass:	3 TONS	**Cost:**	60,000 EB.

Special Equipment: Amphibious, off-road capable, radio, light amplification, searchlight, auto-pilot, navigation system.

Weapons: 7.62mm machinegun and 40mm Auto GL in turret; both weapons have an extra magazine in the body.



"The Peterbilt 2000: With the right options, one truck can be a whole convoy." — MotorArms Magazine Oct 2018

▲ Peterbilt 2000

This vehicle is representative of the rigs used by nomads and other cross-country truckers, including military convoys. Rough, ready, and rugged, the 2000 is easy to maintain, relatively easy on fuel, and can accept many different kinds of fuel with a little tinkering (a must for military service).

Top Speed:	100 MPH	**Acc/Dec:**	10/30 MPH
Crew:	1	**Range:**	960 MILES
Passengers:	1	**Cargo:**	36,000 KG. TRAILER
Maneuver:	-4	**SDP:**	100 (BODY 5)
SP:	20 (ARMOR 1)	**Type:**	TRUCK
Mass:	6.7 TONS	**Cost:**	110,000 EB.

Special Equipment: Radio, entertainment system, simple security system, radar detector, auto-pilot, navigation system, bed, mini-freezer, microwave. Can be cyber-assisted for an additional 30,000 eb.

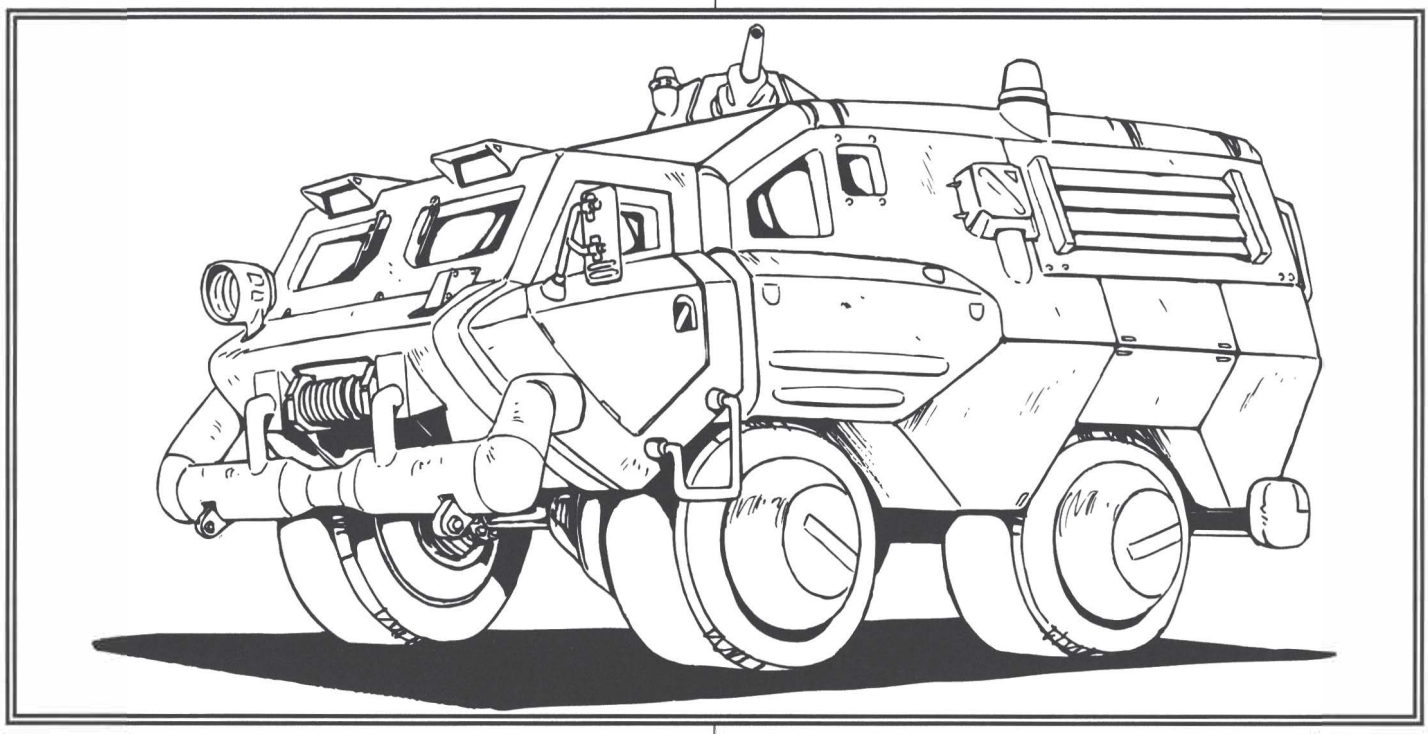
GMI Wolverine

GMI sells a lot of these armored cars to corporations that have a great deal of territory to patrol and aren't restricted by little things like the legality of shooting trespassers. It's got enough firepower to handle small-arms ambushes and enough speed to outrun big problems.

Top Speed:	110 MPH	**Acc/Dec:**	15/30 MPH
Crew:	3	**Range:**	300 MILES
Passengers:	0	**Cargo:**	1 SPACE, 2,500 KG
Maneuver:	-2	**SDP:**	75 (BODY 4)
SP:	35 (ARMOR 2)	**Type:**	APC
Mass:	7.5 TONS	**Cost:**	360,000 EB.

Special Equipment: Amphibious, fire extinguisher, 2 smoke launchers, anti-personnel grenade charges, military radio, scrambler, visual rangefinder, auto-pilot, navigation system, active IR sensors, light amplification, radar detector, searchlight, off-road capable.

Weapons: Twin 12.7mm machineguns and a reloadable Light ATGM in high-angle traverse turret; 4 magazines of 12.7mm ammunition (two apiece; each gun has 150 normal rounds and 150 AP rounds) and 5 extra ATGM rounds. The ATGM rounds have semi-active thermal guidance.



▲ BMW 2020

There are some who consider law enforcement to be a close relative of combat duty. Most inner-city cops consider combat duty to be the lesser hazard. The BMW 2020 Urban Patrol Vehicle's military use is normally confined to security, but its off-road capability makes it useful for field duty.

Top Speed:	100 MPH	**Acc/Dec:**	15/40 MPH
Crew:	2	**Range:**	300 MILES
Passengers	4	**Cargo:**	2 SPACES, 1,000 KG.
Maneuver:	-1	**SDP:**	75 (BODY 4)
SP	30 (ARMOR 1)	**Type:**	CAR
Mass:	3 TONS	**Cost:**	90,000 EB.

Special Equipment: Off-road capable, crash control systems, fire extinguisher, military radio, infra-red, light amplification, radar.

Weapons: Turreted 1-space weapon (7.62mm Minigun, 40mm Auto-GL, or water cannon).

HOVERS

Hovercraft have their uses. They're faster than anything else on the ground (except rockets and dragsters) and they have no problems with land/water interface, since they can drive right off the water and right onto the beach. Militarily, that ends their usefulness — they can't traverse wooded or rough terrain, their lack of maneuverability makes trucks look graceful, they're too lightweight to haul much armor or weaponry, they eat a lot of fuel, and they make a lot of noise. In addition, in dusty conditions, a hover kicks up a lot of dust; you can see it miles off. The same wind blast makes smoke dispensers useless with hovers.

"Panzers," armored fast hovercraft, are popular with some mercenary units and smugglers. Introduced by the Navy as hovercraft gunships, they accompanied the Marine Corps landing hovers onto the beach and inland to provide some fire support. Off the beach, their liabilities became apparent, and when the military was reduced in force, a lot of panzers were dropped with them. Many of them went to National Guard and Coast Guard units, where they served well in the Gulf of Mexico and on the Mississippi.

NAVY M-40 GEV

The old Navy M-40 is still found with a lot of state forces, and is the patrol craft most often encountered by "panzer" smugglers.

Top Speed:	180 MPH	**Acc/Dec:**	15/10 MPH
Crew:	4	**Range**	400 MILES
Passengers	0	**Cargo:**	3,000 KG
Maneuver:	-1	**SDP**	100 (BODY 5)
SP:	50 (ARMOR 2)	**Type:**	HOVER
Mass:	10 TONS	**Cost:**	1.89 MILLION EB.

Special Equipment: Composite armor, crash control systems, environmentcontrol, fire extinguisher, AGAMS, military radio with scrambler, laser rangefinder, auto-pilot and navigation system, image enhancement, laser detector, military radar, thermograph.

Weapons: 30mm autocannon and painting laser on articulated mount forward, two 40mm Auto-GLs in articulated mounts right and left (with one magazine apiece), 4 Hellfire missiles forward on small weapon wings.

GEB Duster

A small hover, the basic Duster (unarmored, without the pintle mount) is a pleasure watercraft on the civilian market. The military Duster is more of a hoverjeep than an armored vehicle, but it serves a great many corporations as a maritime patrol craft; the hovercraft equivalent of the Arasaka-Mitsubishi *Kuma*.

Top Speed:	150 MPH	**Acc/Dec:**	15/10 MPH
Crew:	1	**Range:**	400 MILES
Passengers:	3	**Cargo:**	1 SPACE, 800 KG
Maneuver:	-1	**SDP:**	25 (BODY 2)
SP:	10 (ARMOR 0)	**Type:**	HOVER
Mass:	2.5 TONS	**Cost:**	85,000 EB.

Special Equipment: Radio, pintle-mount.

GMI Hovertruck

A variant of the U.S.M.C. APC, the hovertruck has been refitted to serve as a combination troop/cargo vehicle.

Top Speed:	100 MPH	**Acc/Dec:**	15/10 MPH
Crew:	2	**Range:**	400 MILES
Passengers:	12,NO CARGO	**Cargo:**	12 SPACES, 5 TONS
Maneuver:	-2	**SDP:**	100 (BODY 5)
SP:	20 (ARMOR 1)	**Type:**	HOVER
Mass:	10 TONS	**Cost:**	220,000 EB.

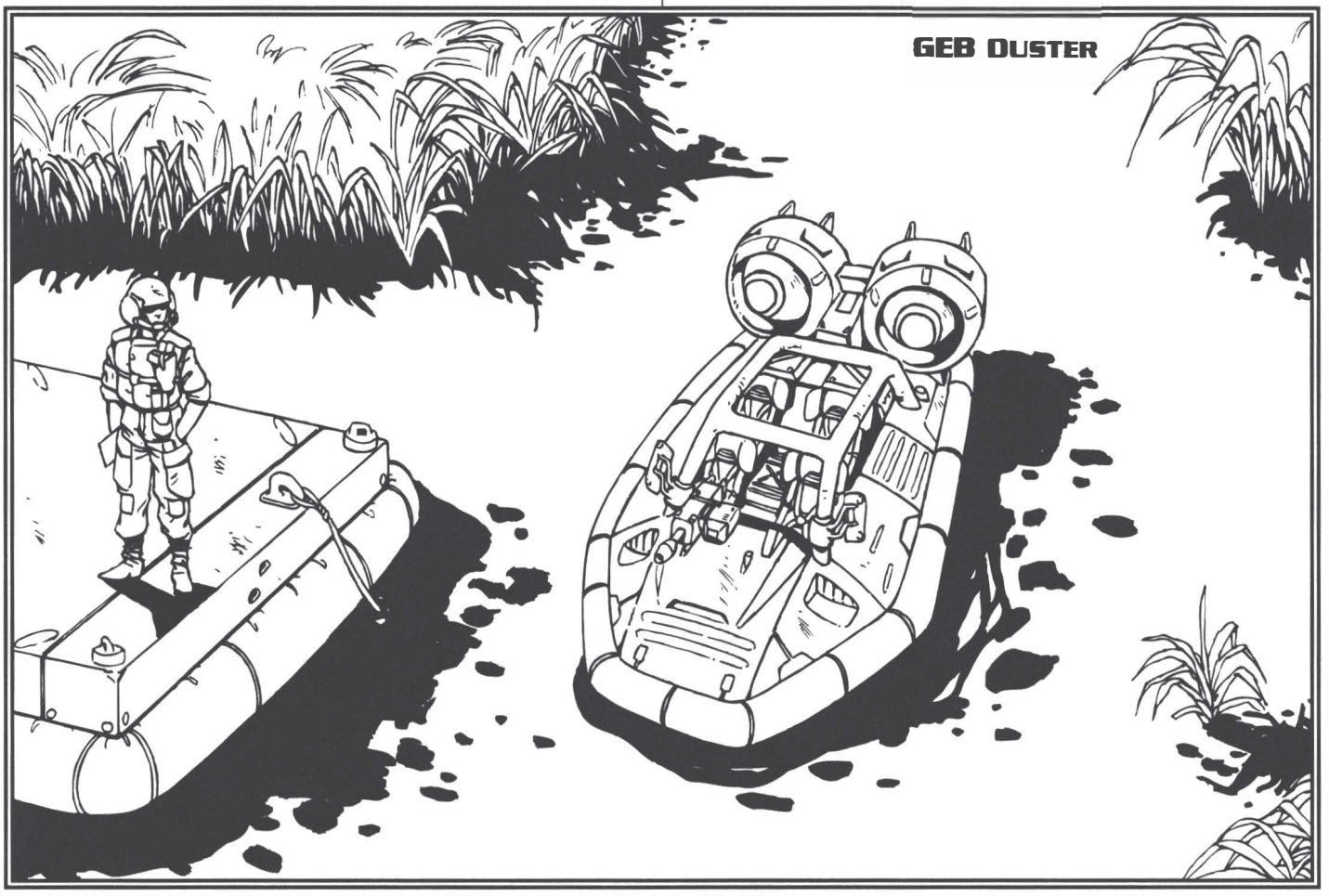
Special Equipment: Military radio, fire extinguisher, radar.

Weapons: Pintle-mounted Auto-GL on the cab, accessed by a hatch over the passenger seat.

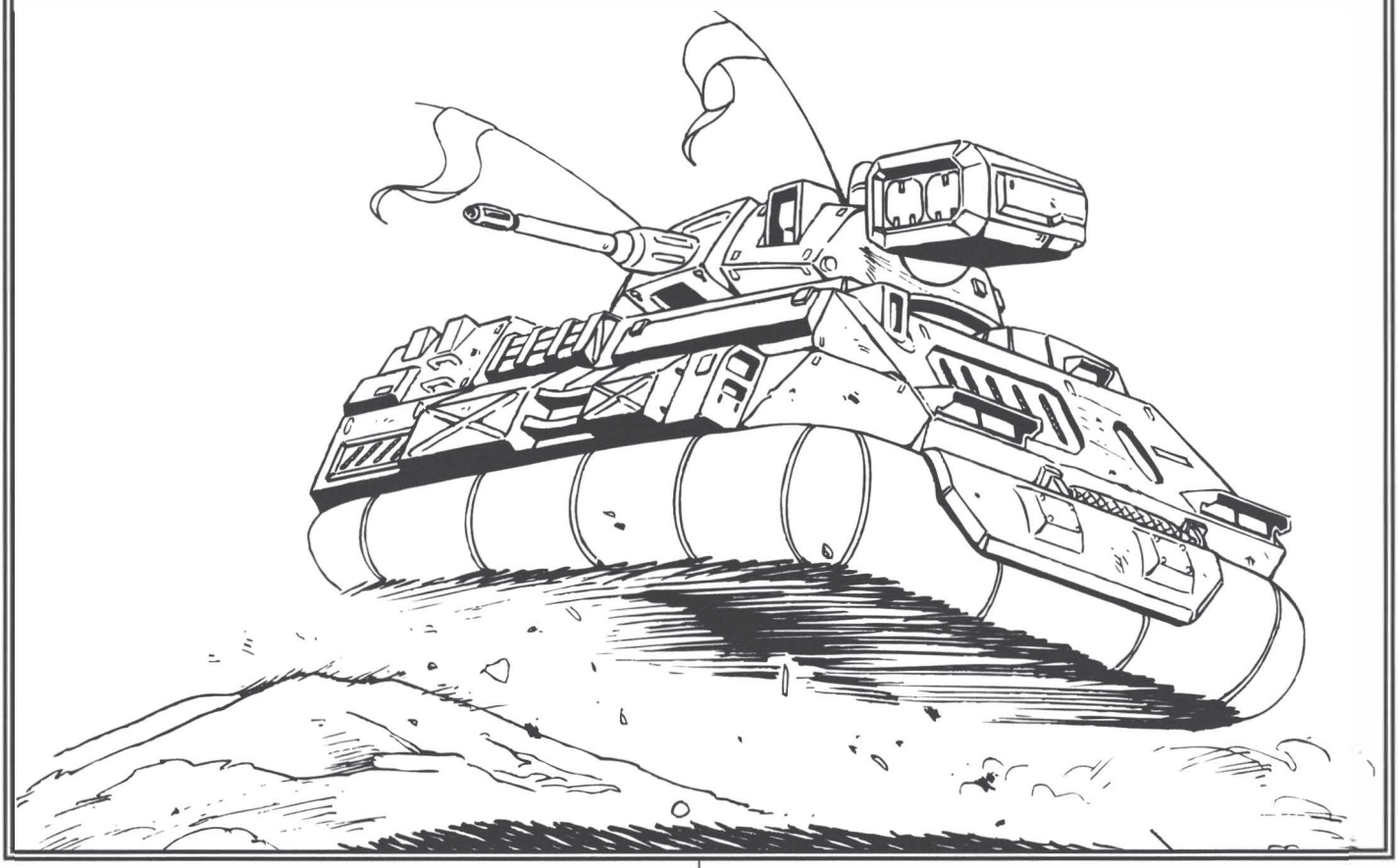
Militech A-20 ACAV

The "panzer" made famous by *Combat Cabb* and numerous movies, the A-20 sheds the varied armament of the original Navy model, but is otherwise very similar to the one the Navy still has in service. Like the Arasaka APCs, it's really too lightly armored to slug it out with the Big Boys. The panzer hopes to strike fast with its missiles and cut out before the enemy can respond.

Top Speed:	200 MPH	**Acc/Dec:**	20/10 MPH
Crew:	3	**Range:**	650 MILES
Passengers:	0	**Cargo:**	10 SPACES, 3 TONS)
Maneuver:	0	**SDP:**	100 (BODY 5)
SP:	50 (ARMOR 2)	**Type:**	HOVER
Mass:	10 TONS	**Cost:**	730,000 EB.



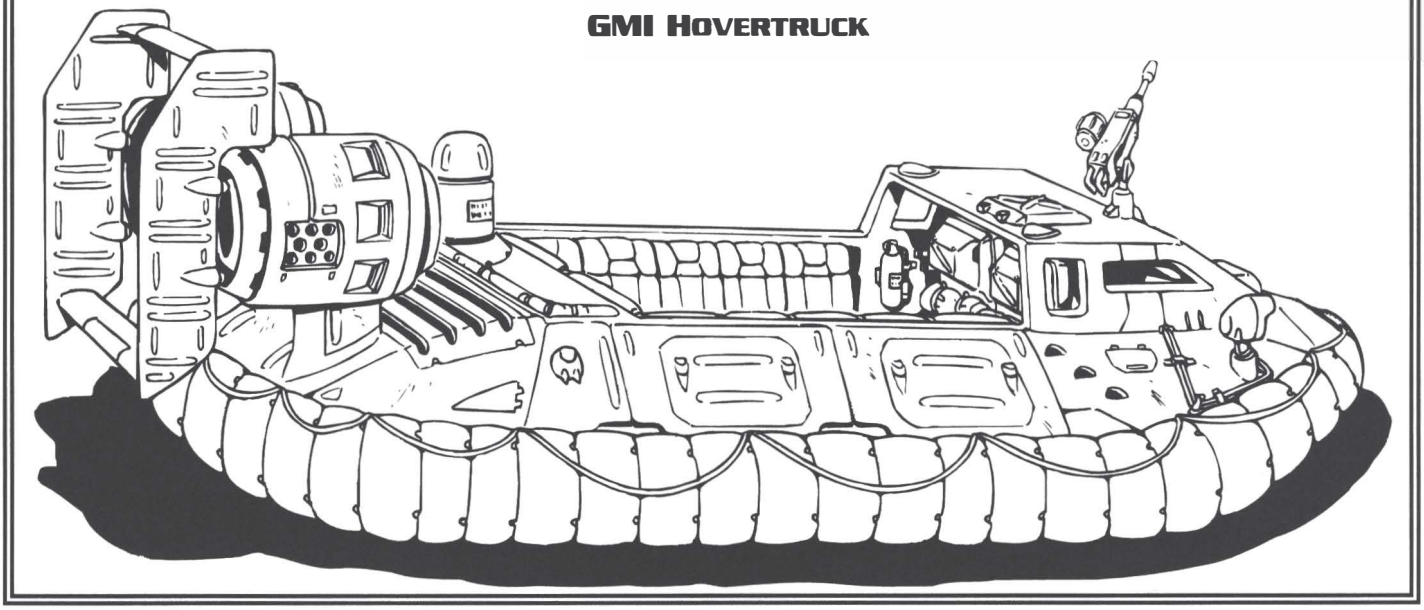
MILITECH A-20 ACAV

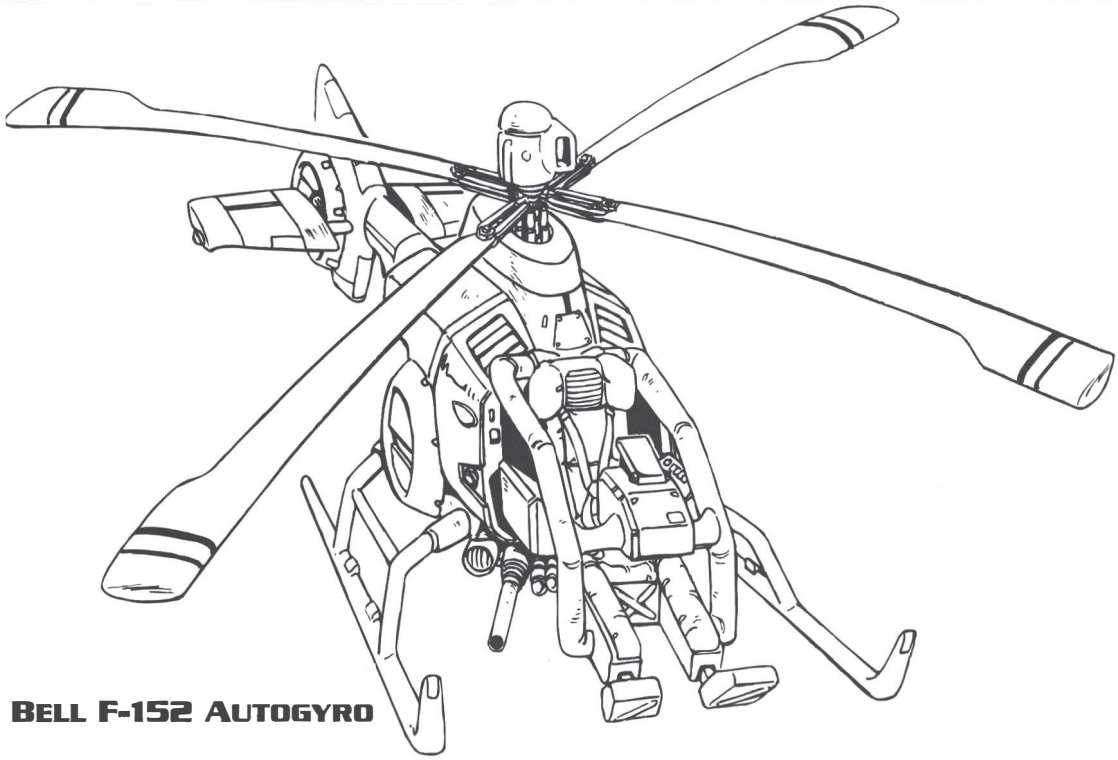


Special Equipment: Cyber-assisted, reactive armor, fire extinguisher, 4 man-hours life support, ejection seats, radar rangefinder, auto-pilot, military radio, military radar with terrain-following capability, sonar, military radar detector, auto-pilot, navigation system, passive IR, thermograph, light amplification.

Weapons: 25mm cannon and Light ATGM in stabilized turret. The cannon has 2 magazines (one loaded with AP), and the ATGM has five extra rounds.

GMI HOVERTRUCK





Bell F-152 Autogyro

Helicopters

Despite the enormous advantages of aerodynes, helicopters are still extremely useful. They are less expensive per kilo of mass lifted, they are cheaper to operate, and they can autorotate down to earth if their engines fail (if an aerodyne's engines fail, it assumes the flight characteristics of a metal ingot). And they can still carry a lot of weaponry.

> **"Flying the Bell 152 into combat is a bit like going to the bathroom in the open: You're naked and you *know* everyone is looking at you."**
>
> **— Sgt. Laura Preston, NCPD**

Bell UH-9

The UH-9 is viewed as a more reasonable troop-moving alternative to the SM-Dragon.

Top Speed:	165 mph	**Acc/Dec:**	15/15 mph
Crew:	2	**Range:**	600 miles
Passengers:	20	**Cargo:**	2,500 kg
Maneuver:	-1	**SDP:**	200 (Body 10)
SP:	40 (Armor 2)	**Type:**	Heavy Helicopter
Mass:	8 tons	**Cost:**	2.45 million eb.

Special Equipment: IR baffling, ejection seats for crew, fire extinguisher, chaff and flare dispensers, military radio with scrambler, auto-pilot and navigation system, image enhancement, infra-red, laser detector, military radar with terrain-following, military radar detector, telescopic optics.

Weapons: Turret-mounted 25mm autocannon. Weapon wings support another 16 spaces of pod weapons

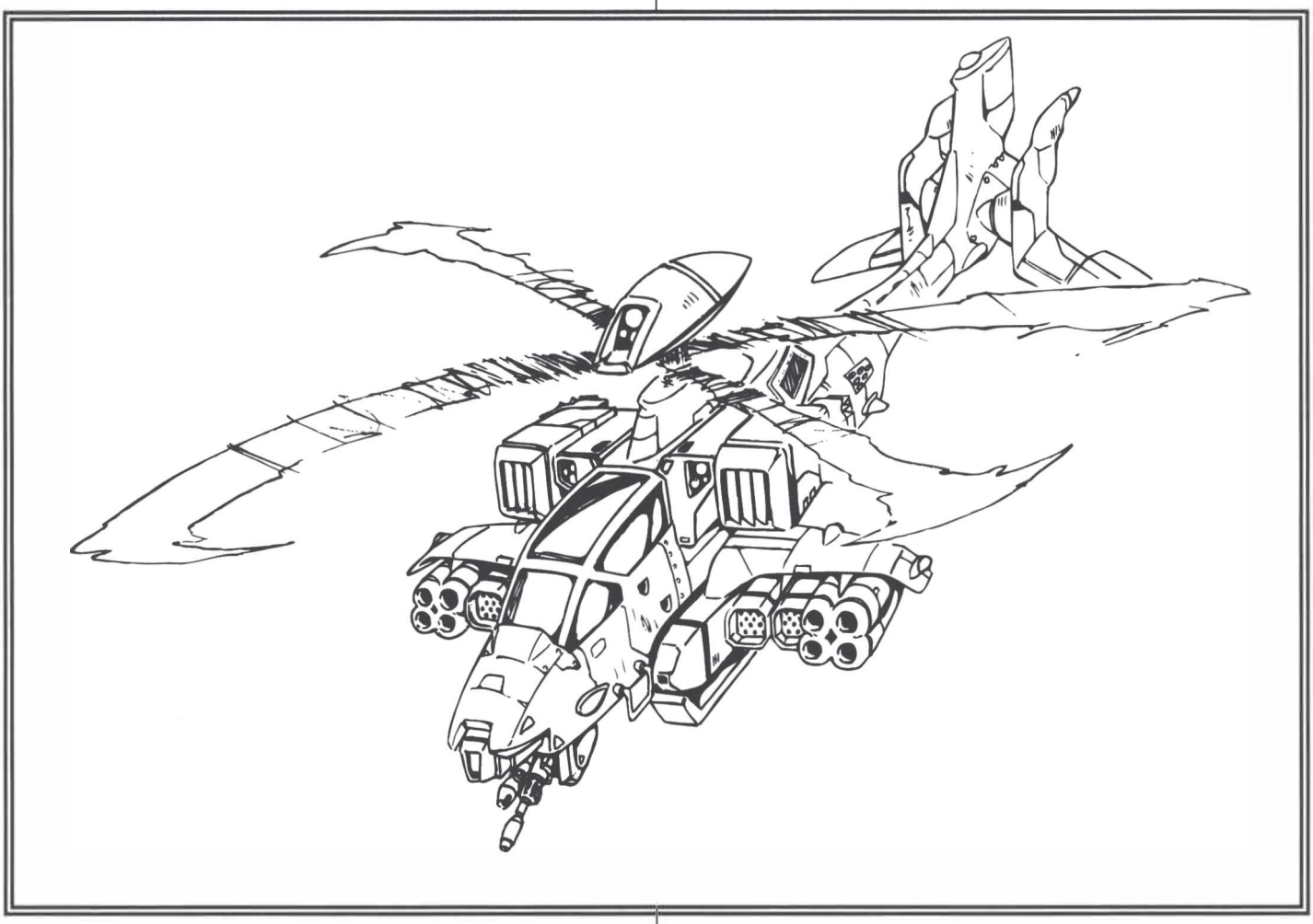
▲ Bell F-152 Autogyro

The ultimate in small aerial combat vehicles, the Bell F-152 is extensively used by police forces and mercenaries. Its lack of protection for the pilot is one of its least popular features.

Top Speed:	195 mph	**Acc/Dec:**	15/15 mph
Crew:	1	**Range:**	50 miles
Passengers:	None	**Cargo:**	None
Maneuver:	+1	**SDP:**	40 (Body 2)
SP:	0 (Armor 0)	**Type:**	Light Helicopter
Mass:	1,500 kg	**Cost:**	145,000 eb.

Special Equipment: Radio, searchlight.

Weapons: One light weapon on a 180° forward–rotating open mount under the body. Popular options include the 5.56mm minigun, the 40mm Auto GL, or 5.56/7.62mm machineguns for low cost versions.



Bell Evil-Eye 19

The military version of the Spy-Eye 18, the Evil-Eye is designed for light military support and recon duties. It can act as a pocket gunship, but it doesn't have the armor or firepower to fill a proper gunship's role.

Top Speed:	180 MPH	**Acc/Dec:**	15/15 MPH
Crew:	2	**Range:**	400 MILES
Passengers:	2	**Cargo:**	2 SPACES, 2,000 KG
Maneuver:	+1	**SDP:**	65 (BODY 3)
SP:	20 (ARMOR 1)	**Type:**	MEDIUM HELICOPTER
Mass:	6,500 KG	**Cost:**	550,000 EB.

Special Equipment: IR baffling, ejection seats, fire extinguisher, chaff and flare dispensers, laser rangefinder, auto-pilot, navigation system, image enhancement, military radar, military radar detector, searchlight, thermograph.

Weapons: Turret-mounted 5.56mm minigun under the cockpit, targeting laser on rotor hub, and up to 12 spaces of pod-mounted weapons. Typical pod armaments include two 5.56mm miniguns/12.7mm machineguns/40mm Auto-GLs and 4 19-shot 2.75" rocket pods, or, 8 Hellfire missiles and 2 SAMs.

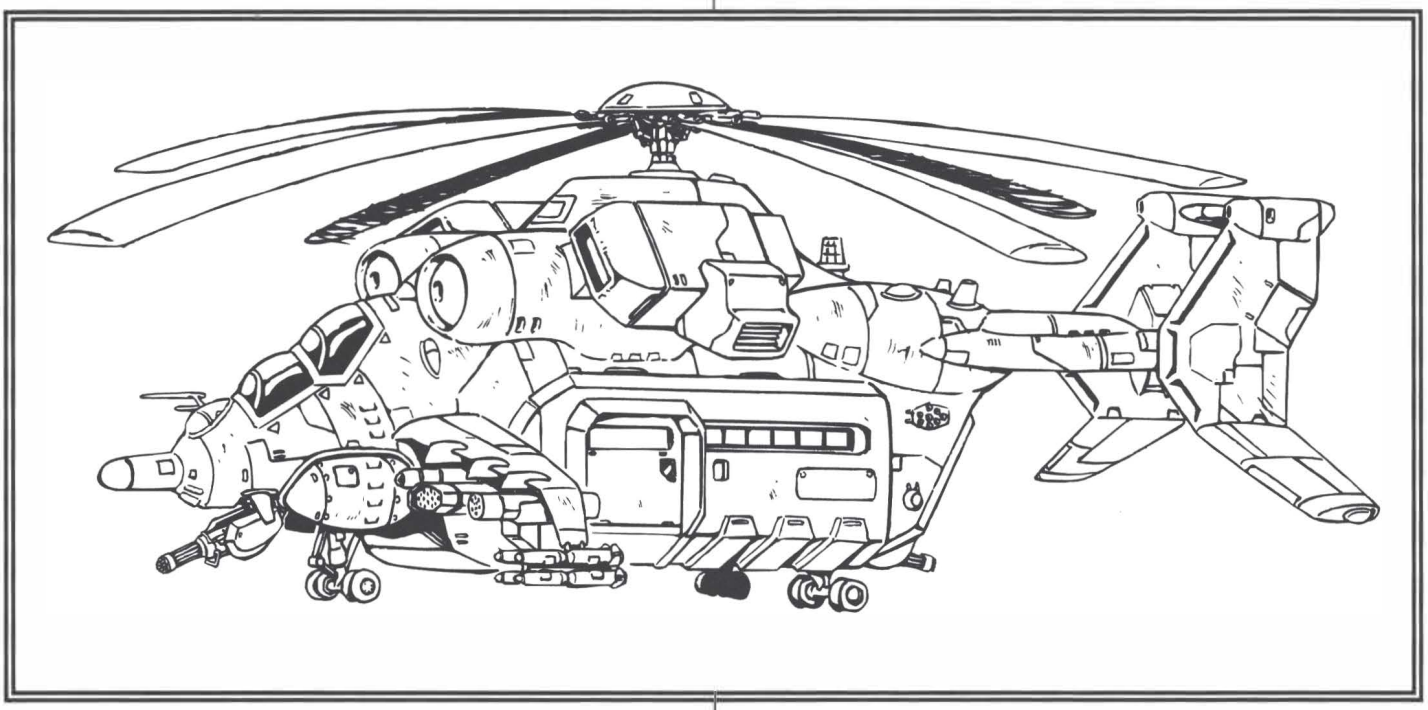
▲ Bell AH-99 Gunship

The AH-99 is intended for one use: Ground Attack. Its array of weaponry is geared to that function, and all its weight capacity is sacrificed to it. Like all helicopters, it's not heavily-armored enough to slug it out with a ground unit, so it relies on long-range firepower to destroy targets from a stand-off position.

Top Speed:	180 MPH	**Acc/Dec:**	10/15 MPH
Crew:	2	**Range:**	600 MILES
Passengers:	0	**Cargo:**	NONE
Maneuver:	-2	**SDP:**	100 (BODY 5)
SP:	40 (ARMOR 2)	**Type:**	HEAVY HELICOPTER
Mass:	4 TONS	**Cost:**	2.3 MILLION EB.

Special Equipment: IR baffling, damage control, ejection seats, environment control, chaff and flare dispensers, military radio with scrambler, microwave rangefinder, auto-pilot and navigation system, cybernetic linkage, ECM, ECCM, image enhancement, laser detector, military terrain-following radar, military radar detector linked to chaff dispenser, telescopic optics and thermograph.

Weapons: Turret-mounted stabilized 30mm autocannon (with two magazines), 40mm Auto-GL (with two magazines), and painting laser. Weapon wings hold 8 spaces of pod weapons; the normal load is two four-shot Hellfire pods, or four 19-shot 2.75" rocket pods.



▲ SM-Dragon

Arguably the biggest combat helicopter in the world, the Dragon is a Euro-Soviet child of last century's monster Soviet helicopters. It's huge, it's expensive, but it's so impressive that it sells well, despite the fact that it's not a very good choice for a heavy-combat vehicle. The Dragon's ability to carry lots of troops makes it useful on the battlefield, though. (Revised stats for the Sikorsky-Mitsubishi Dragon from *Chromebook 1*.)

Top Speed:	120 MPH	**Acc/Dec:**	10/15 MPH
Crew:	2	**Range:**	600 MILES
Passengers:	30	**Cargo:**	4 TONS
Maneuver:	-2	**SDP:**	300 (BODY 15)
SP:	80 (ARMOR 4)	**Type:**	HEAVY HELICOPTER
Mass:	12 TONS	**Cost:**	8.3 MILLION EB.

Special Equipment: Ejection seats for crew, environmental control, fire extinguisher, chaff and flare dispensers, military radio with scrambler, visual rangefinder, auto-pilot and navigation system, ECM, ECCM, image enhancement, laser detector, microwave detector, military radar with terrain-following, military radar detector, telescopic optics and thermograph.

Weapons: Two turret-mounted stabilized 12.7mm Miniguns (with extra magazine apiece), weapon wings for another 12 spaces of pod weapons.

Bell HUEY Cop-Chopper

Built as a low-cost alternative to AVs, this was marketed to police departments. It has become a popular sight in mercenary units and corporate forces, too. (These are the revised stats for the HUEY PH presented in *Protect and Serve*.)

Top Speed:	150 MPH	**Acc/Dec:**	15/15 MPH
Crew:	2	**Range:**	400 MILES
Passengers:	4	**Cargo:**	1 SPACES, 2,000 KG
Maneuver:	-2	**SDP:**	80 (BODY 4)
SP:	20 (ARMOR 1)	**Type:**	MEDIUM HELICOPTER
Mass:	6.5 TONS	**Cost:**	420,000 EB.

Special Equipment: IR baffling, fire extinguisher, chaff and flare dispensers, radio with scrambler, auto-pilot and navigation system, infrared, light amplification, military radar, military radar detector, searchlight.

Weapons: Turret-mounted 7.62mm Minigun or 40mm Auto-GL.

AERODYNES

For sheer tactical versatility, there's not much that can beat an aerodyne. They can go anywhere that's above water, they can land in an area twice their size (which is a fairly small area), they can hover and perform all manner of vectored thrust maneuvers, they're faster than helicopters, and they can carry more armor.

However, there is a down side to AVs. Their mode of transport, vectored thrust from one or two jets, makes them highly vulnerable to heat-seeking missiles, which home in on the heat signatures of the thruster ports. And if they lose thrust, they have no airfoil surfaces to allow them to glide to the ground — an AV without thrust is a rock. In addition, AVs are expensive fuel-hogs.

The advantages of AVs are considered to outweigh the drawbacks. They're a fixed part of military structures now, same as Hummers and tanks.

▲ AV-6 Combat Aerodyne

The standard military AV, the AV-6 is not much more than a truly military version of the AV-4. It handles a little better, and has heavier armament.

Top Speed:	495 MPH	**Acc/Dec:**	50/50 MPH
Crew: 2	**Range:**	1,200 MILES	
Passengers:	10	**Cargo:**	1 SPACE, 1300 KG.
Maneuver:	+1	**SDP:**	100 (BODY 5)
SP:	40 (ARMOR 2)	**Type:**	AV
Mass:	4 TONS	**Cost:**	850,000 EB.

Special Equipment: IR baffling, ejection seats, environment control, fire extinguisher, chaff and flare dispensers, four smoke launchers with IR smoke, military radio, laser communicator, visual rangefinder, auto-pilot with navigation system, image enhancement, laser detector, military radar with terrain-following, military radar detector, thermograph.

Weapons: Turret-mounted 20mm Gatling and painting laser, weapon wings with 8 spaces for pod weapons. Typical pod load includes two 7.62mm Minigun pods and two 19-shot 2.75" rocket pods.

AV-3 Aerocop

A failed military scout vehicle, the Aerocop is unique in the AV field in that it is a dual-mode vehicle — it not only flies, it also has wheels for surface transport. A favorite of cops everywhere.

"I understand, sir. In hindsight, I suppose that disabling the hostile AV while it was hovering over the command trailer wasn't a very good idea. Have they gotten Colonel Benton out from under the wreckage yet?"

Top Speed:	350 MPH	**Acc/Dec:**	50/50 MPH
Crew:	2	**Range:**	525 MILES
Passengers:	3	**Cargo:**	1 SPACE, 650 KG.
Maneuver:	+1	**SDP:**	50 (BODY 2)
SP:	20 (ARMOR 1)	**Type:**	AV
Mass:	2 TONS	**Cost:**	90,000 EB.

Special Equipment: Crash control systems, ejection seats for crew, SP 30 armored wall between crew and passengers, radio, auto-pilot and navigation system, radar with terrain-following, searchlight.

Weapons: Turreted 7.62mm Machinegun.

Notes: The Aerocop costs more than the standard AV because of its wheeled transmission. On the ground, its top speed is 150 mph, Acc/Dec is 15/40 mph, and Maneuvering is 0.

AV-4

The AV-4 is as familiar a sight to the average citizen as CHOOH-2 stations. It is ubiquitous, making up over 70% of the world's aerial traffic. It can be outfitted for a variety of missions, from delivery transport to assault. The military version is used as a multi-purpose workhorse and has heavier armament.

Top Speed:	350 MPH	**Acc/Dec:**	50/50 MPH
Crew:	1 OR 2	**Range:**	800 MILES
Passengers:	6	**Cargo:**	15 SPACE, 1300 KG.
Maneuver:	0	**SDP:**	100 (BODY 5)
SP:	40 (ARMOR 2)	**Type:**	AV
Mass:	4 TONS	**Cost:**	600,000 EB.

Special Equipment: Ejection seats for crew, military radio, auto-pilot and navigation system, light amplification, radar with terrain-following, radar detector.

Weapons: 2 turreted 7.62mm Miniguns.

Notes: Up to half the AV-4's cargo space can be used as weapons mounting space. All of the cargo space may be used to haul passengers, if desired (converting cargo space to passenger space costs 100 eb. per passenger).

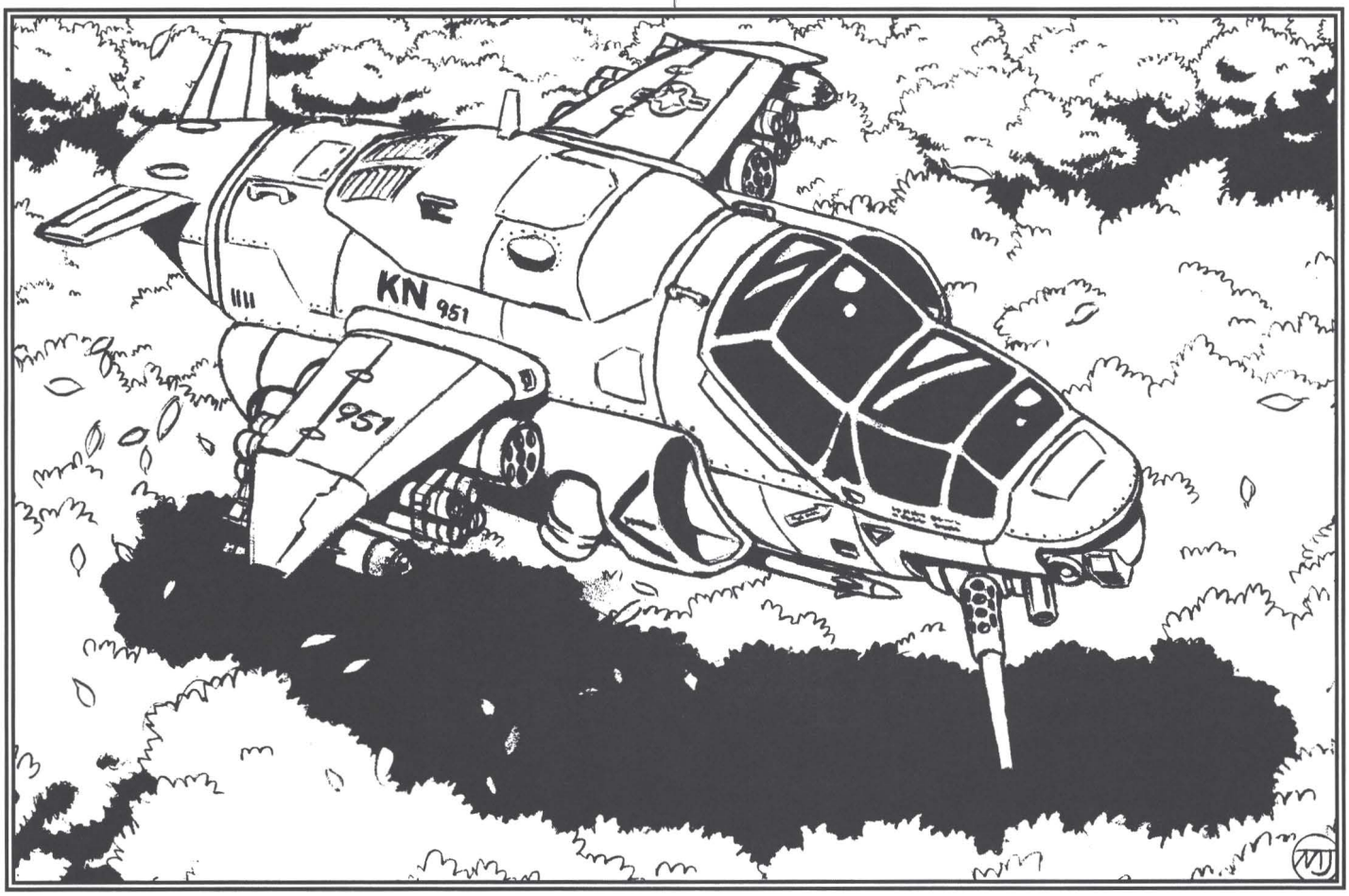
▼ AV-8 Assault Aerodyne

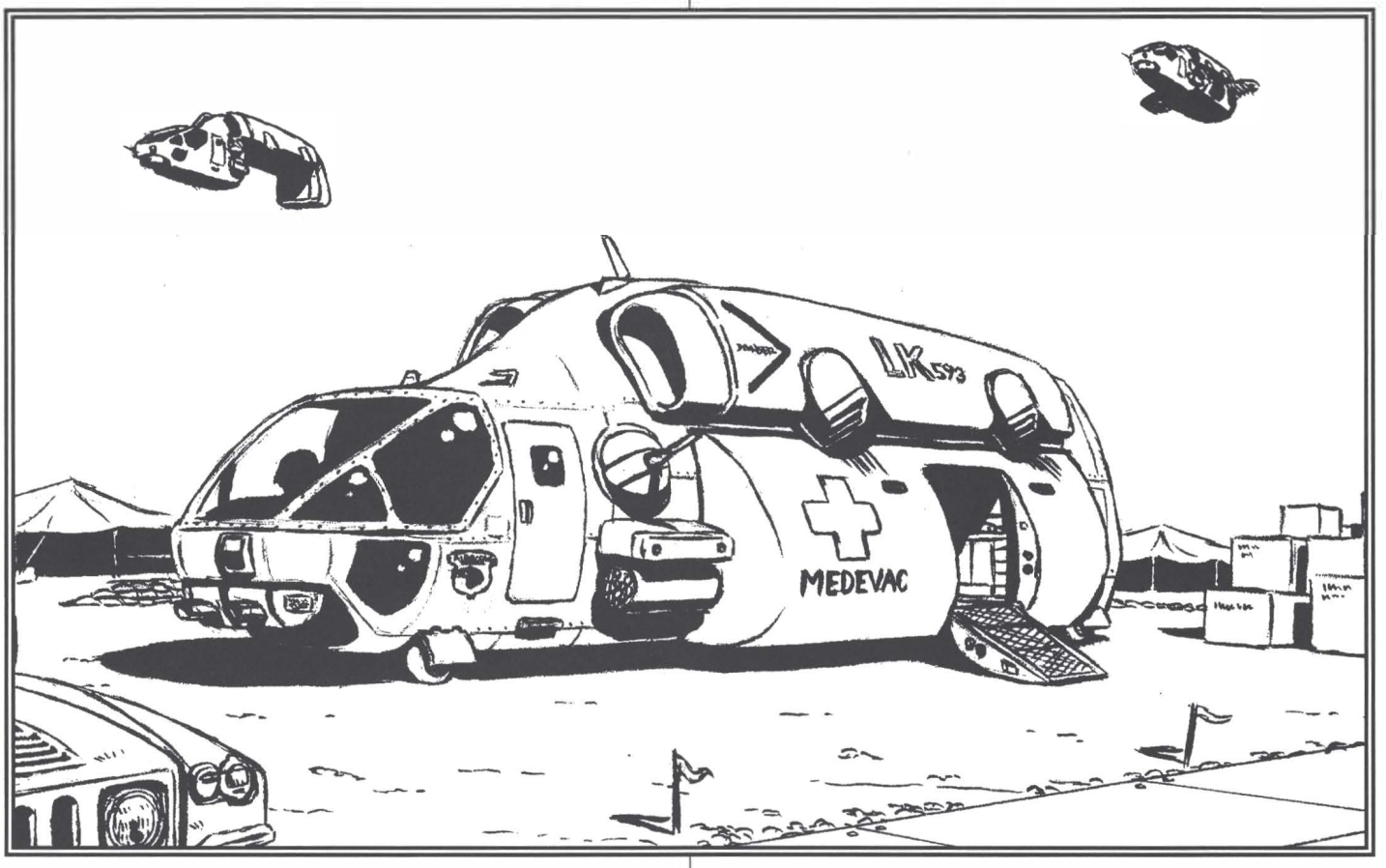
The AV-8 is constructed as the state-of-the-art aerodyne gunship. It does a fair job in that role, although there have been complaints that its loiter time is insufficient.

Top Speed:	495 MPH	**Acc/Dec:**	50/50 MPH
Crew:	2	**Range:**	1,320 MILES
Passengers:	0	**Cargo:**	NONE
Maneuver:	+1	**SDP:**	120 (BODY 6)
SP:	40 (ARMOR 2)	**Type:**	AV
Mass:	4.8 TONS	**Cost:**	2.4 MILLION EB.

Special Equipment: Ejection seats, damage control, 12 man-hours life support, anti-laser aerosol linked to laser detector, chaff and flare dispensers, laser communicator, military radio, auto-pilot with navigation systems, cybernetic controls, ECM, image enhancement, microwave detector, military radar with terrain-following, military radar detector, thermograph.

Weapons: Turret-mounted stabilized 30mm autocannon and 40mm Auto-GL (autocannon has an extra magazine and Auto-GL has two extra magazines). Painting laser in separate turret. Two AAMs, one mounted forward and one aft. Weapon wings with 8 spaces for pod-mounted weapons.





▲ AV-9 Multi-Purpose Aerodyne

The AV-9 is known as a jack-of-all-trades machine, due to its modular exterior pod design. The basic AV-9 consists of hull and engines. The meat of the AV is the module that fits beneath the framework; the pod can be for assault, troop or cargo transport, command, medevac or aid station, ECM/EW, etc. The AV-9 is expensive, but its enormous versatility makes it a valuable asset to any force.

Top Speed:	405 MPH	**Acc/Dec:**	50/50 MPH
Crew:	2	**Range:**	800 MILES
Passengers:	2	**Cargo:**	NO SPACES, 2400 KG
Maneuver:	0	**SDP:**	180 (Body 9)
SP:	45 (Armor 2)	**Type:**	AV
Mass:	3,400 TONS	**Cost:**	1.75 MILLION EB.

Special Equipment: Ejection seats, environment control, fire extinguisher, anti-laser aerosol linked to laser detector, chaff and flare dispensers, laser communicator, military radio with scrambler, satellite uplink, auto-pilot with navigation system, ECM, image enhancement, active/passive IR, military radar with terrain-following, military radar detector, thermograph.

Weapons: Two turreted 40mm Auto-GLs, two remote-control 7.62mm Machineguns in separate turrets, two 19-shot 2.75" rocket pods.

Notes: The AV-9 can carry a weapons pod with another 45 spaces of weapons and ammo, a transport pod with 45 spaces for troops or cargo.

Boeing Cityhawk UAAV

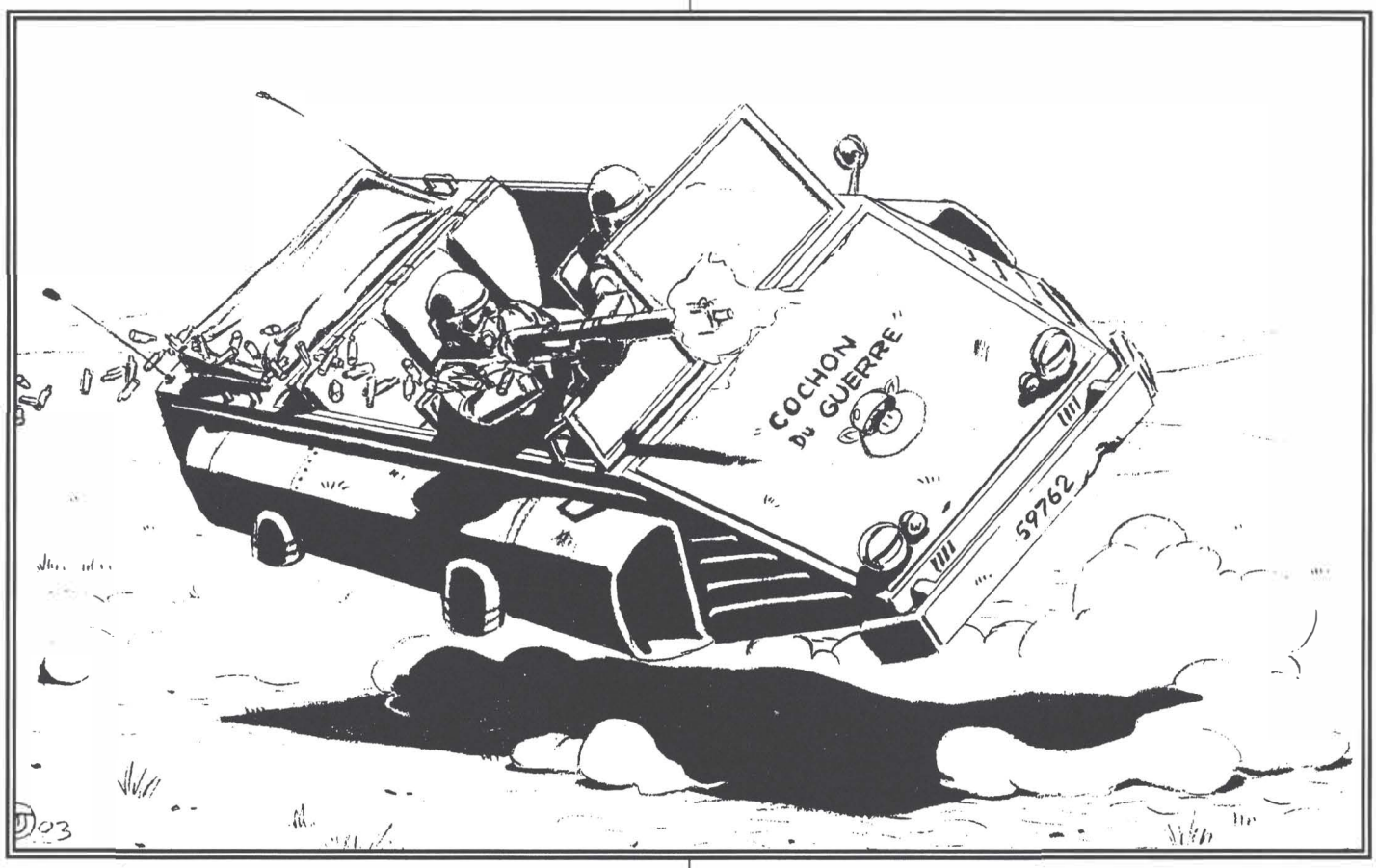
Boeing has been heavily marketing their Urban Airborne Assault Vehicle to police departments the world over, trying to refute Euro-Asian advertising criticizing American manufacturing. Accusations that the UAAV is built more as a combat vehicle than as a security unit have military buyers looking into the UAAV as a sort of AV interceptor, for anti-AV/helicopter use.

Top Speed:	360 MPH	**Acc/Dec:**	50/50 MPH
Crew:	2	**Range:**	800 MILES
Passengers:	0	**Cargo:**	12 SPACES, 1000 KG
Maneuver:	+2	**SDP:**	85 (Body 4)
SP:	40 (Armor 2)	**Type:**	AV
Mass:	3,400 TONS	**Cost:**	920,000 EB.

Special Equipment: Ejection seats, environment control, fire extinguisher, chaff and flare dispensers, military radio, auto-pilot and navigation system, image enhancement, active and passive IR, military radar with terrain-following, military radar detector, telescopic optics.

Weapons: Two 7.62mm Miniguns in separate turrets, two missiles (SAMs or AAMs).

Notes: The proposed "Interceptor" military version has 5 additional spaces for missiles, no cargo space, and a top speed of 675 mph. Its proposed cost is 1.45 million eb.



▲ EEC Airjeep

The EEC's combined efforts are responsible for the Airjeep. And like most team efforts, the result is a compromise of the lowest common denominator — it's slow, reliable, ugly, functional, and cheap. And why does it bear an uncanny resemblance to Germany's old *Kubelwagen*?

Top Speed:	150 MPH	**Acc/Dec:**	50/50 MPH
Crew:	1	**Range:**	525 MILES
Passengers:	5	**Cargo:**	2 SPACES, 650 KG.
Maneuver:	-0	**SDP:**	50 (BODY 2)
SP:	15 (ARMOR 1)	**Type:**	AV
Mass:	2 TONS	**Cost:**	25,000 EB.

Special Equipment: Crash control systems, radio, radar with terrain-following.

Weapons: Pintle mount.

Note: The Airjeep is open, and riders only count as in cover 50% of the time.

Mi-50

Naturally, SovOil tries to save money any way it can; with a world-wide operation, the bottom line is very important. Also, it prefers to buy Soviet rather than EEC or (yuck!) American. The Mi-50 is not much more than a large, crude version of the EEC Airjeep.

Top Speed:	225 MPH	**Acc/Dec:**	50/50 MPH
Crew:	1	**Range:**	800 MILES
Passengers:	6	**Cargo:**	20 SPACES, 1450 KG
Maneuver:	0	**SDP:**	110 (BODY 5)
SP:	45 (ARMOR 2)	**Type:**	AV
Mass:	4,400 KG	**Cost:**	650,000 EB.

Special Equipment: Radio, auto-pilot with navigation system, radar with terrain-following.

Weapons: Two 7.62mm Machineguns on door mounts (these count as pintle mounts, but from the sides only. When using the doorguns or any time that the doors are open, the Mi-50's armor protection counts only 75% of the time).

Militech AVX-9C Viper

Militech's new Viper isn't meant to replace the AV-8, but instead to act as more of an aerodyne version of a tilt-engine attack plane.

Top Speed:	540 MPH	**Acc/Dec:**	50/50 MPH
Crew:	2	**Range:**	800 MILES
Passengers:	0	**Cargo:**	NONE
Maneuver:	+2	**SDP:**	125 (BODY 6)
SP:	60 (ARMOR 3)	**Type:**	AV
Mass:	3,400 TONS	**Cost:**	2.76 MILLION EB.

Special Equipment: Ejection seats, fire extinguisher, 12 man-hours life support, anti-laser aerosol linked to laser detector, chaff and flare dispensers, laser communicator, military radio, laser rangefinder, auto-pilot with navigation systems, cybernetic controls, ECM, ECCM, image enhancement, microwave detector, military radar with terrain-following, military radar detector, thermograph.

Weapons: 7.62mm Minigun and painting laser in nose turret. 10 spaces of internal ordnance stores (bombs or missiles), weapon wings for 10 spaces of weapon pods.

OSPREYS

Tilt-wing VTOL aircraft, now known as "Ospreys" after the first production model, are the backbone of short-haul air cargo transport in the 21st century. They're larger than AVs and helicopters, and require correspondingly larger take-off and landing areas, but they are faster than helicopters and carry more cargo mass than aerodynes. Typically unarmored, most militaries use Ospreys as troop transports or heavy load-lifters (an Osprey can transport heavy loads slung beneath their fuselages, in a fashion similar to helicopter loading. To do so, its rotors must remain in vertical mode. An Osprey with its rotors in vertical mode flies at 1/5 top speed).

Lockheed-Cessna Pinto

The Pinto is a long-ranged, multi-purpose alternative to AVs and attack helicopters. Easy to maintain, the Pinto carries an impressive amount of ordnance into the field, and serves as a cargo transport (cargo carried in special underwing pods) as well.

Top Speed:	450 MPH	**Acc/Dec:** 1	0/20 MPH
Crew:	2	**Range:**	1,600 MILES
Passengers:	2	**Cargo:**	6,250 KG.
Maneuver:	+2	**SDP:**	150 (Body 7)
SP:	20 (Armor 1)	**Type:**	Osprey
Mass:	18.75 TONS	**Cost:**	2.4 MILLION EB.

Special Equipment: Ejection seats, environment control, fire extinguisher, chaff and flare dispensers, military radio, laser rangefinder, auto-pilot and navigation system, ECM, image enhancement, laser detector, military radar, military radar detector, themograph.

Weapons: Two 20mm cannons fixed forward (each has 9 magazines), painting laser in articulated mount forward. The Pinto can carry 36 spaces of pod weapons on its wings.

Bell-Boeing Falcon-B

The Falcon is normally a commuter aircraft, intended for corporate and private passenger service. The Falcon-B is the military version, armored and equipped for combat.

Top Speed:	315 MPH	**Acc/Dec:**	10/20 MPH
Crew:	1	**Range:**	1,000 MILES
Passengers:	9	**Cargo:**	10 SPACES, 4 TONS.
Maneuver:	0	**SDP:**	100 (Body 5)
SP:	20 (Armor 1)	**Type:**	Osprey
Mass:	12.5 TONS	**Cost:**	600,000 EB.

Special Equipment: Ejection seat for pilot, environment control, fire extinguisher, chaff and flare dispensers, long-range radio, auto-pilot with navigation system, light amplification, radar with terrain-following, military radar detector.

Weapons: Turret-mounted 7.62mm Minigun.

Bell-Boeing V-22B Osprey

The heavy-lift version of the original model, this is the most common Osprey on Earth. It has been manufactured, by license, all over the world and has acquired a reputation for steadfast service under appalling conditions, joining the legends of the C-47 "Gooney Bird" and the C-130 "Herky Bird." Because of its tilt-rotors, the Osprey's nickname is "Whirly Bird."

Top Speed:	315 MPH	**Acc/Dec:**	10/20 MPH
Crew:	2	**Range:**	1,200 MILES
Passengers:	20	**Cargo:**	28 SPACES, 9 TONS.
Maneuver:	0	**SDP:**	200 (Body 10)
SP:	0 (Armor 0)	**Type:**	Osprey
Mass:	25 TONS	**Cost:**	650,000 EB.

Special Equipment: Ejection seats for the crew, environment control, long-range radio, auto-pilot and navigation system, radar, radar detector.

Notes: There is a gunship version of the Osprey known as the Guillotine. This model sacrifices cargo and passenger space for armament (three 20mm Gatlings, two 40mm Auto-GLs, and one 75mm cannon, all on portside articulated mounts. All weapons carry 10 magazines. A laser rangefinder, image enhancement, and thermograph are fitted to assist firing, and the plane is fitted with ECM, flare and chaff dispensers to enhance survivability).

"I've hauled cyberware to Mexico City, explosives to Anchorage, and Black Market neural chips to San Francisco. I've even had a frackin' one ton crate full of, get this, fresh human hearts, going to some biotech firm in Night City. I didn't ask what they were for,... but I *do* sometimes wonder where they got them."

— Else Lewis–Independent Osprey Pilot

AIRPLANES

Thanks to the advent of commercial airships and AVs, the role of airplanes has been reduced to that of high-speed cross-country transport. And this transport costs more, too, since the petrol-based fuels needed to run the jets are rarer than in former times (and are needed to run AVs and Ospreys in any case). The fuel consumed on a single jet-liner trip will keep an AV flying for days.

Military organizations still have use for airplanes. In the tactical role, an airplane is faster than any of the other aerial vehicles available for air superiority or ground attack (except for scramjets, and they are limited to extra-atmospheric performance). In the support role, an airplane can carry more cargo than any AV, helicopter or Osprey, and is much faster than any airship.

LOCKHEED C-200 UNIVERSE

The Universe, while not the largest airplane in the world (scramjet cargo-lifters are twice its size), is the largest STOL (Short Take-Off and Landing) jet in the world. Because of this, it is one of the most popular fast cargo-lifters in military service, and is used around the globe.

TOP SPEED:	600 MPH	**ACC/DEC:**	20/25 MPH
CREW:	3	**RANGE:**	4,000 MILES
PASSENGERS:	100 OR	**CARGO:**	150 SPACES, 42 TONS.
MANEUVER:	-4	**SDP:**	200 (BODY 10)
SP:	0 (ARMOR 0)	**TYPE:**	LARGE JET
MASS:	80 TONS	**COST:**	6.1 MILLION EB.

Special Equipment: Ejection seats for crew, environment control, fire extinguisher, chaff and flare launchers, military radio, satellite uplink, auto-pliot and navigation system, radar, military radar detector.

MACDONALD-DOUGLASS F-33 WASP

The F-33 Wasp is MacDonald-Douglass' current market leader in fast interceptors. The Wasp can reach Mach 1.8, has an extended range of 1,000 miles, and carries four air-to-air missiles and other external munitions as well as the internal gun.

TOP SPEED:	1,200 MPH	**ACC/DEC:**	20/25 MPH
CREW:	1	**RANGE:**	1,000 MILES
PASSENGERS:	1	**CARGO:**	NONE
MANEUVER:	+3	**SDP:**	100 (BODY 5)
SP:	20 (ARMOR 1)	**TYPE:**	SMALL JET
MASS:	8 TONS	**COST:**	4.6 MILLION EB.

Special Equipment: Ejection seat, environment control, fire extinguisher, chaff and flare dispensers, military radio with scrambler, multi-target, auto-pilot and navigation system, ECM, ECCM, laser detector, military radar with look-down and radar ID, military radar detector, telescopic optics.

Weapons: 20mm Gatling fixed forward with +5 targeting computer, 16 spaces of pod weapons.

A-01 BLITZ ▶

In the 1990s, the U.S. Air Force phased out history's best ground attack plane, the A-10 Thunderbolt II, on the grounds that it was "obsolete." (The real reason was that the ex-fighter pilots in charge of the USAF wanted nothing to do with any aircraft designed by, and for use with, the U.S. Army.) As soon as the USAF's terrestrial mission was revoked, the Army commissioned an updated replacement to the A-10. The result was the A-01 Blitz, entering service in 2001. It remains the best single-seat ground-attack aircraft in the world.

TOP SPEED:	560 MPH	**ACC/DEC:**	10/35 MPH
CREW:	1	**RANGE:**	1,600 MILES
PASSENGERS:	0	**CARGO:**	NONE
MANEUVER:	-1	**SDP:**	160 (BODY 8)
SP:	60 (ARMOR 3)	**TYPE:**	MEDIUM AIRPLANE
MASS:	20 TONS	**COST:**	3.7 MILLION EB.

Special Equipment: IR baffling, damage control, ejection seat, 12 man-hours life support, 2 chaff and 2 flare dispensers, military radio with scrambler, satellite uplink, microwave rangefinder, auto-pilot and navigation system, cybernetic linkage, ECM, ECCM, image enhancement, laser detector, magnetometer, military radar with look-down and terrain-following, military radar detector, telescopic optics, thermograph.

Weapons: 30mm Gatling fixed forward with extra magazine and +3 fire control computer, stabilized painting laser in articulated mount forward. 40 spaces of pod weapons on the wings.

AIRSHIPS

Military airships are usually cargo-lifters, not combat units. There are a couple of combat support uses for airships: Electronic Warfare and Anti-Submarine Warfare.

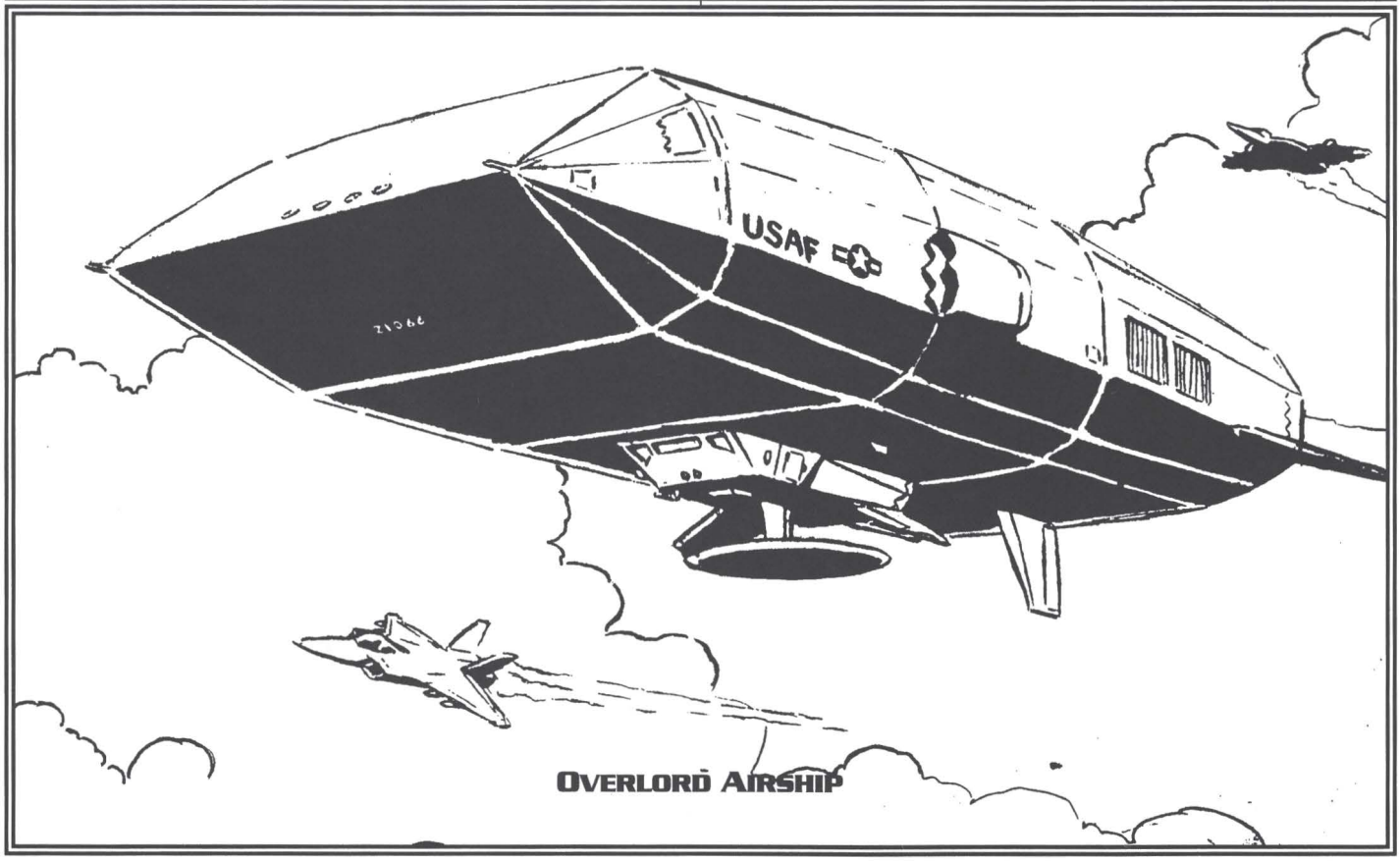
DAYTON OVERLORD AIRSHIP ▶

The Army uses the Overlord to dominate entire battlezones with ECM and jamming. Its multiple ECM generators are set on different frequencies to prevent ECCM from having any effectiveness. Overlords do not operate anywhere near the front lines; they are kept as far away as operationally possible, guarded by several fast-strike combat AVs or air-superiority fighters.

TOP SPEED:	80 MPH	**ACC/DEC:**	5/30 MPH
CREW:	10	**RANGE:**	1,500 MILES
PASSENGERS:	2	**CARGO:**	NO SPACES, 50 TONS
MANEUVER:	+5	**SDP:**	1000 (BODY 50)
SP:	20 (ARMOR 1)	**TYPE:**	AIRSHIP
MASS:	50 TONS	**COST:**	100.6 MILLION EB.

Special Equipment: Stealth, environment control, fire extinguisher, anti-laser aerosol, chaff and flare dispensers, military radio with scrambler, laser communicator, satellite uplink, auto-pilot and navigation system, two 250 km ECM systems, image enhancement, laser detector, magnetometer, military radar with look-down and radar ID, military radar detector, microwave detector, telescopic optics, thermograph.

A-01 Blitz



Overlord Airship

TANKS

Still queen of the battlefield after all these years, despite the best efforts of AT-gun designers, ATGM's, attack helis, etc. Over the last two decades, there has been an upper limit reached in terms of overall size and weight. The emphasis now is on lighter armors, autoloaders to reduce crew numbers, full amphibious capabilities, higher ground speeds, and improved anti-missile self-defence.

▼ U.S. M-11 MBT

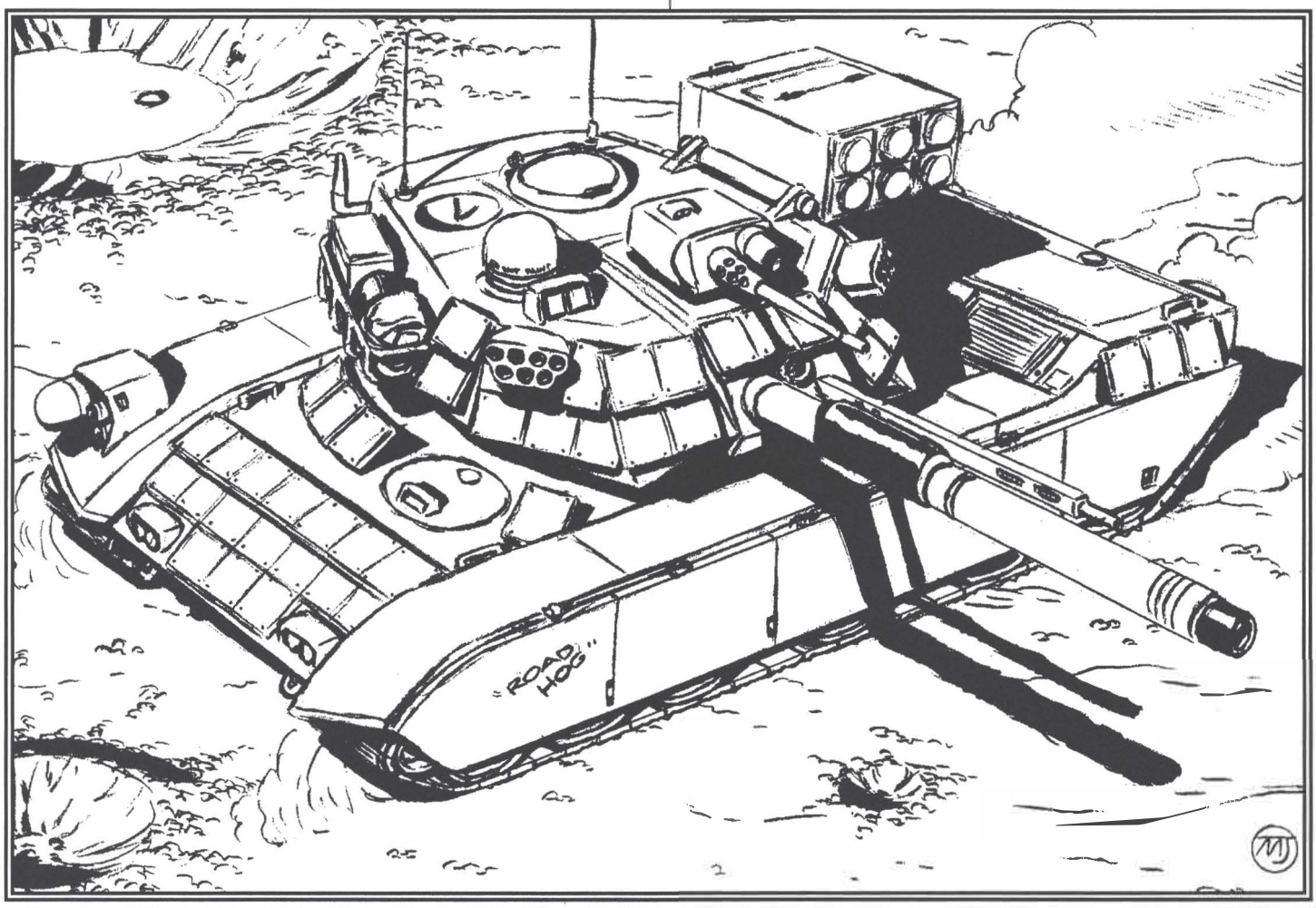
The M-11 is the Army's current state-of-the-art main battle tank. Cyber-linked, fast, heavily-armored and extremely expensive, it is supposed to be too costly for the corporations to match or exceed.

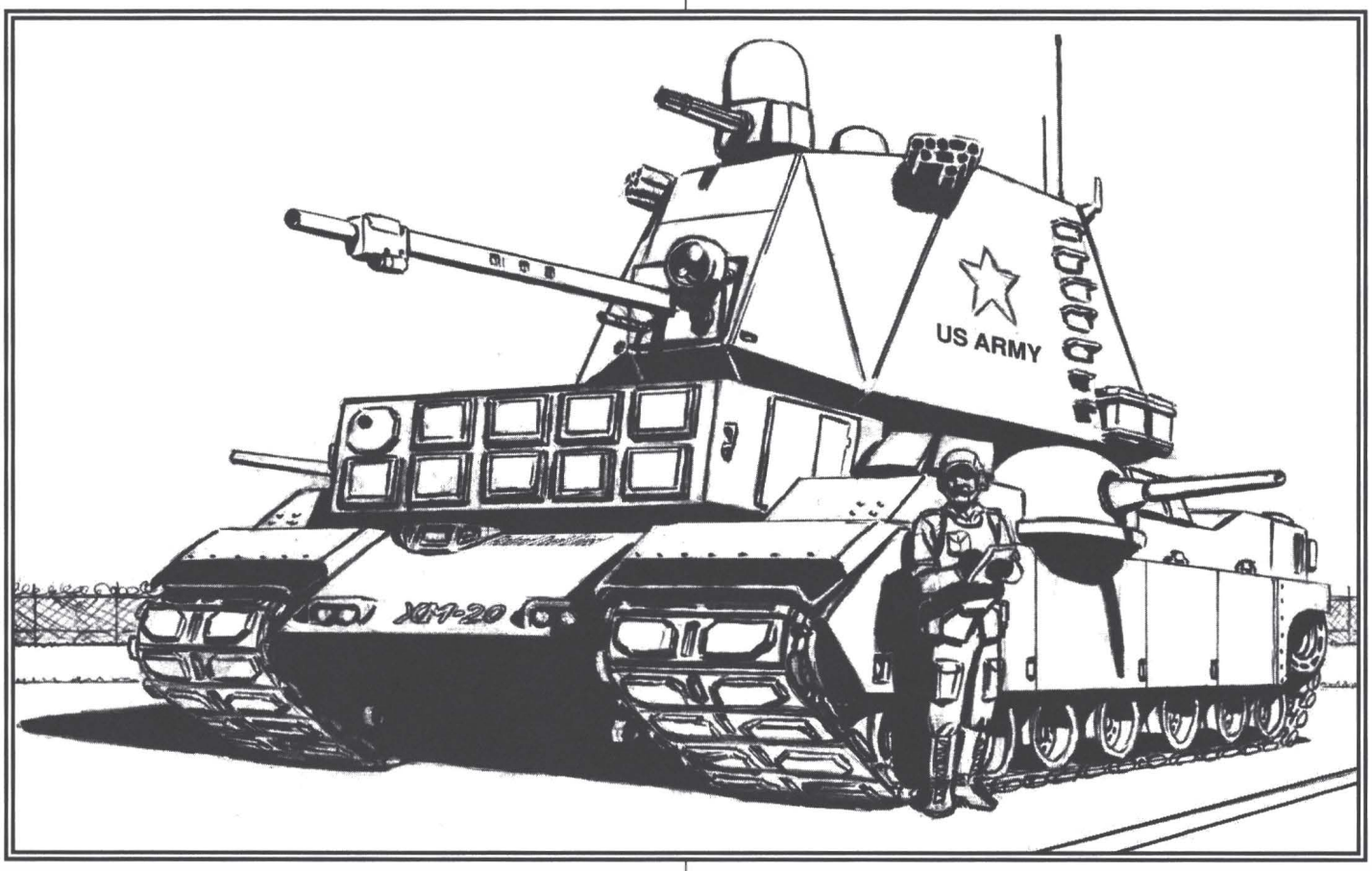
Top Speed:	60 MPH	**Acc/Dec:**	10/50 MPH
Crew:	3	**Range:**	300 MILES
Passengers:	0	**Cargo:**	NONE
Maneuver:	+2	**SDP:**	360 (BODY 18
SP:	225 (ARMOR 11*)	**Type:**	MBT
Mass:	60 TONS	**Cost:**	16.4 MILLION EB.

Special Equipment: Composite Armor, amphibious modifications, damage control, environment control, 12 man-hours life-support, anti-laser aerosol, chaff and IR smoke dispensers, 6 IR smoke projectors, AEAMS, military radio with scrambler, laser communicator, satellite uplink, multitarget, microwave and visual rangefinders, auto-pilot and navigation system, cybernetic linkage, ECM, ECCM, image enhancement, laser detector, microwave detector, military radar, military radar detector, telecopic optics, thermograph.

Weapons: Stabilized LATG, painting laser and 2cm Rail Gun (with extra magazine apiece) in turret, AGAMS and 30mm autocannon in small turret atop main turret, 6 Hellfire missiles in main turret, 7.62mm Machinegun in articulated mount on front hull. +3 fire control computer for rail gun, +4 fire control computer for LATG.

> **"One of the finest MBTs that I've ever seen. Now if we could just find someone to use them on besides other Americans."**
> **— Col. Janice Cardiff, U.S. Army**





▲U.S. M-20 SUPERHEAVY

This monstrosity has yet to leave the testing field. It is reputed to be the biggest MBT since Hitler's *Maus*. Experts are already scoffing at it, saying that it's too heavy and too big to operate anywhere except reinforced concrete runways.

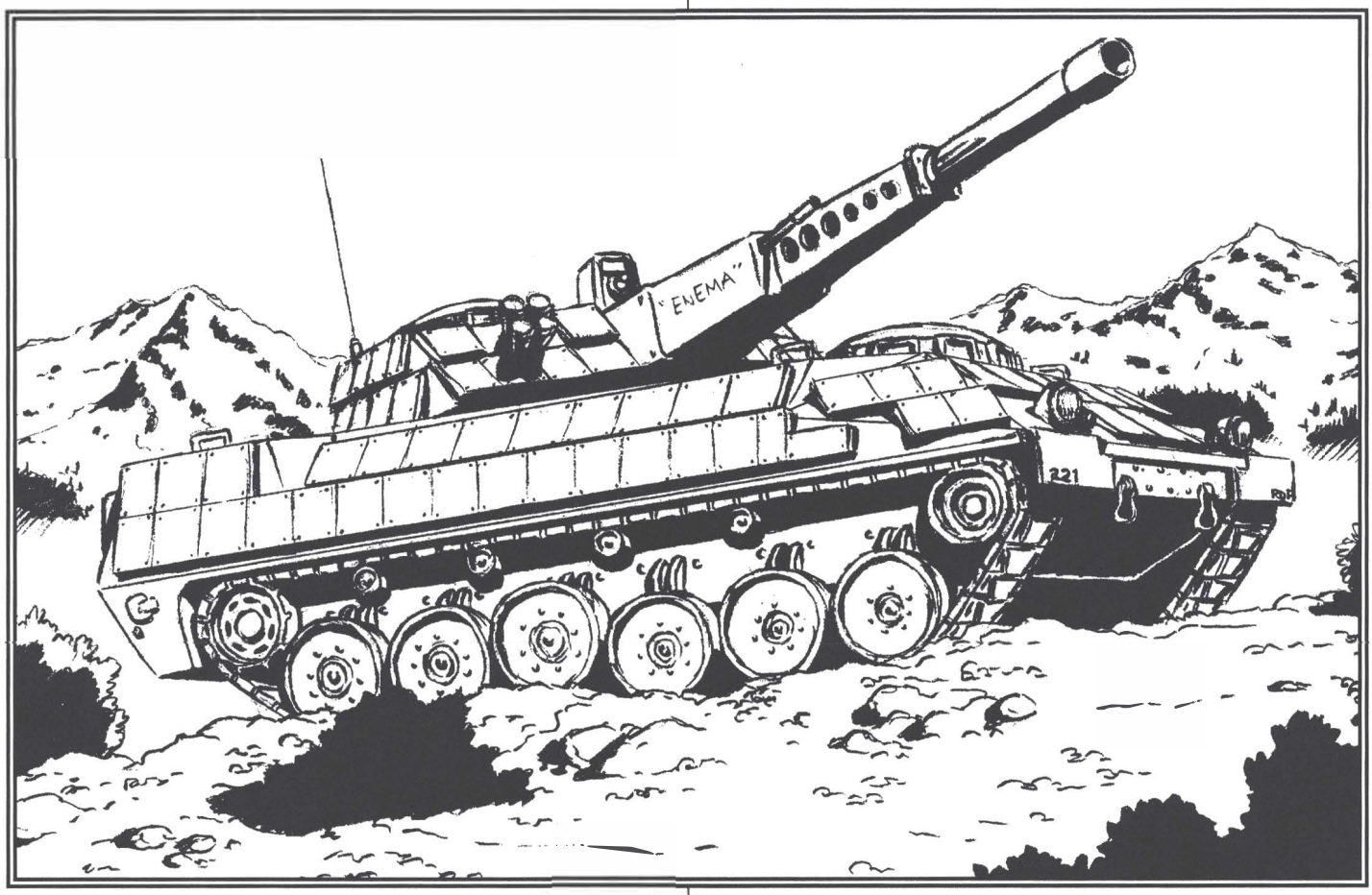
TOP SPEED:	40 MPH	**ACC/DEC:**	10/50 MPH
CREW:	3	**RANGE:**	200 MILES
PASSENGERS:	0	**CARGO:**	NONE
MANEUVER:	+2	**SDP:**	600 (BODY 30)
SP:	375 (ARMOR 19*)	**TYPE:**	MBT
MASS:	100 TONS	**COST:**	23.5 MILLION EB.

Special Equipment: Composite Armor, amphibious modifications, damage control, environment control, 12 man-hours life-support, anti-laser aerosol, chaff and IR smoke dispensers, 6 IR smoke projectors, AEAMS, military radio with scrambler, laser communicator, satellite uplink, multi-target, microwave and visual rangefinders, auto-pilot and navigation system, cybernetic linkage, ECM, ECCM, image enhancement, laser detector, microwave detector, military radar, military radar detector, telecopic optics, thermograph.

Weapons: Stabilized 3cm Rail Gun with extra magazine in turret. AGAMS in turret atop main turret. 30mm Autocannons in articulated mounts (one on each side of the hull), with robotic weapons control. HATGM with 11 active optic/thermal missiles in fixed hull mount forward. +5 fire control computer for Rail Gun; +3 fire control computers for 30mm guns

"Tyrannosaurus Rex, the Sabretooth Tiger, the African Elephant; all big, impressive, ferocious animals. Threatening as hell, just like the M-20. 'Course, they're all extinct— and the mouse isn't. Sometimes big just means more to shoot at."

— Capt. joseph Browning, USMC



▲ U.S. M-75 Light Battle Tank

The M-75 LBT is the tank of choice for the average corporate army. Small, fast, with a quick-firing gun, it's nasty enough to do in anything not an MBT and cheap enough to lose.

Top Speed:	80 MPH	**Acc/Dec:**	10/50 MPH
Crew:	2	**Range:**	200 MILES
Passengers:	0	**Cargo:**	NONE
Maneuver:	+2	**SDP:**	140 (BODY 7)
SP:	60 (ARMOR 3)	**Type:**	MBT
Mass:	14 TONS	**Cost:**	1.4 MILLION EB.

Special Equipment: Reactive armor, amphibious modifications, environment control, fire extinguisher, 4 IR smoke projectors, anti-personnel grenades, military radio with scrambler, laser and visual rangefinders, auto-pilot and navigation system, image enhancement, thermograph.

Weapons: 12.7mm Machinegun and stabilized 75mm gun in turret. 10 magazines for 75mm in hull. +3 fire control computer for 75mm.

Notes: May have cybernetic linkage added for 134,400 eb. Militech makes a version of this tank called the Destructor. The Destructor uses caseless ammunition for its main gun (ammo cost doubles), so that it holds half again as many rounds (50 rounds).

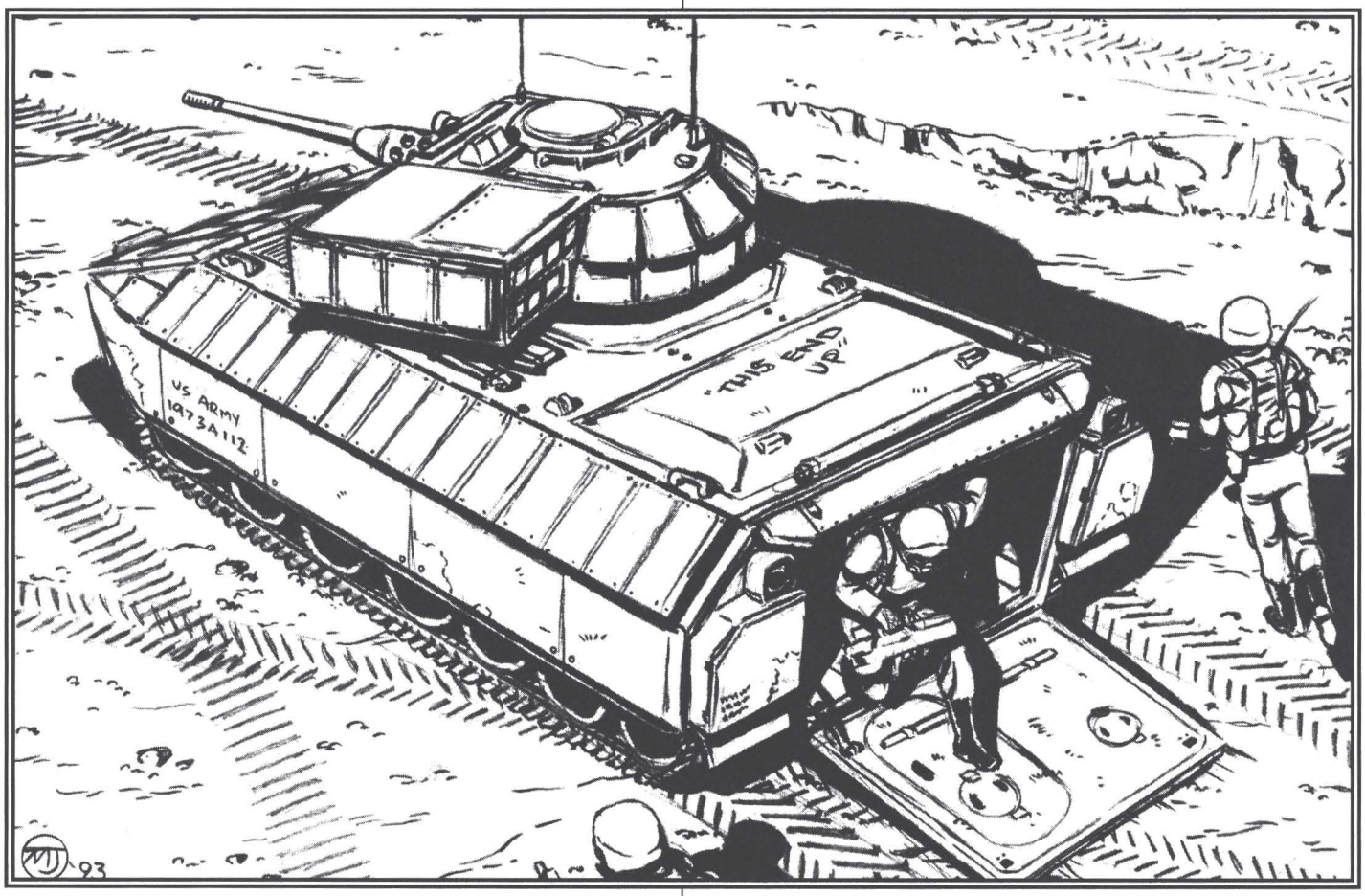
Militech Behemoth APC

Militech doesn't really ascribe to the IFV theory, preferring to use APCs instead. The name is misleading, since most armored cars have better armament than the Behemoth. Such a fearsome name is good for image and morale, though; Militech sells a lot of them.

Top Speed:	60 MPH	**Acc/Dec:**	10/50 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	10	**Cargo:**	4 TONS
Maneuver:	+2	**SDP:**	120 (BODY 6)
SP:	40 (ARMOR 2)	**Type:**	APC
Mass:	12 TONS	**Cost:**	480,000 EB.

Special Equipment: Reactive armor, amphibious modifications, environment control, 4 IR smoke projectors, anti-personnel grenades, military radio with scrambler, visual rangefinder, auto-pilot and navigation system, cybernetic linkage, image enhancement, thermograph.

Weapons: Turret-mounted 20mm autocannon or 40mm Auto-GL.



▲Army M-15 Infantry Fighting Vehicle

The term "Infantry Fighting Vehicle" is applied to an armored personnel carrier that carries enough weaponry to operate in support of the infantry it carries. While this does increase the organic firepower of an armored infantry unit, it also increases the cost, and IFVs can't carry enough armor for a slugfest with anything more powerful than very light vehicles. In practice, the best use for IFVs is at a distance, behind the troops as fire support. Unfortunately, this means that the troops have to disembark at a distance from their objective, nullifying the advantage of armored transport.

Furthermore, the U.S. Army *still* can't seem to get an IFV that can float!

Top Speed:	80 MPH	**Acc/Dec:**	13/50 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	8	**Cargo:**	6 TONS
Maneuver:	+2	**SDP:**	200 (Body 10)
SP:	100 (Armor 5)	**Type:**	IFV
Mass:	20 TONS	**Cost:**	1.6 MILLION EB.

Special Equipment: Reactive armor, amphibious modifications, environment control, fire extinguisher, 4 IR smoke projectors, anti-personnel grenades, military radio with scrambler, laser and visual rangefinders, auto-pilot and navigation system, image enhancement, thermograph.

Weapons: HATGM with 7 active optic/thermal missiles and stabilized 30mm autocannon in turret.

U.S. M-50 Tank Hunter

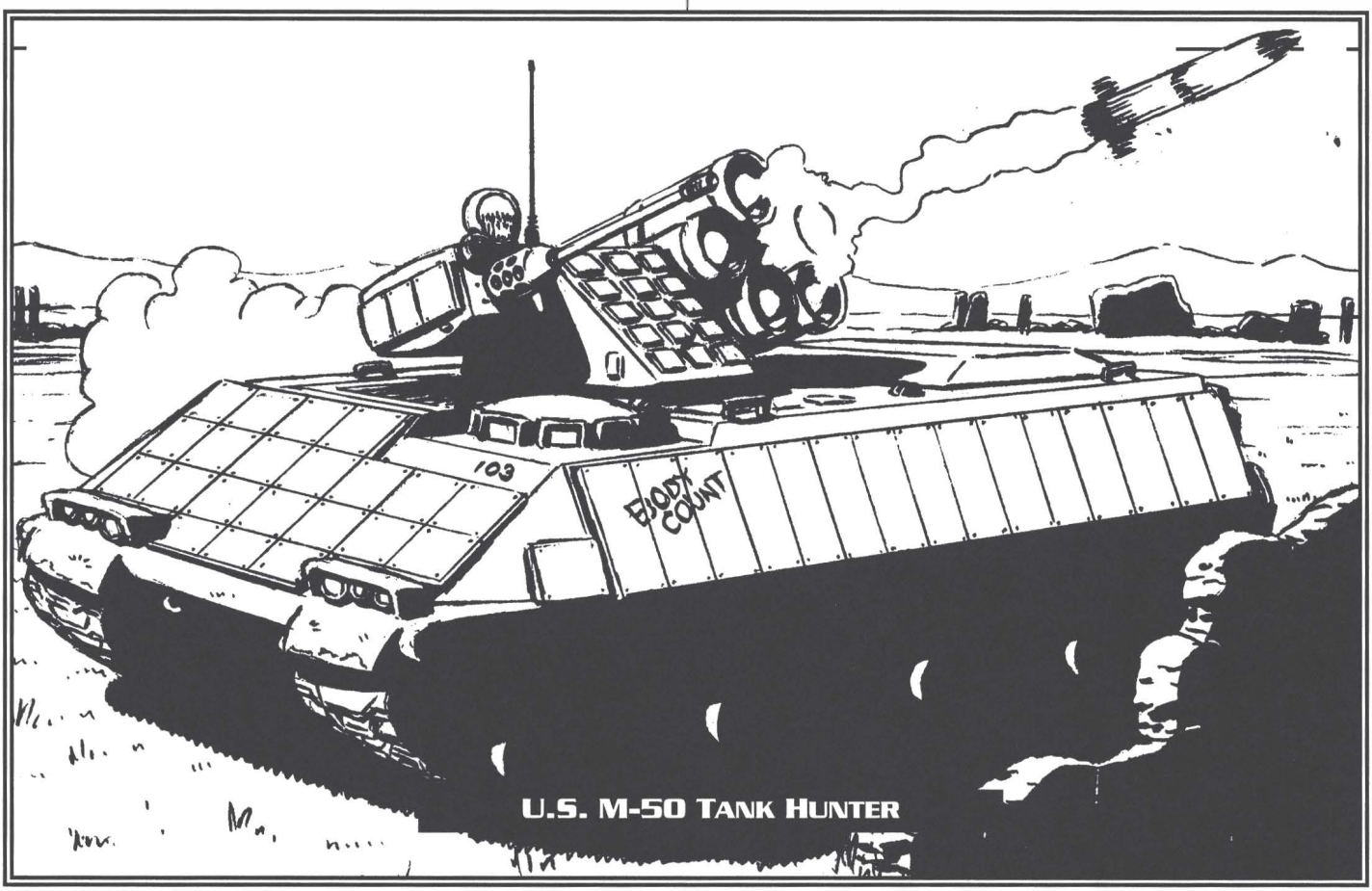
The U.S. Army believes in tank hunters that can survive. Based off the M-15 chassis, this missile-toting killer is designed to engage the enemy from long range, preferably totally behind cover.

Top Speed:	80 MPH	**Acc/Dec:**	13/50 MPH
Crew:	2	**Range:**	300 MILES
Passengers:	0	**Cargo:**	4,500 TONS
Maneuver:	+2	**SDP:**	140 (Body 7)
SP:	40 (Armor 2)	**Type:**	IFV
Mass:	14 TONS	**Cost:**	1 MILLION EB.

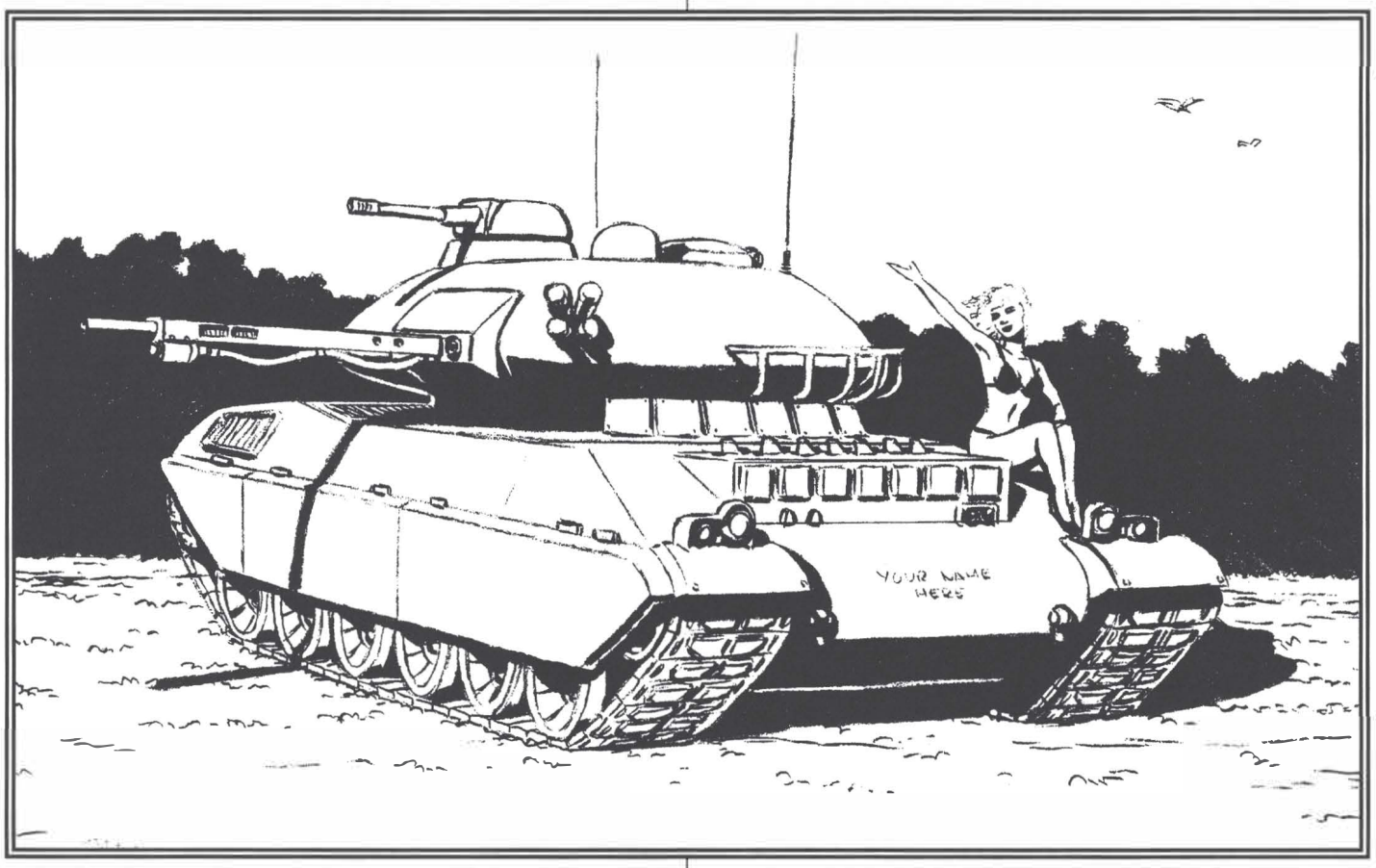
Special Equipment: Reactive armor, amphibious modifications, environment control, fire extinguisher, 4 IR smoke projectors, anti-personnel grenades, military radio with scrambler, visual and laser rangefinders, auto-pilot and navigation system, cybernetic linkage, image enhancement, thermograph.

"It's simple economics. Say that I lose three M-50s and their crews for every enemy MBT that they kill. Chances are, I've still come out way ahead budgetwise..."
— Col. Reginald Brickton, Militech Field Ops.

MILITECH BEHEMOTH APC



U.S. M-50 TANK HUNTER



▲MILITECH MT-4 MBT

Militech is the foremost commercial arms manufacturer in the world. Their entry into the MBT field is well-respected — it has decent armament, good range, good servicability, and is light enough to be transported by airship.

TOP SPEED:	60 MPH	**ACC/DEC:**	10/50 MPH
CREW:	4	**RANGE:**	200 MILES
PASSENGERS:	0	**CARGO:**	NONE
MANEUVER:	+2	**SDP:**	250 (BODY 12)
SP:	160 (ARMOR 8*)	**TYPE:**	MBT
MASS:	41 TONS	**COST:**	9 MILLION EB.

Special Equipment: Composite Armor, amphibious modifications, environment control, fire extinguisher, 12 man-hours life-support, anti-laser aerosol and IR smoke dispensers, 4 IR smoke projectors, AEAMS, military radio with scrambler, laser communicator, laser and visual rangefinders, auto-pilot and navigation system, image enhancement, laser detector, military radar, military radar detector, thermograph.

Weapons: Stabilized 1cm Rail Gun in turret with +3 computer, 25mm autocannon in small turret atop main turret. HATGM fixed forward with 7 active optical/thermal missiles.

Notes: The MT-4 can be equipped with cybernetic linkage for an additional 300,000 eb.

"The MT-4: From the Showroom to the Battlefield, it's more than just a pretty face.!"

"The MT-4: Fast, Effective, Affordable. It's the Future's Firepower— Today!"

— Militech Ad Slogans

"I Thought things were hot enough as it was. Now, Militech goes out and starts selling these hi-tech nightmares to any corp or dictator who has far too much cash and too little sense. I expect to see one with Yakuza markings any day now. Lord, I'll be glad to retire."

— Gen. Leonard Mandela, USMC

POWERED ARMOR

"I'd found me a chromer for sure. He kept pumpin' in those H.E.'s, fraggin' my suit over and over. Then, the whole DMZ broke down, and I got buried. He thought he'd cooled me...I thought he had, too. I mean, the Fenner blew and I couldn't see nuthin'. I guess I started to freak under that rubbish—kept slapping my helm to try to get the Fenner back on. He didn't think to finish me, though. He had my padres on his mind, so he turned his back on me and, like a gift from God, on comes the Fenner. I did a quick SSR and found my little mini-grin was the only thing left workin'. But, that was alright, cause I was loaded up with API, and when I poked up out of that trash and acquired him, he had turned his back and wasn't readin' me at all. You know what happened then..."

— Lt. Bentley Collins, 22nd team, Milltech Extractions, Ltd.

Dressed to Kill

This portion of *Maximum Metal* is an expanded set of rules for *Friday Night Firefight.* It is a combat system for Cyberpunk adventures dealing with Assisted Combat Personnel Armor (ACPA). ACPA or, simply, Powered Armor (PA), refers to a combat environment suit which, (1) has been augmented with rigid or semi-rigid composite plates of armor, and, (2) assists the wearer in carrying its own considerable bulk, and that of the various weapon and utility devices, through some sort of powered assist. In the Cyberpunk period, that powered assist is almost always provided by a heavy-duty linear frame (*CP2020*, pg82), generically referred to as a chassis.

Why powered armor? Veteran CP players know the advantages of strolling through a combat zone in MetalGear®, an all-body exoskeleton armor which provides 25SP of protection. Now, imagine that the good folks at Arasaka, Militech, OrbitalAir, and Zetatech are not satisfied with 25SP of armor; that some of their personnel are too highly trained to be *cheaply* expended; that some ventures are too covert to leave their own dead bodies around; or, that a battle zone is so hot that a conventional soldier cannot conceivably fulfill the objectives. Suppose that you need soldiers who can walk around in 35SP, 50SP, or even more armor, whose primary weapons are capable of clearing out *dozens* of personnel, AFV, and hardened installations. Suppose, that by spending a little *real* money now, you can save the expenditure of lots of real money later. Powered Armor. The simple answer to these and many other fine questions. Not cheap, not subtle, but hard to stop – very hard to stop.

Troopers and Skills

Troopers

A Trooper, properly speaking, is a professional soldier well-trained in the use of Powered Armor. While only an average combatant without a suit, a Trooper is nearly matchless as a threat while wearing PA. It is common practice to refer to anyone wearing Powered Armor as a Trooper, whether they are career ACPA wearers or not. In battle, the difference is obvious.

With the introduction of Powered Armor, a new category of professional Solos slowly arose, much like brawny jet-fighter pilots, specially trained to make use of the equipment. Borrowing the label from 20th Century sci-fi, they were called Troopers. As a profession, the Trooper's special ability is *Combat Sense* , similar to that of a Solo, but specialized for ACPA combat.

Just like the solos, *PA Combat Sense* (usually shortened to *PA Combat*) is a reflection of the Trooper's skill and professionalism in his chosen combat discipline. *PA Combat* permits the Trooper (working through his Reality Interface) to anticipate danger, dodge traps, and avoid dangerous situations which ambush less wary souls. The *PA Combat Sense* provides a bonus to a Trooper's *Awareness* rolls whenever he is in Powered Armor, and acts as a bonus on initiative rolls. Various special maneuvers and combat actions in Powered Armor require *PA Combat* for the die rolls. With a +2 you can run your ACPA without tripping and falling in it all the time. With a +4, you move like an athletic teenager even through the roughest of terrains. However, *PA Combat Sense* is *very* restricted when you're out of your armor (1/2 initiative bonus, no maneuver bonus). Don't go thinking you're a Solo when that happens.

A typical Trooper Career Skill Package: (good for most Corporate Mercs)

PA Combat Sense
Awareness/Notice
Heavy Weapons
Rifle
Melee
Brawling or Martial Arts
Athletics
Weaponsmith
PA Tech
Intimidate
Common pickup skills include:
Endurance, Leadership, Dodge & Escape, Demolitions, Programming, Operate Heavy Machinery, Pilot (Vectored Thrust), AV Tech, PA Tech, Expert (PA Design), and First Aid.

New Skills for ACPA:

PA Tech (3): A construction and repair skill for all non-weapon features of powered armor. This skill combines aspects of *Basic Mechanics, Electronics*, and *Cybertech*, but is specialized for ACPA and Linear Frame use. TECH Skill

Expert (PA Design): The ability to design an ACPA suit's functions for optimum performance of its mission (e.g., when a player tries to design a suit from scratch in game context). Use of a computer system with CADaM programs adds +3 to the roll. This also allows the customization of standard suits without the problems of jury-rigging. INT Skill

PA Pilot (2): Some characters may be trained in the use of ACPA without being Troopers themselves. *PA Pilot* is learned by non-Trooper characters the same as *Streetwise* is learned by non-Fixers (in place of *Streetdeal* ability). It provides the maneuver bonuses of PA Combat Sense, but not the initiative bonus. REF Skill

Trooper's lifepath almost always includes a stint in the military, whether government- or corporate-operated. For game starting age roll 2D6+18. Four years of this are spent in some sort of academy/advanced training. You must select at least half of your pickup skills at this time from the previous list. For every year past 20, roll on the Life Event chart, *CP2020* pg.36. What happened between ages 16 and 20 you ask? Why don't I roll for those? Didn't I make myself clear? Military Academy! You think you've got time for anything else? Oh well, for compensation, you get an extra 1/2D6 in pickup skills. The intensive training is pretty focussed in the academy.

Turns and Turn Order

Suit Initiative Bonuses

Suits of powered armor usually affect a combatant's initiative roll, either positively or negatively. With unsophisticated vision and target acquisition equipment, a PA trooper will experience a terribly limited field-of-view, just like the knights of old. Suits such as these, or those with inadequate power for their mass, will penalize their wearers' initiatives. However, suits from main-line manufacturers, with very advanced personal virtual reality controller interfaces, and more than enough horsepower for their bulk, will almost always provide the wearer with a solid initiative bonus. Frequently, this bonus will enable a PA trooper to enact more than one effective action per round.

Professional Initiative Bonuses

The Trooper's special ability of *Combat Sense* (PA) adds to his initiative while wearing ACPA in the same way as a Solo's special ability. However, Solos do not get their *Combat Sense* special ability while wearing powered armor, and Troopers get only 1/2 their ability (round down) if they're not wearing it! The trooper's *PA Combat Sense* is added to whatever modifiers his ACPA normally provides when rolling combat Initiative .

Note: The total of Suit and Professional initiative bonuses will never exceed 20 before the die roll.

"Cut the crap. I'm no different than what you are. I just do it bigger. What; you think you work for the good guys and we don't? Hey, everything is the same-ole, same-old all over. I just don't go into a firefight naked, like the rest of you fools."

"What do you mean killing? No, I don't know who they were, and I don't care. The thing's like a game. We follow the lights, the cameras, the HUDs. This is an arcade player's war brought to the street. We're just doing a job that somebody's got to do, and we do it well. We find the target, put the box on the screen where it ought to go, and push the button."

"And me, I got security. My chances of puttin' in 20 years may not be any better than yours, but if I make it, I've got a life.

They take care of us upstairs. They have to. We take care of them. And, you know what? I think they may be smart too. With the firepower of just the padres in my unit, we could probably own that damn tower any time we wanted!"

—1st Lt. Matt Bricker, Arasaka "Diamond Team"

Actions

The following types of action are possible in ACPA.

Move up to your full movement (add your Movement stat to your ACPA's Suit Initiative Bonus, then multiply by 3m) per turn.

Leap while stationary or while running (see Jumping in *Movement Feats* section).

Fly, if equipped with Jet Pack or Flight Unit (depending on the environment). See rules, pg. 58.

Attack with a ready weapon at up to the weapon's full ROF, or make a melee attack.

Dodge a melee attack.

Parry a melee attack; some highly advanced suit devices enable a limited ability to parry ranged weapons.

De-activate, disconnect, or drop a suit system, piece, or device, if possible.

Manually activate various suit systems (e.g. Auto-doc, Escape, Auto-destruct, etc.). This can also be done as a free action if using Full-HUD Wideband reality interface or higher.

Manually reload suit weapons.

Attempt to escape a hold, trap or entanglement.

Mount or dismount from vehicles.

Perform a non-combat task.

Ambushes and Backstabs, Line of Sight and Facing

These actions and situations are handled just as in normal combat, as described in *CP2020* pgs. 98-101.

Multiple Actions and Multi-Weapon Attacks

The performance of multiple actions in PA is a little harder than normal because each action must be handled by two processors: the pilot's brain and the suit's control system. For the second action in a combat round there is a -3 penalty; for each action after the second, subtract an additional -1. The maximum number of actions possible is equal to half the pilot's modified Reflex. Due to the suit's reality interface, it is sometimes possible to activate multiple weapons as a single action.

Damage

Damage in combat is determined by rolling groups of six or ten-sided dice, as per *CP2020,* pg100.

Hit Location

Hit location on powered armor Troopers is determined just as in regular *Friday Night Firefight* (see *CP2020* pg100). However, since there are so many separate ACPA systems, and so many kinds of limited damage with power armor, players will almost always make an additional hit location roll to determine which sub-system was hit on a successful attack.

System Damage Determination

After determining the body area for a hit (see *CP2020,* pg.100 "Hit Location"), determine if an External System was affected.

Armored (and Unarmored) External Systems: a number of ACPA systems are too bulky to feasibly place inside the suit's main armor. Large weapons, extra ammo, breathing tanks, and propulsion systems most often fall in this category (all systems are marked for external/internal use). However, such systems may be vital enough to demand their own armor. Such systems will have their own values for SP and SDP (note that the frame's Toughness does not apply). Any time a suit is hit in a Body Area which contains external systems, there is a **50% (5 in 10) chance** that an external system is hit instead of the suit. If the attack penetrates the system's integral SP, the SDP must be reduced by the amount of damage exceeding the SP, and the system must also be checked for system integrity (See below).

For various reasons: size, volatility, etc., a system may be both external to the ACPA and unarmored. Such systems merely have an SDP which can be eroded as any other system, forcing immediate system integrity checks when damaged.

Damage which exceeds the SDP of the External System can pass through to the armor of the suit itself.

If no external systems are hit or if the damage was greater than the SDP and SP of the external system, another roll, called a

Col. Walford Prescott, General Operations Command, Militech Extractions, Ltd., sitting before a view screen with many flashes and columns of smoke, the speaker making reports of heavy weapons fire, small explosions, and doors being ripped off their hinges:

"Sneak! Sneak! You CHOOH-heads, this is a commando operation, a sneak-in, sneak-out operation! Collins! Lt. Bentley Collins, are you reading me, damn it?"

A few moments later:

"Sir, Bentley here. Sorry, sir, cover's blown. There's more to trash here than we thought..."

System Hit roll, may be required **if the armor SP and Toughness modifier are exceeded**. Once a hit location roll designates a target body area, and damage has both penetrated the armor and been reduced by the Toughness Modifier (see pg. 63), a System Hit roll follows. On a D10:

1-3 Main Chassis Hit

4-6 Enclosed Systems Hit

7-9 Internal Weapons

10 Roll again: if even, **Critical Damage** (see chart); if odd, roll System Hit again, ignoring 10's.

If there are multiples of the rolled system type in an area, the PA player has the choice of which one will be effected. If no such system is present in the location, the hit goes to Pilot.

System Damage Application

All ACPA systems have a number of SDP (Structural Damage Points) which limit how many hits the system can take and still stand a chance to keep functioning. There are four kinds of subsystem hits found on ACPA:

Enclosed Systems: These systems (utility or defensive) are normally contained within the main body of the suit's armor and so benefit from its protection. If players determine that an enclosed system has been struck, apply any remaining hits (after armor and the Toughness Modifier) to that system, and make a system integrity check. If there is more than one of that type of system, the player determines which one is damaged. Any damage not absorbed by the system's SDP passes on to the pilot. If all the utility systems or internal weapons in a Body Area (head, arms, legs, torso) are destroyed, any further System Hit rolls for those Enclosed Systems pass the damage directly to the pilot.

Internal Weapons: These are weapons systems mounted in internal spaces. Because they occupy a suit volume different from that of utility or defensive systems, they are given a separate entry on the System Hit Table. It terms of damage allocation, they are treated the same as the other enclosed systems.

Main Chassis Hit: Any hit on powered armor which does not damage a utility system or internal weapon is a hit on the suit's "frame" itself. A system hit roll which designates the chassis will do normal SDP damage. (All chassis have an SDP rating in each Body Area based on a % of the linear frame's STR rating.) If the frame in a particular body location is destroyed by elimination of all its SDP, then **all** systems in that body area are immediately considered inoperable. If the Torso section of the chassis is destroyed, the PA automatically shuts down! Only undestroyed systems with external controls operable by powered, or unpowered, personnel may be retrieved and used. Any further damage taken by a chassis section that is destroyed will be passed on to the pilot, **but** the frame's Toughness Mod still applies.

Critical Hit: There are some systems found on all ACPA, such as the various joints and power supplies on each limb. These can all suffer damage from impact, electrical short, localized armor breakdown, "bad luck," etc. Whenever a Critical system hit roll, players must refer to the chart below.

Critical Hit Chart

1-2 The Body Area which suffered the critical hit "siezes up" and is immobile for 1D10+1 combat rounds. Loss of a leg: 1/2 walking speed, no running; -2 to REF in melee. Loss of an arm: no full lifting; no changing weapons/equipment; -1 to REF when in melee. Loss of torso: -2 REF in melee; -2 To-Hit when turning to face target; no changing weapons/ equipment. Loss of head: -2 To-Hit when turning to face target; +10 to difficulty when making *Notice/Awareness roll*.

3 Cooling System: The suit will become unwearable due to heat build-up in 2D10 minutes. If the pilot is not out of the suit by then, he must make Stun/Shock Saves starting at Serious and progressing one level per turn until he passes out. During this period, the pilot's abitilities are affected as if he was at the appropriate Wound level (Serious, Mortal, etc.). If not removed within 15 minutes after that, the pilot will die of heat stroke.

4-5 Suit Strength lowered by 1D6 points. [A loss of 50-300kgs. lifting; 15-90kgs. carrying.]

6-7 Suit Reflexes lowered by 1D6/2 points. [This reduces both pilot's current Reflex and the control system's maximum Reflex.]

8 The ACPA's Power Unit loses 1D6x2 hours from its life. [A suit has 24 hours normally.]

9 Interface/Electronic Systems are out for 1D6 combat rounds`; 2D6 if a civilian suit. [Determine one system randomly from all available Reflex/ Control, Reality Interface, Communications, or Audio-Visual suites.] If a system takes a second hit of this type, it is destroyed.

Powered Armor Slang:

ACPA: Assisted Combat Personnel Armor.

Acquire: To locate and successfully lock on to a target with guided or linked weapons.

Aperture-Based: very low quality, referring to ACPA with no VRI. The term is often used to make crude sexual innuendoes.

API: Armor piercing incendiary.

Boris: Very large PA, especially Russian made.

CHOOH-Head: Wild or undisciplined personnel or civilians (several derivations suggested, historically connected to "beer drinking rednecks").

Chromer: Someone who "loves" powered armor (by killing it).

Critical: A bad-news term, refers to failure of equipment, or the tactical breakdown of a military scenario.

DMZ: Battle location.

Effer, Iffer: Stands for IFAR, Improved Finned Aerial Rocket, a large unguided explosive rocket of 2.75" dia.

Fenner: Highest tech virtual reality ACPA user interface available; sometimes used like "finer."

Getting Lacey: From the drug Black Lace; to start fighting in a berserk fashion.

Hard: 1) Target wearing exoskeleton, 2) any heavily-armored object or position.

H.E.: High explosive.

Kipple: DMZ rubbish, taken from Vonnegurt.

Mini-grin: A mini-grenade launcher.

Monkey: Someone using ACPA who is not well-trained to do so.

Nudie: Personnel targets without ACPA or exoskeleton.

PA: Powered Armor.

Padre: From compadre, it refers to friends or the other members of your PA team.

Reading: To detect and/or scan, similar to acquire.

S.S.R.: "Suit Systems Read," an inspection of the various status displays in the suit's monitor area.

Trash: To make Trashed.

Trash-can: A usually stationary, perimeter-defense robot.

Trashed: When applied to ACPA or other equipment, means "destroyed"; when applied to persons, means messed-up or dead.

Trooper: A PA soldier, though it can refer to anyone wearing PA, trained or untrained.

10 Mechanical Shock [1D6 extra SDP damage to a random area of the frame, Pilot stunned for a equal number of Combat rounds.]

System Integrity Checks

When systems or weapons are damaged, a check must be made to determine if they continue to function. These checks are made any time the system sustains damage. The difficulty of the check is defined by the fraction of the system's SDP damaged:

If a system loses less than half its SDP, it has a 25% chance of becoming inoperable.

If the system has taken 1/2 or more of its SDP, without exceeding its total, the chance of non-operation is 75%.

When the SDP is exceeded, the system is considered completely destroyed and is scratched off the ACPA system sheet. It will no longer function or absorb damage, and must be replaced. At a later time, systems which became non-operational may be repaired by paying the percentage cost of a new system equal to the percentage of SDP destroyed; fully-destroyed systems must be replaced at full cost.

Ammo reloads are an exception to this rule: If the reload simply fails the System Integrity Check, all ammo in the space is unusable. In addition to the check, however, there is a 10% chance (1 in 10) that any ammo in the magazine may go off for every 10 points of damage inflicted on a reload. In this case, all the ammo in the space is destroyed, and the damage to the pilot and suit is: **1D6/3 (round off) x Normal Ammo Damage**. Armor may protect against this if the reload was externally mounted, otherwise only the Toughness Modifier applies.

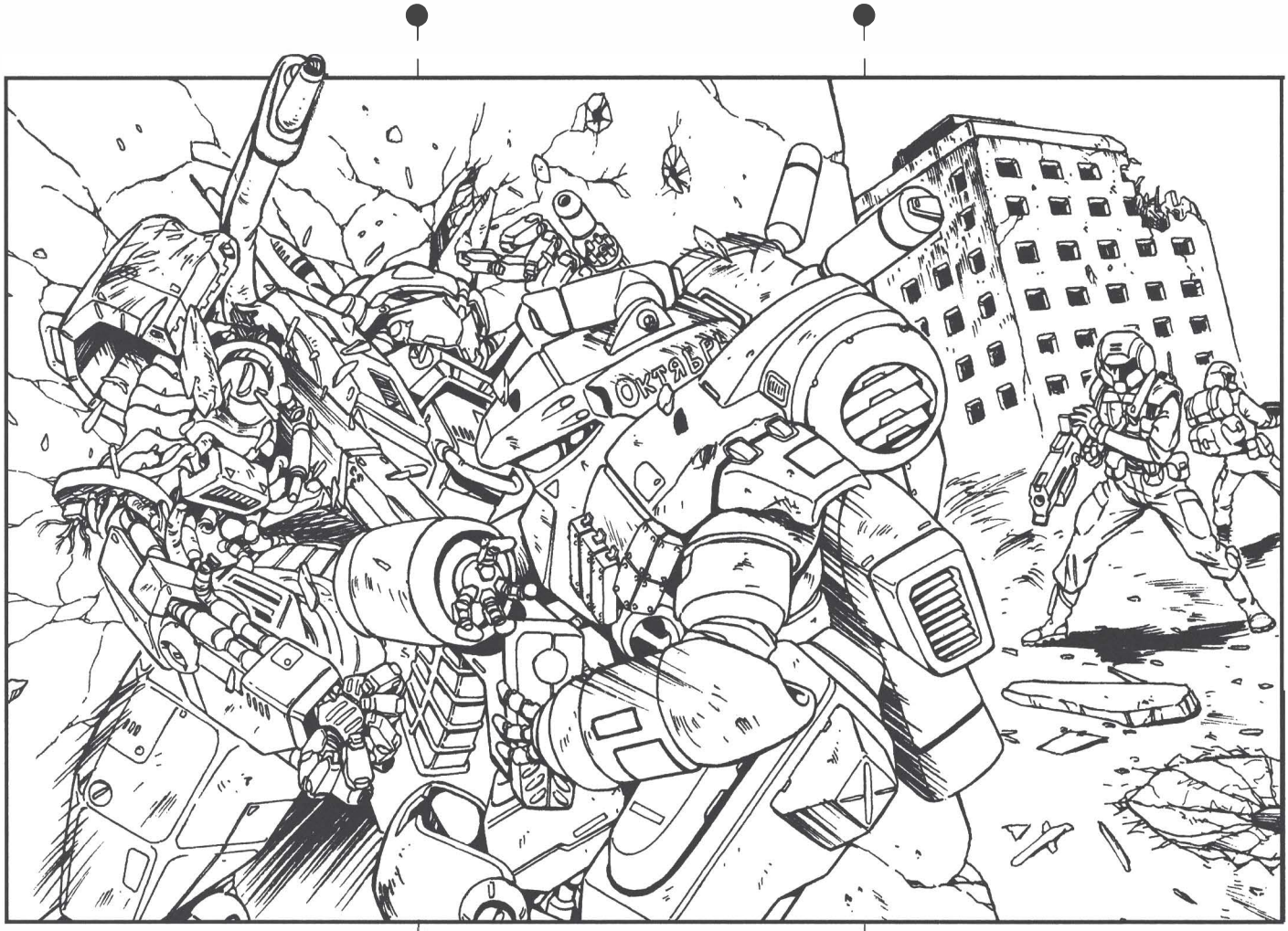
The Body Type Modifier and Wounds to the Pilot

Check *CP2020*, pages 103-105, for the standard rules covering the effect of damage on the Trooper himself. The basic progression for wounding a PA pilot is:

Weapon Damage-Armor SP-Toughness Mod-(any Enclosed/Internal Systems' SDP)-Pilot's BTM=damage taken.

Hits and Damage to Linear Frames

A "naked" (e.g., being worn separately; not part of an ACPA suit) Linear Frame takes damage in a slightly different way than powered armor. When the wearer is hit by a weapon, first make the Hit Location roll. Basic frames (STR12-16) take the damage on a 2 in 10 (20%) chance; larger Advanced frames (STR20-52) take damage on a 3 in 10 (30%) chance. For damage purposes, the frame's SDP is equal to its STR. A damaged frame will continue to function at full abilities until it has taken half its SDP at which time there is a 4 in 10 (40%) chance of breakdown. This chance goes up by 1 (10%) *for every hit the frame takes* after it has reached 50% SDP. The majority of linear frames are made for utility purposes, not combat. They break down quickly if damaged—be warned.



Maneuvers in Powered Armor

This section covers the basics of how to perform feats and make attacks in powered armor. There are four parts to the section: Strength Feats, Movement Feats, Melee Attacks, and Ranged Weapon Attacks.

In addition to its great advantages as armor, ACPA has become famous far beyond its actual ability. Its super-human strength (and speed), ability to take damage like an AFV, and, its terrifying combat capacities (be they with hand-to-hand, small arms, or anti-vehicle weapons) have inspired both respect and terror from opponents.

Strength Feats: Carrying

Naturally, someone with 2300 kilos of assistance can move many things well. A Trooper in ACPA receives the following benefits:

He may carry a total of additional objects equal in weight to **1/2** the Carry rating of his suit's chassis with no noticeable encumbrance. If the amount carried is between **1/2** and the **full** rating, subtract **2** from the suit's initiative bonus (**SIB**). This covers all hand-held weapons and equipment, all externally-mounted ejectable items, and any other external weight supported/carried by the PA.

He may dead lift 90% of his suit's total chassis capacity, and barely carry it a number of meters equal to the pilot's modified Reflex (simulating balance).

Using both hands, he may lift an object over his head weighing up to half his suit's total capacity and may even toss it for a number of meters equal to a roll of:

1D10 + *PA Combat*+ STR/15 (round off)

He may throw an object of 1/8th his suit's total capacity twice as far. An object weighing 1/20th his suit's total capacity he can throw four times as far.

Hitting

Getting slapped around by powered armor is like sumo wrestling an automobile. Suits of ACPA make martial arts possible on a vehicular level! The force of strikes by powered armor is based on the Strength of the chassis. Divide the STR by 9, rounding to the nearest whole number. A hand strike will do that many ten-sided dice in damage. Such a hand will do an additional die in crushing damage. (Remember, you must Grapple before doing a Crush.) Kicks do 50% more damage that a hand strike (again rounding to the nearest whole number).

Punch Formula: STR/9 (Round to nearest whole number) = X D10.

Crushes: (X+1) D10

Kicks: [X+(X/2)] D10

Therefore, a suit with a 2000 kilo capacity:

Punches with 4D10.

Crushes doing 5D10.

Kicks at 7D10 (Ouch!).

While not surprising on one level (after all, battlegloves on human arms do 1D6+3 punching and 3D6 crushing), still, the force is overwhelming and irresistible. A comparison with the rules for vehicular ramming on pg.113 of *CP2020*, shows that getting punched by a 2000kg. capacity suit is a little like getting hit by a car going forty mph.

SDP for Cover Objects

Cyberpunk 2020 does not provide any SDP for the objects it lists as potential cover on page 99. Out of respect for those who would like to punch through doors as well as hide behind them, try the following guideline: an object which has been given an SP but no SDP, has a number of SDP = 3 x SP. For example, that simple concrete utility pole with a 35 SP, we can guess has about 105 SDP. The GM may decide to modify this value if the object is especially massive (e.g. x4, x5, etc.) or if it is a lightweight/partial object of its type (e.g. x1).

Pushing and Pulling

Powered armor may push or pull with a force equal to 60% its capacity if all its limbs may be employed in the effort (100% if braced). Don't forget that unless the Powered Armor is very well braced, it will only succeed in moving itself if the force exerted exceeds its own weight! A single arm can push with a force equal to 1/10th the suit's capacity, a single leg can push with 1/5th.

Crashing

When a Trooper wants to lower his shoulder and ram something with all his might, treat it as a vehicular ram (*CP2020*, pg.113) by a heavy vehicle. Note: round normally (do not round down) when dividing speed by 20; Powered Armor delivers a much more focused point of impact.

Movement Feats: Running

The guys in R & D have finally realized their dream to create a "Superman" suit. The Suit Initiative Bonus is added to the Trooper's movement allowance (MA) when calculating his running rate in meters per combat round:

(SIB + MA) x 3 = Run in meters/combat rnd.

One does tend to build up a lot of momentum with this much mass. If a Trooper is running at full speed and wants to cut to less than half in a consecutive round he must attempt a Difficult maneuver (20+) with *PA Combat* + REF + 1D10. If he's on a slick surface (e.g. linoleum tile) the maneuver becomes Very Difficult (25+). On ice, of course, the Trooper must roll a 30. If he fails this roll, he doesn't slow down at all, but must now attempt a Difficult maneuver to keep from falling and sliding at the same speed.

In addition, a sprinting Trooper bounds a great deal higher with each stride than an unassisted man. Inside structures, running Troopers need **(MA/10)+2.5m** clearance to avoid smashing into the ceiling at the top of a bound.

Jumping

A Trooper may also benefit from ACPA's high power to weight ratio in his ability to Leap. If running at half to full speed the Trooper may leap horizontally up to his Run/4 in meters. He may jump vertically his Leap/3 in meters.

While stationary, the Trooper may leap horizontally his Run/6 in meters. Again, his jump vertically is Leap/3 in meters.

The mass of falling ACPA is something to be reckoned with. Anytime a Trooper "lands" he must immediately make an Environment Check (described later). For every 3 meters (or fraction thereof) he has fallen, his armor is raised one category on the *Trashing the Environment* chart.

Caution: the following rules for flying powered armor add some complexity and scenario dimensions which may not be desirable in your campaign. If you desire you may consider flying ACPA to be so rare as to be practically unavailable altogether.

Flying

Troopers may fly, on those rare occasions when they are operating a suit fitted with a jet pack(s) or true flight unit.

ACPA suits may use jets/rockets to fly, hover, or assist jumps. Jets come in two types: Maneuvering and Thrust.

Maneuver jets allow an MA of 5 in zero-gee. These are designed for use in space.

Thrust jets multiply your Jump distances by +1x, up to a maximum of 6 units (+6x). With x1 thruster assist, an ACPA suit can control its fall from height (aprox. 100m) and allow a "soft" landing. The landing would not damage the suit, but the same can't be said for the environment. (Make an Environment Check at a category one level lower than normal.) In space, Thrust jets allow an acceleration of 10km/hr (aprox. 10m/combat round or MA 3) to a speed of 100km/hr (aprox. MA 30). Hovering can be done at maximum Jump heights and takes 1.25x normal fuel expenditures, but requires a Difficult *PA Combat* maneuver every other combat round. If the pilot attemps other actions while hovering, he must make another PA Combat roll in addition to the one required for hovering.

True flight is a rare breed for many reasons. Not only must the pilot be a skilled ACPA operator, he must also be a skilled vector-thrust pilot as well (skill levels of 3+ and 2+ respectively). The size and weight of the system is another consideration. Taking either the form of a **sled** or **"flying-wing"** type harness, the unit utilizes a cruise missile engine for propulsion! It allows any suit of 800kg. or less (including flight unit) to fly at speeds of up to MA 300 (1000km/hr) at altitudes of 3 to 10,000 meters!!! The fuel range of such a unit is 1600km.

Occasionally a GM will decide that a Trooper desiring to perform an aerial maneuver must make a maneuver roll using his *PA Combat* (or *Acrobatics/AV Pilot* depending on whether you're jumping or flying) + REF + 1D10. The GM may choose to add to the level of difficulty a penalty based on the speed of the Trooper (if flying, not jumping) at +1 per 15 MA .

If the Trooper is able to decelerate fully before landing, no maneuver roll or Environment check is necessary to land (unless the weight of the ACPA alone would force an Environment check). To land at speed requires a Difficult maneuver roll (with a modifier of +1/15 MA) using *PA Combat* + REF + 1D10.

SDP for Cover Objects

In *Cyberpunk*, any object which has been given an SP but no SDP, has a number of SDP = 3 x SP.

Example 1:
A standard 5SP wood door can sustain a total of 15SDP before being completely shattered.

Example 2:
A 10SP concrete block wall which has received 30pts SDP in one location has had the block which was the focus of the attack shattered.

The GM may choose to modify this multiplier up or down depending on the relative massiveness of the object relevant to other objects of its type.

Powered Armor Movement Formulae

Running= (SIB + MA) x 3 m/combat round

JUMPING

Stationary= Run/6 meters
Running= Run/4 meters
Vertical jumps= Horizontal leaps/3

Swimming

Swimming ACPA is even rarer than flying ACPA. So far, only EuroTroopers have used submersible ACPA and EuroArms is still the only manufacturer of a propulsion system designed especially for ACPA. The principles are relatively simple however, and could be implemented by virtually any main corporate or governmental body with such an esoteric interest. To date, non-Europeans have simply hired Euro-Troopers to do what little underwater ACPA work has been required.

The **EuroArms Deepwar®** propulsion unit delivers the following performance:
Maximum speed of 62km/hr (MA 20).
Acceleration of 5m/combat round (MA 2)
Deceleration of 10m/combat round (MA 4)

Fuel for four hours continuous use at maximum speed. At cruising speed, about 34km/hr, fuel will last for eight hours.

Important Note: ACPA suits are not balanced for neutral buoyancy; you must keep moving constantly, be wearing some sort of surface tether, or sink down to stand on the bottom. Just remember: at sea, the bottom's a looong way down...

Trashing the Environment

A brief essay on the problem of ground pressure and the physics of humanoid-shaped objects:

Without question, the most profound misunderstanding about powered armor, and its near cousin, the giant robot, is the terrible difficulty of weight. While there have been games, cartoons, and movies about huge humanoid mechanisms, they must remain fiction. Why? Ground pressure. Simply put, the full weight of a humanoid device is going to be pressed down on two (or four) proportionally sized feet. A 900 pound ACPA stands only inches taller than a normal man (The following calculations are using 84-90"). One of its feet will have a surface area of about 60 inches (about 50% more than a man the same size). Two such feet will thus have 120 inches between them. This works out to about 7.5 pounds per square inch of ground pressure. A normal human male will be about half that much. But, make that same powered armor or robot only twice as tall, about fourteen feet, and the thing will weigh about 7200 pounds, or over three and a half tons! Its feet will have about 240 square inches between them, exerting a ground pressure of 30 pounds per square inch.

Now consider that a heavily loaded 18-wheel tractor-trailor rig is closer to 22 pounds per square inch. If our robot thing is now three times as tall, 21', the monstrosity will weigh 12.1 tons, exerting a ground pressure of 67.5 pounds per square inch, or as much as three stacked 18-wheelers! The ground pressures exerted by appliances like refrigerators and waterbeds are much less than the seven foot robot, because of their generous surface areas; but many old timers in 2020 can remember items like these falling through the floors of older houses. So, how do you build a 50' robot? Well, first you get 327,942 pounds of material (that's if you can make the material about 1/3rd the weight of steel), and stack it, man-shaped over the 428.6" surface area of its feet for a ground pressure of 765 pounds per square inch! Or, why not just stack up a mountain of 35 18-wheelers and see whether the bottom one can move at all (since it's very flat by now).

> **"I thought I was a goner for sure. There I was, face to face with the biggest stinkin' Boris I'd ever seen...later found he was the field officer for the hostiles. He grinned at me and reared back to slug me in the helmet. Well, I knew my Militech helmet couldn't handle that so I fired my Effer between his feet. Course, if the thing'd blown immediately I wouldn't be here. But, I had a feeling it wouldn't go till it had gone through a couple of floors, and when it did, that big, fat Boris was falling in on top of it through the hole in the floor! ... course, HQ's calling the house a neutral target. Can you fraggin' believe it?"**
>
> **— Cpt. Bentley Collins, 22nd team, Militech Extractions, Ltd.**

Rules about floors

In *Maximum Metal* we take ground pressure very seriously. After two or three really severe three-story falls, your Troopers will too. Each suit of Powered Armor has been rated according to its total weight, including the Trooper inside.

Instead of going to all the trouble to calculate exact ground pressure for individual designs, the following simple guidelines will suffice to reflect the troublesomeness of substandard flooring and overweight ACPA:

General Idea:

When a powered armor trooper first moves onto a new kind of surface, and it is of weaker construction (e.g. old, light wood) or of less constitution (e.g. soft earth, mud) than the surface the trooper was on previously, the player should roll to avoid breakthrough, with a die roll based on the GM's estimate of the situation. Some factors will increase the difficulty of avoiding breakthrough. A very few factors might reduce the difficulty. The basic roll is comprised of:
1D10 + PA Combat Skill + Weight Modifiers + GM's Mods

Difficulty Guidelines:

Very unsupportive surface (i.e. thin ice, trap floor, soft mud, delicate floor) **30**
Unsupportive surface (i.e. 4" ice, soft earth, light flooring) **25**
Marginally supportive surface (i.e. normal house floor, light hulls) **20**
Standard supportive surface (i.e. heavy residential flooring, light commercial) **15**
Very supportive surface (i.e. standard commercial, heavy hull, solid bridge) **10**
Trustworthy surface (i.e. road surface, heavy commercial) **5**

"What do you mean the destruction of the command truck was only indirectly your fault, Bentley?"

"Well, sir, I was temporarily outnumbered and ran into the kitchen of the chalet. The Boris came speeding after me. When I got to the kitchen I saw a bowl of fruit and threw it on the floor in front of the door, mostly bananas and grapes. Anyway, the Boris hit it, the fruit I mean, and skid out of control into the outer wall. He broke right through, and fell, well, I think it was four stories, Sir."

"Onto the truck?"

"Yes, sir."

"(pause) Do you realize that the chalet is neutral property, Bentley?"

— Portion of the interchange between Col. Walford Prescott and Maj. Bentley Collins just before the media pressure which led to Collins' promotion to Major.

ACPA WEIGHT MODIFIERS (INCLUDING TROOPER WT.):

956 kilos+	**-15**
701-955 kilos	**-10**
481-700 kilos	**-5**
386-480 kilos	**0**
291-385 kilos	**+5**
191-290 kilos	**+10**
190- kilos	**+15**

OTHER MODIFIERS:

Using slow, cautious, movement	**+5**
Oversized feet	**+3**
Falling or Landing	**(-5 per 3m/sec or 7 MA)**
Tripped, thrown, flipped, dropped	**-3**
Damaged floor	**(-1 per 2 SDP damage)**

Melee Attacks

Powered Armor melee combat is not very different from normal melee combat, although there are a few significant exceptions.

The values for punching and kicking are much higher than normal, "bare-handed" combat. Refer to the Strength Feats section, pg.57.

Troopers may use their *Martial Arts* skills with Powered Armor if the reflex/control system allows it, but not at a skill level higher than their *PA Combat Sense* ability.

Many new items are available for melee combat, including battlefield rubbish. Very large items can be swung or thrown as weapons. Additionally, there are a number of specific weapons available to enhanced infantry. Once again, check the Melee Weapons portion of the ACPA Systems section with its descriptions.

Ranged Weapon Attacks

Powered Armor can be devastating with its great potential array of ranged weapons, some of them as large as those used on infantry fighting vehicles. Ranged weapons, even ones which are thrown, receive the benefit of the HUD (Heads Up Display) intrinsic to most ACPA.

All ranged weapons fall into three categories: Smart-Linked, Targeted, or Guided. All ranged weapons fired from PA suits use the *Heavy Weapons* skill, except when using rifled direct-fire weapons carried and operated with both hands, in which case the PA pilot may substitute his *Rifle* skill instead.

Smart-Linked Ranged Weapons

Weapons such as machine guns, portable cannon, and other simple projectiles, are unguided weapons which, in most circumstances, cause damage to the limits of their visible range. These weapons can be smart-linked into the ACPA with their relevant information graphically illustrated on the PA's HUD. A PA Trooper's smart-linked weapons are fired with the targeting bonus (DFB) indicated for its Reality Interface; this replaces any normal smartgun bonus.

Targeted Ranged Weapons

A number of weapons have parabolic trajectories (i.e. very curved flight-paths) and/or limited range, and have no intrinsic guidance systems – unguided rockets and propelled grenades, for example. The Trooper still benefits from his HUD in these cases, but hitting the target is not nearly as simple as with a smart-linked Weapon. If the ACPA Trooper is not using such weapons in a direct-fire role, use the Indirect Fire rules from the Vehicle Combat section.

Very important note: ACPA with Reality Interfaces that do not include HUD or VR **may not** use targeted or guided ranged weapons for indirect fire!

Guided Ranged Weapons

These are the luxury items of any battlefield. As indicated by the label, guided weapons are those with some sort of ability to self-direct themselves to the target. Missiles (e.g. anti-vehicular, anti-air, anti-ship, etc.) are the primary items in this category. With most of these, firing with a proper lock-on virtually assures a successful hit; for these weapons, a successful hit is a kill. Remember, missiles have a minimum range (1/10th Long range)! Missiles carried by Powered Armor use the Missile rules from the Vehicle Combat section. ■

"Colonel Prescott, in view of the unprecedented success of the 22nd team, over which you have maintained supervisory capacity for the last two years, you are hereby, for extraordinary insight in command, and the most successful extractions rate of any privately funded operations team, by unanimous decision of the Corporate Board, promoted to Brigadier General. In addition, you are today awarded the Crimson Eurodollar, an award offered jointly by the Midtown Business Association of New York City."

— excerpt from the awards speech of General Donald Lundee, CEO, Militech, at the promotion of Colonel Walford Prescott.

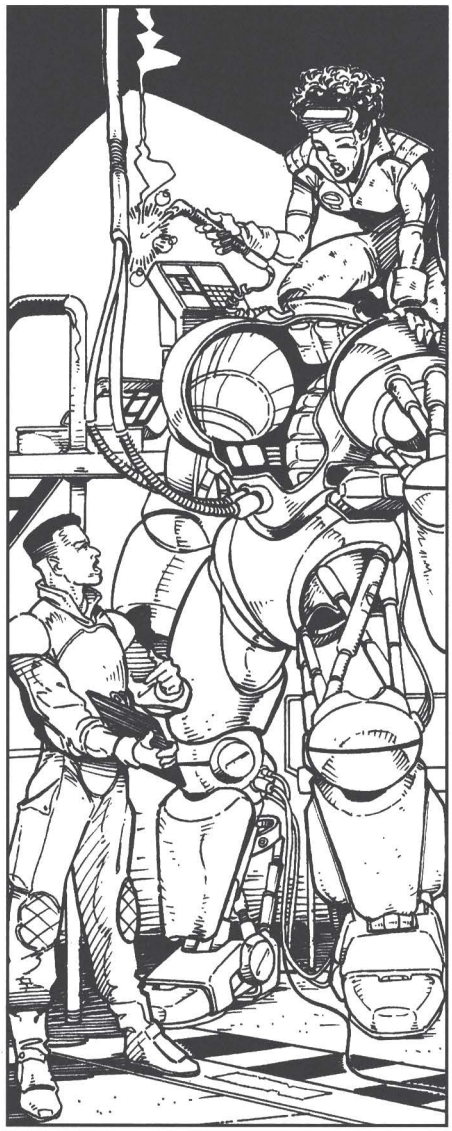
ACPA DESIGN

"Honored guests, every Trooper knows that a Gauss rifle, with all its problems, may nevertheless be one of the most dangerous weapons on the modern battlefield. But, we have an answer for that problem, the new Nemesis Assault Powered Armor from your friends at Mexican Metals. Please watch the following demonstration. A hero you all know, Jackson Dmitry from the 14th precinct, will stand unharmed in our new Nemesis Powered Armor as I fire this 4mm heavy Gauss rifle at the torso plate."

— Oscar Lablonski, primary researcher for Mexican Metals, Inc.

"We are gathered this day to pay tribute to a bona fide hero, Jackson Dmitry, who perished nobly in the line of duty, in the danger and espionage-filled world of corporate research..."

— Dalton Martinez, CEO of Mexican Metals, Inc., at the memorial services of Maj. Jackson Dmitry, immediately after the escape of Oscar Lablonski from Death Row, Mexican Territorial Prison, Laredo, Texas.



THE DESIGN SEQUENCE

I. The first consideration is always the mission: What is it? The equipment, armament, and protection on a stealthy scout is not going to match that of a heavy fire-support platform.

II. The next step is the selection of the chassis. Write down the name of the chassis, and its weight, cost, capacity, and toughness on the Powered Armor data form (**Inside back cover**). The chassis' STR rating is then "broken out" into the various body areas as the SDP for the frame: 25% of the total STR to the Head and each Arm, 50% to each Leg, and 75% to the Torso. Write these values in their specific blanks on the Data Form. More than any other single item, the chassis will be the most influential element in a suit's design.

III. Select the armor for the ACPA. Because armor is bought as a single "shell," just record the SP, weight, and cost values for the armor level selected in the appropriate sections on the PA form. A chassis cannot carry a shell with an SP of greater than *twice* its STR.

IV. Note Trooper Capacity for the ACPA. Different suits have different characteristics in terms of their "roominess" and the amount of assist allocated to support a Trooper's body weight. It is this value which covers the Trooper's own weight. 114 kgs. is a commonly suggested figure. Russian companies frequently use 136 kilos here. Some elite Euro or American units use only 80-91 kgs. There are no costs associated with this step except for the "weight" set aside.

V. Select Utility, Offensive and Defensive systems for the ACPA. Do not exceed the space requirements in each body area of the suit. Be sure to record weights and costs for all such systems. These systems, unless hand-carried, will go in internal or external "spaces" on the suit. A single system may only be place in **one** kind of space–internal or external, not a combination of both.

Internal Spaces: On the PA data form, fill in each item on the appropriate space rosters as many times as the number of spaces they take up. Be sure to include all required systems in the ACPA. Note that enclosed systems can only be placed in internal spaces. Powered Armor suits have a number of internal spaces based on the size of the chassis:

STR	HEAD	ARM/LEG	TORSO
16-20	1	2@	3
25-37	2	3@	4
40-52	3	4@	5

External Spaces: The number of spaces for external systems in each ACPA suit location is equal to the number of internal spaces -1. These are also recorded on the data form in the appropriate rosters. Remember: Systems in external spaces are NOT protected by the suit armor.

Note: These spaces are **not** interchangable with vehicle or cyberware spaces.

VI. Calculate the Suit's Initiative Bonus, or SIB. This value reflects the suit's agility, combat readiness, and power-to-weight ratio. There are three primary steps in deriving the SIB

A. Total all the weights for the ACPA, including chassis, armor, Trooper capacity, and all systems.

B. Divide the chassis capacity by the total weight of the fully loaded suit. If there is a whole number and a fractional remainder, round the value down to the nearest whole number if the fraction is less than 0.8. If the value is equal to or greater than 0.8, round the value up. If there is only a fraction, treat it as 0. Then, subtract 1 from this number.

C. Add the bonus for the Reality Interface system which you selected, directly to the number you derived in step B. Record this value in the SIB blank on the ACPA data form.

Total all the costs of the system, including chassis, armor, and all suit systems. Record the cost in the Total Cost blank of the ACPA data form. If the suit is one which is produced in significant quantities, total cost will be reduced by 10%. Suits such as these often have their weaknesses known and recognized by Troopers and regular combat personnel. If the suit is mass produced in great quantities, cost will be reduced by 20%, and its particular weaknesses will be very well known among Troopers and regular combat personnel.

Name the suit, buy it, and drive it!

Selecting a Chassis to use as a separate Linear Frame is much simpler: go to the Chassis Inventory Table and select the one you want. Record its STR, Damage Mod, Lift, and Carry stats on your character sheet. Don't forget that civilian (and some military, GM's choice) frames have the Basic Reflex/Control system; reduce the price accordingly.

THE COMPONENTS

THE LINEAR FRAME

Powered Armor really became feasible with the birth and development of the linear frame (*CP2020* pgs.67,92). A linear frame is a metal and plastic scaffold of synthetic musculature and rigid supports. Originally developed to assist in loading combat vehicles, common linear frames provide up to 80% of a wearer's "strength," to a maximum of around 800 kilos (at a cost per unit of about 9000eb). However, even with this tremendous assist, common linear frames are not sufficient for ACPA, which often weighs in at 200-400kgs. by itself, and would require the wearer to continuously port between 35 and 70kgs in addition to his own body weight (Obviously not a combat ideal). The R & D teams working with ACPA, a strikingly visionary group, envisioned suits in which Troopers could run faster than normal, with less effort; rip open doors, and arm themselves with ACPA-portable AFV weaponry.

Obviously, what was required was an extremely powerful lifting mechanism, something in the 1300-2200kg. range, and yet maintaining an efficiency of closer to 90% or better, and including the wearer's own weight! Such a suit would permit a 91kg. man, wearing a 270kg. ACPA, to maneuver as if he weighed only 36kgs/80lbs! In one of their rare cooperative efforts, Militech and Orbital Air labored together in the development of Contracting Crystalline Poly-nucleitide Lattice, a plastisteel fibre with electrically controllable length, and a significantly lighter weight than the more conventionally mechanical linear frame. Redesigning the common linear frame with CCPL "Muscles" and heavier-duty structural components, the R & D guys created a more massive linear frame

CHASSIS INVENTORY TABLE

STR	TOUGHNESS	DAM. MOD.	LIFT/CAP.	CARRY	WEIGHT (KG)	COST (EB)
12	-5	+4	600	180	125	5000
14	-5	+6	700	210	138	7000
16	-5	D6+2	800	240	150	9000
20	-6	D10	1000	300	116	28,450
25	-7	D10+2	1250	375	138	37,360
27	-7	D10+5	1350	405	146	38,700
30	-8	D10+5	1500	450	158	46,990
32	-8	3D6-1	1600	480	166	50,890
35	-9	3D6-1	1750	525	180	56,140
37	-9	3D6-1	1850	555	185	61,050
40	-10	2D10	2000	600	200	66,000
42	-10	2D10	2100	630	208	69,970
45	-11	2D10	2250	675	222	75,250
50	-12	2D10+5	2500	750	242	85,230
52	-12	2D10+5	2600	780	250	89,230

designed from the outset to breathe life into ACPA. The researchers called the new design, simply, an Advanced Linear Frame, or, more technically, a Military External Hyper-Contractive Linear Support. The field technicians, factory employees, and general public called them "chassis." The military called them "bones." It is the "power" in Powered Armor, and it comes in several sizes and efficiencies. These frames are also used separately for utility and construction purposes. See the Chassis Inventory Table and Notes for specifications.

The Chassis Inventory Table shows the primary information necessary for linear frame/power armor design and use. The three original linear frames are included for comparison.

STR is the comparative strength rating of the frames, and is used to calculate the SDP of the chassis (see pg .61).

Toughness is similar to the BTM (*CP2020* pgs.29, 103) and is a function of a PA suit's chassis and armor shell working together to absorb damage. A frame has a Toughness Mod ONLY when used as part of a Powered Armor suit.

Damage Mod is the melee combat damage bonus when the chassis is used as a separate linear frame. HTH/melee damage for full ACPA is calculated differently (see pg. 57).

Lift/Capacity is both the dead-weight lift for the chassis when used as a separate linear frame, and the maximum normal load it can support as part of a PA suit.

Carry is the maximum load that can be carried over distance when acting as a separate linear frame. Both Lift and Carry are modified when the frame is acting as the chassis for an ACPA (see pg.62).

Note: Soviet-made linear frames are, as a rule, 50% heaver and 10% cheaper.

STR 20 frames are the lightest Advanced Linear Frames available; the *Ninja* by Arasaka being the only example in this class. A couple of respected scout and stealth suits are built on this frame.

STR 25-30 are low-end frames. These include the *Jacksuit,* created by Meta Industries, one of the first independent firms to build complete powered armor suits. They later licensed it to Militech, who threw out the suit and marketed the chassis (STR 25) as the *Gunslinger*, used in the first large-scale-production ACPA suits. Also in this category is the Orbital Air/Zetatech/Raven Microcyb collaberation, the *Warrior* (STR 27) (basis for the first PA suits using true flight), and IEC's *Hero*-class (STR 30) frame. The Soviets also field a chassis in this group: the *Cossack* (STR 27).

Middle-range frames run from STR 32-40. Arasaka fields the *Bushi* (STR 32) and Ronin (STR 37). The former are multi-mission workhorses with police applications; PA suits built on the latter have seen successful use in recent limited conflicts. Militech's *Highwayman* (STR 35) is an update of the old Gunslinger frame and has been chosen as the basis for a new powered armor for LEDiv's Special Ops Teams. IEC's *Titan*-class (STR40) frame (used in EBM's corporate army PA suits) tops out this range along with the Russian Arms *Vodyanoi* (STR 37) system.

High-range frames begin with Arasaka's *Samurai* model (STR 42), a premier system used strictly for in-company powered armors, and extends to the car-crushing power of the *Shogun* (STR 52!). This overkill model was recently shown off at the World 2020 Military Exposition. In between these two are Militech's *Magnum* (STR 45), originally planned as the guts of a fire-support ACPA, but recently used as general-purpose frames; and Orbital Air/Raven Microcyb's *Crusader* (STR 42), currently the "bones" of the EEC armed forces' powered armors (both dirtside and in space). IEC's final entry is the *Demigod*-class (STR 50) frame, the largest chassis to have seen action in a PA suit. Russian Arms, Ltd. matches that size with their *Mikael* unit.

One of the real peculiarities of the Advanced Linear Frame is its progressively increasing efficiency at larger sizes. The reason for this attribute is the current limitations of miniaturization of the contracting fibres. The larger fibres can, in fact, be produced at a much higher quality. This would seem to lead to inevitably larger ACPA suits, but the very practical limitations of weight have put ceilings on increasingly cumbersome suits. However, this reality has led to the relative commonness of 1250 to 1850 kilo chassis capacities. These are relatively efficient and yet not as unwieldy as the larger models. Perhaps with future breakthroughs in nanotechnology, smaller suits can eventually become more efficient.

Armor

The quality and composition of armor plates found in PA suits worldwide varies widely. Punks who have, heaven forbid, managed to get their hands on a chassis or semi-destroyed suit may weld various pieces of trash armor onto the frame, creating a sort of ACPA Punknaught (See *Chromebook 1*, pg.29 for the original). Only the poorest of companies or shadow-techs use homogenous plates of any type, steel, etc. The major corporations and governments invariably employ composite rigid plates made of a mix of metals, plastics, and ceramics, along with layers of depleted heavy metals, nets of various high-tensile, shock-absorbing materials, etc. Armor is purchased and installed as a homogeneous "shell" protecting the entire suit. For armor types and specifications, see the Armor Inventory Table.

Armor Inventory Table

SP	Weight (kg.)	Cost (eb)
25	36	1200
30	150	5600
40	200	9600
50	250	13, 600
65	330	19, 600
80	400	25, 600

SP and Weight is for the entire armor "shell," which protects equally in all directions. A total-body covering, sealable variant on MetalGear™ has been provided for comparison.

Common producers/brand names are: Militech's KromeGear® and Euroarms' DragonSkin® (SP30), while Russian Arms, Ltd. makes Enamelled CompSteel (SP40) similar to the P-Steel Composite Models 1 and 2 by Militech (SP40, 50). The best upper-range armors (SP65) are Black New Classic (Euroarms), Russian Plate® (Russian Arms Ltd), and PSC Alloy Sandwich (Militech). Chitin Indomitable and Crystalline Steel (SP80), are supposedly "unbreakable" shells produced solely by Euroarms and Militech.

Powered Armor Systems

In General

Powered Armor utilizes three general types of systems beyond the chassis and armor of the

suit. These are listed with their vital data: namely, Weight, Number of Spaces they occupy, SP, SDP, Cost, and whether it can be carried enclosed or external. As stated earlier, Powered Armor systems virtually never cause a significant energy drain on the suit itself. The systems are either unpowered, self-powered, or require negligible power from the suit. With this nearly universal reality, weight, size (i.e. spaces), and cost are the most important factors to consider when selecting ACPA systems.

All ACPA suits are considered watertight down to 30m, and have a filter/rebreather system that allows 1 hour of sealed operation (a pilot normally breathes outside air through the filters). ACPA is driven by a combined fuel cell/battery unit that allows 24 hours of continuous operation. Cells can be replaced in the field, and a suit can carry extra units that can be installed with the help of other PA suits or non-powered personnel. ACPA pilots wear skintight, low-friction bodysuits which also act as cooling garments, and no armor can be worn inside (althought skinweave and subdermal armors are not a problem). ACPA, like a linear frame, requires that the wearer have interface plugs with a vehicle link on his processor.

Utility Systems

In General

Utility systems include some of the most vital elements of ACPA design. Everything not specifically identified as an offensive or defensive weapon falls in this very broad category. Within this category are a few sub-categories, namely Interface/Control, Communications/ Special Sensors, Trooper Safety/ Physical Support, Movement and Basic Utility. Virtually all ACPA Utility systems are sub-categorized by one of these labels.

Reality Interface systems

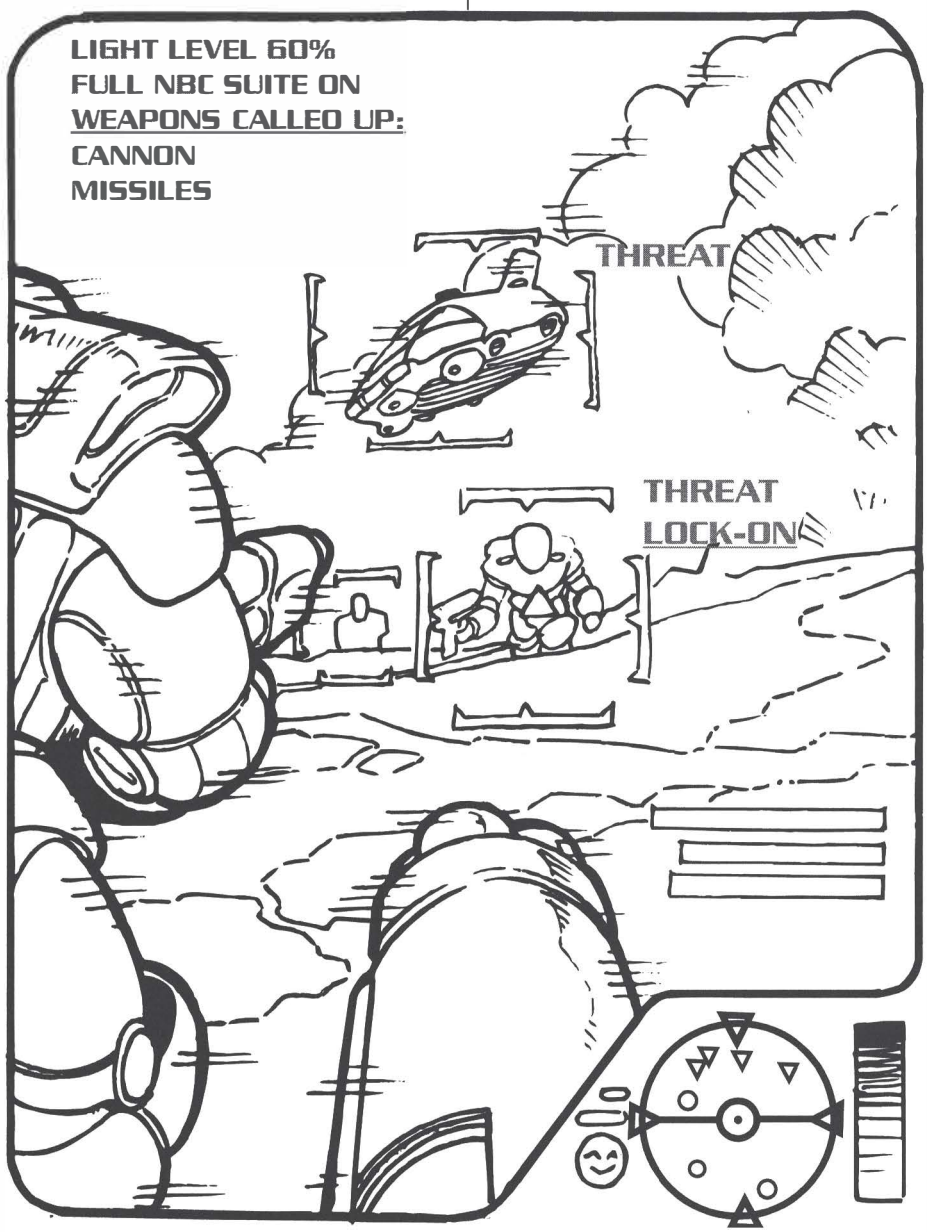
A suit's Reality Interface is the one absolutely essential system after the chassis. The term Reality Interface is applicable to whatever equipment has been applied to facilitate the Trooper's knowledge and experience of his environment. The Reality Interface runs the gamut from horizontal slots cut in the face of the helmet to see through, to high-powered virtual-reality systems which makes Powered

Reality Interfaces

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
Aperture-based	NA	NA	100eb	NA	20	yes
Enhanced Aperture	1kg	1/2	300eb	NA	15	yes
Wideband Aperture	1kg	1/2	800eb	NA	15	yes
Full-HUD Wideband	2kg	1/2	2400eb	NA	10	yes
ECI Wideband HUD	2kg	1/2	4000eb	NA	10	yes
RussianArms VRI	3kg	1	6000eb	NA	25	yes
Militech VRI	2kg	1	8000eb	NA	15	yes

Whatever Reality Interface a suit uses, it will always be placed in spaces in the suit's helmet.

Remember: No ACPA may utilize targeted or guided ranged weapons for Indirect Fire without a Reality Interface which includes a HUD or VRI.



Armor combat look a lot like netrunning. Whatever Reality Interface a suit uses, it will always be placed in the suit's helmet. There are six different levels of interface, varying in quality. Each type has, after its description, its bonus to the SIB and its bonus for Direct Fire weapons (DFB) which replaces any smartgun bonus. Certain interfaces have various audio-visual options as standard (no wt., space, or cost)

Aperture-based reality interface: This simplest model relies on openings in the helmet, protected by projectile-resistent glass or plastic, so that the Trooper can see. This terribly ineffective method limits the Trooper to about the same vision restrictions as a medieval knight. (SIB:-6, DFB: -2)

Enhanced Aperture-Based: The Enhanced aperture simply refers to the addition of limited lenses and/or auditory receptors to the suit. While hardly adequate, the *possibility* of IR or Low-lite equipment as standard (30% chance) makes the Trooper's situation slightly more tenable. All interfaces from this level on up provide graphic readouts on the current status of the Powered Armor's systems. (SIB :-4, DFB: 0)

Wideband Aperture-Based: Wideband Aperture enhances the limited additions of Enhan. Aperture, most significantly with lens arrangements that radically improve the Trooper's peripheral vision. Included is some simple targeting assistance much like Smart Goggles. Anti-Dazzle becomes a standard feature, along with IR or Low-lite. While a long way beyond the simpler aperture systems above, the distorting Wideband images are tiring and troublesome to use. Audio quality is equal to cyberaudio. (SIB:-2, DFB: +1).

Full-HUD Wideband: In addition to improving the quality of the Wideband image, Full-HUD adds an automatic targeting and acquisition system which makes the Trooper's weaponry much more responsive and dangerous, allowing tandem-mounted weapons to be fired as a single action. It is at this level that the penalties of the fully-enclosed helmet are finally eliminated. Anti-Dazzle, IR, and Low-lite are standard, plus Image Enhance (50% chance). Audio quality is cyberaudio w/Amplified Hearing. (SIB: 0, DFB: +2)

Environment-Calculating-Integrated, Wideband HUD: While somewhat tricky to learn to use, this Wideband HUD adds computing power for the Trooper to interpret the geometry of surrounding terrain. Distances, angles, deflections, etc., are expressed to the Trooper symbolically, and, if relevant, graphically. With ECI HUD, the Trooper begins to receive some support in using the superior abilities of his suit, including the ability to target up to 3 separate weapons simultaneously. Anti-Dazzle/IR/Low-lite and Image Enhance or Teleoptics are standard; audio is equal to previous level, plus Enhanced Hearing Range. (SIB: +2, DFB: +2)

Virtual Reality Interface: Really the only way to fly, the Virtual Reality Interface interprets the Trooper's environment for him and presents the information to him in sophisticated graphics, and limited auditory warnings. It is at this level that Trooping is very little different from Netrunning. Competent Troopers so equipped become truly deadly (simultaneous targeting of 4 weapons is allowed). There are a few different VRI's available, differing slightly from one another in quality. All previous audio-visual options are standard plus Thermal Targeting. (SIB: +3, DFB: +3)

Reflex/Control Systems

Not as critical as the Reality Interface (which regulates how a Trooper interacts with the outside world), reflex/control systems regulate how the Trooper interacts with his suit via his neural interface plugs and vehicle link. Military suits of ACPA start with the Advanced level system at no cost. Boosted reflexes **cannot** be "on" while "plugged in" to Powered Armor as there is interference and feedback within the control systems. Reflex/control systems take no spaces.

Basic Control: This is the "idiot-proof" system that most non-combat or utility power armors would use. It's also the system used on all civilian (and a few military) linear frames. Basic control will not, under any circumstances, violate the range of motion for the human body. This means the pilot uses his own Reflex-2, with a maximum operating Reflex of 8. Military linear frames of STR 42+ have even stricter controls, Reflex-3. The price is negative because installing this system actually *saves* you money.

Advanced Control: The standard system for military ACPA. It allows the pilot to function at his full Reflex with a maximum of 10.

Low Boost: This system monitors all voluntary and involuntary muscle movement with a simplistic "dogbrain"-style A.I. processor. It gives the pilot a +1 to his Reflex score when operating the ACPA, to a maximum of 11. It also allows the PA suit wearer to use his *Martial Arts* skill. (to a maximum level equal to his PA Combat ability)

High Boost: A PA Combat Sense ability of +3 or better is needed to use this sophisticated system. It gives the operator control of the full range of neuromuscular functions and coordinates with the Reality Interface (must be Wideband Aperture or better) to prioritize all sensory input. The pilot can maintain full alertness and total concentration for up to 12 hours; he can then induce a refreshing REM sleep for 60 minutes. His Reflex is +2, with a maximum of 12.

Command and Control Computer (C^3): Not a Reflex system, this is a special option which can be integrated into any of the above systems. This computer allows all units so equipped (in a military squad, for instance) to act in concert with one another. All of a group's sensors are accessable by all of the suits in the group. In effect, this gives a group bonus to *Intiative* and *Awareness* of +1 while linked and provides the group commander with a *Tactics* Skill bonus of +1. All information is transmitted directly through the neural

Reflex/Control Systems

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
Basic	NA	NA	-2000eb	NA	NA	yes
Advanced	NA	NA	NA	NA	NA	yes
Low Boost	NA	NA	3000eb	NA	NA	yes
High Boost	NA	NA	9000eb	NA	NA	yes
Command Computer	1kg	NA	5000eb	NA	NA	yes

Auto-Doctors

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
RussianArms Kwikfix	1kg	1/2	200eb	NA	15	yes
Arasaka Monitor	1kg	1	800eb	NA	15	yes
Bodyweight Medic	3kg	1	2000eb	NA	15	yes
Militech Repeater	3kg	2	4000eb	NA	25	yes
Orbital Air Prime	2kg	1	8000eb	NA	20	yes

interface. **Note:** The range of this link is limited to communication link range and may be interfered with in an ECM intensive environment. If the link is broken all benefits are lost.

Auto-doctors

By far, the majority of ACPA are equipped with Auto-doctors. Auto-doctors are more or less automated medical systems which improve a Trooper's combat survivability. They must be installed either in the helmet or torso section of ACPA.

RussianArms Kwikfix: the most basic of systems, Kwikfix has a capacity of up to three different medicines, usually administered by injection. Although several doses of each could actually be contained within Kwikfix, it is usually only feasible to administer a combat or healing drug once. These drugs can be activated manually; a separate trigger is provided for each medicine. Kwikfix can also be set to administer one or more of the medicines automatically if its intrinsic monitor detects that the Trooper has become unconscious.

Arasaka Monitor: a minimal system by Western standards, Arasaka's monitor provides up to four controllable injections. Further, if the Trooper should become unconscious or killed, the suit will broadcast a single radio transmission of 1 minute's length to special reception equipment, detailing the Trooper's status. Last, the auto-doc provides a homing beacon which will stay active and pin-point the Trooper's location for 1D6 hours.

Bodyweight Medic: the standard auto-doctor, Bodyweight's Medic provides up to five different medications which the user may pre-program to his or her own detailed specifications. The Medic provides the same notification and beacon services as the Monitor with the exception that the receiver may request re-transmission of the Trooper's status as often as desired until the beacon runs out. However, the Medic's most noteworthy advance is its Surface Constriction Array, programmable, inflatable sleeves around the Trooper's limbs and torso. When the Medic notes a drop in blood-pressure or a bleeding wound it can intelligently inflate the sleeves in the appropriate location. The effect of this powerful medical support is two-fold:

Troopers may add +2 to their Cool stat for morale rolls.

Troopers may re-roll any stun or death roll which they fail. If they fail the second roll, results are applied normally. The suit will provide an indefinite number of re-rolls as long as the Trooper succeeds.

Militech Repeater: Militech's large, expensive, and much-advertised entry is the Repeater. Essentially much like Bodyweight's Medic, the Repeater provides a capacity for seven medications, a questionably valuable item. It is most famous for its "Conversing Diagnostician™," a speech-activated, suit-enclosed, micro-computer which permits the Trooper to ask his suit what the best approaches to his current medical condition are. As a point of trivia, the Troopers are permitted to select the voice type and "Name" of the Auto-doctor "personality". (They are currently working on a faster-operating model that will work with a Trooper's VRI reality interface.) The constriction equipment of the Repeater is somewhat more expansive than the Bodyweight Medic's. With the Repeater, all re-rolls for stun or death get a +2 bonus on the die roll, extending the Trooper's chances considerably.

"Sir, I'm afraid the report is conclusive. Lt. Kergor Bjerny would have survived had his Kwikfix unit not activated. His injuries rendered him, apparently, very mildly unconscious. The Kwikfix detected just the unconsciousness and immediately injected a huge dose of cardiac epinephrine. That often starts stopped hearts, but more frequently stops going ones. Anyway, what do you want me to do with this? Discard it? Dr will we have to execute someone?"

— Kapitan Adjutant Serge Zasulich to his current commander, Polkovnik Alexander Dostoevsky, of the Free Russian Company,

Orbital Air Prime: The Prime, a true miracle of miniturization, is identical to Militech's Repeater, with the exception of its more efficient size. While Orbital Air is careful to equip all their Troopers with Primes, some argue that the device was built simply to humiliate Militech, in line with OA's new motto, "Whatever you can do, we can do smaller!"

Safety Systems

While not all the of following are safety systems, this category of systems is for all those utilities which increase combat survivability or

Safety Systems

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
Escape Hatch	1kg	1/2	500eb	NA	30	yes
Self-seal Compression	5kg	4	6000eb	NA	50	yes
Food/Filtration	2kg	1/2	400eb	NA	10	yes
Extended Life Support	special	special	500eb/unit	[30]	20/unit	yes/no
Extra Power Cells	special	1/2	2000eb	NA	15/unit	yes

Notes: SP in brackets [#], represents intrinsic protection for retractable devices when they are extended. It also represents protection for items in permanent external mounts.

endurance, and are not auto-doctors. Of these, the escape hatch is found on virtually every suit of ACPA manufactured by anyone, with the others being fairly rare.

Escape Hatch: a great value for the money, an escape hatch is a "device" comprising explosive bolts, a micro-processor, a large electrical capacitor, and cunningly cut joints in the ACPA itself. When the suit takes damage which drops it, and/or shuts it down, the capacitor will fire one or more intelligently-guided charges to cause the suit to roll over onto its front. The bolts then fire, opening the helmet, shoulders and upper torso to permit easy removal of the Trooper. The hatch does not introduce any significant structural weaknesses into functioning ACPA. However, a suit opened in this way will cost a minimum of 25% of its base cost to repair from the effect of the hatch alone. A trooper can indefinitely postpone the firing of the hatch and may choose to do so for several reasons, especially hostile battlefield conditions. The space for this device must be taken from the torso.

Self-sealing Compression: a necessity for vacuum or underwater operations. While all ACPA tend to be at least fairly air- and water-tight, they are not completely secure in airless or high-pressure environments without self-sealing compression. With this system, the Trooper may operate in vacuum, or in water up to 750 meters deep, as if normal. This system is also required if using a true flight unit. In case the suit takes damage, this unit can usually seal 3D6 breaks in the PA before its liquid sealants are expended. Extended Life Support is required if the pilot is to remain in such an environment for over an hour. The spaces required for this option can be spread over the entire suit.

Food/Filtration: a notoriously uncomfortable unit, this is designed to permit Troopers to function for up to 2 and 1/2 days in battlefield conditions without having to stop for rations or waste. The unit does tend to cause chafing and occasional minor inflammations in body apertures. May be placed anywhere.

Extended Life Support: Absolutely necessary for extended PA use in outer space, underwater, or with true flight. Requires 1 space and 10kg/4 hour unit of life support. May be an enclosed or external system in the torso or legs.

Extra Power Cells: The main power unit for the ACPA has been factored in to the suit, and takes no weight or space. These removable units weigh 6% of the base Chassis mass (remember Russian models weigh 50% more)). Each one gives an extra 8 hours of operating time. Remember that 48 hours is maximum pilot duration. Extra power cells can be mounted in the torso or legs.

Audio-Visual, Communications, and Special Sensors

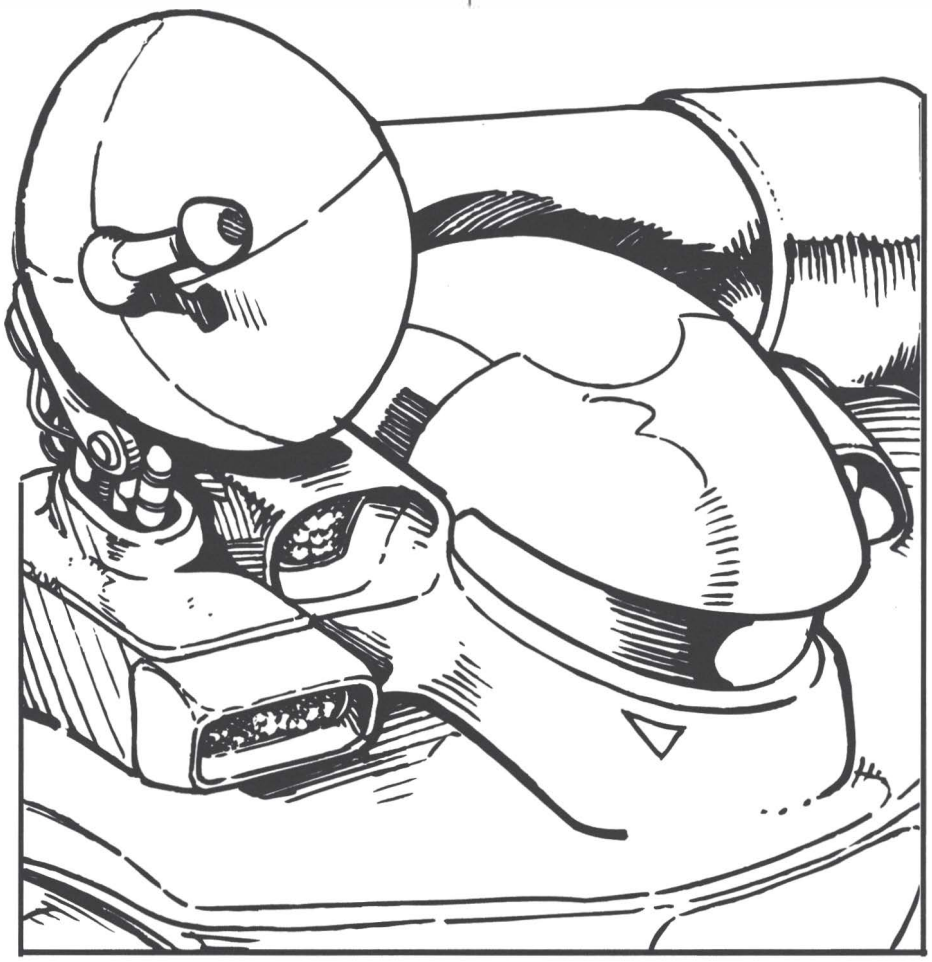
The following systems are, of course, vitally important for maintaining the suit's combat effectiveness and coordination with its unit. All of the following systems must be located in the helmet or torso of the ACPA, unless specifically excepted.

Up to 4 "1/4-space" items (unless otherwise noted) may be combined as a "suite", taking one space on the ACPA Data Form. A suite uses the combined SDP of its components, and if it fails a System Integrity Check, all components in the suite become non-functional. Some of these items are standard with the more advanced Reality Interfaces. All visual options can be placed in sensory extensions identical to the cyberoption (*CP2020*, pgs.79,93).

Commo Link: Standard radio, no wt./space, 5SDP, 200eb, communication range 80km. Long-range radio, 5kg, 1/4 space, 5SDP, 1000eb, range 300km. Military radio (band-jumping, burst transmission), 10kg, 1/2 space, 10SDP, 2500eb, range 500km. All radios are assumed to have IFF transponders built in.

Satellite Uplink: This allows the PA suit to link directly to a communications or reconnaissance satellite in orbit. The unit is considered external/unarmored when deployed.

Cellular Phone: A regular cell system, but with longer range (can link into urban networks from a distance of 20km). Does not work underground or through mountains without repeater stations.



Audio-Visual, Commo, Special Sensors

Name	Weight	Spaces	Cost	SP	SDP	Enlosed
Commo Link	special	special	special	NA	special	yes
Sat Uplink	20kg	1	3000eb	NA	15	retract
Cell Phone	2kg	1/4	500eb	NA	5	yes
Scrambler	NA	1/4	500eb	NA	5	yes
Laser Com	10kg	1/4	7000eb	NA	10	yes
Sensory Extensions	2kg	1/2	500eb	15	15	no
Remote Targeting	1kg	1/2	800eb	NA	5	yes
Anti-Dazzle	NA	1/4	200eb	NA	5	yes
Low Light	NA	1/4	200eb	NA	5	yes
Infra Red	NA	1/4	400eb	NA	5	yes
Thermal Targeting	NA	1/4	500eb	NA	5	yes
Telescopics	NA	1/4	150eb	NA	5	yes
Image Enhance	NA	1/4	450eb	NA	5	yes
Visual Spectrum Backup	1kg	1/2	300eb	NA	15	yes
Audio/Visual Recorder	2kg	1/4	300eb	NA	10	yes
Radar	5kg	1/2	1000eb	NA	15	yes
Sonar	10kg	1	2000eb	NA	10	yes
Magnetometer	20kg	1	3000eb	NA	15	yes
LaserDetector	NA	1/4	1000eb	NA	5	yes
Microwave Detector	NA	1/4	5000eb	NA	5	yes

Scrambler: Compatible with all 3 of the above options, a scrambler allows coded communication which can only be understood by another scrambler-equipped suit that has the proper scrambler combination. For another 500 euro, a scrambler can equipped with a processor that provides the correct combination 20% of the time, allowing listening in on intercepted conversations.

Laser Communicator: This allows the PA suit to communicate with another similarly-equipped suit within line-of-sight. It cannot be jammed, and can only be "tapped" by interrupting the beam (breaking the communication) with a laser-com equipped suit.

Sensory Extensions: These are the ACPA equivalent of the cyber system (*Cyberpunk 2020*, pg. 93). These antennae mount optics audio pickups which can poke around corners and transmit images to the pilot without exposing the entire suit to enemy fire. The suit must have at least the Wide Band Aperture Interface to properly utilise these extensions. Average length is .66 meters. External mount only on arm, torso, or head spaces.

Remote Targeting: this is a "real-time" link for use with a forward observer. The observer must transmit his data (gathered by observation or electronic system) via this link to the unit attempting indirect fire, or launching indirect guided weapons. This provides a substantial bonus to accuracy. See the Indirect Fire rules (pg.8) and Remote Targeting in the Vehicle section (pg.25).

Anti-dazzle: Identical to cyberoptic protection (*CP2020*, pg87).

Low-Lite: identical to LI Goggles (*CP2020*, pg70).

Infra-red: similar to the Infrared cyber-option (*CP2020*, pg86), but this model is equipped with an IR source for active viewing.

Thermal Targeting: identical to the Thermograph cyber-option (*CP2020* pg87).

Telescopic Optics: identical to the Teleoptics cyber-option (*CP2020* pg87)

Image Enhance: better that the Image Enhancement cyber-option (*CP2020* pg87). With a wider viewing area and "quick-zoom," this option gives the "computer-assisted optics" Notice/Awareness bonus (see Vehicle Combat rules, pg.10.

Visual Spectrum: this is simply a backup version of basic visual spectrum devices, in case of failure of the primary interface (Enhanced Aperture or higher). It provides a view (and SIB/DFB) equal to the Enhanced Aperture level without visual upgrades.

A/V Recorder: like a multi-media VCR, this recorder is fed through the primary senses of the Trooper's ACPA and can record up to six hours of data on a single digital chip. Unit holds two chips.

Radar: Radar detects objects out to 10km range so long as there is no other object blocking the beam. Radars can be jammed (see Defensive Systems, pg.79) Military radars (10kg, 1/2 space, 10000eb, 50km range) are harder to detect and jam.

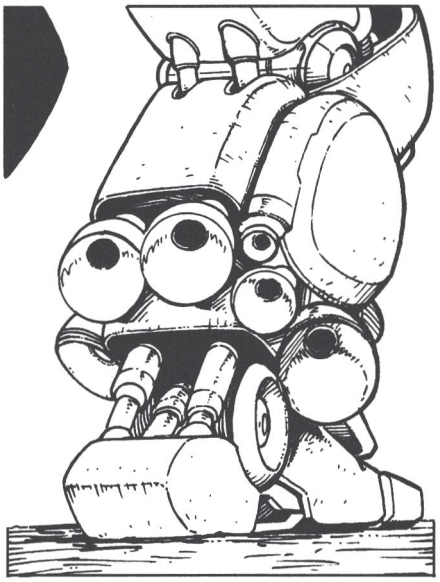
Sonar: Sonic emitter/detector systems give the PA suit sonar, capable of detecting solid objects within 50m. It can only be jammed by a huge amount of focussed noise (explosions, truck-mounted white-noise generator, etc.). If the sonar is not actively searching, it can be used to listen in on specific noises via shotgun extention mike at 200m range. (10x all ranges underwater)

Magnetometer: Also known as a Magnetic Anomaly Detector, this unit detects large masses of metal within 100m. Not very useful in urban situations, but a good way of detecting hidden vehicles or ACPA in rural terrain. Magnetometers are *excellent* for detecting railguns. The magnetic "spike" of a firing railgun can be detected at 3x the effective range of the weapon.

Movement Systems

The following systems enhance, in some way, ACPA's maneuverability. Several of the systems can retract within the suit; a couple must remain exposed continuously. Not all of them are normally efficient, or combat-effective, systems; but their data has been provided for special projects, interest, and historical completeness.

Climbers: Climbers are particularly wicked blade sets, similar to wolvers, but much larger, usually one set per limb. They are retractable into the suit (or into external housings). The blades are so sharp and sturdy that they can be driven into heavy construction material and used to climb. A Trooper can climb up or down a sheer surface at a speed equal to his SIB in meters every combat round. Naturally, the blades are lethal in combat, adding 1D10 to strike, or kick, damage in ACPA combat. Notice that all such damage will now be of a cutting rather than a crushing kind, so soft armor is halved versus these blades.



Jets: A heavy-duty jet pack. Stats are for Thrust jet units, which can only be mounted on the exterior torso or legs. Weight per unit is 2.5% of suit total (not including the thrusters themselves; it is assumed that the thrusters can lift their own weight). Fuel weight is 1% of suit Maximum Capacity per 10 combat rounds of fuel use.

Maneuver jets for space use are: 2 spaces, 1000eb, no SP, 30SDP; weight is 1% of suit total/100 combat rounds of propellant. They may be mounted as an enclosed system. Details of flight characteristics are in the Movement Feats section of these rules.

Glider: An extraordinary idea, this device is an enormous, mechanized, marvelously-machined set of retractable gliding wings. Its six (external) space requirement must be taken from all of a suit's body areas. Naturally, the wings are quite clumsy, and except for escapes from cliffs and tall buildings, there are few uses for them. Also, they are very vulnerable to small arms fire when extended. However, when first utilized, they instantly caught the public imagination, and inspired some unusual (and usually unsuccessful) special military operations. The gliders take 2D6 rounds to extend and 3D6 rounds to retract. When employed, a Trooper is treated as having a flight pack with an acceleration of 14m/round (MA 5), and a maximum velocity of 97m/round (32 MA)

Flyer: The ultimate flight system. The engine and frame technology is the taken from the EEC's *Wyrm*-class cruise missile pulse-jet, designed by IEC (Weight is 300kg, 30SP armor, 60SDP). The sled type is ridden with the PA suit locked down, taking no space.

Movement Systems

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
Climbers	1kg/limb	1/2@	1000eb/ pair	[30]	15@	yes/no
Jets	special	1/unit	10,000eb/unit	20	30	special
Gliders	45kg	6	3000eb	[15]	30	retract
Flight Unit	300kg	special	75,000eb	30	60	no
Skates (powered)	14kg	1/leg	4000eb	[20]	20	retract
Skates (unpowered)	5kg	1/2 per leg	500eb	20	20	no
Swimmer	50kg	2	6000eb	25	60	no

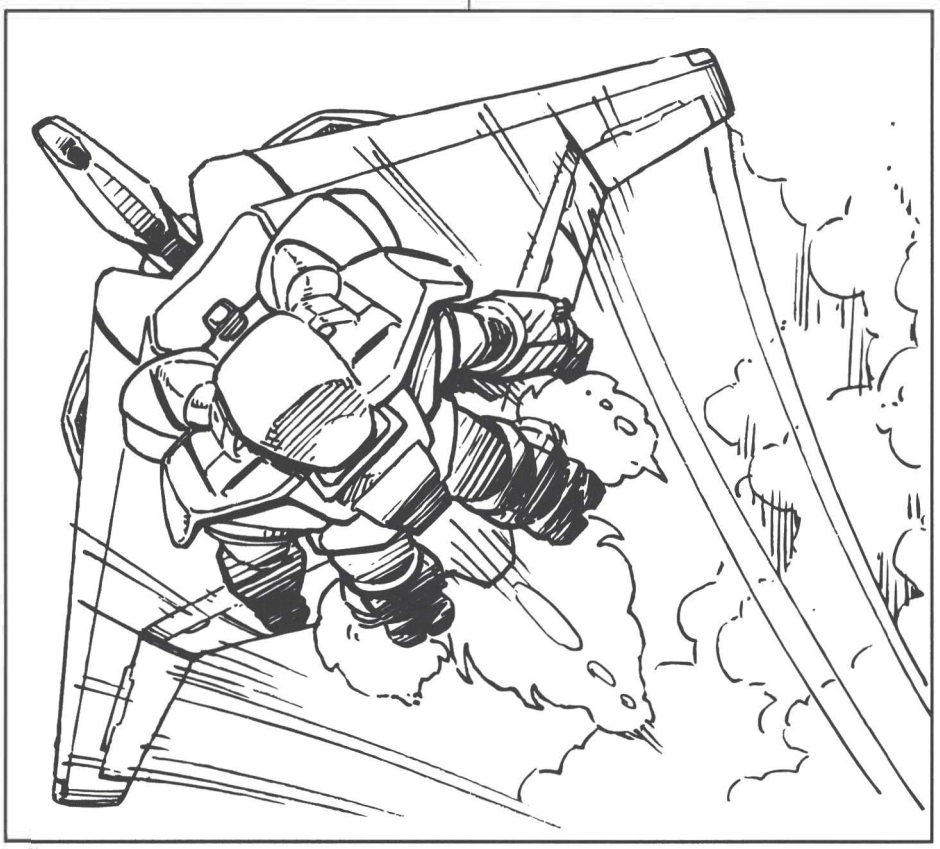
Notes: SP in brackets [#], represents intrinsic protection for retractable devices when they are extended. It also represents protection for items in permanent external mounts.

The flying-wing type requires 8 external spaces (much like the Glider), but would allow relaunch (assisted by the suit's Thrust Jets; a minimum of 2 units required) after landing. The drawback is that the unit's weight must then be counted against the suit's capacity. Actual flight characteristics are described in the Movement Feats section (Pg. 58) of the rules.

Skaters (powered): These retractable, powered skates permit a Trooper to fly down a paved surface at speeds approaching 117km/h (MA 35). Treat as having an accel./decel. of 10m/round (MA 3). To make any kind of turn or stop requires a Difficult (20+) maneuver with *Acrobatics* or *Skating* skill. Remember, a fall is the same as a sideswipe crash!

Skaters (unpowered): These unpowered retractable skates permit a Trooper to double his MA on good surfaces (if he has *Skating* skill). Same maneuver difficulties apply. External mount only.

Swimmers: The famous Deepwar™ ACPA underwater jet. Mounting is restricted to external torso only. This unit's performance has been fully described in the Movement Feats section.



General Systems

These are systems that are not part of the regular categories. Such systems are usually found on powered armor built for civilian purposes. **Note:** ACPA may mount other, non-standard, devices such as extra computers, cybermodems, and even exterior interface plugs. See *Cyberpunk 2020* and the two *Chromebooks* for some ideas.

Winch & Grapple: One of the simpler but more useful systems, it includes a powerful, spring-loaded grapple launching tube (only someone in powered armor can compress it). About 100m of slender steel cable is attached to the grapple, permitting the Trooper to fire it out as a support line or swing line. The Trooper can fire upward and use the winch for a quick elevator, or draw items up from below (the winch is rated to a max of 1200 kilos). The cable is SDP 20, and counts as a very small target (-6 To Hit) when fired at. Occasionally, a daring Trooper will equip himself with several line and grapple units, permitting himself to swing from building to building, leaving the lines behind as he goes.

Fire Extinguisher: A CO2/Foam system that extinuishes flaming material on the outside of the ACPA, or can be used on small fires (up to 2m in diameter). 4 uses before refilling.

Searchlight: An external searchlight on a flexible mount. The light is treated as a small target. (For 200eb more, it can be armored to 10 SP/10 SDP; armor is a must for vacuum/underwater work.) Searchlights can be white light, IR, or UV. The visible light model can be used as a weapon, blinding opponents. Make a To-Hit roll as normal, with a +4WA, and a max range of 200m. If the target is hit, all darkness modifiers for subsequent attacks are removed, plus, the target suffers the blinded modifier for his own attacks (*CP2020*, pg.99).

Heavy Tools Suite: For heavy work in dangerous environments (near orbit, underwater), powered armor has proven a godsend. These tool suites contain heavy-duty equipment (powered and unpowered) for construction or mechanical maintenance jobs. They are mounted externally anywhere except the head.

Light Tools Suite: This tool suite is similar to the one above, but is intended for electronic repair and light mechanical work. It is an enclosed system that can be mounted anywhere.

General Systems

Name	Weight	Spaces	Cost	SP	SDP	Enclosed
Winch & Grapple	20kg	1	500eb	NA	40	yes
Fire Extinguisher	10kg	1	500eb	[20]	20	yes/no
Searchlight	5kg	NA	300eb	[10]	5	no
Heavy Tool Suite	50kg	2	400eb	15	40	no
Light Tool Suite	8kg	1	560eb	NA	15	yes

Notes: SP in brackets [#], represents intrinsic protection for retractable devices when they are extended. It also represents protection for items in permanent external mounts.

Offensive Systems

Melee Weapons

What the next nine weapons have in common is that they are utilized only in close combat. They also have in common devastating levels of damage, especially in contrast to similar non-PA melee equipment. It is important to remember that Powered Armor is driven by a chassis literally rated in the thousands of pounds; that all of the actions are performed in the heaviest possible armor, and that the weights involved are many times greater than those of normal melee combat. In short, these are melee attacks capable of damaging *other PA Troopers*; as a consequence, they are positively lethal to non-PA personnel. Unless noted, all melee weapons are sheathed mounted in external spaces. The bracketed SP on the ACPA Weaponry Table represents the protection of the sheath/mounting. The other SP are the toughness of the weapon.

Climber Claws: have been dealt with in the previous Utility Systems rules.

Fist: a surprisingly devastating attack, the rules for calculating damage were presented previously (pg.57) A PA fist is capable of opening many doors in a single stroke.

Kick: more dangerous even than the fist, most of the comments made for the fist also apply here.

Melee Weapons

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
Climber Claws	+1	1D10+Fist/Kick	NA	2	1.5m	1/2@	1000eb/pair	1kg/ limb	15	15
Fist	0	special (spcl)	NA	2	1.2m	NA	NA	NA	NA	NA
Kick	-1	special (spcl)	NA	2	1.2m	NA	NA	NA	NA	NA
Heavy Bladed Weapon (1-hand)	+1	4D6AP+Fist (4+special)	NA	1	2m	1/2	550eb	6kg	[20]	20
Heavy Bladed Weapon (2-hand)	-1	6D6AP+Fist (5+special)	NA	1	3m	1	1000eb	10kg	[20]	30
Heavy Blunt Weapon (1-hand)	0	4D6+Fist (2+special)	NA	1	2m	1/2	200eb	10kg	[20]	25
Heavy Blunt Weapon (2-hand)	-1	6D6+Fist (3+special)	NA	1	3m	1	500eb	20kg	[20]	40
Heavy Pointed Weapon (2-hand)	0	3D6AP+Fist (2+special)	NA	1	5m	1	225eb	6kg	[20]	15
Large Power Saw	-2	8D6AP (6)	NA	1	2m	1	1250eb	15kg	20	25
Retract Mono-PA Sword	+1	4D6AP+Fist (6 +special)	NA	1	2m	1	2000eb	4kg	NA	15

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. Vehicle Penentration for Fist/Kick is claculated as per page 4. SP in brackets [#], represents the protection of the weapons sheath. Other SP are the intrinsic toughness of the weapon.

Heavy Bladed Weapon: any massive bladed weapon (sword, axe, halberd) which can stand the stress of delivering PA-level blows, but could not be wielded effectively by an unpowered human. Some recognized platoons or individuals may carry such unretractable bladed weapons as a mark of distinction, some anachronous badge of honor, symbolic significance, chivalric attitude, etc. Unlike man-wielded weapons the AP effect covers hard as well as soft armors.

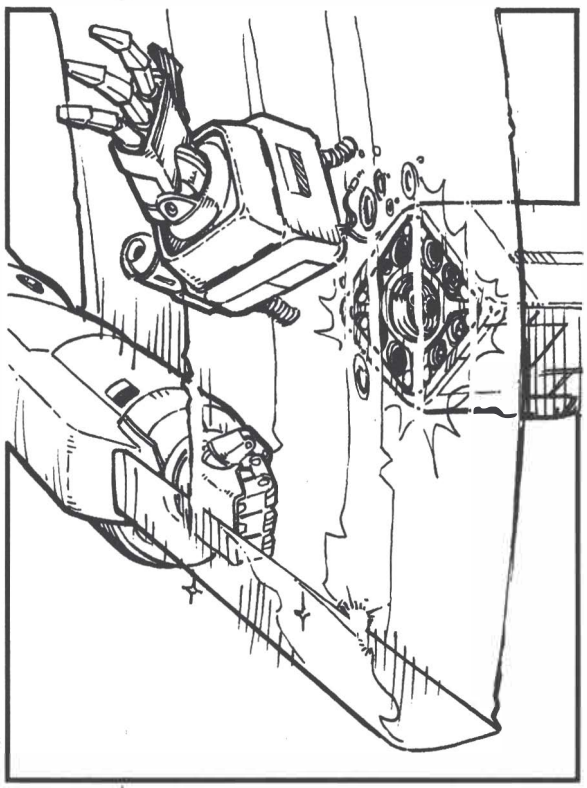
The most common model is the Trooper Sword, an externally sheathed and wielded weapon in the classic medieval Crusader design . Weighing several times the mass of a normal sword, the Trooper Sword still attains a sharpness equal to that of a good combat knife. This weapon is manufactured to very high standards and only has a 10% chance of breaking on a fumble; non-sword type weapons have a 40% chance of breaking, or otherwise becoming unusable.

Heavy Blunt Weapon: This is a scrounged weapon, perhaps even being the limb of a disassembled Trooper! Like the Bladed Weapon above, this device may have been made for PA combat but at a lower quality of production. Please note that this weapon does not share the Armor Piercing capacities of the Bladed weapons. Purpose-built weapons have a 15% chance of breaking or becoming otherwise unusable on a fumble (try breaking a 2m steel and concrete mace!). Scrounged weapons add 10% to breakage chance

Heavy Pointed Weapon: Like the weapons above, these are usually scrounged, although some are designed. Because of the point focussing the energy of the attack, the weapon is AP, but penetrating damage is x1/4. Its weaker structure makes it more vulnerable to breakage, which will occur on 50% of fumbles.

Large Power Saw: referring to either a powered disk or chain saw, this weapon is equipped with very sharp, hardened-alloy teeth. 2-handed (or mounted in an arm), it's able to cut through materials up to Stopping Power 80. SP is x1/3 vs this weapon.

Retractable Mono PA Sword: Of lighter weight than the Trooper Sword, this weapon can fully retract into the ACPA arm (internal mount). Being a true mono-edge blade, this weapon is as dangerous as the suit which wields it. (see mono-weapon rules, *CP2020* pg.112) Because of the thinner blade cross-section, these blades will shatter on 30% of fumbles.



Machine Guns and Heavy Rifles

In many ways these have become the standard primary weapons of ACPA combat. These high-impact weapons are capable of wounding a Trooper in armor with a good shot. The 13.9mm and 4mm weapons are especially accurate. Except for the 12.7mm Gatling, all these Rifles/MGs can be enclosed systems in the arms, or external systems on the arms or torso; they can also be used two-handed. If carrying or external mounting is chosen, an armored pod/housing may be purchased for the weapon at 15% of its price (its SP on the ACPA Weaponry Table is bracketed). Some weapon's ROF and #shots have been reduced from the vehicle-mounted standards to accomodate the lesser capabilities of ACPA.

12.7mm HMG: this weapon was originally designed as a vehicular heavy machine gun. Your choice of the US .50 GPHMG or the Soviet NSV-12. Can use Saboted-AP rounds (Penetration 4).

13.9mmx99mm Rifle: this rare (EEC only), very large caliber rifle was based on a .55 caliber anti-tank weapon used between the world wars called the Boys AT-Rifle. Its lighter weight and semi-auto action has made the modern redesign a more useful ACPA heavy rifle.

14.5mm KPV: This massive machine gun is one of the most devastating anti-ACPA weapons ever used. Featuring a high ROF, this weapon

Heavy MGs & Rifles

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
12.7mm Hvy MG	+1	6D10 (3)	100	5 or 10	550m	2	2000eb	30/13kg	[25]	30
13.9x99mm Hvy Rifle	+2	6D10+5 (4)	60	3	600m	2	2400eb	18/11kg	[25]	30
14.5mm Hvy MG	0	7D10 (4)	100	3 or 5	550m	2	2500eb	50/25kg	[25]	35
12.7mm Gatling	0	6D10 (3)	500	100	500m	4	6000eb	140/65kg	[20]	25
4mm Railgun	+3	5D10+10AP (7)	5	1/2rnd	1500m	3	11,370eb	35kg	[20]	15

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents the optional protection for external/carried weapons. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. Prices are for the weapon only, for ammo costs, see the Ammo section.

was the largest machine gun made by the Russians, and originally mounted on vehicles. While its firepower is enviable, its extreme weight makes the weapon's use relatively rare. The EEC has developed a similar weapon in 15mm, the BRG-15 (+1WA, ROF10, 650m, 2800eb, other stats equal).

Note: the above weapons can also be fired at an ROF of 1.

12.7mm Gatling: A multibarrel electric-powered design, this weapon is usually mounted in AVs and helis. Its weight and bulk limits it to 2-handed and external torso mountings only, but its multi-round penetration can drop most suits of Powered Armor.

EMG-85 4mm Railgun: The immense power requirements of this weapon leave it so few shots that it is of questionable battlefield value. Once the ammo "clip" is used up, the Gauss is completely useless, having expended its entire power pack. Reloading and recharging cannot be done in the field and costs 1200eb. However, it is some consolation that the gauss railgun is matchless in penetration and firepower. It has been rumored that Militech is experimenting with a removable capacitor unit which can be "clipped" in and out of the weapon like a normal weapon magazine.

Beam Weapons

Powered Armor has a tendency to be equipped with experimental weapons (due to the fact that it is somewhat of an exotic piece of equipment itself). Beam weapons have been limited primarily to large-scale space use, but there have been a couple prototype manpack devices. The painting laser can be mounted anywhere on the suit; while the "Photon" Assault weapon must be mounted or hand-carried as a heavy rifle from Section 2.

Painting Laser: At the moment, the only viable battlefield laser weapon is the painting laser, used to spot for laser-guided weaponry. It can be blocked by anti-laser aerosols and smoke. It delivers no damage, but looking directly into it has a 90% chance of blinding; biological eyes are permanently blinded. Range is to maximum line of sight.

Meta-Armson "Photon" Assault Cannon: The first combat laser weapon to see field use. Earlier designs have been limited by weight, range, and reliability. On Powered Armor, weight is no longer a problem. The unique dual-element design makes this weapon twice as deadly as other laser weapons. Power is provided by a backpack superconductor battery. Damage can be varied by adjusting the amount of power used (see *CP2020*, pg.108), penetration is calculated as follows: 1-2D6=Pen 0, 3-4D6=Pen 1, 5-7D6=Pen 2, 8-9D6=Pen 3, 10D6=Pen 4. Reliability is UR (-1 if damaged).

Scatter-Packs

Scatter packs are light-weight weapons which use explosive charges to fire an area-filling cone of munitions. The tremendous recoil of the weapons have virtually limited them to PA soldiers or to anti-personnel munitions on vehicles.

- The widths of the cones of fire vary significantly from weapon to weapon. The angle of a weapon's cone is noted in the individual descriptions of those weapons which follow. These packs can be mounted anywhere (internal or external)on the ACPA suit except the head.
- The direction of the cone (e.g. front, rear, left, right) must be determined at the time of suit construction. For flexible cones of fire, the weapons must be mounted on external mounts and will not receive the benefit of the suit's armoring. They will, however, automatically have the SP that is in brackets on the ACPA Weaponry Table.
- These modular weapons, since they share the same basic shapes and sizes, may be replaced in a PA suit with those of different types. However, the replacement unit will face the same direction as the original.
- Note that these weapons are considered to be normal armor-piercing.
- If the PA soldiers have ammo reloads for these weapons, reloading takes three times longer than with normal firearms. Reloads weigh and cost as much as the original unit (basically, the entire unit is consumed when used).
- The WA, #Shot and ROF entries are utilized somewhat differently for these weapons. WA is used to determine if a target is hit by any of the munitions, but the to-hit roll is not used to tell how many projectiles strike the target. The #Shot values with the multiplication symbols indicate how many times a volley of so many projectiles may be fired; e.g. 6x24 means six shots of twenty-four projectiles each; 1x144 means 1 shot of 144 projectiles. The numbers in the ROF column indicate the dice which should be rolled against a hit target to determine how many individual munitions struck.
- Non-powered infantry sometimes use these same weapons, but the following limitations apply: the weapon must be mounted on a stationary tripod/platform, or it must have a rifle-style stock (for firing while wearing a linear frame). If non-PA/linear frame soldiers attempt to use these weapons unmounted, they will always be knocked down, and will suffer a bone break to the clavicle, arm, and shoulder, or (1/2D6)+2 ribs. (GM's choice, either does a D6+2 damage and immobilizes the character for a month.)

Beam Weapons

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
Painting Laser	+3	NA	NA	NA	special	1/2	1000eb	3kg	[15]	10
"Photon" Assault Cannon	+2	1-10D6AP (specl)	30	2	300m	3	80,000eb	40kg	[25]	10

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents the optional armored protection for external/carried weapons.

■ These extremely dangerous anti-personnel weapons have incurred special restrictions under the laws of most civilized lands. Firing one in a location not recognized as a militarized zone indicates immediate suspension with investigation of the soldier or officer involved. Such investigation attempts to determine if the situation warranted such action.

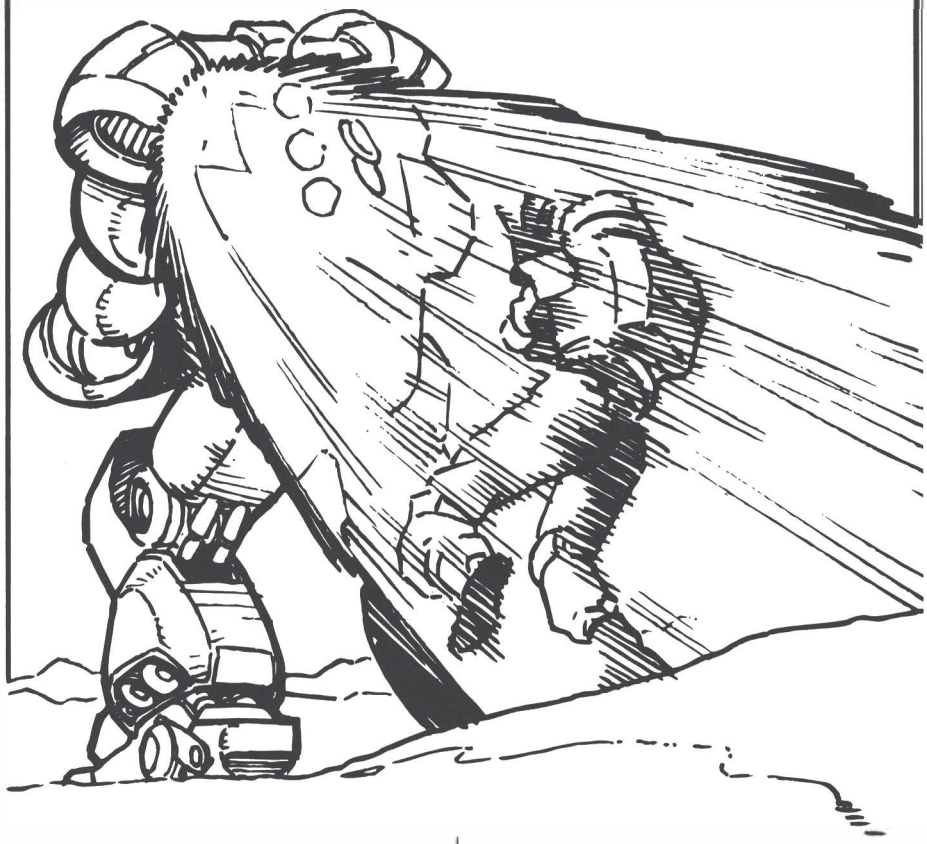
BRP Battledress Ripple Flechette Pack: the "burp" holds its flechette clusters and explosive charges in separate tubes which may be fired individually. If tubes are fired simultaneously, the number of projectiles which hit is multiplied by the number of tubes fired. The BRP fires in a 60 degree cone, which is sufficient to clear a hallway or most rooms from the doorway.

BFC-2,3,4 and BFCWA Flechette Clouds: the "clouds" fire tremendous numbers of needle projectiles in a wider cone than the ripple pack. Therefore, they permit PA troops to wade through (or gun down) vast numbers of "soft" or lightly-armored infantry. The BFC models 2, 3, and 4 fire their spreads in 120 degree cones. Only the model 4 is effective at all against Powered Armor. It works somewhat reliably against light PA troopers, with only a little effectiveness against medium PA. The BFCWA Wide Angle Cloud fires its projectiles in a cone which virtually covers 180 degrees.

BIM Minelets Volley: this weapon differs from nearly all other scatter-packs in that it is not designed primarily for direct fire at personnel targets. Rather, the intent of the weapon is to seed a 60 degree cone with crippling mini-mines. These do damage usually to the legs and feet of anyone stepping on them. Since most boots are not well-armored on the soles, the blast and shrapnel usually causes immediate incapacitation. Regardless, non-PA personnel will be hurled 1-2 meters in a random direction. Naturally, this could well cause the unfortunate victim to land on additional munitions. The ROF value is provided in case minelets are fired directly at targets or physical obstacles. Minelets fired directly do explode on contact!

BSP Variety Show: the "Show" is a special

Rear-Mounted BRP in Action



Scatter Packs

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP	Notes
BRP Ripple Fletch Pack	+4	3D10AP (3)	6x24	2D6	15m	1	500eb	2kg	[20]	20	60° cone
BFC-2 Fletch Cloud	+6	2D10AP (2)	1x144	3D6	25m	1	300eb	2kg	[20]	20	120° cone
BFC-3 Fletch Cloud	+9	1D10AP (1)	1x288	4D6	30m	1	300eb	2kg	[20]	20	120° cone
BFC-4 Fletch Cloud	+3	4D10AP (4)	1x72	1D6	20m	1	1200eb	2kg	[20]	20	120° cone
BFCWA Fletch Cloud	+5	2D10AP (2)	1x144	2D6	30m	1	300eb	2kg	[20]	20	180° cone
BIM Minelet Volly	+3	4D6 (1)	1x50	1D6	50m	1	1000eb	2kg	[20]	20	60° cone
BSP Variety Show	+3	special	1x50	1D6	50m	1	300eb	2kg	[20]	20	60° cone

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents intrinsic protection for packs in external mounts.

effects weapon which can be loaded with a wide variety of munitions. The following common types are indicated below, but many others exist:

Rubber Pellets: mainly used for crowd control and dispersal when it is not the operator's intention to cause permanent injury. These will cause 1D10 damage to anyone they hit, but, since the damage is only in the form of stunning bruises and welts, targets "heal" 1 point of damage every fifteen minutes. Unconsciousness can result from head hits, which are still doubled in effectiveness, but such damage recovers in the same way.

Smoke Pellets: these pellets effervesce into opaque, colored, laser-resistent, or chemical smoke when they are fired. The effects usually remain in an area, depending on the wind, for about five minutes.

Paint Pellets: like the old pellets of "paint-ball" fame, these splash fluid over their targets. This fluid may be as benign as paint, or could be a petroleum distillate, napalm base, acid or fluid-soluble drug. With flammable substances, one or two of the pellets may be filled with phosphorus to provide instant ignition.

Phosphorus Pellets: these flash pellets can cause fires, permanent blindness (10% chance, minimum 12 mins - BT temporary blindness vs unshielded vision), or significant burns (1D6 damage to flesh or soft armors for 3 rds).

Delayed-charge Minelets: these function just as the BIM Minelet Volley scatter pack except the mini-mines are not triggered by pressure. Instead, all will explode simultaneously at a pre-set time delay. As each mine will do 4D6 damage, the fifty of these can sometimes collapse entire floors, small buildings, boats, etc.

TP-4.6 Pyrotechnics Package: Powered Armor troopers frequently joke about the "four-sixes." This package, mainly intended for loud and colorful diversions, releases a swarm of firecrackers, bottle rockets, whistling fliers, fountains, pinwheels, roman candles and holiday shells. There is only a 20% chance that any unarmored personnel caught in the cone will suffer 1D6 damage. The "four-six" has been somewhat valuable to PA soldiers when they are missing and their suit's homing beacons and/or radios have been damaged. In such circumstances, a "four-six" may well indicate the location of a helpless PA soldier, like a flare.

Specialty Utility Mini-Packs

PA soldiers can wear many utility materials in modular spray and launch packs. Most of these are located in the arms of a PA suit, but can be mounted anywhere. If mounted externally, the packs will automatically have the SP in brackets on the ACPA Weaponry Table. The mini-packs listed here are simply a few of the most common kinds.

BLP C6 Gel Breech Spray: this mini-pack contains three entire kilos of Liquid C6. The PA soldier can spray this on any wall or heavy door he wishes to breech (takes six rounds). Two small, timed detonators are included in the mini-pack. One is to be stuck into the gel after it is sprayed. The enormous blast has the potential of opening any breech. Any amount of the 3 kilos can be sprayed but only two detonators are provided.

BOM Wire Obstacle: the wire obstacle consists of a square grenade which the PA trooper manually removes or springs from the mini-pack. The square grenade is composed of a hundred lengths of piano wire with flechette-like, weighted ends. When the obstacle is exploded, it will fill any 4m x 4m x 4m corridor with an irregular piano wire "spider web." Such an obstacle takes at least several rounds for even powered armor to remove, unless a kilo of C6 or equivalent is detonated in the area. It must be warned that any soft targets in the area at the time of detonation will be strung to the floor, walls, and ceiling (minimum of 1D6 x 1D6 damage). No armor of greater than SP30 will be penetrated by the weights.

BPL Plastic Obstacle: this munition is incredibly simple yet relatively effective against any bipeds (including humans) or quadrapeds. It consists of nothing more than about twenty dozen 1m plastic loops which spread out on the floor in about a 5m radius. These plastic loops, which were first invented by the United States Post Office to strap heavy packages, are a very effective and troublesome hall or room filler. While PA troopers can move through such an area without hindrance, simply snapping loops as they go, non-PA personnel cannot usually move faster than 0.5m/round through such an area.

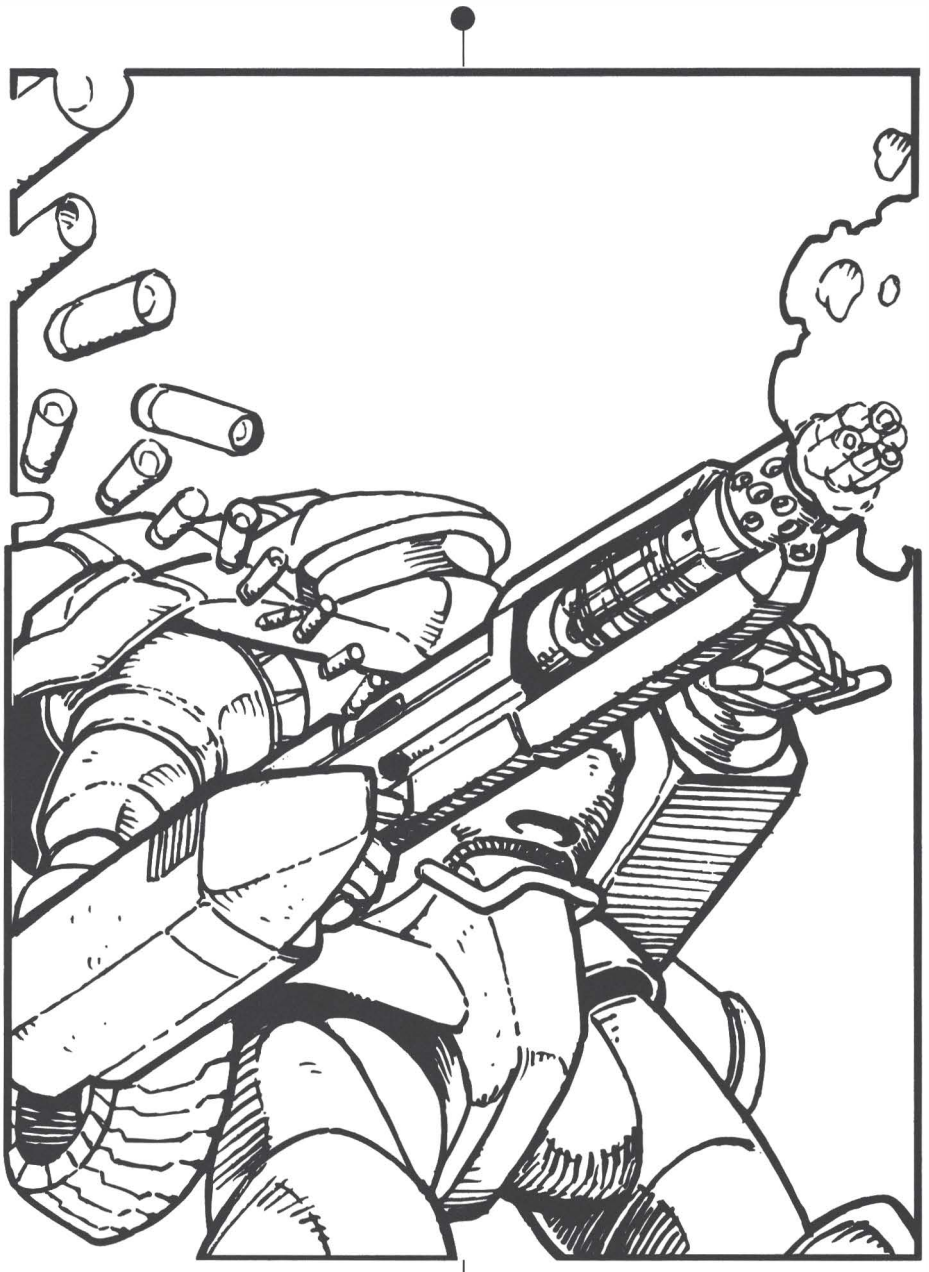
BSS Silicon Spray: this mini-pack sprays up to 3 kilos of a clear, sticky, plastic glue. This material sticks instantly, yet takes twenty-four hours to fully cure. When fully cured, the silicon loses its tacky characteristic and forms a tough, rubbery seal. PA soldiers use this spray either to form long-term structural repairs, to temporarily fill a hole, or to create a tough, sticky obstacle surface. The soldier may spray as much of the silicon as he wishes.

BES Epoxy Spray: actually consisting of two spraying units, one for the resin and one for the hardener, this epoxy spray will cure to a brittle, very hard bond within five minutes. While this quick-dry epoxy has a tendency to slowly lose its strength, it is the strongest glue-bond yet discovered while it lasts. As with the silicon spray,

Utility Packs

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
BLP Breech Spray	-1	varies	1	1	2m	1/2	300eb	1kg	[20]	10
BOM Wire Obstacle	-1	NA	1	1	5m	1/2	100eb	2kg	[20]	10
BPL Plastic Obstacle	0	NA	1	1	10m	1/2	10eb	2kg	[20]	10
BSS Silicon Spray	-1	NA	1	1	5m	1/2	30eb	2kg	[20]	10
BES Epoxy Spray	-1	NA	1	1	2m	1/2	30eb	2kg	[20]	10

Notes: SP in brackets [#], represents intrinsic protection for packs in external mounts.



the PA soldier is free to determine how much of the glue he wishes to use at a time. If the spray unit is filled with a 24-hour curing epoxy, the glue will not lose its strength with age.

ACPA-portable Cannon

Second in use only to heavy rifles, portable cannon are common on the PA battlefield. Most are designed as a bullpup battlepack which makes the large weapons easier to handle by the ACPA. The Long 20mm is the most common of the weapons, the weights of the bigger models being somewhat cumbersome. The two rifles can be mounted in the same manner as the heavy MGs, but the other cannons must be 2-handed or external torso mounts. Some weapons' ROF and ammo loads have been reduced from their vehicle-mounted standards in order to accomodate the lesser capabilities of ACPA. If carried or externally-mounted, these weapons can be given an armored housing for 15% of cost.

BCL-20 20mm Rifle: a longer barrel and bigger shell make the "Long-20" a slightly more efficient upgrade of the Barret-Arasaka "Light-20."

BHC-G8 30mm Rifle: this enormous ACPA cannon/rifle is available when someone absolutely must be able to guarantee dropping a big "Boris" instantly. The gun uses a 30mm heavy shell simular to those made famous by the A-10 attack plane in the late 20th century. Obviously, the weapon's weight makes its reputation more common than its actual employment.

ACPA Cannon

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP	Notes
BCL-20	+1	8D10 (4)	20	2	550m	2	2700eb	44/10kg	[25]	35	
20-25mm Autocannon	0	8D10 (4)	100	10	500m	3	3000eb	40/50kg	[25]	30	
BHC-G8	0	9D10 (5)	10	1	600m	2	3500eb	70/9kg	[30]	40	
27-30mm Autocannon	0	9D10 (5)	50	10	600m	3	4000eb	75/45kg	[30]	30	
LATG 37mm	+3	6D10AP (6)	10	1	800m	2	10,000eb	100kg	[25]	25	
EMG-83 Improved Railgun	+2	5D10+10AP (7)	10	1	1000m	3	17,500eb	42kg	[25]	15	
75mm Recoiless	0	8D10 AP(8*)	4	1	500m	2	15,000eb	15/30kg	[15]	20	2m burst

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. Weapons with an * by their Pen. are HEAT/shaped-charge weapons. Armor is x1/2 vs these weapons, but any damage that penetrates is not halved. Further effects are noted in the Vehicle Combat section. SP in brackets [#], represents the optional protection for external/carried weapons.

Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. #Prices are for the weapon alone, for ammo costs, see the Ammo section.

LATG 37mm: A modernized/accuratized version of the venerable 37mm anti-tank gun of WW2, now shooting depleted uranium slugs. Used as a sort of monster sniper rifle.

20-25mm AutoCannon: Comes in a couple generic models, of which Colt's BC25d is the most common.

27-30mm AutoCannon: Arasaka's WCH27 "Standard" is the best of the various weapons at this level. Modern versions of the 1980's-90's ASP-30 are also common. Once again, weight is the primary drawback.

EMG-83 Improved railgun: Suffering from the same problems as the more portable 4mm rifle, this more robust gauss cannon offers twice the shots and rate of fire. This cannon is famous for being able to open man-sized holes in concrete walls with a single, shocking blast.

75mm Recoilless Cannon: A magazine-fed support and anti-vehicle weapon of simple construction. When fired, anything in a 8m long x 2m wide area to the rear sustains 6D6 backblast damage. Only fully sealed armor protects against this. Can be loaded with HE (8D10/Pen. 4, Burst 5m), or white phosphorous (5D6 for 3 turns/Pen. 3, Burst 20m) shells as well.

Rockets and Missiles

The following weapons are true heavy arms normally found in combat zones utilizing AFV or helicopters. These weapons are all at the extreme end of destructive capability and are only appropriate for true, large-scale military operations. Private use and even ownership of such devices should be considered illegal in the extreme, perhaps even requiring treason hearings upon discovery. All of the weapons require the targeting capabilities of at least a HUD-using Reality Interface. These weapons can be given an armored housing for 10% of cost.

IFAR: One of the most venerable of designs, the 2.75" Folding-Fin Aerial Rocket has been in combat use since the Korean Conflict. With a reduction in size and weight, the current 'Improved' model of this rocket is intended for medium-hard targets. This particular model is a single shot tube, either mounted on the arm of the Trooper (external arm), or on a flip-up back mount (external torso). Troopers, from the abbreviation, call these "Iffers."

IFAR/3-Pod and 6-Pod: The latter pod is normally the smallest in use on helicopter gunships. Naturally, for Troopers, this is a huge piece of equipment capable of levelling urban structures seven ways! The 3-Pod was developed specifically for ACPA. Any number of rockets can be salvoed from a pod (or set of pods) in one turn. 2-handed carry or external torso mounts only.

Mini-Roc 6 and 15C: The Mini-Roc is like the IFAR, but constructed on a smaller scale (50mm) for bombardment of light targets and anti-personnel use. This weapon does not entail quite the governmental control and protection as the larger items in this inventory. The 15 shot pod is 2-handed carry or external torso mounts only; the 6 shot pod can also be externally leg-mounted.

Law-III: The third model of the LAW disposable anti-tank system, this 70mm system is designed to punch through armor and get to the soft parts inside. This is but one example of a more common item on the PA battlefield (mainly because of its very low price). 1-handed carry, or external arm, leg or torso mount.

Light Anti-Tank Guided Missiles: A much bigger weapon than the LAW, these are capable of stopping most AFV's on the battlefield. If this weapon ends up in private hands it is because somebody needs to stand trial for permitting terrorists in their supply depot. They are wire-guided, semi-active control weapons (see Missile rules in Vehicle Combat section) and can be bought single-shot or reloadable (2500eb; extra missiles 1500eb, 10kg). Common models are the Milan-C and Texas Arms' TOW-Lite. 2-handed or external torso mounts only.

Spectre: This is an extremely accurate fire-and-forget (i.e., active-type) heavy ATGM (23kg/missile) which depends on excellent televisual guidance to attain its target.(see Missile rules in the Vehicle Combat section). 2-handed mount only.

Scorpion 16: The classic standby man-portable SAM can be adapted for powered armor use. Extra missiles can purchased at normal price. 2-

Rockets & Missiles

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP	Notes
IFAR	-2	8D10 (4)	1	1	500m	2	200eb	10kg	[20]	30	6m burst
IFAR 3-pod	-2	8D10 (4)	3	special	500m	3	2100eb	40kg	[20]	45	6m burst
IFAR 6-pod	-2	8D10 (4)	6	special	500m	4	4200eb	81kg	[20]	105	6m burst
Mini-roc 6	-2	6D10 (3)	6	special	500m	2	1800eb	69kg	[20]	45	3m burst
Mini-roc 15C	-2	6D10 (3)	15	special	500m	3	4500eb	171kg	[20]	112	3m burst
LAW-III	-2	4D10AP (4*)	1	1	200m	1	300eb	3kg	[20]	10	2m burst
Light ATGM	+2	12D10AP (12*)	1	1	1000m	2	3000eb	25kg	[20]	20	4m burst
Spectre ATGM	spcl	18D10 AP(18*)	1	1	3000m	NA	10,000eb	86kg	[20]	25	4m burst
Scorpion 16 SAM	-1	7D10 (4)	1	1	2000m	2	1000eb	15kg	[20]	20	6m burst
Red Knight SAM	spcl	10D10 (5)	1	1	4500m	NA	4600eb	23kg	[20]	15	10m bst

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. Weapons with an * by their Pen. are HEAT/shaped-charge weapons. Armor is x1/2 vs these weapons, but any damage that penetrates is not halved. Further effects are noted in the Vehicle Combat section. SP in brackets [#], represents the optional protection for external mounts/carried weapons. Ranges for rockets (IFAR, Mini-Roc) are Direct-fire only, for Indirect Fire, triple range.

handed or flip back mount (external torso) vertical-launch backpack option: 3 shots, 3 spaces, 54kg, 4800 eb.

Red Knight: this is an extremely deadly fourth-generation infra-red SAM/AAM (Treat as thermal-guidance active missile, see Missile rules, Vehicle Combat section) Normally hung under fighter planes and helicopters, this weapon is an overkill device when used with Powered Armor. 2-handed carry only.

Anti-Personnel Weaponry

Powered Armor Troopers actually are mismatched against unpowered personnel more often than they encounter other Troopers. The seven representative weapons in this category demonstrate the way Powered Armor can be equipped to mow down great numbers of unarmored or lightly-armored people. Unless noted, these weapons can be mounted anywhere (enclosed or external) except the head, or can be carried in one hand. If carried or externally-mounted, they can be given an armored housing for 15% of cost.

5.56 and 7.62mm Machine Guns: These are essentially hi-tech, bullpup, versions of common vehicle and squad autoweapons, made to sweep unarmored opponents.

G-20 10mm Caseless MG: Made by H&K specifically for PA use, the G-20 is effective vs. all personal armor and even some light ACPA suits. Can be loaded with saboted AP ammo (Veh. Pen. 3).

5.56mm Minigun: A light minigun, this gatling machine gun looks frighteningly appropriate mounted on the arm of ACPA. The unit is light enough to be carried one-handed. If hand-carried the ammo cannister is linked by flexible feed and takes 1 external space.

7.62mm Minigun: This heavier minigun was made famous by helicopter gunships in Viet Nam. Obviously, the weapon is heavy enough that it is used as primary armament on some suits. However, its firepower is not sufficient to direct against other ACPA. If hand carried, the linked ammo cannister takes 2 external spaces.

10mm Caseless Gatling: The Malour/MetaCorp HIVE is a monster weapon. Utilizing a tri-barrel, chain-drive action, this device could almost move up a class with its bigger cousins, as it will smash combat 'borgs, light ACPA, civilian vehicles, and any number of soldiers in Metal Gear. 2-handed carry (the linked ammo cannister takes 2 external spaces), or torso mounts only.

"ONI" Autoshotgun: this Arasaka-built 10 Ga. scattergun never seems to run out of pellets. It happens with some frequency that a residential structure will cave-in after some trigger-happy Trooper has used one of these weapons while inside.

Grenade Launchers

Once again we enter a category where the majority of weapon models are considered high military and should not normally be available on a non-governmental level. These low-weight, high-bulk systems fire a plethora of shells capable of dealing with man and vehicle alike, making them a premier support weapon. Unless noted, these weapons can be mounted anywhere (enclosed or external) except the head, or can be carried in one hand. If carried or externally-mounted, these weapons can be given an armored housing for 10% of cost.

Tsunami 25mm Grenade Launcher: Firing a 25mm high-pressure grenade, this PA-specific launcher is Arasaka's entry in the support weapon catagory. The grenade effects are equal to those of the Militech U-55 *Cowboy* GL, but high-pressure grenades **cannot** be fired from hand-held launchers.

Fragmentation	2D6+1 (Pen 1), 5m radius
HE	5D6 (Pen 2), 3m radius
HEP	5D6 Special AP (Pen 3*)
Incendiary	4/3/2D6 over 3 turns (Pen 2), 2m radius

Grenades are 15eb each.

40mm Auto-Grenade Launcher: Modified from the classic NATO squad support weapons, this launcher is designed to fire 50-unit belts of grenades. The value of its firepower is somewhat offset by the much greater mass.

Fragmentation	7D6 (Pen 2), 5m radius
HE dual-purpose	4D10AP (Pen 4*) impact; 4D6, 1m radius
Flare	1D6 for 2 turns (Pen 0) impact; 20m radius illumination
Smoke	10m radius cover
White Phosphorus	4D6 for 3 turns (Pen 2), 10m radius
Fletchettes	1-3x2D6AP (Pen 1), 3mx25m area

Grenades are 100eb @.

30mm Auto-Grenade Launcher: The Russian equivilant of the 40mm weapon. It fires from a 30-unit drum, with an ROF slow enough to squeeze off single shots. Due to technology

Anti-Personnel Weapons

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
5.56mm Light MG	+1	5D6 (2)	100	10	450m	1	1200eb	6/2kg	[25]	25
7.62mm Light MG	0	6D6+2 (2)	100	10	500m	1	1200eb	10/3kg	[25]	25
G-20 Caseless 10mm MG	0	8D6 (2)	200	20	600m	2	3000eb	15/3kg	[25]	25
5.56mm Minigun	+1	5D6 (2)	1000	100	450m	2	2000eb	13/15kg	[25]	20
7.62mm Minigun	0	6D6+2 (2)	2000	100	500m	3	4000eb	25/30kg	[25]	20
HIVE 10mm Caseless Gatling	0	5D10AP (4)	2400	60 or 120	500m	4	12,500eb	50/25kg	[20]	20
ONI Autoshotgun	0	4D6+3 (2)	180	5 or 20	75m	2	1350eb	7/12kg	[25]	20

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents the optional protection for external mounts/carried weapons. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. Prices are for the weapon alone, for ammo costs, see the Ammo section.

Grenade Launchers

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
Tsunami 25mm Grenade-Launcher	0	special	20	1/3/5	1500m	1	1700eb	18/2kg	[20]	25
40mm Auto-GL	+1	special	50	3 or 20	1600m	2	2500eb	40/25kg	[25]	30
30mm Auto-GL	0	special	30	1 or 10	1300m	2	2000eb	20/11kg	[25]	25
Super Rakate	0	5D6 (1)	8	special	300m	1	700eb	5kg	[20]	20
Saucer Shooter	-1	2D6+3 (0)	30	1	250m	1	1500eb	15kg	[20]	20
EMP Grenadier	0	special	5	1	300m	1	2000eb	10kg	[20]	15

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents the optional protection for external mounts/carried weapons. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. Prices are for the weapon alone, for ammo costs, see the Ammo section.

advances, the grenade effects are similar despite the difference in sizes.

30mm Super Rakate: this system is simply a larger, Powered Armor model of Rostovic's Wrist Rakate (*Chromebook 1*, pg.49). Without taking up an inordinate amount of space or weight in a powered armor suit, it provides some quick support-level firepower. This weapon is common outside of government use, and is not heavily restricted.

Saucer Shooter: This radical design has the distinction of being first attempted for Troopers rather than for a squad weapon. The weapon fires the distinctive FEN dz-22 "Saucer Grenades" (*Chromebook 1*, pg.47). Many spectacular effects are achieved by Troopers experienced in the use of this weapon, especially in high winds, off steep declivities, or ricocheting from walls.

EMP Grenadier: This device is thankfully rare, as its appearance usually occasions great frustration and battlezone collapse for both sides of a conflict. For details on the EMP grenades, see *Chromebook 1*, pg.47.

Small Arms

Weapons in this category are useful as secondary armament on Powered Armor, fulfilling a role analogous to a combat soldier's sidearm. The weapons are also useful when a Trooper's primary weapon is unavailable or inappropriate. These weapons can be mounted in any Body Area, enclosed or external. If mounted externally, they are automatically placed in an armored housing at no extra cost.

M-31PA: This is a stripped-down M-31a1 AICW (*Chromebook 1*, pg.45) with extra ammo capacity.

Flechette "Pistol": A copy of the Malorian sub-flechette gun (*Chromebook 1*, pg.48) with triple ammo capacity.

14mm Pistol: A copy of the Malorian 3516 (*Chromebook 1*, pg.52) with triple ammo capacity.

"Dragon" Flamer: A larger version of the Kendachi Dragon (*Chromebook 1*, pg.48) with increased capacity and range.

Micro-Missiles: This is a magazine-fed, battlesuit version of the weapon system from *CP 2020 (pg.* 79 & 91). While the damage from the small rockets is not as severe as some, the accuracy, the damage radius (2 meters) and ability of the missiles to track around obstacles make this a popular accessory. Reloads cost 400eb per magazine. See also *Chromebook 2,* pg. 49

"Big Boomer": A bigger model of the .477 Boomer Buster (*Solo of Fortune*, pg.50) that carries double the shots.

Defensive Systems

Several important systems fall into the category of defensive weaponry. The detectors, EMP devices, ECM/ECCM suites and countermeasure "cans" can be placed anywhere inside the PA suit ("cans" may also be mounted externally); AGAMS must be mounted in the Head or Torso (or a combo of both).

Laser and Microwave Detectors: These devices have a 90% chance (2-10 on a D10) of detecting a laser (weapon or rangefinder/ guidance) or focused microwave beam (anti-elec-

Small Arms

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
M-31PA	+2	4D6 (1)	300	1/3/30	400m	1	1800eb	6/2kg	[20]	10
Auto-Fletchette "Pistol"	+2	1D6x1D6AP (1)	100	3 or 30	200m	1/2	900eb	3/2kg	[20]	15
14mm Pistol	0	6D6 (1)	20	2	75m	1/2	2260eb	2/1kg	[20]	15
"Dragon" Flamer	0	3D6/1D6 (1)	8	1	8m	1	990eb	5kg	[20]	10
Micro-Missiles	+2	4D6 (1)	8	2	200m	1	900eb	5/3kg	[20}	10
"Big Boomer"	+1	5D6AP (2)	8	2	100m	1/2	550eb	12/1kg	[20]	20

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#] represents the optional protection for items in external/carried mounts. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine.Prices are for the weapon alone, for ammo costs, see the Ammo section.

tronic "Microwaver," or range finding/ guidance maser) striking the suit. The detector can simply inform the pilot, or be set to release "stardust" and "ribbon" cans. Though described in the defensive systems, these devices should be treated as sensors, and can be part of a 1 space "suite." Their stats are found on the Utility Systems Table.

EMP Sponge: prevents EMP shock or damage to sensitive electronic equipment. The sponge is effective to relieve only one EMP jolt as it is burned and fused as it does its job. The operation of the device is analogous to computer static-shock prevention equipment pioneered in the 1980s.

EMP Capacitor: the capacitor attempts to absorb an EMP pulse and slowly discharge it rather than burning up under the assault as does the sponge. However, the science is still young, and an EMP capacitor still has a 50% chance of being destroyed as it protects equipment from EMP damage.

"Smoke" Cannister: a simple device which releases clouds of colored, IR-blocking smoke for the purpose of obscuring vision and defending against visually guided munitions (-3 To-Hit unless using radar/microwave rangefinder, +10 difficulty to *Notice* rolls, blocks Thermographs).

"Stardust" Cannister: this is a very specific defense against lasers and laser guidance. "Stardust" is actually a fine glass dust of fairly precise technical definition. This is a high-quality defense against all light-based attacks, rendering virtually all of them impotent (90% chance) if employed in time.

"Ribbon" Cannister: analogous to ECM Chaff in fighter jets, "Ribbon" will temporarily foul up radar or metal-oriented tracking systems. The cannister fires out the precisely cut metal foil strips in a billowing cloud, cluttering up and misguiding affected systems. (+10 Difficulty to hit w/Radar-guided missiles, +5 Difficulty w/Laser-guidence, 70% chance of blocking radar-based search/detection.)

"Flash" Cannister: similar in some ways to an intense roman candle, "Flash" can be used as a "Flash-burst" visual stun bomb (30+ COOL roll, add *Dodge/Resist Torture* skills or convulsions/paralysis for 1D6 min.), or as a spoofing flare vs. thermal-guided weapon systems. (+10 Difficulty to hit w/Thermal-guided missiles, +5 difficulty to *Notice* rolls w/IR and Thermograph).

"Ghost" Cannister: an expensive, one-shot, but very effective decoy. Ghost is a sophisticated electronic transmitter, coil, and battery, which imitates many of the physical characteristics of powered armor as it is being tracked. "Ghost" will send out its misleading transmissions for about a minute (6 combat turns), with the same effect as ECM (protects launching suit only). At the end of the minute, "Ghost" typically self-destructs with the force of a grenade. This feature is very difficult to deactivate because the designers do not intend for the device to be re-used by battlefield scavengers. See ECM.

ECM: Electronic Counter-Measures is a sophisticated electronics system that is used to baffle, jam and mask electronics emissions and operations. In game terms, its use is simplified: ECM is either on or off. When on, the suit is attempting to effect the electronics around it; jamming extends to a 100m radius. ECM can be extended to a greater range, at a price. (3 spaces, 500m radius, 1 Million eb.)

ECM jamming has the following effects: it jams military radar and radio on a 4-10 with a D10. Civilian radar/radio is automatically jammed, and it adds +15 to the hit Difficulty for radar-guided missiles.

ECCM: Counter-counter measures is a system of fine-tuned electronics used to "burn through" jamming. On a D10 roll of 4-10, it negates the effects of jamming. Only the ECCM-equipped suit enjoys these benefits, and only vs. its designated target. (Which might not be the jammer; the ECCM-equipped suit might be targeting another unit that is within the jamming radius of the ECM source.)

Stealthing: An *extremely* expensive method of rendering a PA suit undetectable by Radar or IR sensors. Cost is 10x the suit's *total cost*. Stealthing reduces the suit's maximum capacity by 10%, and the number of external spaces by one per body area. It automatically fools civilian Radar and basic IR; military Radar is baffled on a 1-9; Thermographs on a 1-8 (D10). See Countermeasures rules in the Vehicle Combat section.

Defensive Systems

Name	WA	Damage	#Shots	ROF	Range	Space	Cost	Weight	SP	SDP
EMP "Sponge"	NA	NA	NA	NA	NA	1/2	500eb	2kg	NA	30
EMP Capacitor	NA	NA	NA	NA	NA	1	1500eb	2kg	NA	10
Smoke Cannister	NA	NA	6	1	NA	1	200eb	4kg	[20]	15
Stardust Cannister	NA	NA	2	1	NA	1/2	500eb	2kg	[20]	
Ribbon Cannister	NA	NA	3	1	NA	1	300eb	3kg	[20]	20
Flash Cannister	NA	NA	6	1	NA	1	300eb	6kg	[20]	20
Ghost Cannister	NA	NA	1	1	NA	1/2	3000eb	4kg	[20]	10
ECM	NA	NA	NA	NA	100m	2	500K eb	25kg	NA	15
ECCM	NA	NA	NA	NA	NA	1	100K eb	5kg	NA	15
Stealthing	NA	NA	NA	NA	NA	spcl	special	special	NA	NA
IR Baffling	NA	NA	NA	NA	NA	NA	special	NA	NA	NA
AGAMS	NA	3D6 (0)	30	special	400m	2	24,000eb	25/13kg	[20]	20

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#], represents intrinsic protection for items in external mounts. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine.

COMBAT NOTES FOR THE CLEVER 'BORG—

With the advent of ACPA, some players are complaining that such a device makes combat-oriented full borgs obsolete. "They're too strong!" they say. "They're too fast, too tough." they say. Well, let's just see how tough they really are...The following is a comparison between the Militech Dragoon (currently the premiere combat borg), and the Arasaka Standard B (a mid-range, off-the-shelf PA suit).

	DRAGOON	STANDARD B
Cost	120,000eb	88,550eb
Weight	282kg	661kg
SP	40	50
SDP	40 arm/leg, 60 torso	10 arm, 19 leg, 28 torso
STR/BOD	20	37
REF	15	Special*
MA	25	Special*+3
Punch	3D6+8	4D10
Kick	6D6+8	6D10

*Note: these stats are equal to those of the person wearing the suit.

Interesting comparison, hmmm?

Of the nine comparison categories, the Standard B has a distinct advantage in only two: cost and STR. A 10 SP advantage is not as significant at these higher levels as one might think, and the Standard B's HTH combat values are only 4 points greater on the average roll. On the other hand, the Dragoon shows serious advantages in weight, reflexes, speed and the ability to take damage. The final arbiter is HC. The sophisticated surgeries involved in a Dragoon give it the highest Humanity Loss of any cybernetic system in the game; a suit of ACPA can be stepped into (and out of) in under 10 minutes with no loss.

Dragoon tactics must take advantage of these strengths—speed to take up commanding positions for attack or defence; quick reflexes allow unexpected maneuvers and that all-important first shot; your lighter weight means Death From Above (make use of those third and fourth building floors, the tin suits'll never follow you up there). The final advantages are much more subtle—Combat Crystal allows a fireteam of Dragoons to act as one, while the overall *endurance* of a borg is incredible compared to ACPA. Weeks, possibly months, can pass without need for maintenance or sometimes even nutrition. On the other hand, the "power" for Powered Armor will only last 48 hours, maximum, and the wearer will be feeling rather "wiggly" after 24.

In the long run, each system has a certain niche to fill. *What is the Mission?* is always the primary question before choosing a military asset. What you want done, and (more important in some cases) how you want it done, should be your guiding principles in the Combat Borg/Powered Armor debate.

IR Baffling: This acts as per the vehicle modification. It only reduces IR signature. Cost 10% of Chassis cost. Takes no spaces, has no SDP, or SP.

AGAMS (Active Gatling Anti-Missile System): Without a doubt, one of the most complex and amazing of all PA systems, the "Mini-Phalanx" is an anti-missile firearm (based on the .22 minigun design) analagous to the Aegis protection system on sea-going vessels. The system actually tracks incoming missiles or rockets, self-aims, and attempts to destroy or set off the device before it strikes the Trooper. If a rocket or missile is fired at an AGAMS-protected suit, the system will detect it 90% of the time.(2-10 on a D10). Once detected, an interception will be made at 100m or less; AGAMS can be confused by multiple projectiles. Roll 1D10 for each missile detected, with a -1 per missile over 1: a 4+ safely destroys the projectile, 1-3 detonates it within its burst range (1/2 damage and Veh. Pen. factor), on a 0 or less, AGAMS failed the interception, and the rocket/missile attacks as normal.

AMMUNITION

What keeps the guns going. A single magazine of bullets (which is included in the space utilized by a standard weapon mounting as listed in the chart), won't see you through a battle. In the case of powered armor, you have to lug enough munitions into action to supply a heavy weapons platoon. And it's all got to fit on your body somewhere...

Unless noted in the weapon's description, extra rounds (#Shots=1) cost 5% of the weapon's cost. Extra magazines (#Shots>1) cost 10% of weapon cost, per 100 rounds (or proportional part thereof). All ammo must be purchased seperately from the weapon. **Note:** These prices, especially for grenades, reflect purchases in military lots. Private buyers of smaller quantities may face far higher prices.

Extra ammunition takes the following space:

AMMO TYPE	SPACES (PER EXTRA MAGAZNE)
Heavy MG/Rifle	**1**
12.7mm Gatling	**2**
PA Cannon	**1**
PA Autocannon	**2**
Light ATGM	**1**
Anti-Personnel Weapon	**1/2**
5.56mm Gatling	**1**
7.62/10mm Gatling	**2**
25mm GL	**1/2**
30/40mm Auto-GL	**1**
Small Arms	**1/2**

All other weapons are bought as complete, self-contained units (i.e. Rockets, missiles cannisters, and scatter packs)

Ammunition reloads have 10SDP per 1/2 space and each magazine handles damage seperately. If they take damage, they may gang-fire in the magazine, see Damage Rules pg 56. Externally mounted reloads have SP15 armor protection unless otherwise noted in the text. ■

ACPA CATALOG

"Powered Armor, bah! They are just big, slow infantry. They carry only pop-guns. I told you that they could not hold this city without armored sup... What was that?! Is something on the turret?! Mother of God!..."

The shrill sound of steel plate wrenching and popping, then autocannon fire, very close.

— The last transmission of Major Irina Altmeyer, 2nd Serbian Armored Command.

ALTHOUGH ACPA IS A RELATIVELY NEW TECHNOLOGY, SEVERAL COMPANIES ARE ALREADY PRODUCING SUITS FOR MILITARY AND CORPORATE USE. PRESENTED HERE ARE SOME PAS FROM MAJOR MANUFACTURERS THAT ARE NOW HITTING THE MARKET. THESE LISTINGS REFLECT THE BASIC SUITS AS THEY COME FROM THE FACTORY (BASE STICKER PRICE), AND, AS WITH ANY EXPENSIVE AND PRESTIGIOUS VEHICLE, THERE ARE ALWAYS NUMEROUS OPTIONS WHICH MAY BE ADDED (FOR AN ADDITIONAL CHARGE, OF COURSE). USE THESE AS QUICK-START SUITS OR AS SAMPLES FOR YOUR OWN DESIGNS.

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	Commando			MANUFACTURER:	MILITECH
TOTAL WEIGHT:	945 KG			SIB/DFB:	+4/+3
CHASSIS TYPE:	HIGHWAYMAN, STR 35			CHASSIS WEIGHT:	180
PUNCH:	4D10	KICK:	6D10	CHASSIS CAP./CARRY:	1750/525 KG
CRUSH:	5D10	RUN:		**TOTAL COST:**	108,306 EB.
LEAP:		JUMP:		TROOPER SIZE:	114 KG
				TOUGHNESS MOD.:	-9

S	P	A	C	E	S
HEAD [1]	R. ARM [2]	L. ARM [3]	R. LEG [4-5]	L. LEG [6-7]	TORSO [8-0]
SP 65	SP 65	SP 65	SP 65	SP 65	SP 65
SDP 9	SDP 9	SDP 9	SDP 18	SDP 18	SDP 27
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] MILITECH	1] BCL-20	1] M-31 PA 10	1] 40MM GL	1] BCL-20	1] REPEATER
VRI 15	20MM		RELOAD 20	RELOAD 20	AUTO-DOC 20
	CANNON 35		(50)	(20)	
2] MILTARY	2]	2] M-31	2] 40MM GL	2] BCL-20	2]
RADIO 10		RELOAD (300) 10	RELOAD 20	RELOAD 20	
A/V RECORD. 10		M-31	(50)	(20)	
LASER DETECT 5		RELOAD (300) 10			
3]	3] RIBBON	3] SMOKE	3] 40MM GL	3] BCL-20	3] ESCAPE
	CANNISTER 20	CANNISTER 15	RELOAD 20	RELOAD 20	HATCH 30
			(50)	(20)	EMP
					SPONGE 30
EXTERNAL SP/SDP	4]	4]	4]	4]	4] BRP
1]					PACK 20
					(REAR)
	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	5]
2]	1]	1]	1] ATGM	1] ATGM	
			RELOAD 20	RELOAD 20	
			(1)	(1)	
	2]	2]	2]	2]	EXTERNAL SP/SDP
					1] BFC-4 20/20
					(FRONT)
	3]	3]	3]	3]	2] BSP
					VARIETY
					PACK 20/20
					(FRONT)
					3] 1-H HEAVY
					BLADE 20/20
					4]

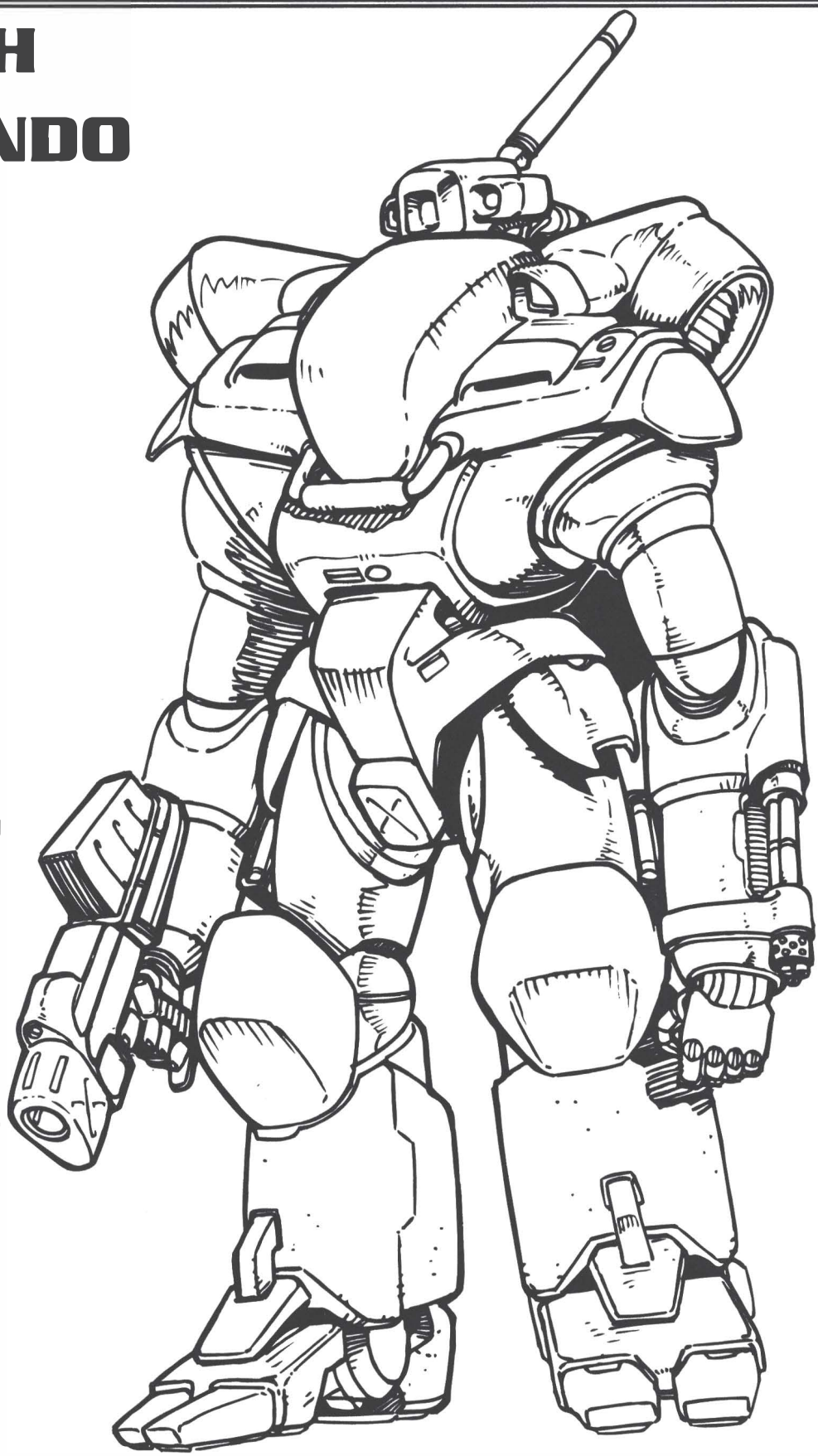
NOTES:
IR BAFFLING
COMMAND
COMPUTER

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]	40MM AUTO GL	25/30/65	8]		
2]	RELOADABLE ATGM	20/20/25	9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

MILITECH COMMANDO



DESIGN NOTES:
The name is a little misleading; this is actually Militech's excellent front-line combat suit, utilizing the Highwayman-class chassis. It's frequently seen (and respected) on the battlefield and in urban combat zones. The design focuses on information handling and hard-hitting firepower, making piloting and targeting easy tasks for the operator. While many buyers customise their Commandoes with specialised external options, the percentage of factory standard Commandoes used is higher than any other commercial PA. This suit shows the power of a concept design, one where ideas are applied without bureaucratic influence.

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	BORIS 1	MANUFACTURER:	RUSSIAN ARMS
TOTAL WEIGHT:	1235 KG	SIB/DFB:	+1/+2
CHASSIS TYPE:	MIKAEL, STR 50	CHASSIS WEIGHT:	375
PUNCH: 6D10	KICK: 9D10	CHASSIS CAP./CARRY:	2500/750 KG
CRUSH: 7D10	RUN:	TOTAL COST:	116,027 EB.
LEAP:	JUMP:	TROOPER SIZE:	136 KG
		TOUGHNESS MOD.:	-12

S	P	A	C	E	S
HEAD [1]	R. ARM [2]	L. ARM [3]	R. LEG [4-5]	L. LEG [6-7]	TORSO [8-0]
SP 65	SP 65	SP 65	SP 65	SP 65	SP 65
SDP 12	SDP 12	SDP 12	SDP 25	SDP 25	SDP 37
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] FULL	1] 14.5MM	1] SUPER	1] 14.5MM	1] BHC-G8	1] ESACPE
HUD 10	HEAVY	RAKATE 20	RELOAD 20	RELOAD 20	HATCH 30
STD, RADIO 5	MG 35	↓	(100)	(20)	KWIKFIX
A/V RECORD. 10	↓	↓	↓	↓	AUTO-DOC 15
2] VISUAL SPEC.	2]	2] G-20	2] 14.5MM	2] BHC-G8	2] WINCH
BACKUP 15	↓	10MM MG 25	RELOAD 20	RELOAD 20	&
THERMAL TAR. 5	↓	↓	(100)	(20)	GRAPPLE 40
↓	↓	↓	↓	↓	↓
3]	3] 14.5MM	3]	3] BHC-G8	3] BHC-G8	3] EMP
↓	RELOAD 20	↓	RELOAD 20	RELOAD 20	SPONGE 30
↓	(100)	↓	(20)	(20)	EMP
↓	↓	↓	↓	↓	SPONGE 30
EXTERNAL SP/SDP	4] 14.5MM	4] G-20	4] BHC-G8	4] BHC-G8	4] BFC-2
1]	RELOAD 20	RELOAD (200) 10	RELOAD 20	RELOAD 20	PACK 20
↓	(100)	G-20	(20)	(20)	(FRONT)
↓	↓	RELOAD (200) 10	↓	↓	↓
2]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	5] BFC-2
↓	1]	1]	1]	1]	PACK 20
↓	↓	↓	↓	↓	(REAR)
↓	↓	↓	↓	↓	↓
	2]	2]	2]	2]	EXTERNAL SP/SDP
	↓	↓	↓	↓	1] BFC-2
	↓	↓	↓	↓	PACK 20/20
	↓	↓	↓	↓	(FRONT)
	3]	3]	3]	3]	↓
	↓	↓	↓	↓	2]
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	3]
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	4]
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓

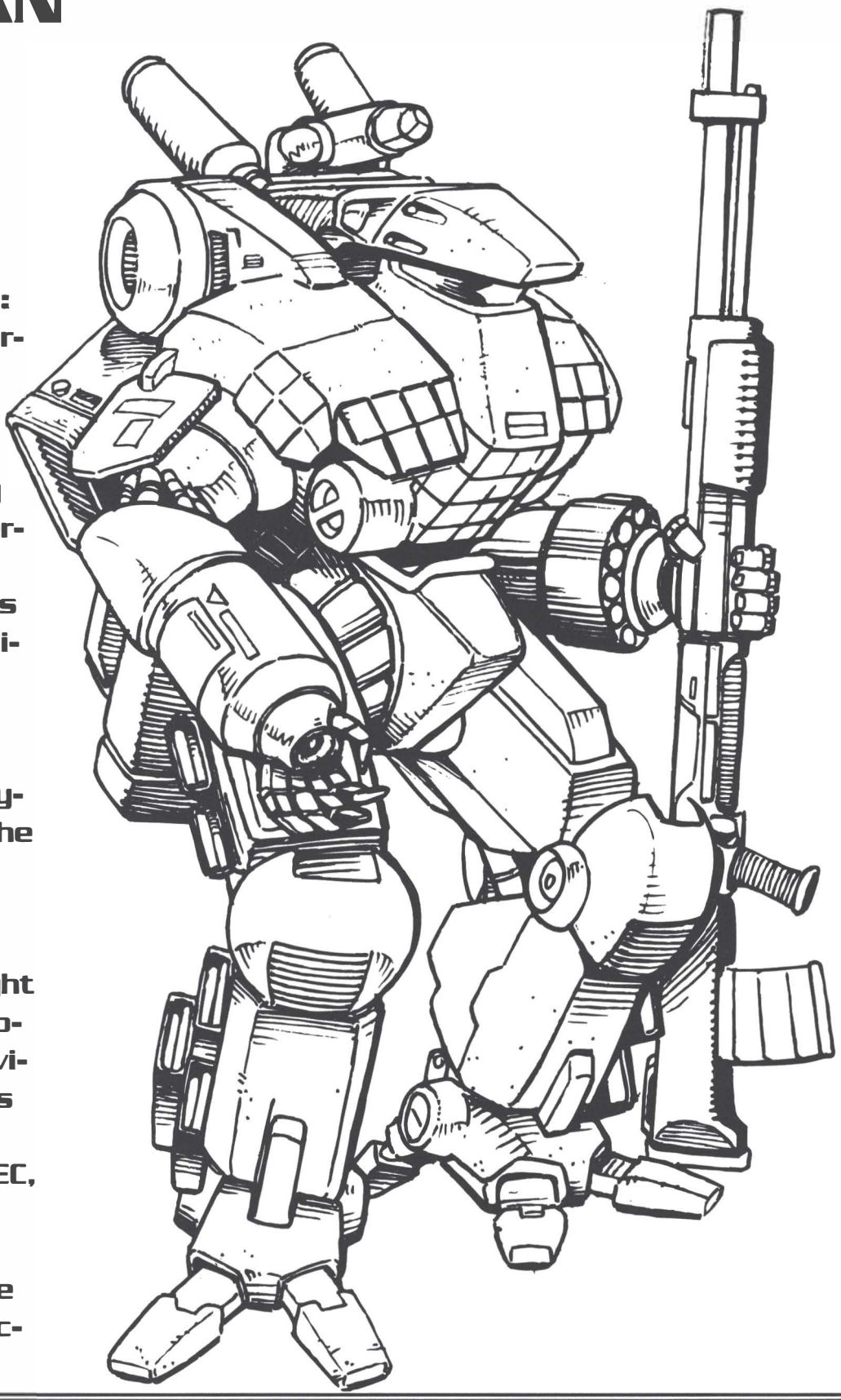
NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]	BHC-G8 30MM RIFLE	30/40/79	8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

Russian Arms Boris



Design Notes: The famous overweight suit of Powered Armor. The standard Boris is actually somewhat underarmed against vehicles, but has the payload ability to pack on hard-hitting external accessories. Most buyers load up on the heavy weapons pods after purchase, but be careful: Its weight can prove a problem in some environments. It has found a serious market in the EEC, who often upgrade the Reality Interface and internal electronics.

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	GRASSHOPPER	MANUFACTURER:	ZETATECH
TOTAL WEIGHT:	462 KG	SIB/DFB:	+2/+2
CHASSIS TYPE:	IRONMAN, STR 25	CHASSIS WEIGHT:	138
PUNCH: 3D10	KICK: 5D10	CHASSIS CAP./CARRY:	1250/375 KG
CRUSH: 4D10	RUN:	TOTAL COST:	54,742 EB.
LEAP:	JUMP:	TROOPER SIZE:	114 KG
		TOUGHNESS MOD.:	-7

S HEAD [1]	P R. ARM [2]	A L. ARM [3]	C R. LEG [4-5]	E L. LEG [6-7]	S TORSO [8-0]
SP 30	SP 30	SP 30	SP 30	SP 30	SP 30
SDP 6	SDP 6	SDP 6	SDP 12	SDP 12	SDP 19
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] FULL HUD	1] CLIMBERS 15	1] CLIMBERS 15	1] CYBORG	1] CYBORG	1] BODY
WIDEBAND 10	▼	▼	RIFLE	RIFLE	WEIGHT
STD. RADIO 5	BIG BOOMER 20		RELOAD 20	RELOAD 20	MEDIC
A/V RECORD. 10	▼		(30)	(30)	A/D 15
2]	2] BOOMER	2]	2] CYBORG	2] CYBDRG	2] ESCAPE
	RELOAD (8) 10		RIFLE	RIFLE	HATCH 30
	BOOMER		RELOAD 20	RELOAD 20	EMP
	RELOAD (8) 10		(30)	(30)	SPONGE 30
3]	3] BOOMER	3]	3]	3]	3] BSP
	RELOAD (8) 10				VARIETY
	BOOMER				PACK 20
	RELOAD (8) 10				(FRONT)
EXTERNAL SP/SDP	4]	4]	4]	4]	4] BRP
1]					FLETCH
					PACK 20
	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	(REAR)
2]	1]	1]	1] UNPOWERED	1] UNPOWERED	5]
			SKATES 20/20	SKATES 20/20	
					EXTERNAL SP/SDP
	2]	2]	2]	2]	1] BRP
					FLETCH.
					PACK 20/20
	3]	3]	3]	3]	(FRONT)
					2]
					3]
					4]

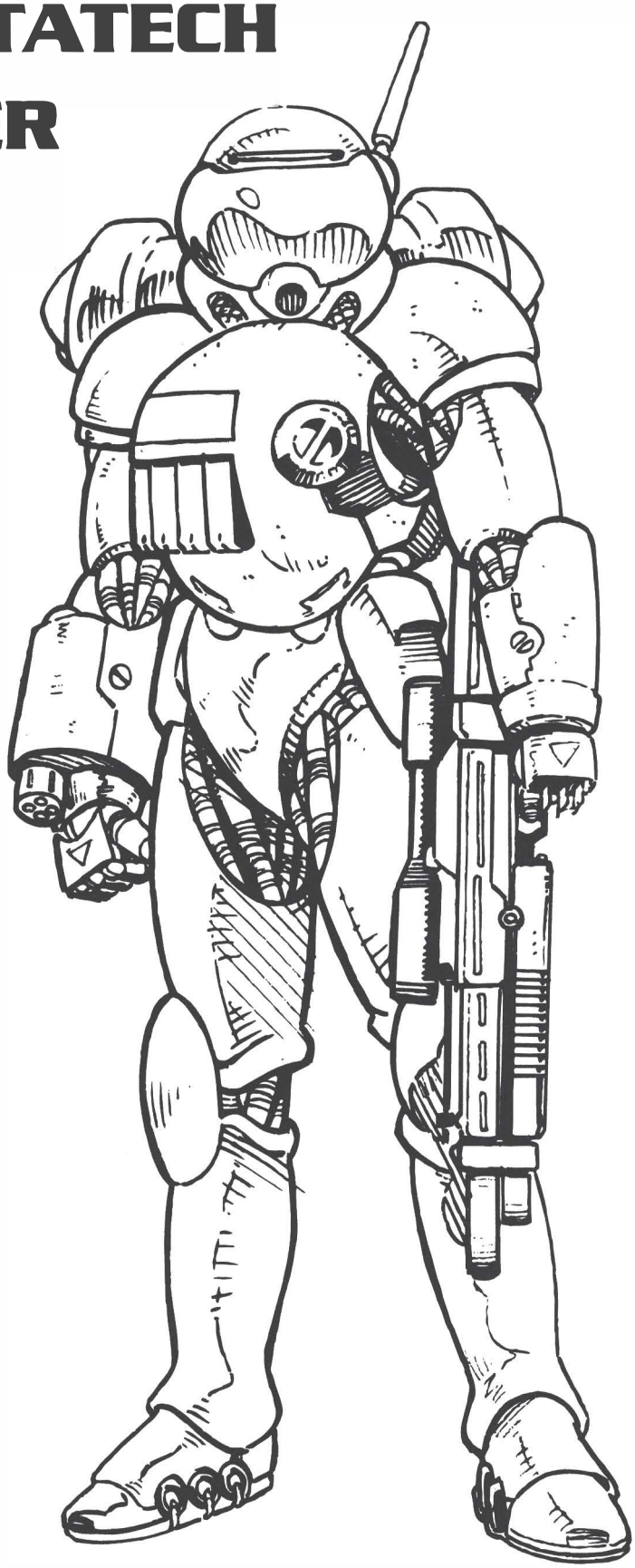
NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]	MILITECH CYBORG RIFLE	5/20/8	8]		
2]	(*CHROMEBOOK 2*, PG. 36)		9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

Dynalar/Zetatech Grasshopper



Design Notes:

An early model PA that's a real lightweight. It's really just energized MetalGear™; tough enough for the street, but don't take it into a real war zone. It has seen some use in police work, however, where its size and weight make for minmal limitations. In truth, this suit did pioneer many of the concepts now taken for granted in ACPA circles and should be given its due. The chassis has excellent capabilities and, because of its light weight, it is the only standard suit on the market that could use the flight system without modification. Not that anyone has thought it was really worth it...

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	STANDARD B	MANUFACTURER:	ARASAKA
TOTAL WEIGHT:	691 KG	SIB/DFB:	+1/+2
CHASSIS TYPE:	RONIN, STR 37	CHASSIS WEIGHT:	185
PUNCH: 4D10	KICK: 6D10	CHASSIS CAP./CARRY:	1850/555 KG
CRUSH: 5D10	RUN:	TOTAL COST:	89,050 EB.
LEAP:	JUMP:	TROOPER SIZE:	114 KG
		TOUGHNESS MOD.:	-9

S	P	A	C	E	S
HEAD [1]	R. ARM [2]	L. ARM [3]	R. LEG [4-5]	L. LEG [6-7]	TORSO [8-0]
SP 50	SP 50	SP 50	SP 50	SP 50	SP 50
SDP 10	SDP 10	SDP 10	SDP 19	SDP 19	SDP 26
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] ECI WIDE-BAND HUD 10	1] TSUNAMI 25MM GRENADE LAUNCHER 25	1] BSS SILICON SPRAY 10	1] 12.7MM RELOAD 20	1] BPL PLASTIC OBSTACLE 10	1] MONITOR AUTO DOC 15
EMP SPONGE 30	2] 25MM GL RELOAD (20) 10	BSS SILICON SPRAY 10	(100)	BPL PLASTIC OBSTACLE 10	2] EMP SPONGE 30
2] THERMAL TAR. 5	25MM GL RELOAD (20) 10	2] AUTO-FLETCH. PISTOL 15	2] 12.7MM RELOAD 20	2]	ESCAPE HATCH 30
LNG RNG. RADIO 5	3]	FLETCH. RELOAD (100) 10	(100)	3]	3] BRP FLECH. PACK 20 (FRONT)
3]	4]	3] FLETCH. RELOAD (100) 10	3] 12.7MM RELOAD 20	4]	4] BRP FLETCH. PACK 20 (REAR)
EXTERNAL SP/SDP	EXTERNAL SP/SDP	FLETCH. RELOAD (100) 10	(100)	EXTERNAL SP/SDP	5]
1]	1]	4]	4]	1]	EXTERNAL SP/SDP
2]	2]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	2]	1]
	3]	1]	1]	3]	2]
		2]	2]		3]
		3]	3]		4]

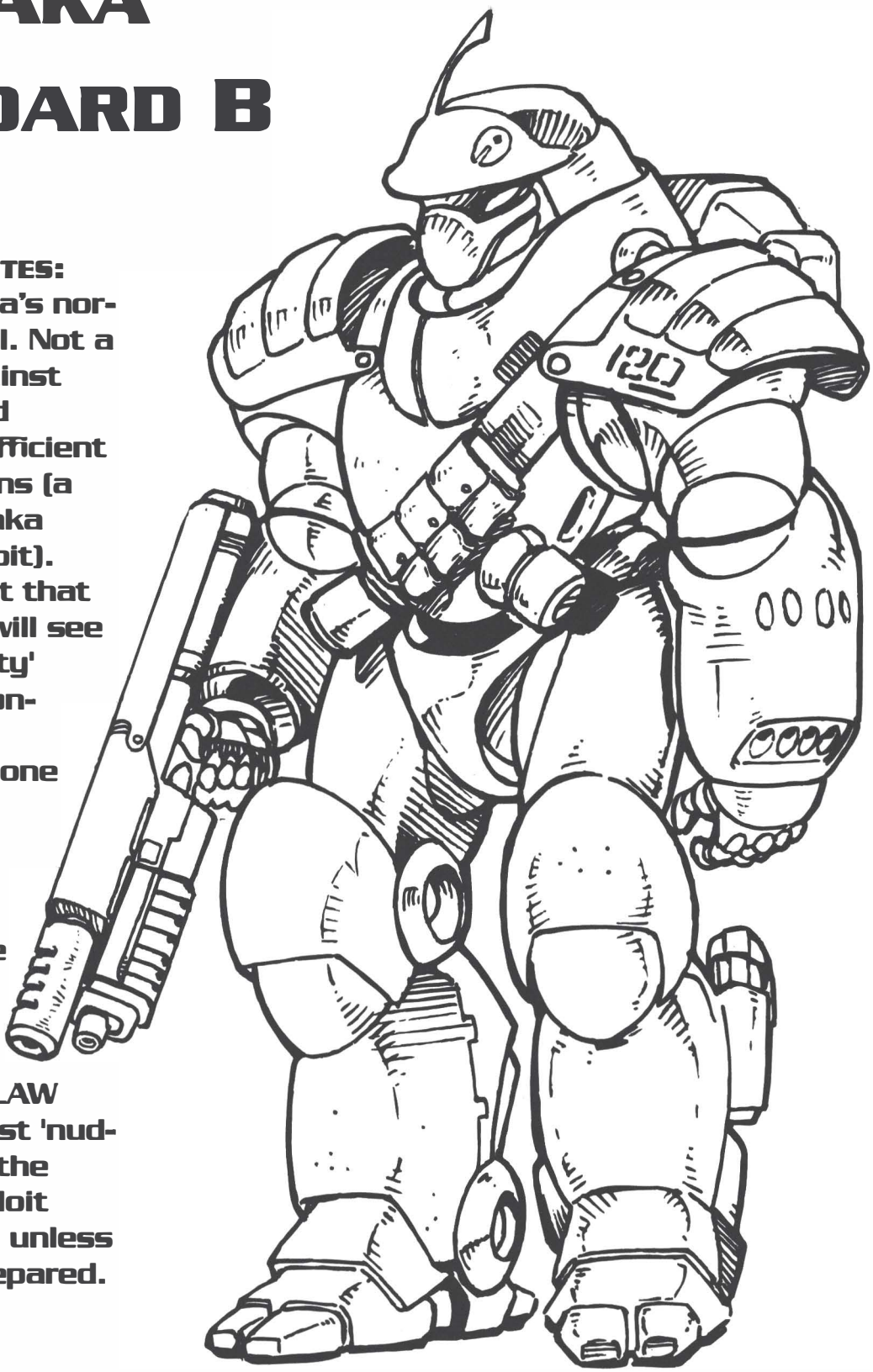
NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]	12,7MM HVY. MG	25/30/43	8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

Arasaka Standard B



Design Notes:
This is Arasaka's normal line model. Not a great suit against other Powered Armor, but sufficient against civilians (a concept Arasaka tests quite a bit). This is the unit that edgerunners will see in 'low-intenisty' combat environments and is therefore the one most likely to turn up to squash them flat during a mission. While it has definite weaknesses, such as armor that a LAW could pop, most 'nudies' won't get the chance to exploit this, however, unless they come prepared.

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	NEMESIS	MANUFACTURER:	MILITECH
TOTAL WEIGHT:	1481 KG	SIB/DFB:	+3/+3
CHASSIS TYPE:	HOMBRE, STR 45	CHASSIS WEIGHT:	333
PUNCH: 5D10	KICK: 7D10	CHASSIS CAP./CARRY:	2250/675 KG
CRUSH: 6D10	RUN:	TOTAL COST:	146,693EB.
LEAP:	JUMP:	TROOPER SIZE:	114 KG
		TOUGHNESS MOD.:	-11

S	P	A	C	E	S
HEAD [1]	R. ARM [2]	L. ARM [3]	R. LEG [4-5]	L. LEG [6-7]	TORSO [8-0]
SP 80	SP 80	SP 80	SP 80	SP 80	SP 80
SDP 11	SDP 11	SDP 11	SDP 22	SDP 22	SDP 34
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] MILITECH	1] CLIMBERS 15	1] CLIMBERS 15	1] CLIMBERS 15	1] CLIMBERS 15	1] REPEATER
VRI 15	PAINTING		EMP	EMP	AUTO-DOC 25
	LASER 10		SPOMGE 30	SPOMGE 30	2]
2] LNG. RNG RADIO 5	2] 13.9MMX99MM	2] 5.56	2] 30MM	2] 30MM	
SCRAMBLER 5	RIFLE 30	MINIGUN 20	RELOAD 20	RELOAD 20	
A/V RECORD. 10			(10)	(10)	
3]	3]	3]	3] BRP	3]30MM	3] ESCAPE
			FLETCH.	RELOAD 20	HATCH 30
			PACK 20	(10)	FOOD/
			(REAR)		FLTRATION 10
EXTERNAL SP/SDP	4] 13.9	4] 5.56	4] BFC	4] BRP	4] BHC-G8
1]	RELOAD 20	MINIGUN	FLETCH.	FLETCH.	30MM
	(60)	RELOAD 20	PACK 20	PACK 20	RIFLE 40
		(1000)	(REAR)	(FRONT)	
2]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	5]
	1]	1]	1]	1]	
					EXTERNAL SP/SDP
	2]	2]	2]	2]	1] MINI ROC 15 20/112
					2]
	3]	3]	3]	3]	3]
					4]

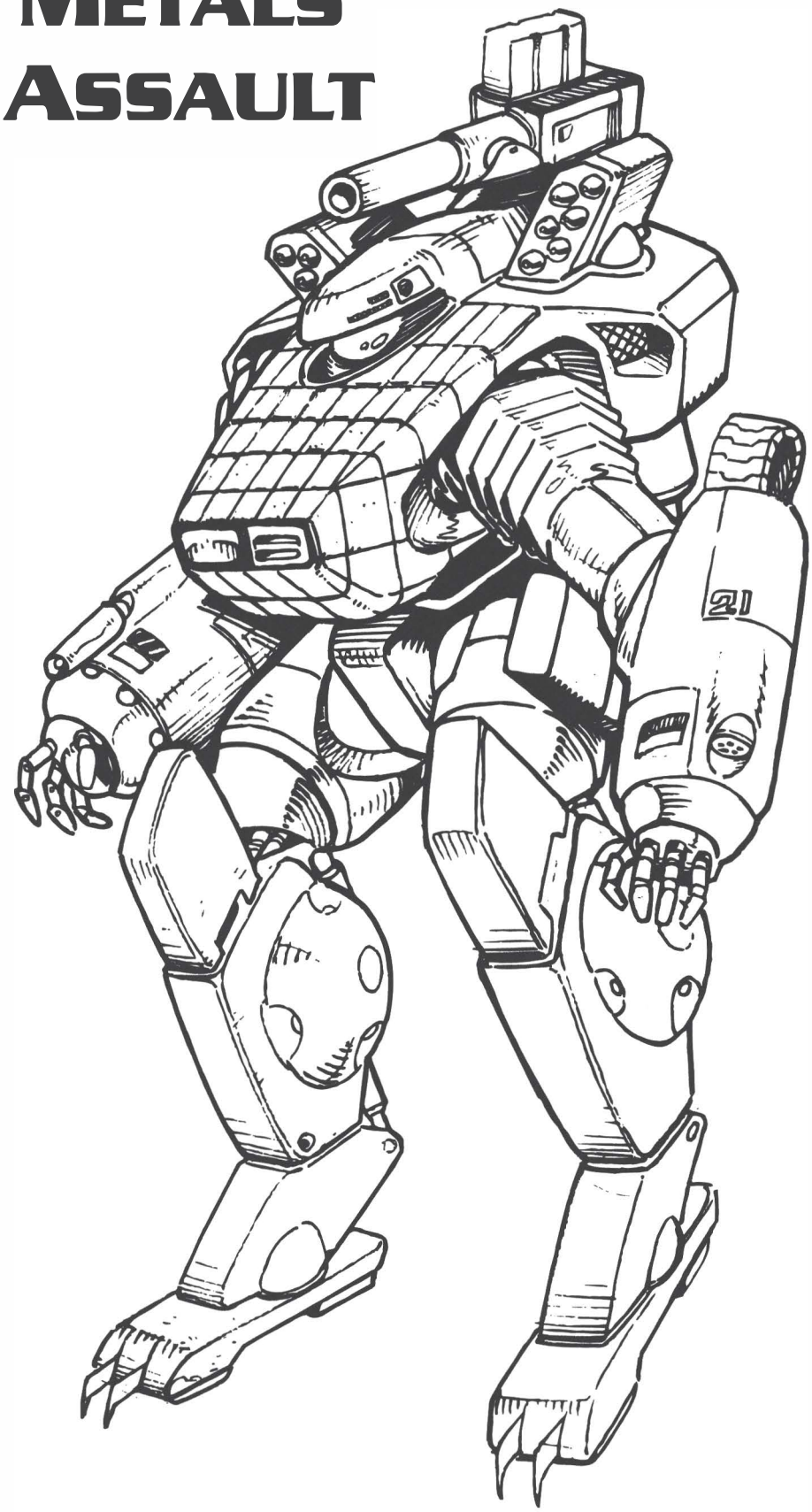
NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

Mexican Metals Nemesis Assault



Design Notes:
A good heavy suit from a second-rate manufacturer. (They used the engineering expertise of men from Meta-Corp's defunct Jacksuit production line.) The Nemesis suffered an unfairly negative reputation because of a tragic accident at its first, much advertised release (see pg. 61). It is tougher than most Russian models even though it uses a Russian chassis—which hasn't endeared them to their Neo-Soviet suppliers. Mexican Metals has developed a reputation for having good technical expertise and terrible business sense. Assuming the company survives, this suit will probably be cropping up in the the arsenals of aggressive corps worlwide.

POWERED ARMOR SPECIFICATIONS

SUIT NAME:	SPIDER	MANUFACTURER:	MILITECH
TOTAL WEIGHT:	620 KG	SIB/DFB:	+4/+3
CHASSIS TYPE:	WARRIOR, STR 27	CHASSIS WEIGHT:	180
PUNCH: 3D10	KICK: 4D10	CHASSIS CAP./CARRY:	1350/405 KG
CRUSH: 4D10	RUN:	TOTAL COST:	789,830 EB.
LEAP:	JUMP:	TROOPER SIZE:	114 KG
		TOUGHNESS MOD.:	-7

S	P	A	C	E	S
HEAD [1]	R. ARM [2]	L. ARM [3]	R. LEG [4-5]	L. LEG [6-7]	TORSO [8-0]
SP 40	SP 40	SP 40	SP 40	SP 40	SP 40
SDP 7	SDP 7	SDP 7	SDP 13	SDP 13	SDP 20
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1] MILITECH VRI 15	1] PHOTON CANNON 10	1] SELF SEAL*	1] ECM 15	1] SELF SEAL*	1] PRIME AUTO DOC 20
2] RADAR 15	2]	2] RETRAC. MONO PA SWORD 15	2]	2] ECCM 15	2] SELF-SEAL* 50 *ALL SELF-SEAL HITS AFFECT THIS SDP TOTAL.
MILITARY RADIO 10					
3]	3] MICRO MISSILE LAUNCHER (8) 10	3] AUTO FLETCH. PISTOL 15 FLETCH. RELOAD (100) 10	3] MANUVER JETS**	3] MANUVER JETS 30 ** ALL JET HITS AFFECT THIS SDP TOTAL	3]
EXTERNAL SP/SDP	4]	4]	4]	4]	4] EXTENDED LIFE SUPPORT 4 HR. 20
1] SENSORY EXTENSION 15/15					5]
SENSORY EXTENSION 15/15	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	
2]	1] MISSILE RELOAD (8) 15/10	1] FLETCH. RELOAD(100) 15/10	1]	1]	EXTERNAL SP/SDP
	MISSILE RELOAD (8) 15/10	FLETCH. RELOAD (100) 15/10			1] EXTENDED LIFE SUPPORT 4 HR. 30/20
	2] MISSILE RELOAD (8) 15/10	2]	2]	2]	2]
	MISSILE RELOAD (8) 15/10				
	3]	3]	3]	3]	3]
					4]

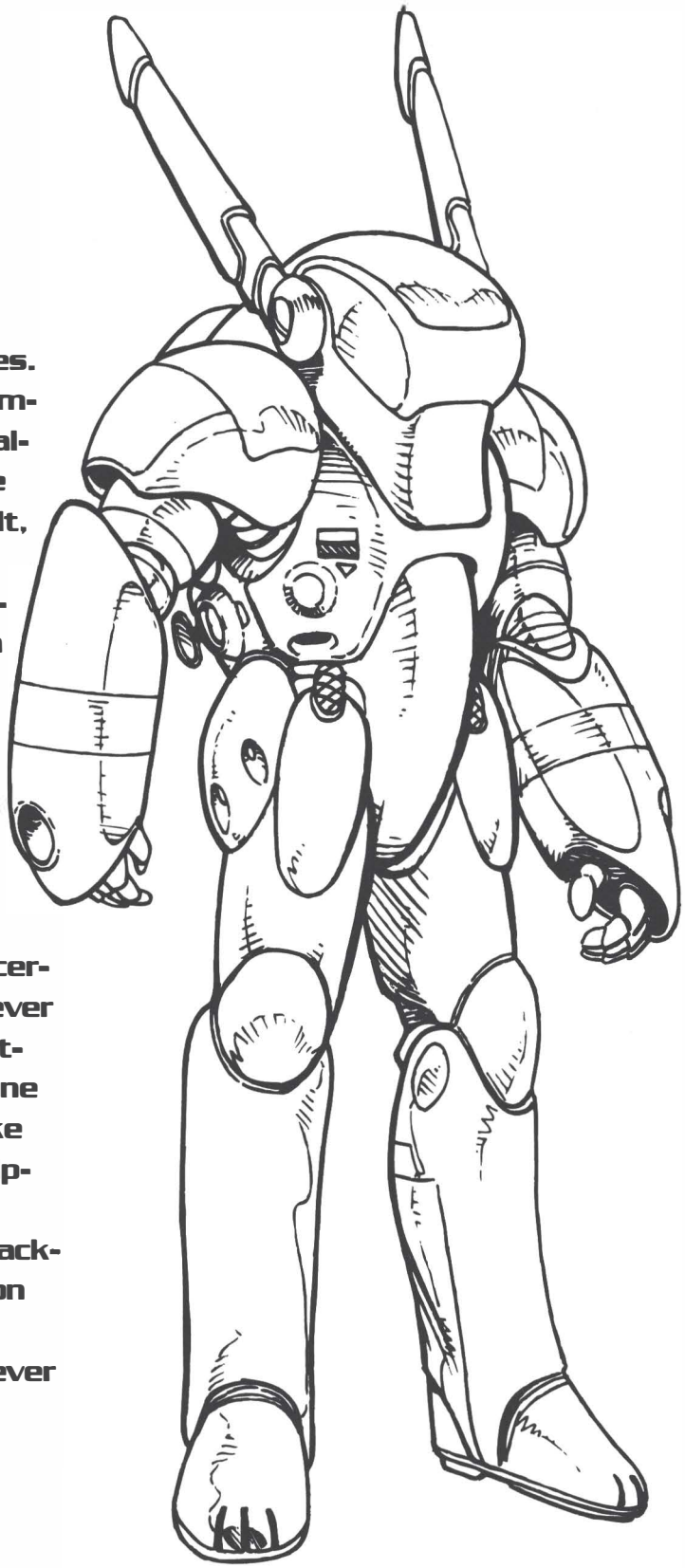
NOTES:
HI-BOOST REFLEX
IR BAFFLING
COMMAND
COMPUTER

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL FOR CYBERPUNK®

Orbital Air/Raven Microcyb Spider



Design Notes:

One of the top-line suits in Orbital Air's aerospace forces. This one is an excellent example of expensive over-specialization. While very effective at the task of orbital assault, the ECM suites jack up the cost to the point of absurdity (there is rumored to be a stealth model as well with a, literally, astronomical price tag). But since Orbital Air makes their own suits, it can be assumed that they give themselves a healthy discount...It is not absolutely certain that these suits have ever seen action, since no eyewitness reports exist, but no one believes that OA would make such an costly piece of equipment just to see it sit idle. Independent orbital workshackers have been stocking up on high-powered 'comm' lasers and other such equipment ever since OA announced the Spider's release.

APPENDIX A POWERED ARMOR CHARTS

AUDIO-VISUAL, COMMO, SPECIAL SENSORS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
COMMO LINK	SPECIAL	SPECIAL	SPECIAL	NA	SPECIAL	YES
SAT UPLINK	20KG	1	3000EB	NA	15	RETRACT
CELL PHONE	2KG	1/4	500EB	NA	5	YES
SCRAMBLER	NA	1/4	500EB	NA	5	YES
LASER COM	10KG	1/4	7000EB	NA	10	YES
REMOTE TARGETING	1KG	1/2	800EB	NA	5	YES
SENSORY EXTENSIONS	2KG	1/2	500EB	15	15	NO
ANTI-DAZZLE	NA	1/4	200EB	NA	5	YES
LOW LIGHT	NA	1/4	200EB	NA	5	YES
INFRA RED	NA	1/4	400EB	NA	5	YES
THERMAL TARGETING	NA	1/4	500EB	NA	5	YES
TELESCOPICS	NA	1/4	150EB	NA	5	YES
IMAGE ENHANCE	NA	1/4	450EB	NA	5	YES
VISUAL SPECTRUM BACKUP	1KG	1/2	300EB	NA	15	YES
AUDIO/VISUAL RECORDER	2KG	1/4	300EB	NA	10	YES
RADAR	5KG	1/2	1000EB	NA	15	YES
SONAR	10KG	1	2000EB	NA	10	YES
MAGNETOMETER	20KG	1	3000EB	NA	15	YES
LASERDETECTOR	NA	1/4	1000EB	NA	5	YES
MICROWAVE DETECTOR	NA	1/4	5000EB	NA	5	YES

CHASSIS INVENTORY TABLE						
STR	**TOUGHNESS**	**DAM. MOD.**	**LIFT/CAP.**	**CARRY**	**WEIGHT (KG)**	**COST (EB)**
12	-5	+4	600	180	125	5000
14	-5	+6	700	210	138	7000
16	-5	D6+2	800	240	150	9000
20	-6	D10	1000	300	116	28, 450
25	-7	D10+2	1250	375	138	37, 360
27	-7	D10+5	1350	405	146	38, 700
30	-8	D10+5	1500	450	158	46, 990
32	-8	3D6-1	1600	480	166	50, 890
35	-9	3D6-1	1750	525	180	56, 140
37	-9	3D6-1	1850	555	185	61, 050
40	-10	2D10	2000	600	200	66, 000
42	-10	2D10	2100	630	208	69, 970
45	-11	2D10	2250	675	222	75, 250
50	-12	2D10+5	2500	750	242	85, 230
52	-12	2D10+5	2600	780	250	89, 230

Notes: SP in brackets [#], represents intrinsic protection for retractable devices when they are extended. It also represents protection for items in permanent external mounts.

GENERAL SYSTEMS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
WINCH & GRAPPLE	20KG	1	500EB	NA	40	YES
FIRE EXTINGUISHER	10KG	1	500EB	[20]	20	YES/NO
SEARCHLIGHT	5KG	NA	300EB	[10]	5	NO
HEAVY TOOL SUITE	50KG	2	400EB	15	40	NO
LIGHT TOOL SUITE	8KG	1	560EB	NA	15	YES

REALITY INTERFACES						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
APERTURE-BASED	NA	NA	100EB	NA	20	YES
ENHANCED APERTURE	1KG	1/2	300EB	NA	15	YES
WIDEBAND APERTURE	1KG	1/2	800EB	NA	15	YES
FULL-HUD WIDEBAND	2KG	1/2	2400EB	NA	10	YES
ECI WIDEBAND HUD	2KG	1/2	4000EB	NA	10	YES
RUSSIANARMS VRI	3KG	1	6000EB	NA	25	YES
MILITECH VRI	2KG	1	8000EB	NA	15	YES

REFLEX/CONTROL SYSTEMS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
BASIC	NA	NA	-2000EB	NA	NA	YES
ADVANCED	NA	NA	NA	NA	NA	YES
LOW BOOST	NA	NA	3000EB	NA	NA	YES
HIGH BOOST	NA	NA	9000EB	NA	NA	YES
COMMAND COMPUTER	1KG	NA	5000EB	NA	NA	YES

AUTO-DOCTORS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
RUSSIANARMS KWIKFIX	1KG	1/2	200EB	NA	15	YES
ARASAKA MONITOR	1KG	1	800EB	NA	15	YES
BODYWEIGHT MEDIC	3KG	1	2000EB	NA	15	YES
MILITECH REPEATER	3KG	2	4000EB	NA	25	YES
ORBITAL AIR PRIME	2KG	1	8000EB	NA	20	YES

SAFETY SYSTEMS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
ESCAPE HATCH	1KG	1/2	500EB	NA	30	YES
SELF-SEAL COMPRESSION	5KG	4	6000EB	NA	50	YES
FOOD/FILTRATION	2KG	1/2	400EB	NA	10	YES
EXTENDED LIFE SUPPORT	SPECIAL	SPECIAL	500EB/UNIT	[30]	20/UNIT	YES/NO
EXTRA POWER CELLS	SPECIAL	1/2	2000EB	NA	15/UNIT	YES

MOVEMENT SYSTEMS						
NAME	**WEIGHT**	**SPACES**	**COST**	**SP**	**SDP**	**ENCLOSED**
CLIMBERS	1KG/LIMB	1/2@	1K EB/ PAIR	[30]	15@	YES/NO
JETS	SPECIAL	1/UNIT	10K EB/UNIT	20	30	SPECIAL
GLIDERS	45KG	6	3000EB	[15]	30	RETRACT
FLIGHT UNIT	300KG	SPECIAL	75,000EB	30	60	NO
SKATES (POWERED)	14KG	1/LEG	4000EB	[20]	20	RETRACT
SKATES (UNPOWERED)	5KG	1/2 PER LEG	500EB	20	20	NO
SWIMMER	50KG	2	6000EB	25	60	NO

ARMOR INVENTORY TABLE		
SP	**WEIGHT (KG.)**	**COST (EB)**
25	36	1200
30	150	5600
40	200	9600
50	250	13, 600
65	330	19, 600
80	400	25, 600

MELEE WEAPONS										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
CLIMBER CLAWS	+1	1D10+FIST/KICK	NA	2	1.5M	1/2@	1K EB/PAIR	1KG/ LIMB	15	15
FIST	0	SPECIAL (SPCL)	NA	2	1.2M	NA	NA	NA	NA	NA
KICK	-1	SPECIAL (SPCL)	NA	2	1.2M	NA	NA	NA	NA	NA
HEAVY BLADED WEAPON (1-HAND)	+1	4D6AP+FIST (4+SPECIAL)	NA	1	2M	1/2	550EB	6KG		
HEAVY BLADED WEAPON (2-HAND)	-1	6D6AP+FIST (5+SPECIAL)	NA	1	3M	1	1000EB	10KG		
HEAVY BLUNT WEAPON (1-HAND)	0	4D6+FIST (2+SPECIAL)	NA	1	2M	1/2	200EB	10KG		
HEAVY BLUNT WEAPON (2-HAND)	-1	6D6+FIST (3+SPECIAL)	NA	1	3M	1	500EB	20KG		
HEAVY POINTED WEAPON (2-HAND)	0	3D6AP+FIST (2+SPECIAL)	NA	1	5M	1	225EB	6KG		
LARGE POWER SAW	-2	8D6AP (6)	NA	1	2M	1	1250EB	15KG	[20]	25
RETRACT MONO-PA SWORD	+1	4D6AP+FIST (6 +SPECIAL)	NA	1	2M	1	2000EB	4KG	NA	15

HEAVY MGS & RIFLE										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
12.7MM HVY MG	+1	6D10 (3)	100	5 OR 10	550M	2	2000EB	30/13KG	[25]	30
13.9X99MM HVY RIFLE	+2	6D10+5 (4)	60	3	600M	2	2400EB	18/11KG	[25]	30
14.5MM HVY MG	0	7D10 (4)	100	3 OR 5	550M	2	2500EB	50/25KG	[25]	35
12.7MM GATLING	0	6D10 (3)	500	100	500M	4	6000EB	140/65KG	[20]	25
4MM RAILGUN	+3	5D10+10AP (7)	5	1/2RND	1500M	3	11,370EB	35KG	[20]	15

BEAM WEAPONS										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
PAINTING LASER	+3	NA	NA	NA	SPECIAL	1/2	1000EB	3KG	[15]	10
"PHOTON" ASSAULT CANNON	+2	1-100AP (SPECL)	30	2	300M	3	80,000EB	40KG	[25]	10

SCATTER PACKS											
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP	NOTES
BRP RIPPLE FLETCH. PACK	+4	3D10AP (3)	6X24	2D6	15M	1	500EB	2KG	[20]	20	60° CONE
BFC-2 FLETCH CLOUD	+6	2D10AP (2)	1X144	3D6	25M	1	300EB	2KG	[20]	20	120° CONE
BFC-3 FLETCH CLOUD	+9	1D10AP (1)	1X288	4D6	30M	1	300EB	2KG	[20]	20	120° CONE
BFC-4 FLETCH CLOUD	+3	4D10AP (4)	1X72	1D6	20M	1	1200EB	2KG	[20]	20	120° CONE
BFCWA FLETCH CLOUD	+5	2D10AP (2)	1X144	2D6	30M	1	300EB	2KG	[20]	20	180° CONE
BIM MINELET VOLLY	+3	4D6 (1)	1X50	1D6	50M	1	1000EB	2KG	[20]	20	60° CONE
BSP VARIETY SHOW	+3	SPECIAL	1X50	1D6	50M	1	300EB	2KG	[20]	20	60° CONE
BLP BREECH SPRAY	-1	VARIES	1	1	2M	1/2	300EB	1KG	[20]	10	
BOM WIRE OBSTACLE	-1	NA	1	1	5M	1/2	100EB	2KG	[20]	10	
BPL PLASTIC OBSTACLE	0	NA	1	1	10	1/2	10EB	2KG	[20]	10	
BSS SILICON SPRAY	-1	NA	1	1	5M	1/2	30EB	2KG	[20]	10	
BES EPOXY SPRAY	-1	NA	1	1	2M	1/2	30EB	2KG	[20]	10	

ACPA CANNON										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
BCL-20	+1	8D10 (4)	20	2	550M	2	2700EB	44/10KG	[25]	35
20-25MM AUTOCANNON	0	8D10 (4)	100	10	500M	3	3000EB	40/50KG	[25]	30
BHC-G8	0	9D10 (5)	10	1	600M	2	3500EB	70/9KG	[30]	40
27-30MM AUTOCANNON	0	9D10 (5)	50	10	600M	3	4000EB	75/45KG	[30]	30
LATG 37MM	+3	6D10AP (6)	10	1	800M	2	10K EB	100/20KG	[25]	25
EMG-83 IMPROVED RAILGUN	+2	5D10+10AP (7)	10	1	1000M	3	17.5K EB	42KG	[25]	15
75MM RECOILESS	0	8D10AP (8*)	4	1	500M	2	15.K EB	15/30KG	[15]	20

ROCKETS & MISSILES											
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP	NOTES
IFAR	-2	8D10 (4)	1	1	500M	2	200EB	10.5KG	[20]	30	6M BURST
IFAR 3-POD	-2	8D10 (4)	3	SPECIAL	500M	3	2100EB	40KG	[20]	45	6M BURST
IFAR 6-POD	-2	8D10 (4)	6	SPECIAL	500M	4	4200EB	81KG	[20]	105	6M BURST
MINI-ROC 6	-2	6D10 (3)	6	SPECIAL	500M	2	1800EB	69KG	[20]	45	3M BURST
MINI-ROC 15C	-2	6D10 (3)	15	SPECIAL	500M	3	4500EB	171KG	[20]	112	3M BURST
LAW-III	-2	4D10AP (4*)	1	1	200M	1	300/NAEB	3KG	[20]	10	2M BURST
LIGHT ATGM	+2	12D10AP (12*)	1	1	1000M	2	3000EB	25KG	[20]	20	4M BURST
SPECTRE ATGM	SPCL	18D10AP (18*)	1	1	3000M	NA	10,000EB	86KG	[20]	25	4M BURST
SCORPION 16 SAM	-1	7D10 (4)	1	1	2000M	2	1000EB	15KG	[20]	20	6M BURST
RED KNIGHT SAM	SPCL	10D10 (5)	1	1	4500M	NA	4600EB	23KG	[20]	15	10M BST

ANTI-PERSONNEL WEAPONS										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
5.56MM LIGHT MG	+1	5D6 (2)	100	10	450M	1	1200EB	6/2KG	[25]	25
7.62MM LIGHT MG	0	6D6+2 (2)	100	10	500M	1	1200EB	10/3KG	[25]	25
G-20 CASELESS 10MM MG	0	8D6 (2)	200	20	600M	2	3000EB	15/3KG	[25]	25
5.56MM MINIGUN	+1	5D6 (2)	1000	100	450M	2	2000EB	13/15KG	[25]	20
7.62MM MINIGUN	0	6D6+2 (2)	2000	100	500M	3	4000EB	25/30KG	[25]	20
HIVE 10MM CASELESS GATLING	0	5D10AP (4)	2400	60 OR 120	500M	4	12,500EB	50/25KG	[20]	20
ONI AUTOSHOTGUN	0	4D6+3 (2)	180	5 OR 20	75M	2	1350EB	7/12KG	[25]	20

GRENADE LAUNCHERS										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
TSUNAMI 25MM GRENADE-LAUNCHER	0	SPECIAL	20	1/3/5	1500M	1	1700EB	18/2KG	[20]	25
40MM AUTO-GL	+1	SPECIAL	50	3 OR 20	1600M	2	2500EB	40/25KG	[25]	30
30MM AUTO-GL	0	SPECIAL	30	1 OR 10	1300M	2	2000EB	20/11KG	[25]	25
SUPER RAKATE	0	5D6 (1)	8	SPECIAL	300M	1	700EB	5KG	[20]	20
SAUCER SHOOTER	-1	2D6+3 (0)	30	1	250M	1	1500EB	15KG	[20]	20
EMP GRENADIER	0	SPECIAL	5	1	300M	1	2000EB	10KG	[20]	15

SMALL ARMS										
NAME	WA	DAMAGE	#SHOTS	ROF	RANGE	SPACE	COST	WEIGHT	SP	SDP
M-31PA	+2	4D6 (1)	300	1/3/30	400M	1	1800EB	6/2KG	[20]	10
AUTO-FLETCHETTE "PISTOL"	+2	1D6x1D6AP (1)	100	3 OR 30	200M	1/2	900EB	3/2KG	[20]	15
14MM PISTOL	0	6D6 (1)	20	2	75M	1/2	2260EB	2/1KG	[20]	15
"DRAGON" FLAMER	0	3D6/1D6 (1)	8	1	8M	1	990EB	5KG	[20]	10
MICRO-MISSILES	+2	4D6 (1)	8	2	200M	1	900EB	5/3KG	[20}	10
"BIG BOOMER"	+1	5D6AP (2)	8	2	100M	1/2	550EB	12/1KG	[20]	20

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. SP in brackets [#] represents the optional protection for items in external/carried mounts. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. Prices are for the weapon alone, for ammo costs, see the Ammo section.

ACPA DEFENSIVE SYSTEMS										
NAME	**WA**	**DAMAGE**	**#SHOTS**	**ROF**	**RANGE**	**SPACE**	**COST**	**WEIGHT**	**SP**	**SDP**
EMP "SPONGE"	NA	NA	NA	NA	NA	1/2	500EB	2KG	NA	30
EMP CAPACITOR	NA	NA	NA	NA	NA	1	1500EB	2KG	NA	10
SMOKE CANNISTER	NA	NA	6	1	NA	1	200EB	4KG	[20]	15
STARDUST CANNISTER	NA	NA	2	1	NA	1/2	500EB	2KG	[20]	25
RIBBON CANNISTER	NA	NA	3	1	NA	1	300EB	3KG	[20]	20
FLASH CANNISTER	NA	NA	6	1	NA	1	300EB	6KG	[20]	20
GHOST CANNISTER	NA	NA	1	1	NA	1/2	3000EB	4KG	[20]	10
ECM SUITE	NA	NA	NA	NA	100M	2	500K EB	25KG	NA	15
ECCM SUITE	NA	NA	NA	NA	NA	1	100K EB	5KG	NA	15
STEALTHING	NA	NA	NA	NA	NA	SPCL	SPECIAL	SPECIAL	NA	NA
IR BAFFLING	NA	NA	NA	NA	NA	NA	SPECIAL	NA	NA	NA
AGAMS	NA	3D6 (0)	30	SPECIAL	400M	2	24,000EB	25KG	[20]	20

Notes: The damage # in parentheses () is the Vehicle Penetration rating for the weapon. Weapons with an * by their Pen. are HEAT/shaped-charge weapons. Armor is x1/2 vs these weapons, but any damage that penetrates is not halved. Further effects are noted in the Vehicle Combat section. Ranges for rockets (IFAR, Mini-Roc) are Direct-fire only, for Indirect Fire, triple range. Weight ratings that have two #s separated by a slash /, are the weapon's empty weight and the weight of a full magazine. Prices are for the weapon alone, for ammo costs, see the Ammo section.

EXTRA AMMUNITION		
AMMO TYPE	**SPACES (PER EXTRA MAGAZNE)**	**NOTES**
HEAVY MG/RIFLE	1	
12.7MM GATLING	2	
PA CANNON	1	
PA AUTOCANNON	2	
LIGHT ATGM	1	
ANTI-PERSONNEL WEAPON	1/2	
5.56MM GATLING	1	
7.62/10MM GATLING	2	
25MM GL	1/2	
30/40MM AUTO-GL	1	
SMALL ARMS	1/2	

All other weapons are bought as noted intext or as complete, self-contained units. Ammunition reloads have 10SDP per 1/2 space and each magazine handles damage seperately. IExternally mounted reloads have a SP15 armor sheath unless otherwise noted in the text.

APPENDIX B
VEHILCE CHARTS

BOMBS								
BOMBS	**WA**	**PEN**	**BURST**	**#SHOTS**	**ROF**	**REL**	**COST**	**SPACES**
100-LB	-3	5	10M	1	1	VR	250	1
250-LB	-3	6	16M	1	1	VR	450	1
500-LB	-3	8	48M	1	1	VR	500	2
750-LB	-3	9	64M	1	1	VR	600	3
1000-LB	-3	10	72M	1	1	VR	700	4
2000-LB	-3	11	96M	1	1	VR	1000	5
3000-LB	-3	12	104M	1	1	VR	1500	6

BOMB OPTIONS				
OPTIONS	**WA**	**PEN**	**BURST**	**COST**
ANTI-PERSONNEL		X1/2	X2	X2
ANTI-TANK		X2	4M	X3
CLUSTER		-3	X2	X3
FAE			X3	X10
GUIDED	+2			X2
INCENDIARY			X2	X3
NAPALM		3	2X LONG, 1/2X WIDE	X5

VEHICLE ACC./DEC.		
VEHICLE	**ACCELERATION**	**DECELERATION**
CYCLE:	ACC 18 MPH	DEC 30 MPH
CAR:	ACC 15 MPH	DEC 40 MPH
PICKUP:	ACC 15 MPH	DEC 40 MPH
TRUCK:	ACC 10 MPH	DEC 30MPH
APC*:	ACC 10 MPH	DEC 50 MPH
IFV*:	ACC 13 MPH	DEC 50 MPH
MBT:	ACC 10 MPH	DEC 50 MPH
HOVER:	ACC 15 MPH	DEC 10 MPH
AV:	ACC 50 MPH	DEC 50 MPH
OSPREY:	ACC 10 MPH	DEC 20 MPH
LIGHT AIRPLANE:	ACC 15 MPH	DEC 20 MPH
JET:	ACC 20 MPH	DEC 25 MPH
MED/HVY AIRPLANES:	ACC 10 MPH	DEC 25 MPH
AIRSHIP:	ACC 5 MPH	DEC 30 MPH
LHT/MED HELICOPTERS:	ACC 15 MPH	DEC 15 MPH

*Wheeled APCs and IFVs accelerate and decelerate as Trucks. A ground vehicle can try to decelerate up to twice as much as its listed deceleration. This is considered an Emergency Stop, as noted in the maneuvers section of the rules.

VEHICLE TYPES				
STATISTICS	**CYCLE**	**CAR**	**PICKUP**	**TRUCK**
SDP Range	15-30	25-80	30-90	50-125
SDP Limits	15 SDP Minimum	8 SDP per space	4 SDP Min. per space	12.5 SDP per space
SDP Cost (per SDP)	100EB	250EB	400EB	750EB
Spaces	1	3-10	8-20	4-10
Top Speed	120 mph	100 mph	100 mph	100 mph
Range	400 mi.	300 mi.	300 mi.	800 mi.
Mass	4 kg/SDP	1 ton per 25 SDP	1 ton per 25 SDP	1 ton per 15 SDP
				**Truck Mass Rating:36,000 kg
	APC*	IFV*	MBT	Hover
SDP Range	75-150	75-200	200-600	25-100
SDP Limits	75 SDP Minimum	75 SDP Minimum	4 SDP per space	25 SDP Minimum
SDP Cost (per SDP)	1000EB*	1200EB*	3000EB	2000EB
Spaces	10-15	10-20	50-160	4-20
Top Speed	90 mph	100 mph	40 mph	150 mph
Range	300 mi.	300 mi	200 mi.	400 mi.
Mass	1 ton per 10 SDP	1 ton per 10 SDP	1 ton per 6 SDP	1 ton per 10 SDP
	Light Helicopters	Medium Helicopters	Heavy Helicopters	AV
SDP Range	15-40	25-80	100-250	30-200
SDP Limits	15 SOP Minimum	25 SOP Min.; otherwise 5 SOP/space	100 SOP Min.; otherwise 5 SOP/space	30 SOP Min.; otherwise 4 SOP/space
SDP Cost (per SDP)	1500EB	2500EB	3000EB	3500EB
Spaces	1-4	4-16	20-50	5-50
Top Speed	150 mph	150 mph	150 mph	450 mph
Range	200 mi.	400 mi.	600 mi.	800 mi.
Mass	1-2 tons	1 ton per 10 SDP	1 ton per 25 SDP	1 ton per 25 SDP
	Osprey	Lt. Plane	Med. Plane	Hvy. Plane
SDP Range	75-240	25-100	75-250	150-300
SDP Limits	75 SOP Min., otherwise 4 SOP/space	25 SOP Min., otherwise 10 SOP/space	5 SOP per space	2 SOP per space
SDP Cost (per SDP)	3000EB	2000EB	2500EB	4000EB
Spaces	8-60	5-10	15-50	75-150
Top Speed	350 mph	250 mph	400 mph	400 mph
Range	1200 mi.	500 mi.	1000 mi.	1200 mi.
Mass	1 ton per 8 SDP	1 ton per 20 SDP	1 ton per 8 SDP	1 ton per 4 SDP
	Small Jet	Large. Jet	Airship	
SDP Range	100-250	100-400	100-3000	
SDP Limits	10 SDP per space	2 SDP per space	10 SDP per space	
SDP Cost (per SDP)	10,000EB	20,000EB	300EB	
Spaces	10-25	50-200	10-300	
Top Speed	800 mph	600 mph	80 mph	
Range	1600 mi.	3000 mi.	1500 mi.	
Mass	1 ton per 12.5 SDP	1 ton per 2.5 SDP	1 ton per 20 SDP	

Notes: *APCs and IFVs are bought wheeled; pay double SDP cost and halve Top Speed for tracked ones. Both tracked and wheeled APC/IFVs are automatically Off-Road capable. Tanks are automatically tracked and Off-Road capable. Airships have a cargo capacity of 100% of their weight. ** Mass Rating definition in Cargo section of Options text.

DIRECT-FIRE WEAPONS							
DIRECT-FIRE WEAPONS	**WA**	**PEN**	**BURST**	**#SHOTS**	**ROF**	**REL**	**RANGE**
5.56 MINIGUN	0	2	—	1000	100	ST	450M
5.56 MG	+1	2	—	100	10	VR	450M
7.62 MINIGUN	0	2	—	2000	100	VR	500M
7.62 MG	0	2	—	100	10	VR	500M
12.7MM MINIGUN	0	3	—	1000	100	ST	500M
12.7MM MG	0	3/4	—	100	10	VR	600M
14.5MM MG	0	4	—	100	10	VR	550M
20-25MM AUTOCANNON	0	4	—	100	10	VR	500M
20MM GATLING	0	4	—	1000	100	VR	500M
30MM GATLING	0	6	—	1200	30	VR	600M
27-30MM AUTOCANNON	0	5	—	100	10	VR	600M
LATG 37MM	+3	6	—	10	1	VR	800M
40MM GL	+1	2/4*	5M/1M	1	1	VR	250M
40MM AUTOGL	0	2/4*	5M/1M	50	20	VR	1600M
75MM CANNON	+1	7	—	10	2	VR	750M
HI-EX	0	4	5M				
HEAT	-1	8*	2M				400M
75MM RECOILLESS	0	8*	2M	1	1	VR	500M
90MM CANNON	0	9	—	1	1	VR	750M
HI-EX	0	5	6M				
HEAT	0	10*	2M				400M
105MM CANNON	+1	10	—	1	1	VR	1000M
HI-EX	0	6	6M				
HEAT	0	11*	2M				800M
105MM RECOILLESS	0	11*	2M	1	1	VR	800M
120MM CANNON	0	13	—	1	1	VR	1250M
HI-EX	0	7	6M				
HEAT	-1	12*	2M				600M
140MM CANNON	0	16	—	1	1	ST	1500M
HI-EX	0	7	6M				
HEAT	-2	18*	3M				600M
EMG-85 RAILGUN	+3	7	—	5	1/2	ST	1500M
EMG-83 RAILGUN	+2	7	—	100	1	ST	1200M
EMG-84 RAILGUN	+1	7	—	500	10	UR	1000M
1CM RAIL CANNON	+2	10	—	50	2	ST	1000M
2CM RAIL CANNON	+1	17	—	50	1	ST	1500M
3CM RAIL CANNON	0	22	—	50	1/2	UR	1500M
E-HARPOON	+1	20**	—	1	1	ST	500M

Note: Hi-Ex shell penetration is not affected by range.
*HEAT Penetration not affected by range; Composite Armor halves penetration. ** See description in text.

ROCKET/MISSILE WEAPONS							
ROCKET WEAPONS	**WA**	**PEN**	**BURST**	**#SHOTS**	**ROF**	**REL**	**RANGE**
LAW	-2	4*	2M	1	1	VR	200M
HLAW	-2	12*	4M	1	1	VR	200M
MILITECH RPG-A	-2	6*	4M	1	1	VR	750M
MILITECH RPG-B	-2	10*	4M	1	1	VR	500M
LATGM	+2	12*	4M	1	1	VR	1000M
HATGM	+2	18*	4M	1	1	VR	3000M
HELLFIRE	**	21*	4M	1	1	VR	3000M
SAM (SCORPION 16)	-1	4	6M	1	1	VR	1000M
VSAM	15A	8	10M	1	1	VR	5000M
AAM, SHORT-RANGED	15A	8	12M	1	1	VR	15000M
AAMRAM	20A	9	12M	1	1	VR	80000M
2" ROCKET	-2	3	3M	1	1	VR	500M
2.75" ROCKET	-2	4	6M	1	1	VR	500M
3.5" ROCKET	-2	5	8M	1	1	VR	600M
5" ROCKET	-2	7	15M	1	1	VR	2000M

Note: Rocket Weapons are high-explosive; their penetration is not affected by range. Missiles and rockets scatter as per the Rocket Salvo rules if the target is missed. *HEAT warhead Composite Armor halves penetration. **If the painting laser hits the target that round, then the Hellfire hits.

ARTILLERY							
ARTILLERY WEAPONS	**WA**	**PEN**	**BURST**	**#SHOTS**	**ROF**	**REL**	**RANGE**
40MM GL	+1	2/4*	5M/1M	1	1	VR	500M
40MM AUTOGL	0	2/4*	5M/1M	50	20	VR	3200M
60MM MORTAR	0	4	5M	1	2	VR	2000M
80MM MORTAR	0	5	6M	1	1	VR	3500M
120MM MORTAR	0	7	6M	1	1	VR	6000M
105MM HOWITZER	+1	6	6M	1	1	VR	17000M
150MM HOWITZER	+1	7	6M	1	1	VR	24000M
200MM HOWITZER	0	15	8M	1	1/2	VR	20000M
2.75" ROCKET	-2	4	6M	1	1	VR	2000M
3.5" ROCKET	-2	5	8M	1	1	VR	2000M
5" ROCKET	-2	7	15M	1	1	VR	2000M
230MM ROCKET	0	4*	45M	12	3	VR	28000M

Note: Artillery weapons use high-explosive shells; their penetration is not affected by range. *Composite Armor halves penetration. Mortars have a minimum range of 1/100 their maximum range.

APPENDIX C
RULES CHARTS

COMMON VEHICLE TO-HIT MODIFIERS:	
CONDITION	**MOD.**
FIRING AT A LARGE TARGET	+4
FIRING AT A SMALL TARGET	-4
FIRING AT A STATIONARY TARGET	+4
TARGET MOVING, PER FULL 20 MPH (PER FULL 40 MPH IF MOVING DIRECTLY TOWARDS YOU)	-1
USING A TURRET-MOUNTED WEAPON	+2
TARGETING COMPUTER	VARIABLE
FIRER MOVING, NON-STABILIZED WEAPON	-3
FIRER TURNING WEAPON TO FACE TARGET IN SAME ACTION	-2
FIRER HAS VEHICLE LINK/CYBERNETIC CONTROLS	+2
DARKNESS/TARGET OBSCURED	-3
HEAT-SEEKING MISSILE FIRED AT AV	+4
ROCKET SALVO*	-2

VEHICLE DAMAGE TABLE	
DIE ROLL	**RESULT**
0 OR LESS	SURFACE DAMAGE
1-5	MINOR DAMAGE
6-9	MAJOR DAMAGE
10+	CATASTROPHIC DAMAGE

VEHICLE HIT LOCATION TABLE		
1D10 ROLL (+2 IF SHOOTING AT THE TOP, -1 IF SHOOTING AT THE SIDE, -2 IF SHOOTING AT THE BACK OR BOTTOM)		
DIE ROLL	**LOCATION HIT**	**EFFECT**
-1, 0	FUEL	IF HIT, MAY BURN OR EXPLODE
1-3	MOTIVE GEAR	IMMOBILIZES VEHICLE IF DAMAGED/DESTROYED
4-7	HULL	ROLL ON HULL SUBTABLE
8-12	TURRET	ROLL ON TURRET SUBTABLE; IF NO TURRET, ROLL ON HULL SUBTABLE

VEHICLE LOCATION SUBTABLES		
ROLL 1D10 (+1 IF SHOOTING AT THE FRONT, -1 IF SHOOTING AT THE BACK)		
DIE ROLL	**HULL SUBTABLE**	**TURRET SUBTABLE**
0-2	CARGO/AMMO	CARGO/AMMO
3-4	ENGINE	CREW
5-7	CREW	CREW
8	EQUIPMENT	EQUIPMENT
9	WEAPON	WEAPON
10-11	EMPTY SPACE	WEAPON

SAMPLE BATTLEFIELD NOTICE/AWARENESS DIFFICULTIES	
CONDITION	**DIF.**
SINGLE INFANTRYMAN	15+
SQUAD (5-10 INFANTRY)	10+
VEHICLE	6+
VERY LARGE VEHICLE	2+
RECOILLESS RIFLE FIRING (NO FIRING MODIFIER)	6+
MISSILE FIRING (NO FIRING MODIFIER)	10+
MISSILE IN FLIGHT	20+

NOTICE/AWARENESS MODIFIERS (THESE ARE CUMULATIVE)	
CONDITION	**MOD.**
UNIT FIRING	+4
UNIT MOVING	+5
UNIT IN COVER	-10
UNIT CAMOUFLAGED	-5
SPOTTED IN VEHICLE	-5
SPOTTER IN AFV (TOTAL -10)	-5
SPOTTER DOING SOMETHING ELSE BESIDES SPOTTING	+10
COMPUTER-ASSISTED OPTICS	+5
CYBERLINKED INTO VEHICLE	+2
DARKNESS	-3
USING IR, THERMOGRAPH TO FIND IR-BAFFLED TARGET (IN ESSENCE, IR CAMOUFLAGE)	-5

VEHICLE WEIGHT MODIFIER TABLE	
MULTIPLIER	**SIZE**
X 1/2	VERY LIGHT (LESS THAN 25 KG, CARDBOARD, GLASS)
X 1	LIGHT (MAN, 25-100 KG, PLYWOOD)
X 2	MEDIUM (MOTORCYCLE, 101-500 KG, PLASTER/PLASTIC)
X 3	HEAVY (CAR, 501-5000 KG, CONCRETE)
X 4	VERY HEAVY (TRUCK, 5000+ KG, REINFORCED
	CONCRETE,TANK, ARMORED WALLS/VAULT DOORS)

MANUVER DIFFICULTY MODIFIERS:	
MOD.	**CONDITION**
+1	EVERY 10% OF A VEHICLE'S SPEED OVER 50% OF TOP SPEED
+10	DRIVER/PILOT CAN'T SEE AND HAS NO SENSING INSTRUMENTS
+5	DRIVER/PILOT TRYING TO DO SOMETHING ELSE BESIDES DRIVING (UNLESS CYBERLINKED TO VEHICLE)
+3	SLIPPERY ROAD (GROUND VEHICLES ONLY, NOT HOVERCRAFT)
+5	ICY ROAD (GROUND VEHICLES ONLY, NOT HOVERCRAFT)

REVISED CONTROL MODIFIERS	
VEHICLE	**MOD.**
STANDARD CAR	-0
AV	-0
LIMOUSINE, PICKUP	-3
OSPREY	-0
CYCLE.	+1
LIGHT PLANE	-0
TRUCK	-4
MED/HVY PLANE	-3
APC/IFV/MBT*	+2
SMALL JET	+1
HOVER	-2
LARGE JET	-4
LT. HELI	-0
AIRSHIP	+5
MED/HVY HELI	-2

*Wheeled APCs and IFVs handle at -2; treads are a great benefit to handling.

PA SYSTEM HIT TABLE	
ROLL	**LOCATION**
1-3	**MAIN CHASSIS HIT**
4-6	**ENCLOSED SYSTEMS HIT**
7-9	**INTERNAL WEAPONS**
10	ROLL AGAIN: IF EVEN, **CRITICAL DAMAGE** (SEE CHART); IF ODD, ROLL SYSTEM HIT AGAIN, IGNORING 10'S. IF THERE ARE MULTIPLES OF THE ROLLED SYSTEM TYPE IN AN AREA, THE PA PLAYER HAS THE CHOICE OF WHICH ONE WILL BE EFFECTED. IF NO SUCH SYSTEM IS PRESENT IN THE LOCATION, THE HIT GOES TO PILOT.

PA HAND -TO-HAND DAMAGE

PUNCH FORMULA: STR/9 (ROUND TO NEAREST WHOLE NUMBER) = X D10.
CRUSHES: (X+1) D10
KICKS: [X+(X/2)] D10

POWERED ARMOR MOVEMENT FORMULAE

RUNNING= (SIB + MA) X 3 M/COMBAT ROUND

JUMPING

STATIONARY= RUN/6 METERS
RUNNING= RUN/4 METERS
VERTICAL JUMPS= HORIZONTAL LEAPS/3

PA CRITICAL HIT CHART	
ROLL	**EFFECT**
1-2	The Body Area which suffered the critical hit "siezes up" and is immobile for 1D10+1 combat rounds. Loss of a leg: 1/2 walking speed, no running; -2 to REF in melee. Loss of an arm: no full lifting; no changing weapons/equipment; -1 to REF when in melee. Loss of torso: -2 REF in melee; -2 To-Hit when turning to face target; no changing weapons/ equipment. Loss of head: -2 To-Hit when turning to face target; +10 to difficulty when making *Notice/ Awareness roll.*
3	Cooling System: The suit will become unwearable due to heat build-up in 2D10 minutes. If the pilot is not out of the suit by then, he must make Stun/Shock Saves starting at Serious and progressing one level per turn until he passes out. During this period, the pilot's abitilities are affected as if he was at the appropriate Wound level (Serious, Mortal, etc.). If not removed within 15 minutes after that, the pilot will die of heat stroke.
4-5	Suit Strength lowered by 1D6 points. [A loss of 50-300kgs. lifting; 15-90kgs. carrying.]
6-7	Suit Reflexes lowered by 1D6/2 points. [This reduces both pilot's current Reflex and the control system's maximum Reflex.]
8	The ACPA's Power Unit loses 1D6x2 hours from its life. [A suit has 24 hours normally.]
9	Interface/Electronic Systems are out for 1D6 combat rounds ; 2D6 if a civilian suit. [Determine one system randomly from all available Reflex/ Control, Reality Interface, Communications, or Audio-Visual suites.] If a system takes a second hit of this type, it is destroyed.
10	Mechanical Shock [1D6 extra SDP damage to a random area of the frame, Pilot stunned for a equal number of Combat rounds.)

ERRATTA & ADDENDA

PAGE 10, Sample Awareness/Notice Modifiers:

The listing "Spotter doing something besides spotting: has a modifier of minus 10 (-10), not plus 10. The plus is a typo; trying to spot while doing something else is harder, not easier.

Page 11, Crashes, first column, last paragraph:

Change the sentence :...to determine collision Penetration (3.5 points per d10..." to "15.5 points per d10..."

Page 12, Constructing Vehicles:

Each crewmember takes one space. Each passenger takes one space.

Page 29, Arasaka Combat 10:

The armament was ommitted. It is: Turreted 7.62 mm Minigun with 2 magazines and 40mm cannon with 30 rounds. Reduce cargo to 0 spaces and raise the cost to 100,000 eb. The 40mm is a special gun made for the vehicle - HVY 0 N R 8D6(40mm) 10 1 ST 10,000 euro.

Page 31, Arasaka Riot 8:

This carries 8 passengers.

Page 41, AV-9 and UAAV:

These vehicles mass 3,400 kg, not 3,400 tons!

Page 48: The M-75 LBT

is built on an APC chassis, not an MBT chassis.

Page 49, U.S. M-50 Tank Hunter:

The armament was ommitted. It is: Turreted 25mm autocannon, painting laser and 5 Hellfire missles, HATGM with 19 teleguided/thermal semi-active missiles.

Page 76, Rockets and Missiles, first paragraph:

Change the sentence "All of the weapons require the targeting capabilities of at least a HUD-using Reality Interface" to "The following weapons require the targeting capabilities of at least a HUD-using Reality Interface: Light ATGM, Spectre ATGM, Scorpion SAM, Red Knight SAM."

What is the Acc/Dec for Heavy Helicopters?

Mega-oops! It was left out of the book by mistake!! Acc 10 mph, Dec 15 mph.

How much armor can an airship's gondola carry?

According to the rules, up to 1500 SP! Uh, this is screwy. Let's say up to 1/5 (20%) of the airship's SDP.

Can airplanes and Ospreys be fitted with amphibious modifications?

Sure. So can Helicopters and AV's (!). They're called Pontoons. Installing pontoons on an aircraft costs 250 eb. per vehicle ton (or part thereof) and reduces vehicle top speed by 5% per 5 tons (or part thereof) of vehicle mass. These allow vehicles to float and even move on water surfaces. For instance, installing pontoons on a Bell 152 would cost 500 euro and reduce its topspeed to 185 mph. On a Falcon-B Osprey, it would cost 4,750 eb. and reduce top speed to 360 mph.

Can AI Robotic control be placed inside a bomb or missile?

Yes, but the price would be considerably less steep!! Call it 250,000 euro and no spaces. This modification can only be made to Active missiles and bombs (the AI has to have sensors, don't you know). Obviously, this "genious bomb" would be able to function quite comfortably on it own, seeking out targets without human direction.

How do Drop Tanks work?

Like an externally-carried bomb. A gallon of fuel weighs 7 lbs. in a tank (including tank mass). Simply strap them on like external bombs (same weight and spaces) and use their fuel first - when hit (**NEW RULE** - Externally-carried weapons are hit when Cargo or Equipment hits are rolled, and there are external pods/bombs in the area) they have SP 5, SDP 10, and are damaged like fuel tanks!

So how far can you go on a drop tank? Well, each vehicle type uses fuel at a different rate:

Cycle	50 mpg
Car	30 mpg
Pickup	25 mpg
Trunk	15 mpg
Wheeled Hover	4 mpg
APC	3 mpg
IFV	2 mpg
Tracked	
APC .	75 mpg
IFV	.5 mpg
MBT	.25 mpg
Planes and Helicopters	
Light Helicopter	5 mpg
Med. Helicopter	2 mpg
Large Jet	.5 mpg
Heavy Helicop.	1mpg
AV	1 mpg
Osprey	1 mpg
Med. Plane	10 mpg
Lt. Plane	20 mpg
Heavy Plane	5 mpg
Small Jet	1 mpg

Cars and other ground vehicles can carry 1/5 of their spaces in external tanks per side used (front, left, right, back), for a maximum of 80% of internal spaces carried in external fuel. This is dangerous, dangerous, dangerous.!!

Are there larger hovercraft than those allowed?

Yes. Here are the stats for the constructing massive cargo hovers, like the English Channel types and the truly huge KvP-121:

Cargo Hover SDP Range	200-1000
SDP limits	2 SDP per space
SDP Cost (per SDP)	3000 eb
Spaces	100-500
Top Speed	60 mph
Range	1000 miles
Mass	1 ton/10 SDP
Mass Rating*	3 x cargo hover mass

That's right, these have a mass rating like trucks. And they can haul immense cargo masses (the KvP-121 weighs 86 tons, and can haul 225 tons of cargo!!). However, because of this,

cargo capacity can't be improved, and cargo hovers suffer speed reduction due to armor like helicopters and Ospreys (-20% top speed for each 10% of SDP in SP). In addition, mass rating suffers equally (-20% mass rating for each 10% of SDP in SP).

How are Punknaughts constructed? +3 hovers smashed together?

Yup. Treat a Punknaught scratch-built vehicle as having the mass of the appropriate number of vehicles, with 75% of the totaled SDP, range, Top Speed, and spaces of those vehicles, and capable of being armored to 33% of its SDP.

Can rockets use warhead fillers used in artillery rounds?

Yes, but only the following: Chemical, HEAT, White Phosphorus.

How much space do ACPA suits take up in cargo/passenger space?

2 spaces per 1,000 kg, rounded off.

Can AT Walkers "duck walk" by squatting, thereby lowering their signature?

Do they use the ACPA rules for cornering? Yes, but they only shuffle along at 5 mph while "duck-walking", and yes, they corner like ACPA suits. Clumsy ACPA suits....

Why does the 30mm Gatling do only 6D10 damage when the normal 30mm does 9D10 damage?

For the same reason the Barret-Arasaka 20mm only does 4D10AP damage while the normal 20mm does 8D10. That's the high density AP... **NEW RULE:** High-density AP rounds (the Barret-Arasaka 20mm and the 30mm Gatling) do full damage through armor, like HEAT rounds. I meant to put this into the book, and forgot...

OPTIONAL MORALE RULE

Most vehicles lost in combat, particularly armored vehicles, are not destroyed outright. In fact, most of them are still operable with marginal repairs; some of them sustain only minimal damage, and the vehicle is still combat-capable! It takes an insanely brave vehicle crew to man a damaged vehicle - the vase majority of them bail out once the vehicle's armor has been penetrated.

If a combat vehicle sustains a penetrating his (Minor Damage or greater), have the crew make a morale check. The vehicle commander amkes a Leadership Diffculty +15 roll, modified for the damage (+5 for Major Damage, +15 for Catastrophic Damage). If the roll fails, the crew deserts the vehicle, bugging out through escape hatches on the side of the vehicle away from the combat. If the crew is under fire from small arms from all sides, or knows that they are covered and likely to die if they bail out, the difficulty of the test is +10, not +15.

This rule makes for a bit less heroism on the part of most NPC's (and some P C's), but Game Masters interested in more realistic tank battles might like to use this rule.

NEW VEHICLE - Bell UH-10 PAPC

With the recent advent of powered armor as a viable battlefield weapon, a problem has appeared: no AV or helicopter is really powerful enough to haul a full squad of PA suits! Even the monster DM Dragon only carries 4 tons, barely enough for 5 Arasasa Standard-B suits (or 3 Boris suits), and the AV-9 can fit in 2 Militech Commandos. Since the normal U.S. Army PA squad is four 800kg suits and a 1,500kg "Pigman," the Army commissioned Bell to make the new UH-10 Powered Armor Personnal Carrier. Mitsubishi/Arasaka is also selling this carrier under the commercial license.

In tight spots where the helicopter cannot land to deploy the suits, the PAs either jump, using their jets or parafoils to slow them, or are lowered by a winch.

Top Speed:	135 mph
Acc/Dec:	15/15
Range:	1000 miles
Crew:	2
Passengers:	0
Cargo:	5 tons, 12 spaces
Maneuver:	-2
SDP:	250 (Body 12)
SP:	40 (AV 2)
Type:	Heavy Helicopter
Mass:	10 tons
Cost:	1.85 million euro

Special Equipment: Auto-pilot and Navigation system, chaff dispenser, ejection seats, flare dispenser, image enhancement, IR baffling, laser detector, light amplification, military radar, military radio, radar detector, telescopic optics, thermograph.

The following are some rules clarifications and additions prompted by some very intelligent questions from Tim Villadmoros of Jacksonville, FL. Thanks, Tim!

How do vehicle spaces relate to cargo capacity, and vice versa?

As stated on page 14, most vehicles (except AFV's) have a weight capacity of 1/3 their mass. If the vehicle doesn't have any spaces left inside of it, then it can't carry internal cargo, period. A vehicle may strap cargo to the outside of the hull. but this is limited to a percentage of the vehicle's internal spaces, as noted on the chart below. In addition, any externally-mounted devices (like jury-rigged or open weaon mounts) or weapons that have to traverse across the vehicle's top (like tank turret weapons) subtract their spaces from this available space.

Vehicle Type	External Cargo %
Cycle	100*
Car, Pickup, Truck	25
APC, IFV, MBT	5**
Hover	10
Helicopter, AV, Osprey	0***
Airship	0***
Plane, Jet	0****

*Cycles can carry up to 1 space of cargo on the rear of the seat. This includes another person! (People take one space apiece.)

** These vehicles do have some "cargo capacity" of weight, equal to 10% of their mass. This is usually used for crew cargo, extra fuel/ammunition, etc.

***Helicopters, AVs, Ospreys and Airships can lift and carry items of any amount of spaces, so long as they do not exceed the vehicle's maximum cargo weight (remember to add in the weight of any internal cargo). These are items loaded onto a pallet and hung beneath the flying vehicle.

For example, take a cargo carrier mounted a top a Hummer. A Hummer has 10 spaces, so 2.5 spaces are available to stash cargo on and around the top. The Hummer has an external weapon, though, taking up 1/2 space. 2.5 minus 0.5 equals 2 spaces available for carrying external cargo.

The cargo pod of the AV-9 takes up the entire internal capacity of the vehicle?

Oops! You're right. The cargo pod is 25 spaces, not 45 spaces.

Articulated mount weapons take "no spaces." How many articulated mounts can be put on a vehicle?

A maximum of 25% of the vehicle's spaces may be used for articulated mounts; no more than 10% of a vehicle's spaces per side. For instance, a 20-space vehicle could mount up to 5 articulate mounts, up to two of which could be mounted per side.

How do you calculate the monetary and space costs for smaller turrets mounted atop larger turrets?

This is no extra monetary cost; they're turret weapons already, and you are paying for it. If the smaller weapon is a high-angle-traverse weapon, pay double again for the appropriate weapon only. Turret-top weapons on any sort of mount are limited to a number of spaces equal to 1/4 of the turret size! So, a 12-space turret could have 3 spaces of weapons and equipment mounted atop the turret.

And from a comment made at GENCON:

Cycle Sidecars: A cycle may have a sidecar mounted to it. This costs 25% of the cycle's SDP cost. The sidecar have 1/2 the cycle's SDP; it may be armored separately. The cycle's top speed is reduced by 10%. A sidecar has 1 space for cargo, passengers, or equipment.

How many spaces are required to carry another vehicle internally?

The vehicle's amount of spaces, plus 10. Vehicles with wings take up the square of the wing spaces, too, unless the wings are dismantled (in which case the wing spaces are not squared). For instance, at 15 spaces, an M-75 LBT takes up 25 spaces of cargo, so a C-200 Universe could fit 6 of them (but only carry 3, at 42 tons apiece).

Do weapons cease to have weight counted against them if they are on weapon mounts, instead of being carried at cargo? For instance, the A-01 Blitz has spaces for 8.62 tons of bombs (maxed out with 6 3000-lb and 1 1000lb bombs.), while its cargo capacity is only6.6 tons.

Yes. Do not count weapons loads against cargo capacity. (You will note that the A-01 Blitz has no internal cargo capacity.) Vehicles with external weapons loads are made to carry the load without impeding cargo capacity (which makes some vehicles real workhorses.)

What are the monetary, weight, and space costs of converting a vehicle to a medevac/ambulance?

The medevac package includes a cryotank, portable diagnostic and emergency grear, supplies, and one stretcher. The cost is 200,000 euro, the mass is 250 kg of cargo weight capacity, and it takes up 3 spaces, +1 for each patient.

How much does the E-Harpoon cost?

It costs 10,000 eb, 2 sp for weapons and 2 sp for batteries.

Thank you, Tim, and all the people who asked not-so-silly questions at GENCON. Did you know that, according to the U.S. military, about 1/2 the land surface of the Earth is inaccessible to wheeled, tracked, and hovercraft vehicles? Only air vehicles and things with legs can go there.

The army's been trying to build viable legged vehicles for decades. They finally succeeded....

ARMOR DAMAGE VIA PENETRATION

Players have realized that it's very hard to knock down a powered armor suit's SP, especially with the "1SP per successful penetration" rule for small arms. So, we've written a new rule and a list of armor damages. The major change is that for rounds >20mm, the weapon doesn't have to successfully penetrate in order to damage SP. The amount of SP removed is based on the Penetration rating of the round:

HE	0.50 x Pen
DPU/AP	0.60 x Pen
HEAT	0.75 x Pen
HESH/HEP	1.00 x Pen
Railgun	0.20 x Pen

GUN	NORMAL/HE	HEAT	HESH/HEP	DPU/AP
5mm-20mm	1	2	2	1
25mm grenade	1	-	2	-
25mm-40mm	3	-	-	2
40mm grenade	2	3	-	-
Rifle grenade	2	3	-	-
37mm	-	-	-	4
75mm Recoilless	2	6	8	-
75mm gun	2	6	-	5
90mm Recoilless	3	8	-	5
105mmRecoilless	3	8	11	-
105mm gun	3	8	-	6
120mm gun	4	9	13	8
140mm gun	4	13	-	10
4mm railgun	-	-	-	1
1cm railgun	-	-	-	2
2cm railgun	-	-	-	3
3cm railgun	-	-	-	4
15cm artillery	4	1	4	-
20cm artillery	8	15	-	-

Here is a table for most standard weapons: **SP REMOVED BY ROUND**

WEAPON	SP REMOVED
LAW	3
HLAW	9
Lt. ATGM	9
HATGM	13
Hellfire	15
RPG-A	5
RPG-B	8
2" rocket	2
2.75" rocket	2
3.5" rocket	3
5" rocket	4
230mm rocket	3
SAM	2
AAM	4

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POWERED ARMOR SPECIFICATIONS

SUIT NAME: _____ MANUFACTURER: _____

TOTAL WEIGHT: _____ SIB/DFB: _____

CHASSIS TYPE: _____ CHASSIS WEIGHT: _____

PUNCH: _____ KICK: _____ CHASSIS CAP./CARRY: _____

CRUSH: _____ RUN: _____ TOTAL COST: _____

LEAP: _____ JUMP: _____ TROOPER SIZE: _____

TOUGHNESS MOD.: _____

S HEAD [1]	P R. ARM [2]	A L. ARM [3]	C R. LEG [4-5]	E L. LEG [6-7]	S TORSO [8-0]
SP	SP	SP	SP	SP	SP
SDP	SDP	SDP	SDP	SDP	SDP
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1]	1]	1]	1]	1]	1]
2]	2]	2]	2]	2]	2]
3]	3]	3]	3]	3]	3]
EXTERNAL SP/SDP	4]	4]	4]	4]	4]
1]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	5]
2]	1]	1]	1]	1]	EXTERNAL SP/SDP
	2]	2]	2]	2]	1]
	3]	3]	3]	3]	2]
					3]
					4]

NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL

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POWERED ARMOR SPECIFICATIONS

SUIT NAME: _____ MANUFACTURER: _____

TOTAL WEIGHT: _____ SIB/DFB: _____

CHASSIS TYPE: _____ CHASSIS WEIGHT: _____

PUNCH: _____ KICK: _____ CHASSIS CAP./CARRY: _____

CRUSH: _____ RUN: _____ TOTAL COST: _____

LEAP: _____ JUMP: _____ TROOPER SIZE: _____

TOUGHNESS MOD.: _____

S

SP
SDP
INTERNAL SDP
1]
2]
3]
EXTERNAL SP/SDP
1]
2]

P

SP
SDP
INTERNAL SDP
1]
2]
3]
4]
EXTERNAL SP/SDP
1]
2]
3]

A

SP
SDP
INTERNAL SDP
1]
2]
3]
4]
EXTERNAL SP/SDP
1]
2]
3]

C

SP
SDP
INTERNAL SDP
1]
2]
3]
4]
EXTERNAL SP/SDP
1]
2]
3]

E

SP
SDP
INTERNAL SDP
1]
2]
3]
4]
EXTERNAL SP/SDP
1]
2]
3]

S

SP
SDP
INTERNAL SDP
1]
2]
3]
4]
5]
EXTERNAL SP/SDP
1]
2]
3]
4]

NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL

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POWERED ARMOR SPECIFICATIONS

SUIT NAME: _____ MANUFACTURER: _____

TOTAL WEIGHT: _____ SIB/DFB: _____

CHASSIS TYPE: _____ CHASSIS WEIGHT: _____

PUNCH: _____ KICK: _____ CHASSIS CAP./CARRY: _____

CRUSH: _____ RUN: _____ TOTAL COST: _____

LEAP: _____ JUMP: _____ TROOPER SIZE: _____

TOUGHNESS MOD.: _____

S HEAD [1]	P R. ARM [2]	A L. ARM [3]	C R. LEG [4-5]	E L. LEG [6-7]	S TORSO [8-0]
SP	SP	SP	SP	SP	SP
SDP	SDP	SDP	SDP	SDP	SDP
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1]	1]	1]	1]	1]	1]
2]	2]	2]	2]	2]	2]
3]	3]	3]	3]	3]	3]
EXTERNAL SP/SDP	4]	4]	4]	4]	4]
1]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	5]
2]	1]	1]	1]	1]	EXTERNAL SP/SDP
	2]	2]	2]	2]	1]
	3]	3]	3]	3]	2]
					3]
					4]

NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL

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POWERED ARMOR SPECIFICATIONS

SUIT NAME:
TOTAL WEIGHT:
CHASSIS TYPE:
PUNCH: KICK:
CRUSH: RUN:
LEAP: JUMP:

MANUFACTURER:
SIB/DFB:
CHASSIS WEIGHT:
CHASSIS CAP./CARRY:
TOTAL COST:
TROOPER SIZE:
TOUGHNESS MOD.:

S	P	A	C	E	S
SP	SP	SP	SP	SP	SP
SDP	SDP	SDP	SDP	SDP	SDP
INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP	INTERNAL SDP
1]	1]	1]	1]	1]	1]
2]	2]	2]	2]	2]	2]
3]	3]	3]	3]	3]	3]
EXTERNAL SP/SDP	4]	4]	4]	4]	4]
1]					5]
2]	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP	EXTERNAL SP/SDP
	1]	1]	1]	1]	1]
	2]	2]	2]	2]	2]
	3]	3]	3]	3]	3]
					4]

NOTES:

EQUIPMENT CARRIED

	ITEM	SP/SDP/WT		ITEM	SP/SDP/WT
1]			8]		
2]			9]		
3]			10]		
4]			11]		
5]			12]		
6]			13]		
7]			14]		

MAXIMUM METAL

BLAZING TANKS, SCREAMING JET FIGHTERS, AND STOMPING POWER ARMOR

Helicopters chasing a motorcyclist through twisting city streets; Corporate armor at war in some Third World country; huge metal forms crash a corporate board meeting—This is Maximum Metal in action!

This is the military vehicle and powered armor supplement which "tops off" the *Cyberpunk 2020* combat system. Tanks, artillery, ground-support aircraft and AV's, even Advanced Combat Personal Armor, everything for near-future warfare is here. And it's all tied together by a vehicle combat and design system that allows you to put your Cyberpunkers right into the hottest action they've ever seen—with the metal taken to the Max!

MAXIMUM METAL

A CYBERPUNK SUPPLEMENT

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