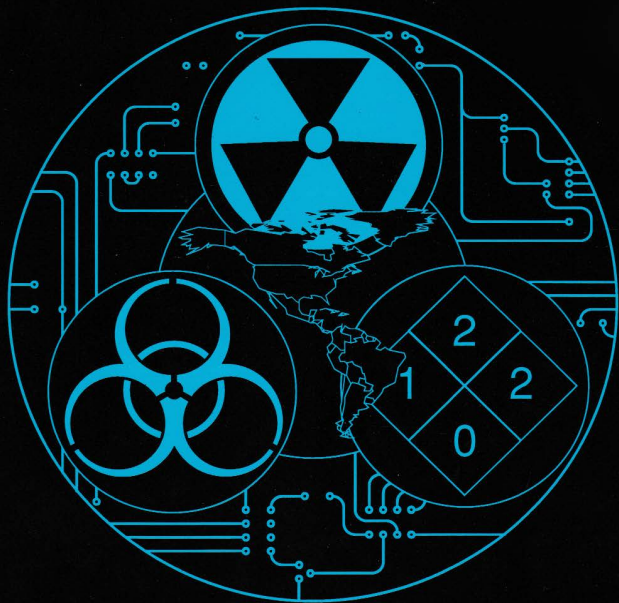


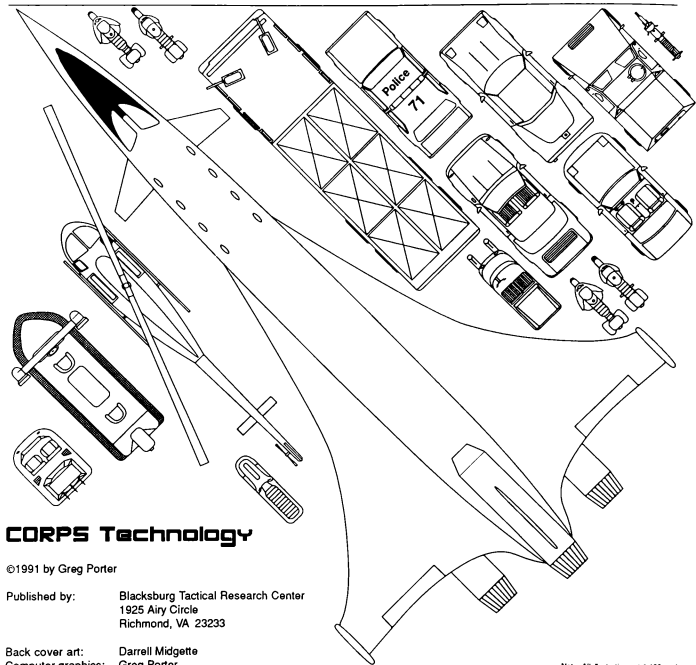
CORPS

TECHNOLOGY 1991



BTRC

Greg Porter



CORPS Technology

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CORPS is the BTRC trademark for its global conspiracy role-playing game.



Intro - This sourcebook is designed for use with **CORPS**, a somewhat fictional game about the way the world *really* works, with secret societies, government plots and grand conspiracies.

However, like our **Worldbook**, everything in this sourcebook is *true* (to the best of our knowledge). The technologies described are currently in actual use, under active development, or despite no *official* (i.e. publicly known) research or production, have been classified or suppressed. Especially in the latter case, the theories or devices may be flawed and unusable, but that hasn't been proven yet. To make things easier for you, each item will have a prefix, a character that tells you the availability or status of the item. These are:

- OK Available to civilians in the developed world
- OK₁ Available to resourceful civilians in US/Australia/Europe
- OK₂ Civilian technology under development
- OK₃ Available to civilians by government permission only
- OK₄ Available to military or government forces only
- OK₅ Military technology under development
- OK₆ Military technology theoretically possible

Basically, if it has a "Q" sign in front of it, you can't buy it legally. It has to be stolen, or acquired by some other means, and carries the stigma of stolen military goods if you are ever caught with it. The subscripted number is a *general* "Contact" level that would be *useful* (although not absolutely necessary) to acquire the item. For instance, if you for some reason wanted use of an expensive ocean-floor minisub, a contact at an oceanographic institute might be helpful. Or, if you needed some military hardware not available through the normal channels, a contact with an arms dealer might be needed.

Obviously, not all items can or will be acquired by the characters. Some will be acquired by their enemies, though, and some may simply be a focus or background part of an adventure. To prevent "stat-mongering", the GM should allow players to see as little as possible of this book.

If a character wishes to purchase or acquire something, find the closest item, describe it in terms the character would be familiar with, and give them only as many stats on the item as they need to know. The same thing applies if the characters find out about some secret or restricted device. They should not get to know everything. An appropriate way to withhold information is to use the same method as the FBI. Photocopy the page or part of a page used, and black out sections with an indelible marker. Then photocopy the page again so they can't try to read through the ink, and snicker when they try and fail.

However, for your convenience, there is a full index in the back of this book, listing every item by name and type, as well as a manufacturer and subject index, so if you need something, and can't find it, check there as a last resort.

Organization - The items in this supplement will be broken down into the following categories:

1. **Weapons** - Anything designed to cause damage
2. **Armor** - All forms of personal armor
3. **Transport** - Any vehicle or mobility enhancement
4. **Security** - Security systems and equipment
5. **Personal gear** - Carried/worn non-combat items
6. **Other** - Everything else

The last category will cover everything that doesn't fit into one of the others, for whatever reason. Within these categories, items will run in alphabetical order. Since many items will be representative of a class, rather than a specific item (portable thermal imagers, for example), you can assume the item can be manufactured, ordered or procured in any developed country (aka the First World), and may probably be procured with varying difficulty everywhere else. Most real-world items will have manufacturer and nationality listed.

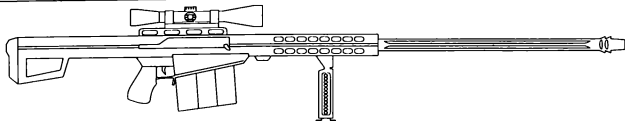
Special note - The Size of an item corresponds mainly to its physical bulk rather than structural integrity. The equipment damage rules are designed mainly for hand-held objects, usually Size 20 or less. Assume that a Size of 100 corresponds to about the size of a person, or a vehicle cargo space.

However, you still need to make some other assumptions about the structural integrity of an item. Obviously, a Size 100 computer inside an AV8 housing is still more likely to break if hit by gunfire than a Size 100 rock with an AV of 8.

If an item is delicate, like microelectronics, glass, pottery, etc., regardless of actual size, the item is never treated as having a Size of greater than 5. If the item is a normal mechanical or electromechanical device, with some inherent ability to resist damage, like metal parts, the item is never treated as having a Size of greater than 10. Most guns fall into this category, as do most vehicle engines. If an item is of a very sturdy type of mechanical construction, with very few parts that are delicate or easily damaged, it is never treated as having a Size of greater than 20. If an item is of homogeneous construction, like a box of books or a bag of sand, or of a dispersed structure that minimizes the effects of damage to a single section, like a backpack or dropcloth, then you always use the actual Size of the object.

Item is:	Maximum effective Size
Delicate	5
Normal	10
Tough	20
Homogeneous	Size

A side effect of this is that if a large item is "broken", it usually means that a single component or part is broken, rather than the entire device. Repair or replacement will restore the object to functioning.





Weapons - Everyone loves to have data on weapons, and characters will be walking arsenals unless they are suitably restrained, in which case they just hide them at home or in their car trunks, "just in case". In **CORPS**, that probably isn't such a bad idea...

Most of the section on projectile weapons will be a simple expansion of the list in **CORPS**, with new weapons for different countries, and different character tastes. A few of them, however, warrant additional paragraphs due to their unusual nature or non-standard format.

In the compressed scale of **CORPS**, there is not much difference between a lot of weapons within a type (assault rifles, 9mm pistols, etc.), except aesthetics and personal preference. Cost may not be a measure of performance, and no effort is made to keep any weapon from having an "edge" over any similar one. Many military weapons are adopted more from political concerns than for the needs of the actual users.

Availability to characters may vary based on their location and current political situation. For instance, most military rifles are also made in semi-auto civilian versions (ROF=4). However, in the US, importation of many of these weapons has been banned due to the knee-jerk political reactions that accompany any well-publicized controversy or event. As a result, in the US, these weapons now command a premium price, over 50% more than in 1989, for instance.

OK₃ AM-402 Baton - This is a police weapon manufactured by Condor SA of Brazil. It is an anodized aluminum police baton (+1 combination damage), but also functions as a single-shot 12ga shotgun. One presumes most police departments would only authorize the use of tear gas or rubber buckshot, but there is no physical reason why more lethal rounds could not be fired, especially in Latin American countries where this is most likely to be sold.

OK₁ Ares FMG - Made by the Ares Corporation in the US, the Ares FMG is a "folding" machine pistol, in that the magazine and a rudimentary stock fold *parallel* to the barrel, making the entire weapon fold down to a package approximately the size of a full column of this text, and about 3.6cm thick. This accounts for its small size, but this is offset by the Difficulty 6 Pistol task (2 seconds) needed to draw and unfold it before use.

OK₁ Barrett Model 82A1 - This is one of the most powerful rifles in current production, if not the most powerful. It fires any .50cal ammo that the Browning M2 can, and it can be used for target shooting at ranges of a kilometer or more. Due to its weight, it is usually fired from a prone position. The company currently makes a more compact, lighter version. It is, however, significantly more expensive.

OK₁ Briton MP37 Riot gun - Manufactured in England, this is a 5-shot, semi-auto, 37mm riot gun. It can fire a variety of crowd control rounds, including tear gas, smoke, illuminating rounds, rubber slugs (DV5 combination damage), and rubber buckshot (DV3 combination damage, +2 hits).



000 Buckshot



00 Buckshot



#2 Shot



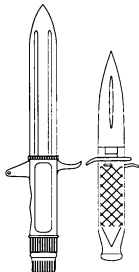
#4 Shot

OK₁ Caltrops - These are an anti-vehicle weapon, and can be made from a variety of improvised materials. Properly constructed, they use the weight of a vehicle to do the damage, and a successful caltrop attack counts as an eventually fatal result on 1 or more the vehicle's tires (unless self-sealing). A box of 50 will cover 2 lanes of road enough to guarantee at least 2 hits. Caltrops (box of 50), Size 10, AV4, 3.0kg, \$50.

OK₁ C-Mag - This is an extended magazine for 5.56mm assault rifles, manufactured by The Beta Company in the US. It is interchangeable with normal magazines, but holds 100 rounds, and can be stored indefinitely in the loaded state. It is currently available for the AR-15(US), M-16(US), Steyr AUG(Austria), FA MAS(France), and will probably be available for still more in the future. Size 4 (+3 to weapon Size), AV3, Mass(loaded) 2.2kg, Mass(empty) 1.0kg, \$75.

OK₃ Combat Knife, Firing - This weapon was first reported on in 1988. Manufactured by the state-run North China Industries Company (NORINCO), it is a medium quality combat knife, with a 4-shot .22 derringer built into the handle. The shots can be fired while the weapon is in a ready position for fighting, although it is a bit awkward to sight it. Sheathed, it looks like a regular military knife, although casual inspection will show it is out of the ordinary, and a person with any firearms skill would be able to tell its purpose and means of operation on close inspection.

The company also makes a folding pocket knife with a 3-shot .22 Short capacity. Although of dubious combat use, it is a gun, and if demonstrated, has the threatening ability of same.



OK₁ Garotte - This is a special purpose melee weapon, and can be manufactured easily from improvised materials. In **CORPS** terms, a successful attack counts as a lethal DV of up to the attacker's STR Aptitude, to the throat of the target. Every second that this is maintained counts as another attack, and if the neck is unprotected, the damage is *cumulative*. Doing this is easier said than done, since it is a -3 called shot for the neck, and a person can counter the attack by simply shielding their neck with an arm or other object, which takes normal (non-cumulative) damage. Normally, it would be done as an attack from behind on an unsuspecting target. Size 2, AV2, .1kg, \$10.

OK₄ HAFLA DM34 - A one-shot flame launcher, manufactured by BCTW GmbH in Germany. It fires a incendiary charge at 40m/sec, to a maximum distance of 80m. It bursts at this distance, or on impact, whichever comes first. There is a minimum arming distance of 6m, within which the charge will not burst or ignite, to protect the user. On bursting, it covers a lozenge-shaped area of up to 15m x 10m with 1300°C fragments (red phosphorus), which burn and produce dense smoke (-4 to AWR rolls) for about 2 minutes.

Count this as a normal grenade to see if a person is hit by any of the fragments, each of which has a lethal DV of 1 each second they are in contact with a character. Any flammable material will be set on fire by the fragments.

OK₃ Impact round, 40mm - This is a "knockdown" round designed for 40mm grenade launchers. It is a plastic packet filled with lead powder, and streamlined for optimum accuracy. It does less lethal damage than rubber bullets because of the area of the impact, and while it is not strictly non-lethal damage, the rules will treat it as such. It has a DV of 6, and anyone struck by it will have to make a Difficulty 6 AGL check to remain standing, taking "target" penalties for movement and arc struck from. So, a person struck from the rear while running is almost certain to be bowled over, possibly taking collateral damage from the fall.

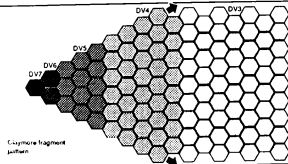
Q₅ H&K Caseless LMG - Under development by Heckler & Koch in Germany, the caseless LMG is an experimental weapon that is intended to replace current light machine guns, and fires the 4.9mm caseless ammunition used in their G11 assault rifle prototypes. The ammunition is contained in the hollow stock, and comes in disposable clips of 300 rounds. Like the G11, it includes an integral 1.5x telescopic sight.

OK₁ H&K HK4 - The HK4 is a standard, small semi-auto pistol, notable only because it can be purchased with conversion kits in .22LR (DV4), .25ACP (DV3), .32ACP (DV4) and .380ACP (DV4), thus allowing the owner to practice with a number of calibers, or practice with the less expensive .22LR ammunition, and switch to a more powerful round for normal use, while maintaining the expertise gained with the same weapon in the smaller caliber. Formerly used as a service weapon by German police, large numbers of these became available on the US surplus market in the late 1980's, for about \$200, in .32ACP with a .22LR conversion kit.

Q₄ M18A1 AP mine - No equipment supplement is complete without the ever-popular Claymore mine. Usually set off by a tripwire detonator or manual trigger, it explodes with a blast effect of 8, and fragmentation damage in a 60° arc, with the following stats:

Claymore mine	0m	1m	2-4m	5-9m	10-16m
Explosion	8	4	2	1	0
Fragment skill	6	5	4	3	2
Fragment DV	7	6	5	4	3

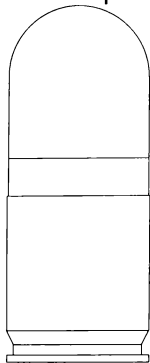
This has the potential to inflict injuries out to a range of 50m or more. Other countries make similar types of AP mines, including a Swedish version which masses 20kg, and delivers fragments out to 150m! Size 4, AV3, 1.6kg, \$50.



Q₄ M203 40mm Grenade Launcher - This is representative of many under-barrel 40mm launchers, and is manufactured by Colt Industries in the US. It attaches to a rifle, and cannot be fired by itself (although a single-shot 40mm launcher would have the same stats). The extra mass usually drops the Initiative of the combination by 1, and while the accuracy is poor, it designed to be fired at groups of individuals rather than a specific hit location. Since its muzzle velocity is only about 75m/sec, you can even see one coming, and perhaps get out of the way if you are far enough away.

40mm grenades do less fragmentation damage than other grenades, and their stats are below.

40mm frag grenade (actual size)



There is also a 40mm HE/HEAT grenade, which has a blast of 2, and an armor-piercing DV of 40 vs. whatever is struck by the round, and a "shotgun" round, which is treated as a single 10ga round, firing 000 Buckshot. Individual 40mm grenades are Size 2, AV2, .3kg, \$15.

Q₄ Micro grenade - Manufactured by the Special Cartridge Company of England, these are extremely small grenades, designed to be fired from normal 12ga shotguns. They have a Range of 1. Judging from their size and payload capacity, they are limited to a strictly police role, as it would take several to do more than severely annoy anyone behind decent cover. There are a number of versions, some of which may only reach production if demand warrants it. The first is a frag grenade, and the second is a stun grenade, with the following stats:

40mm grenade	0m	1m	2-4m	5-9m	10-16m
Explosion	3	1	1	0	0
Fragment skill	2	1	0	-1	-2
Fragment DV	4	3	2	1	0

Micro frag grenade	0m	1m	2-4m	5-9m	10-16m
Explosion	1	0	0	0	0
Fragment skill	1	0	-1	-2	-3
Fragment DV	3	2	1	0	0

Micro stun grenade	0m	1m	2-4m	5-9m	10-16m
Explosion	1	0	0	0	0

Next is a tear gas/smoke round, which delivers a dose of tear gas over a 1 hex radius, and creates a smoke cloud over that area which is a -2 to AWR rolls to see into, out of or through. Last is a 12ga HEAT round, which has an armor-piercing DV of 25. Cost for each type of round is \$10 each, in quantities of 20 or more, with small purchases costing up to double this amount. Size 0 (each), AV1, .1kg, \$10.

Weapons

⚡ Mini grenade - This is a small version of a standard fragmentation grenade. It has less fragments, and a small casualty radius, but is much lighter and smaller than a conventional grenade. Like most grenades, it has a non-resettable 4 second delay time from when it is activated, and detonates on the same Initiative as it was activated on. Size 1, .2kg, AV2, \$10.

Mini grenade	0m	1m	2-4m	5-9m	10-16m
Explosion	3	1	1	0	0
Fragment skill	2	1	0	-1	-2
Fragment DV	4	3	2	1	0

⚡ MISAR P-40 AP mine - A bounding AP mine, made by MISAR SPA in Italy. It consists of a pressure sensor that activates on a force of 2kg or more, and ejects a fragmentation charge with a Blast of 3, and frag effects like a normal grenade. Normally, the mine is activated by a tripwire, but direct contact with the mine will also set it off. Size 4, AV3, 1.5kg, \$40.

⚡ Model 59 AP mine - Another typical anti-personnel mine, this time from SAEA in France. It consists of a pressure sensor that activates on a force of 10kg or more, with an explosive charge having a blast effect of 2 and an armor-piercing attack of 10 against whatever triggered it, usually a foot or lower leg. It is also available in a smoke producing version, for training. Size 2, AV2, .1kg, \$10.

⚡ Paintball gun - Made mostly in the US, but available elsewhere without too much restriction. It fires a low-velocity gelatin ball filled with paint, and mock combats with these guns are a popular recreational pastime in some parts of the US. It is mentioned as a possible way for a person to get firearms experience in areas where true guns are banned, and the weapons could theoretically be modified to fire darts, or balls filled with something more useful than paint. Semi-auto and clip-fed full-auto versions are also available, at roughly double and triple cost.

⚡ Pistol birdshot - This is a special variety of pistol ammo, made by a variety of manufacturers, generally for pest control. Available in .22LR, .45ACP, 9mm, .357Mag, .41Mag, .44Mag and a few others, it counts as a lethal DV1 autofire attack, with an additional +1 to hit, as it spreads out in a narrow cone immediately upon leaving the barrel. In .22LR, it acts as a lethal DV0 autofire attack. In either case, it loses a point of damage every 3 range steps, and is most effective for quick shots against small targets, like rats, snakes, etc. Increased damage called shots with this ammunition will only count on the first pellet hit. If available, this ammo will generally cost about \$25 for a box of 50.

⚡ Porcupine - The Porcupine is made by SNPE in France. It is a weapon usually only employed by counter-terrorist teams, in preparation for building entry. It fires a single, large, hollow dart into a target in the same hex, and can penetrate up to 5 points of AV, like a plaster wall, fire door, airliner body, etc. Then, a cylinder of some gas or dust is dumped through an attached hose into the enclosed area on the other side, instantly flooding an area of up to 60 square meters (4 hex radius). This would usually tear gas, but could also be a sleep agent, smoke or other substance.

If it hits a person, the results would be gruesome, as it counts as an armor-piercing attack. In addition to doing normal damage, the payload would cause massive tissue damage, automatically counting as a broken bone result (at least), and a penetrating torso or head hit should be instantly fatal.

⚡ Power Staf KA-1 - Manufactured by Power-Staf Inc. in the US, this is an air-powered melee impact weapon. It looks like an oversized police baton with a small compressed air tank attached. The baton telescopes under pressure from the tank, and gives the effect of a DV3 punch anywhere within 2 hexes of the wielder (-2 modifier to skill in non-adjacent hexes). This uses Brawling, and can be specialized in as a secondary skill.

This weapon can only be used for thrusting attacks, but is a -1 to block or parry due to speed of the blow. The air cylinder is good for 30 "strikes" before it needs refilled. A backpack air cylinder is available which will give 300 strikes, and this can be attached to the above model, or a version without its own air cylinder. While not sold as such, it can be modified to accept a more lethal implement than the blunt tip it comes with. Size 9, 3.2kg, AV3, \$300.

⚡ PSM - The 5.45mm PSM pistol is the standard sidearm of the Soviet police and internal security forces. The poor DV suggests that perhaps they don't trust arming people with very powerful guns. Forces desiring a more powerful (but less concealable) weapon would probably use the Makarov.

⚡ Rifleman's Assault Weapon - Or 140mm RAW. Manufactured by Brunswick Defense in the US, this is a rocket-propelled bomb launcher that can be attached to most assault rifles. Ignited by gases from firing a normal bullet, it sends a 2.0kg, spherical, spin-stabilized bomb downrange at 170m/sec. This explodes on impact with the force of 1.3kg of TNT (Blast of 11), and this payload could also be smoke, incendiary or a HEAT round, depending on the mission required of the user.

⚡ Rubber buckshot - Has a DV of 2, and does combination damage. That is, treat it as a DV of 2 against any armor, and then alternate between non-lethal and lethal impairment on anything that gets through, with any location modifiers counting as non-lethal damage. For example, an arm hit would do a -1 lethal impairment, and a -2 non-lethal impairment. It reduces the Range of the weapon fired from by half (round down) to reflect the slower, less accurate shot.

⚡ Rubber bullet - These are usually made of plastic instead of rubber, especially for rifles. They fire from a reduced charge, and reduce the Range of the weapon by half (round down). Their DV is usually 1/3 (round down) the DV of an equivalent lead slug, and is treated as combination damage.

⚡ Rubber shotgun slug - As for rubber buckshot, but has a DV of 4. It reduces the Range of the weapon fired from by half (round down).

⚡ Stingball grenade - This is a fragmentation grenade filled with rubber pellets instead of steel fragments. The fragments have a non-lethal DV of 3 at minimum range, and lose a point of DV for each range step.

Stingball grenade	0m	1m	2-4m	5-9m	10-16m
Explosion	1	0	0	0	0
Fragment skill	2	1	0	-1	-2
Fragment DV	3	2	1	0	-1

Q4 TC/3.6 AT mine - The TC/3.6 anti-tank mine is an example of current technology, manufactured by Technovar in Italy. It may be buried up to 15cm below ground level, and is activated by a pressure of 200kg or more, causing it to explode with a blast of 19 (16 if buried), and an armor-piercing DV280 attack against the controls of whatever hit it. Similar mines may have remote detonation and activation by coded radio signal, or act on magnetic disturbances instead of pressure, attacking a random spot on the bottom of the vehicle. Such mines commonly have anti-lifting switches, which detonate the mine if it is moved. Deactivating one is a Difficulty 6 Security Systems task (1 minute), with failure resulting in detonation of the mine.

OK₁ Tear gas grenade - These act much as an area effect mace attack, as described in the drug and disease section of **CORPS**. Tear gas grenades come in several sizes. The smallest is about the size of pen (Size 0), and is suitable for filling a small room. It has a normal time delay of 2 seconds, and will fill one hex immediately. It will continue to fill 1 hex per second for the next 6 seconds, making a 1 hex radius at the end of this time. Over the next 12 seconds, it will expand out to fill a 2 hex radius, over which it has the normal effect.

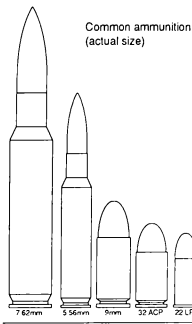
The regular size (Size 3) grenade has two variants. The first is blast effect grenade. After a 3 second delay, the grenade detonates and spreads a cloud of irritant particles instantly over a 6 meter radius. The continuous burn model simply throws out irritant fumes and particles over a potentially larger area, at the rate of 6 hexes per second.

Time	Radius of effect
0 seconds	0 hexes (fills 1 hex)
1 second	1 hex
3 seconds	2 hexes
6 seconds	3 hexes
10 seconds	4 hexes
15 seconds	5 hexes
21 seconds	6 hexes
28 seconds	7 hexes

Tear gas grenades do not have a "wall", or exact cutoff distance, and characters on the fringe of an affected area should have to make rolls with a bonus to avoid taking some effect from the spreading irritant cloud. Tear gas grenades: Small, Size 0, AV0, .1kg, \$10. Regular, Size 3, AV1, .4kg, \$30.

OK₁ Tear gas rounds - These are full-size 12ga shotgun shells with a tear gas payload. The shell has a lethal DV of 1, which is sufficient to barely puncture automobile windows or light residential doors. The tear gas has normal effects on the two hexes immediately on the other side of the obstacle struck. If a person is struck and takes lethal damage, double the impairment and automatically count it as a broken bone injury for healing purposes. If the obstacle has an AV of 2 or more, the projectile dumps its payload in the hex where it strikes. These rounds are also available for 37mm riot guns (DV2) and 40mm grenade launchers (DV2), and will fill a 4 hex diamond shaped area instead, or scatter to the hex of impact and 1 hex to either side if the target is too tough to penetrate.

OK₃ THV Ammo - This is a French type of high-velocity, armor-piercing ammunition. The bullets are largely hollow, and this space is filled with extra powder, giving the very light bullet nearly double the velocity of a regular round. The shape of the bullet causes it to decelerate very rapidly, and it loses a point of damage each 4 range steps, rather than a point per 5 range steps, as most other ammunition does. These bullets are available in most pistol calibers, and generally add 1 to the DV in addition to being AP.



However, if a random disaster comes up for a group, and could affect a person firing this ammo, that weapon will malfunction instead of someone else's. If available, these rounds cost about \$30 for a box of 50.

Q4 Type 67 Assassination Pistol - The Type 67 is a specialized assassination pistol manufactured by the Chinese State Arsenal. The 7.65mm round it uses is unique to that weapon, and is the only round it will fire. It has a number of features to keep it quiet, including a silencer which needs to be refurbished after each clip is fired, subsonic ammunition, and a slide lock which keeps the slide fixed during firing, lowering the noise made, but only allowing 1 shot, with a Difficulty 6 Pistol task (2 seconds) to disengage the lock, manually work the slide, and reengage the lock. Incidentally, the slide lock also keeps any telltale cartridge cases from being ejected. As a result of all these features, it is only a +0 to hearing AWR rolls to spot it being fired. If the slide lock is disengaged, the bonus is +1 instead, and ROF increases to 4. The low DV means that the best ammunition to use would be hollow-point, to get a better impairment and (optionally) eventually fatal chance, but even so, an increased damage called shot is necessary for a chance of a one-shot kill.

A very small number of these weapons are in the hands of Western collectors, and are the sole source of public information on them.

OK₃ Walther WA2000 - The WA2000 is a German sniper rifle, and is supposedly one of the more accurate firearms in existence. Each one is custom-made, and only to approved customers. The unusual appearance of the weapon marks it even to the untrained eye, and the price places it even out of the reach of many police departments. The caliber listed for the weapon is just one of several that are available.

Weapons

		Initiative	Range	Size	Mass	Extra	Rate	Clip	AV	Cost	Origin
Pistols	Caliber	DV	mod	mod	mod	clip	of fire				
Desert Eagle .44	.44Mag	10	+0	1	4	1.8kg	.3kg	4	9	4	\$600 Israel
Freedom Arms .22	.22LR	4	+2	0	2	2.2kg	-	2	5	4	\$150 USA
Glock 20	10mm	8	+1	1	3	.9kg	.3kg	4	13	4	\$500 Austria
Glock 22	.40S&W	8	+1	1	3	.9kg	.3kg	4	15	4	\$500 Austria
H&K HK417	.32ACP	5	+1	1	2	.6kg	.1kg	4	8	4	\$350 Germany
H&K P7M13	9mm	7	+1	1	3	1.1kg	.2kg	4	13	4	\$550 Germany
Makarov	9mm	7	+1	0	3	.8kg	.1kg	4	8	5	\$350 USSR
PSM	5.45mm	4	+1	0	2	.4kg	.1kg	4	8	3	\$270 USSR
Ruger P85	9mm	7	+1	1	3	1.1kg	.2kg	4	15	4	\$300 USA
S&W Model 57	.41Mag	9	+1	1	3	1.3kg	-	3	6	5	\$400 USA
Type 67 ⁸	7.65mm	3	+1	1	3	1.0kg	.1kg	1	9	3	n/a ⁴ China
Civilian longarms	Caliber	DV	mod	mod	mod	clip	of fire	Clip	AV	Cost	Origin
Barrett Model 82A1 ⁸	12.7mm	32	-2	7	17*	19.0kg	1.1kg	4	11	7	\$2400 USA
RAI Model 500	12.7mm	32	-1	8	15*	13.6kg	-	1	1	7	\$2000 USA
Ithaca Roadblocker	10ga	. ⁹	-1	2	14*	4.9kg	-	2	5	6	\$450 USA
Mossberg 500 Bullpup	12ga	-	+0	2	10	4.3kg	-	2	8	6	\$500 USA
Machine pistols	Caliber	DV	mod	mod	mod	clip	of fire	Clip	AV	Cost	Origin
Ares FMC ⁸	9mm	7	+0	1	3	2.0kg	.3kg	11	20	4	\$800 USA
Beretta 951R	9mm	7	+1	1	3	1.4kg	.2kg	12	10	4	\$300 Italy
Mini-Uzi	9mm	7	+0	1	4	2.0kg	.4kg	12	20	4	\$400 Israel
Stechkin	9mm ⁵	6	+1	1	3	1.3kg	.3kg	11	20	4	\$500 USSR
Submachineguns	Caliber	DV	mod	mod	mod	clip	of fire	Clip	AV	Cost	Origin
FN P90	5.7mm	9	+0	1	5	3.1kg	.4kg	10	50	4	n/a ⁷ Belgium
HM-3	9mm	8	+0	2	9†	3.4kg	.7kg	10	32	5	\$400 Mexico
Jati-matic	9mm	7	+0	2	5	2.0kg	.3kg	10	20	4	\$600 Finland
Spectre M4	9mm	7	+0	2	8†	3.6kg	.7kg	14	50	4	\$600 Italy
Steyr Mpi 69	9mm	8	+0	2	10	3.6kg	.5kg	9	32	4	\$400 Austria
Wz63	9mm	7	+0	1	7†	2.1kg	.3kg	10	25	4	\$500 Poland
Military longarms	Caliber	DV	mod	mod	mod	clip	of fire	Clip	AV	Cost	Origin
Dragunov SVD	7.62mm ⁵	21	+0	6	14*	4.6kg ²	.3kg	4	5	6	\$800 USSR
Enfield L85A1	5.56mm	16	+0	4	10	5.0kg ¹	.5kg	12	30	5	\$800 England
Gallil SAR	5.56mm	15	+0	4	10†	5.6kg	1.0kg	10	50	5	\$900 Israel
H&K Caseless LMG ⁸	4.9mm/c	17	-1	4	10	7.0kg ¹	2.0kg	12	300	4	n/a ⁷ Germany
H&K G41	5.56mm	16	+0	4	12†	4.6kg	.5kg	14	30	5	\$900 Germany
SIG 543	5.56mm	16	+0	4	10†	3.6kg	.6kg	12	30	5	\$900 Switz.
WA2000 ⁸	.300Mag	23	-1	6	12*	8.3kg ³	.4kg	4	6	6	\$4000 Germany
ENARM Pentagun	12ga	10	+0	2	9	3.1kg	-	2	5	5	n/a ⁷ Brasil
Olin CAWS (flechettes)	12ga	10	+0	3	10	4.3kg ¹	.6kg	6	10	4	n/a ⁷ USA
Olin CAWS (slug)	12ga	13	+0	3	10	4.3kg ¹	.6kg	6	10	4	n/a ⁷ USA
Pancor Jackhammer	12ga	10	+0	2	12*	5.6kg	1.0kg	4	10	5	n/a ⁷ USA
Other	Caliber	DV	mod	mod	mod	clip	of fire	Clip	AV	Cost	Origin
140mm RAW ⁸	n/a	-	-	3	+4	2.7kg	-	1	1	2	\$200 USA
Briton MP-37 Riot gun ⁸	37mm	-	+0	0	10*	4.8kg	2.0kg	1	5	3	\$400 England
Combat knife, .22 ⁸	.22LR	4	+2	-1	3	.6kg	-	1	4	4	\$150 China
HAFLA DM34 ⁸	35mm	-	+1	0	5	.6kg	-	1	1	2	\$100 Germany
M203 Gren. Launcher ⁶	40mm	-	-	0	+5	1.6kg	-	1	1	4	\$200 USA
Paintball gun ⁷	12mm	-	-1	0	4	.6kg	-	1	10	2	\$100 USA
Pocket knife, .22 ⁸	.22Short	2	+2	-1	2	.3kg	-	1	3	3	\$100 China
Porcupine ⁸	n/a	5	-1	-1	5	9.5kg	.5kg	1	1	4	\$1500 France
Riot baton (12ga) ⁸	12ga	-	+1	-1	5	.6kg	-	1	1	4	\$600 Brasil
Series 50 Launcher ⁸	n/a	-	-1	0	12*	7.5kg	-	1	1	4	\$1000 England

Notes:

- Includes mass of 1.5x telescopic sight
- Includes mass of 4x telescopic sight
- Includes mass of 2.5-10x telescopic sight
- Extremely rare item

- Ammunition not compatible with Western weapons
- Must be attached to a rifle to fire
- Prototypes only, not for sale
- See text

9. A 10ga slug has a DV of 11

* Not concealable

† Folding stock, folded is 3pts less



Armor - There are a number of "non-standard" armors that are in development, production or actual use in different parts of the world, but which are not mentioned in the basic **CORPS** rules due to their rarity or special purpose.

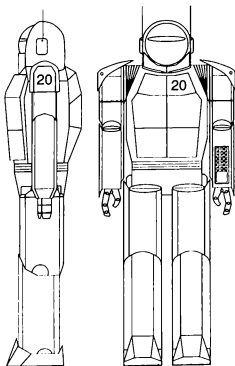
OK1 **Armored body suit** - Manufactured by Eagle Military Gear in Tel Aviv, this is a multi-piece suit that provides an AV of 5/5 over every part of the body except skull, face, hands and feet. Complete, it masses 13.0kg, and will have a significant effect on the wearer, both from load and increased felt temperature. It is extremely obvious, and could not be concealed under any form of normal clothing. \$5,000. Size 25(folded), AV5/5, 13.0kg, \$3,000.

OK1 **Armorshield riot shield** - Manufactured by Armorshield, Ltd, in Manchester, England, this is a medium riot shield (both arms, chest, and abdomen or head). It has an AV of 10, and no other features. Size 40, AV10, 3.5kg, \$400.

OK1 **Ballistic face mask** - A rigid black facemask made of a Kevlar composite, much like the PAGST helmet used by the US Army. It is available from American Body Armor and Equipment, in the US. It protects the entire face with an AV of 5/3, except for two eyeholes (-4 to hit). Any visual AWR rolls will take an extra -1 due to poor visibility when wearing this mask. Only extremely small melee attacks (stilettoes, etc.) will fit through the eyeholes, and random projectile weapon hits only have a 5% chance of striking an eyehole (roll a 1 on 1d10 followed by a 5 or less). Size 6, AV5/3, 1.7kg, \$200.

OK6 **Powered armor** - There are classified patent drawings on the subject of powered armor. While we don't know the exact technical specifications, assumptions can be drawn by piecing together fragments of disparate technologies.

Powered armor



Control - We do not have implantable neural control of such complex equipment as an entire musculature, although electronic bypass of severed nerves in paraplegic patients suggests this is not too far off. For now, any control of our armor is going to be mechanically converted into electrical impulses. You move a part of your body, and the armor amplifies it. This will be sensed via strain gauges. To prevent false signals the controls would have to fit snugly, requiring the user to either be strapped in, or held in place by inflatable cuffs, easier and more suitable to use by individuals of slightly different height and weight.

Environment - This close fit requires some sort of temperature control system, much like a space suit, but not having to match the extremes of outer space. While life-support is not mandatory, it will be included. No one wants their expensive armor incapacitated by a tear-gas grenade. Naturally, it will be completely watertight and seals will prevent a puncture in one area from affecting another (another advantage of inflatable cuffs). A rebreathing apparatus with oxygen augmentation will provide up to 12 hours of usable air in the event that outside air is not suitable.

Movement - The "muscles" of the suit will be telescoping cylinders that extend and contract, reducing the redundancy of human muscles, which can only contract. Motive power will be from high-efficiency electric motors connected to small continuously variable transmissions. This means that under small loads, motion can be extremely fast, but as more and more pressure is needed, the motors automatically gear down to supply a much greater force, albeit at a slower rate. It would be impossible to move the arms and legs of the suit if power was lost, so each suit will have an emergency disconnect, which blows out the attachment points of the muscles, making the suit useless, but hopefully giving the wearer enough mobility to extricate themselves from the suit, a process that will take several minutes at least (Difficulty 10 AGL task, 10 minutes). The hands of the suit have a thumb, trigger finger, and "claw" that encompasses the other three fingers. The palm of the suit can be opened to allow fine work, without disrupting the physical integrity of other suit parts. Otherwise, the "fingers" are too large to go through the trigger guards of normal weapons, although this could be countered by a simple "feeler" sticking off the index finger of the suit.

Armor - The body of the wearer and most of the musculature will be armored with titanium plates against all small arms fire, and over the especially vital areas like torso front and head may even provide single hit protection against heavy machine guns, by way of energy absorbing ceramic or ceramic-metal alloy plates. This armor will be backed on the inside by a gooey penetration sealer and ballistic fabrics to stop splinters from near-penetrations, and on the outside by radar and IR absorbent composites and a layer of flame-retardant fabric, like that worn by race car drivers. All armor panels will be modular in design, and can be replaced without disassembling the suit.

Sensors - The helmet will be faced with a narrow bullet proof visor, and supplemented with a wide variety of communications, surveillance and electronic warfare equipment, including inertial and satellite navigation, night vision equipment, scrambled satellite communications, infrared and ultrasonic countermeasures, radio jamming and direction finders, laser sensors and mine detection equipment. All functions will be controlled by voice, by optional eye movements on a control panel, and backed up with an armored,

arm mounted control panel. The suit continually runs diagnostics, and automatically detects and compensates for short circuits or power failure of primary or backup systems.

Armament - The suit will be armed as befits its mission. Since it is not a static, continuous use item, it will only be used by specially trained elite units, for special purposes only, like ultra-secret commando missions. A wide variety of firepower should be available, and can be designed for a single use only, like extremely efficient silencers that burn out after only a limited number of uses. Suggested armament:

1. A .22 caliber machinegun (DV5) with an extremely high rate of fire (ROF=30), and 2,000 rounds of armor-piercing ammunition, attached to a high efficiency silencer. This will burn out after the second burst, but can provide short-range sentry removal in single shot mode. Mounted on left arm, with high intensity (blinding) infrared laser sight and thermal TV camera. The sight has a "lethal" DV of 5, which only does damage on a called shot to the eyes, and the impairment is only to sight AWR.
2. Two light anti-tank rockets (DV200, blast 5), with similar sighting arrangements, mounted on right arm.
3. Ten anti-personnel grenades, mounted on belt, in armored pouch/dispenser (AV10).
4. Two large demolition rockets (Blast of 12), mounted on belt, in armored pouch/dispenser (AV10).
5. One 12.7mm assault rifle, selective fire, with 50 rounds armor piercing ammunition (drum magazine) and laser sight, plus one extra drum, carried in hands.

Power - The final problem is power. Unfortunately, current plans are somewhat stymied by the lack of superconductors that work under battlefield conditions. Thus, power consumption will be extremely high. For short term use, or under standby conditions, this can be provided by high-energy lithium batteries. However, for extended use (several hours), some other source will be needed. There are currently research submarines that run underwater using diesel engines that run on liquid (not compressed) oxygen, and have an underwater endurance measured in thousands of kilometers. A pair (redundancy) of small diesel engines, each about the size of a milk jug, and accompanying liquid oxygen tanks should be able to power this suit at full capacity for up to 12 hours, and at reduced capacity for up to 24. Either generator can provide all the power needed if run at full capacity, but usually, both will be run at lower RPM to insure reliability. These engines are virtually silent, leave no thermal traces, and are designed to have no diesel smell. Underwater, they would leave a tell-tale stream of bubbles, but this can be negated by use of the backup battery, which would provide full power for up to 30 minutes, and standby power for up to 2 hours.

Stats - The basic suit provides the wearer with a STR of 10, after taking the 100kg mass of the suit into account, that is, the mass of the suit does not count towards encumbrance. The user is restricted in AGL tasks, however. There is a special Primary skill of "Powered Armor" (AGL, +0), and no AGL-based skill may be used at a level of more than the skill at using the suit. This also counts towards increased time bonuses.

For purposes of lifting, crushing and tearing (but not striking), the STR of the suit can be increased up to 20, but each point over 10 is an additional -1 to AGL actions to represent the slowing of suit motions. However, in most of these cases, AGL is not a factor, since the target is already

grabbed. Such crushes and tears will be counted as lethal damage, which is split between affected locations.

Movement is at a maximum of 18 meters per second, with an acceleration of 6, and deceleration of 9.

The entire body of the suit has an AV of 24/0, and the front of the torso and the entire head have an additional 20/0 protection, which is reduced by the DV of any hit on it, counting the chest, abdomen and head as separate locations for this purpose. The visor is always 20/0, but is -4 to be hit.

All other physical abilities, like jumping, melee damage, etc. are based on the STR of the suit. It will absorb up to 4 points of lethal falling damage due to the cushioning effect of the control harness, but non-lethal damage will still occur from the sudden impact.

If the suit is breached by damage, the wearer takes damage normally, and the suit should have to check for a malfunction in that location like any other piece of equipment (Size 10). The maximum abilities of the suit are determined by the force the wearer exerts, and to this extent, the STR and mobility of the suit is impaired by damage to the wearer.

Area	Systems affected
Head	Sensors, control panel
Chest	Control computer
Upper back	Life support, generator #1, generator #2
Lower back	Emergency power
Abdomen	Temp. controls, weapons, backup computer
Arms	Musculature, joints, weapons, backup cont.
Legs	Musculature, joints

OK₁ PTT-100 stun shield - A heavy duty riot shield manufactured by the Lumenn Corporation of Taiwan, it comes in 3 configurations. The first is a standard, opaque AV2 riot shield, which can cover the torso, arms and either the head or upper legs of the holder. In addition, it has a battery pack and two large metal strips on the outer face, which will deliver a DV2 non-lethal stun attack on a successful Brawling attack. It can be upgraded to Level I ballistic protection (AV7), or Level II (AV10), at significant weight and cost penalties. Any version can be equipped with a small window and/or firing port in the upper half, with the same protection as the rest of the shield.

Basic model, AV2, Size 50, 3.0kg, \$200. Level I model, AV7, Size 50, 4.0kg, \$400, Level II model, AV10, Size 50, 5.0kg, \$500. Window, \$100 extra on any model.

OK₁ Riot armor - Police forces that are expected to be attacked by rocks and blunt objects, but not by gunfire, will usually have lighter armor. A helmet is usually AV 2/2 over head, face and neck. Torso protection is usually covered by a standard bullet-proof vest or riot shield, and arm or leg protection covers the front of the arms or legs, and also has an AV of 2/2. None of these AV's are designed to stop gunfire, which is counted as armor-piercing against them.

Helmet, AV2/2, 1.0kg, \$100
Arm guards, AV2/2, 5kg, \$70
Leg guards, AV2/2, 1.0kg, \$100

OK₁ V-450 Visor - Made by the ERO Sicherheitsausrüstungs GmbH armor firm in Luhe, Germany, this is a full-face clear visor that can be attached to almost any type of helmet, providing face protection of AV 8/0, and protection to the neck as well if you keep your chin down. Size 6, AV8, Mass .9kg, \$100.



Transport - In **CORPS**, you need to worry mostly about two types of vehicles, the mundane and the *really* exotic. The mundane is for when the police are chasing you, or you are stealing something from a deserted lot, and the *really* exotic is for... well, we can't tell you that.

Prices - Prices for many vehicles are unavailable, or unreliable. Political expediency has sold fully-equipped M60 tanks to Saudi Arabia for less than \$2,000 each, while a civilian trying to buy a HMMWV Jeep could expect to pay \$30,000 or more. Military or police equipment is almost always bought on contract, at prices which sometimes have little to do with the actual value of the item in question. Take all military prices with a grain of salt. Prices for civilian vehicles will vary with country, tariffs and popularity, but should be somewhat more accurate.

Engines - For designing your own vehicles, assume that an engine has an AV equal to the square root of its horsepower. Increase this by 25% if a diesel engine, and decrease by 25% for lightweight or high-performance engines, and 50% for both. This takes into account the more fragile parts that can be hit, and which affect the engine's functioning.

Explosions - Assume that blast applies vs. *all* exposed locations over the area of effect, with any penetration only applying once vs. *all* affected internal parts.

Size - All vehicle silhouettes at 1:100 scale will work perfectly on 10mm hex paper, or can be enlarged to 127% for 1/2" hex paper. Other scales require more enlargement.

Advanced vehicle maneuvering - Vehicles can be used for ramming attacks, sideswipes and shoving other vehicles. These tactics, especially the latter, can be handled using the normal vehicle chase rules, but with an additional modifier for the difference in vehicle mass. The first multiple of mass the larger vehicle has on the smaller is a +2 modifier to the larger vehicle's total, and another +2 each time it is doubled.

Example - An 800kg car is bumping a 200kg motorcycle. A mass of 400kg is double the mass of the motorcycle, for a +2, and double this is 800kg, for another +2. So, the car gets a +4 to its maneuvering total when doing a maneuver that uses the mass of one vehicle against another. This includes increasing the damage of a collision on the smaller vehicle, but not by more than the original damage. This does not count against people, who take impact damage as per the regular rules.

An attempt to force a vehicle off the road is usually counted as both an attack and an effect on steering. For instance, if one vehicle had a total 4 points higher than the other, it would be counted as a 4 point attack vs. the side of both vehicles, and would subtract 4 from the target vehicle's Turn mode for that action. If they were on a turn at the time, they could not turn as sharply, and might go off the side of the road. A second option would be to treat the total as an attack on both vehicles, and any difference as a lateral amount both vehicles are "bumped" to one side, again dangerous if there is oncoming traffic, no guardrail, etc. The attacking vehicle may move less than the total amount if desired.

In a situation where your vehicle is attempting to pass without being bumped, etc., if you have the higher total, you may move forward the difference, allowing you to eventually bob and dodge past someone attempting to force you off the road.

✕ **Alfa Romeo 75** - This is a police version of the 4-door sedan currently manufactured by Alfa Romeo of Napoli, Italy. While not suitable to the "no speed limit" of the German autobahn, its top speed of 58m/sec (209kph/127mph) is still quite respectable. Stats for an optional high-performance engine are in brackets. The 1,700kg vehicle is not armored in any way, but can be configured for a variety of police roles, but such additions as remote rear door locks, front/rear partitions, etc. Cost varies with engine and accessory package, but starts around \$20,000.

Alfa Romeo 75

Front	4
Top	4
Sides	4
Rear	4
Bottom	4
Windows	1
Controls	2
Engine(f)	12(10)

Max	58(62)
Acc/Dec	6/6(7/6)
Turn	8
Passengers	5
Cargo	2
Range	500
Fuel	50

4.3m x 1.7m x 1.4m



1:100 scale

✕ **AMX-13 Light tank** - Manufactured by Creusot-Loire in France. Normally, tanks are beyond the scope of what characters would have to deal with, but this is a lightly-armored one, and in service with over 20 Third World countries, including such current hot spots as El Salvador, India and Lebanon.

Originally produced in 1952, it has a long and varied history, and a large number of variants are in use. Modernization programs have extended the life of the vehicle for some countries which might have otherwise scrapped them.

Main armament on the 15-ton vehicle is a 90mm or 105mm cannon (Range of 23), which does more than enough damage (DV of about 250) to kill any vehicle in the game, or which can fire HE shells with a blast of 10 (90mm) or 14 (105mm). Normally, the vehicle carries 34 of the 90mm rounds, or 27 of the 105mm rounds. Secondary armament of the AMX-13 is a 7.62mm coaxial MG, and a cupola-mounted 7.62mm MG, with a total of 4,000 rounds of ammunition. Both MG's are always counted as using Spray Fire, and the main gun cannot deliberately aim at a target smaller than a person. The AMX-13 also has a total of 4 smoke grenade launchers, two on either side of the turret, facing to cover whichever 120° arc the gun is facing. The turret can traverse 30° per second, and aim at targets 1m up for each 5m of distance, or 1m down for each 12m of distance. Firing while traversing takes an extra -2 modifier.

It has few or no modern accoutrements unless fitted by the user. It normally has no night-vision capability, gas or smoke protection, deep fording or amphibious capability. The mobility stats show both the basic and improved engine versions of the vehicle. Cost varies with purchaser and condition of vehicle, but an unarmed chassis would go for between \$5,000 and \$20,000, depending on condition. Shipping is extra, of course.

AMX-13

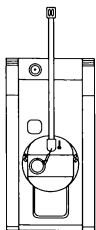
Front	61
Top	28
Sides	57
Rear	43
Bottom	28
Windows	n/a
Controls	28
Engine(f)	16(21)

Max	17(18)
Acc/Dec	3/6
Turn	7

Passengers	3*
Cargo	1*
Range	400/500
Fuel	480

*Passengers and cargo used do not affect Acc/Dec

6.3m x 2.5m x 2.3m



1 100 scale

OK₃ Armcor RCV9 - Manufactured by Armcor, based in Pretoria, South Africa. It is a fairly large, armored multi-role vehicle. It will carry up to 9 people in normal use, although double this would fit as some penalty to normal actions. The armor will stop most small arms fire. The 6,900kg vehicle has a rated top speed of 28m/sec (100kph/63mph), and can be equipped with a number of options, such as 4-wheel drive, wire mesh windows, gunports, powered doors, winch, searchlights, etc. Estimated base price is \$35,000.

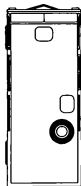
Armcor RCV9

Front	18
Top	18
Sides	18
Rear	18
Bottom	10
Windows	16
Controls	5
Engine(f)	14

Max	28
Acc/Dec	3/6
Turn	6

Passengers	9
Cargo	6
Range	500
Fuel	120

5.2m x 2.1m x 2.1m



1 100 scale

OS Aurora - Aurora is supposedly the code name for the super-secret replacement for the SR-71 reconnaissance plane. We say "supposedly", because very little except the name is available, and what is available could easily be misinformation. Whatever it is, it is hellaciously fast. Since current research on the X-30 Spaceplane is stalled, trying to iron out problems with the scramjet (material science difficulties), we will assume Aurora is conventionally powered, probably a rocket/ramjet or turbojet/ramjet, using liquid methane as both fuel and airframe coolant. If you have friends at Marquart, ask around, since they might be making the engines, and Lockheed is probably making the plane itself. Don't even ask how much it will cost.

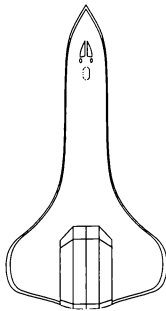
Since the SR-71 could fly in excess of 3,500kph (2,200mph), and reach sustained heights of 26,000m (85,000ft), the Aurora will have to do significantly better. A guesstimate places sustained top speed at Mach 5.5 (6,200kph/3,900mph), and sustained height at 37,000m (120,000ft). It is also a good bet that the design incorporates the latest stealth technology.

Unusual airplane-like noises have been heard at night in the regions around Edwards AFB in California, and Nellis AFB in Nevada, which may be attributable to Aurora. If so, the ramjets still don't have all the bugs worked out yet.

What role does an extremely expensive, ultra-high speed recon aircraft have in a world surrounded by satellites which can supposedly spot a golf ball from orbit? It turns out that there actually are a couple. For one, such an aircraft would be all but immune to countermeasures that a Third World country could develop. This has its uses, as witnessed by SR-71 recon data given to the British during the Falklands War. And if you can spot a golf ball from orbit, you can probably read the brand name from 35km up. Second, it is flexible. It will probably have a good-sized payload bay and a two- or three-man crew, which allows easy interchange of components, and mission specific sensors or cameras, something not possible on satellites. Last, it makes a wonderful anti-satellite platform. A few anti-satellite missiles can go a long way when launched at Mach 6 from 35km up, and we already have test-fired them from F-16's (standing on their tails with afterburners lit). And in CORPS, they might be trying to nail a UFO or two...

OK Bell 206L helicopter - This is representative of many corporate or police helicopters, manufactured by Bell Helicopter in Fort Worth, Texas. It is a slightly longer version of the Bell 206B, holding 5 passengers and 2 crew instead of 3 passengers and 2 crew. Passenger space is interchangeable with cargo space unless the seats are fixed, like a corporate personnel transport. It has a climb rate of 7m/sec, and a service ceiling of 6,000m. Climb rate is reduced like acceleration would be for a land vehicle, based on load. The rotor span of the helicopter is 11m, and it has a payload of 900kg, of which up to 350kg is the fuel load. Base cost is around \$250,000.

A common helicopter in the West, there are a number of options available, including weapon mounts, searchlights, thermal and image intensification cameras, and internal armor packages for the pilots, fuel tank, passengers and/or engine. A section for fuel or engine masses 50kg, and those for the pilots and passengers mass 100kg each. This armor adds 10 points of AV to that part of the vehicle from all facings, and applies before any damage is taken to that component. For passengers and pilots, it also adds an extra -1 to any direct visual AWR checks due to reduced visibility.

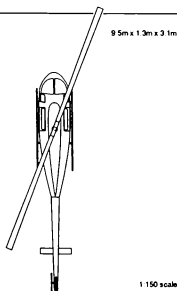


Bell 206L helicopter

Front	2
Top	2
Sides	2
Rear	2
Bottom	3
Windows	1
Controls	6
Engine(r)	13

Max	100
Acc/Dec	10/10
Turn	10

Passengers	5
Cargo	2
Range	660
Fuel	345



✖ **BMW K75RT** - This is a medium-performance touring bike made by BMW in Germany. Performance of the 270kg bike is not stellar, but it is solidly constructed and of high quality. The cargo capacity is split between 3 carriers on the sides and rear, holding boxy items of up to Size 30, 30 and 40, respectively. Price tag on the cycle starts around \$8,000. The top-line version, the K100RT, has slightly higher performance, and correspondingly higher price tag.

BMW K75RT

2.9m x 7m x 1.3m

Front	3
Top*	4
Sides*	2
Rear	4
Bottom	4
Windows	n/a
Controls	2
Engine(f)	7

Max	53
Acc/Dec	6/7
Turn	8



Passengers	2
Cargo	1
Range	400
Fuel	20

*Does not protect passengers

1:100 scale

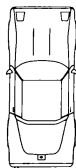
✖ **Corvette** - Manufactured by the Chevrolet Motor Co. of the United States, this is the American Sports Car. The stats reflect the base 1991 version, with the ZR1 stats in parentheses. The 1,500kg vehicle incorporates a number of advanced features to wring maximum performance from its 5,700cc engine. Performance modifications to the ZR1 increase the normal 66m/sec (232kph/145mph) top speed to 79m/sec, and to increase the Acc by 1 point, at significant cost (\$30,000), and increased maintenance and insurance bills. The \$35,000 sports car comes with a fairly standard automotive security system, which sounds an alarm if the proper deactivation sequence is not done in 30 seconds. Bypassing the alarm within this time period is a Difficulty 7 task with the proper tools.

Corvette

Front	3
Top	3
Sides	3
Rear	3
Bottom	3
Windows	1
Controls	2
Engine(f)	12(15)

Max	66(79)
Acc/Dec	6/7(7/7)
Turn	9

Passengers	2
Cargo	1
Range	800
Fuel	75



4.5m x 1.8m x 1.2m

1:100 scale

✖ **Diver tow** - This device is a battery-operated motor, driving a shrouded propeller or small water jet. It will tow a single scuba diver at 1m/sec for an hour, allowing the diver to operate at a much reduced level of air consumption. In addition, it has a small searchlight (Intensity 5 for underwater visibility) on the front, the constant use of which will reduce the range of the tow by 10%. An alternative is a package which straps a motor to the diver's scuba gear, and battery packs to the belt. It has the same capabilities (sans light), costs \$400 more, but allows the diver to have both hands free. Larger versions can tow a diver at 2m/sec for 2 hours, and may additionally carry a spare air tank. Small version: Size 35, AV3, 20kg, \$1000. Large version: Size 100, 50kg, \$2,000.

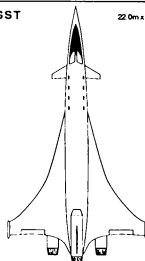
✖ **Gulfstream-Sukhoi SST** - This will be the world's smallest supersonic passenger jet. In a combined effort with Gulfstream (US), the Sukhoi Design Bureau (USSR) is developing a supersonic business jet, with a top speed of Mach 2.0, and a range of 6,500km. The current configuration has three engines, and will carry 6-8 passengers plus luggage. Test flights are scheduled for 1993. Cost is unknown, but is likely to be high enough that the only use will be for executives of major corporations, or extremely wealthy individuals.

Gulfstream-Sukhoi SST

Front	4
Top	4
Sides	4
Rear	4
Bottom	4
Windows	6
Controls	10
Engine(rx3)	12

Max	636
Acc/Dec	12/10
Turn	30

Passengers	8
Cargo	3
Range	6500
Fuel	17000



22.0m x 12.0m x 4.5m

1:300 scale

Transport

α Honda ST1100 - This is a high performance touring bike made by Honda of Japan. The 1085cc water-cooled engine will drive the 270kg bike up to a maximum speed of 58m/sec (208kph/128mph). Its cargo capacity is split evenly between a pair of Size 25, lockable side cases, and a Size 50 rear case. Base price of the ST1100 is around \$9,000.

Honda ST1100

2.0m x 8m x 1.1m

Front	3
Top*	4
Sides*	2
Rear	4
Bottom	4
Windows	n/a
Controls	2
Engine(f)	8

Max	58
Acc/Dec	8/7
Turn	8

Passengers	2
Cargo	1
Range	500
Fuel	30

*Does not protect passengers

1:100 scale



α Hovercraft, personal - There are a number of small firms that make 1 or 2-man hovercraft. Hovercraft have the advantage that they are immune to the type of terrain they are on, with the exception of its roughness. Sand, snow, water, ice, dirt and pavement are all identical to the 200kg vehicle. They have the disadvantages of a small useful load and poor maneuvering, since they have no contact with the ground to supply turning friction. A skilled driver (Difficulty 6 task) can use the Acc of the hovercraft to add to its Turn or Dec, in effect pivoting the entire vehicle to use the main fan for control, rather than a rudder to deflect part of its force. Hovercraft of this type cannot cross any obstacle higher than 20cm, and speed is reduced significantly on any surface with obstacles more than 10cm high. Base price for these vehicles is around \$5,000.

Personal hovercraft

2.0m x 1.5m x 1.5m

Front	2
Top*	2
Sides	2
Rear	2
Bottom	2
Windows	n/a
Controls	4
Engine(r)	4

Max	18
Acc/Dec	3/3
Turn	3

Passengers	2
Cargo	0
Range	150
Fuel	15

*Does not protect passengers

1:100 scale



α₁ HMMWV (Hummer) - This vehicle is made by American Motors in the US, and is a replacement for the classic Army Jeep. Larger, faster, more versatile and much more expensive, nearly 60,000 of the 3,900kg diesel-powered vehicles will be produced for the various armed services. There are an endless number of variants, such as command vehicles, ambulances and weapon carriers, and also a light armor package, which adds 10 points of AV to the passenger compartment, at the cost of a point of Acc, and 5 points of Max. The base vehicle has a price of around \$25,000.

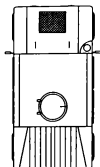
HMMWV

4.6m x 2.2m x 1.8m

Front	5
Top	5
Sides	5
Rear	5
Bottom	6
Windows	2
Controls	4
Engine(f)	16

Max	36
Acc/Dec	4/6
Turn	6

Passengers	5
Cargo	4
Range	480
Fuel	90



1:100 scale

Kawasaki JetSki SX650 - Manufactured by Kawasaki in Japan, this is, for all practical purposes, a water-based motorcycle. The 130kg vehicle will carry one or two riders at up to 19m/sec (68kph/42mph), and can operate in water less than a meter deep due to its low draft and waterjet propulsion. Base price starts around \$4,500.

JetSki SX650

2.4m x 5m x 9m

Front*	2
Top	2
Sides	2
Rear	2
Bottom	3
Windows	n/a
Controls	5
Engine(r)	6

Max	19
Acc/Dec	4/6
Turn	10

Passengers	2
Cargo	0
Range	150
Fuel	17

*Does not protect passengers

1:100 scale



Kawasaki Ninja ZX-6 - A high-performance street bike, made by Kawasaki in Japan. The 195kg bike wrings an incredible amount of performance from its 600cc engine, giving it an acceleration that will leave behind anything with 4 wheels, and a top speed of 62m/sec (223kph/136mph). Its cargo capacity is very limited, and it only has a pair of Size 20 side cases for storage. With all this performance, it still manages a reasonable base price of around \$5,500.

Kawasaki Ninja ZX-6

1.9m x 7m x 1.1m

Front	3
Top	3
Sides	2
Rear	3
Bottom	3
Windows	n/a
Controls	2
Engine(f)	5



Max	62
Acc/Dec	9/7
Turn	8

Passengers	2
Cargo*	.4
Range	400
Fuel	18

*Does not protect passengers

*Cargo used does not affect Acc/Dec

1:100 scale

ok **Miata** - The MX5 Miata is manufactured by Mazda of Japan, and has become a very "trendy" car in the US, jacking the suggested retail of \$14,000 up to \$18,000 or more through dealer profiteering. Will probably become a "classic", but for now is representative of lower-priced sports cars. The 1,000kg vehicle is exclusively a 2-seater, and there is no backseat or space to cram a third person. In convertible form, there is a 20% chance of the top being hit on a body hit that is adjacent to the passenger compartment. In this case, the vehicle's AV is reduced by 2. If the top is down, it has no AV in these areas, but add 4 to the AV of whichever accessory hit is closest to the passenger compartment. The removable hardtop is considered to have the same Body AV as the rest of the car.

Miata

3.9m x 1.7m x 1.2m

Front	4
Top	4
Sides	4
Rear	4
Bottom	4
Windows	1
Controls	2
Engine(f)	10



Max	58
Acc/Dec	5/6
Turn	8

Passengers	2
Cargo	1
Range	570
Fuel	45

1:100 scale

ok **Moped** - The generic moped, made all over the world. In the US, they are limited to 50cc engines, and in some areas, have a provision that you must be able to pedal them, a daunting task, considering their mass of around 50kg. Simple "scooters" have the same stats, but cannot be pedaled. Regardless, they are a relatively cheap and efficient form of urban transportation, and are extremely common in some Second and Third World countries. Base cost is around \$500.

Moped

1.8m x 4m x 1.0m

Front*	2
Top*	2
Sides*	2
Rear*	2
Bottom	2
Windows	n/a
Controls	1
Engine(f)	2



Max	16
Acc/Dec	4/6
Turn	7

Passengers	2
Cargo	0
Range	120
Fuel	4

*Does not protect passengers

1:100 scale

ok **MSB-18 Anti-riot vehicle** - This is a 29-ton, 6-wheel drive anti-riot vehicle made as a collaboration by several Belgian firms. There are a total of 18, in service with the Belgian police, but the capabilities are available to any nation that can afford the \$200,000 price tag.

On the defensive side, it has moderate armor for stopping thrown items, and can be up-armored to stop bullets over the crew compartment, which is pressurized and has filters to stop gas and smoke. It is equipped with sprinklers to extinguish Molotov cocktails, and solvent sprays to keep it from being blinded by paint bombs. All door handles, footrests and other protrusions fold away, making the vehicle very difficult to climb onto.

Offensively, it is equipped with two AWR 20 searchlights, a PA system, and a pair of remotely-controlled water cannons. Water cannons are a useful way of dispersing crowds. These count as an autofire attack with a ROF of 20, and a Range of -2. The cannons have a "DV" of 10, and lose 1 point every range step. This DV does not do any damage, but anyone struck by it will have to make an AGL check against a Difficulty of the DV to remain standing, taking "target" penalties for movement and arc struck from. So, a person struck from the rear while running is almost certain to be bowled over, possibly taking collateral damage from the fall. The water tanks on the vehicle hold 9,000 liters, sufficient to run both cannons at full blast for 5 minutes.

While not specifically mentioned as a capability of the vehicle, the water jets could easily have tear gas, indelible or invisible marking dyes added to them for extra effect.

Transport

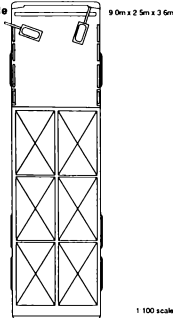
MSB-18 Anti-riot vehicle

Front	7
Top	7
Sides	7
Rear	7
Bottom	7
Windows	6
Controls	6
Engine(l)	22

Max	24
Acc/Dec	3/5
Turn	5

Passengers	5*
Cargo	3*
Range	650
Fuel	150

*Passengers and cargo used do not affect Acc/Dec



1 100 scale

OK Norton Commander - Manufactured by the Norton Motorcycle Company of Staffordshire, England. It is designed exclusively for police and military use, although there are no features that would prohibit civilian ownership. The main details are styling and other considerations like stowage, adequate lights for police use and performance. The bike has two cargo areas, each of which is Size 30. The 600cc engine delivers 85hp, and gives the 260kg vehicle a top speed of 64m/sec (230kph/141mph). Base price of the cycle is around \$6,000.

Norton Commander

Front	4
Top*	4
Sides*	4
Rear*	4
Bottom	4
Windows	n/a
Controls	2
Engine(l)	7

Max	64
Acc/Dec	8/7
Turn	8

Passengers	2
Cargo*	.6
Range	450
Fuel	25

*Does not protect passengers

*Cargo used does not affect Acc/Dec

2.0m x 7m x 1.3m



1 100 scale

OK NR1 nuclear submersible - The NR1 is the world's smallest known nuclear submarine. Launched in 1969, it has a displacement of 700 tons. It is 42 meters long, 3.8 meters wide, 4.5 meters high, has a maximum speed of about 6 meters per second (21kph/13mph), and a rated diving depth of 800 meters. As it is a US Navy vessel, the crew of 7 includes two officers, the rest being technicians and/or scientists. It is equipped with a remote manipulator arm, lights, TV cameras, maneuvering thrusters and wheels to allow "driving" on the ocean floor.

The NR1 was originally built as a test platform for a small nuclear propulsion plant, but has also served in a deep underwater engineering role with civilian passengers. It is worth noting that the NR1 was used in the recovery of wreckage from the Challenger space shuttle, from January to April 1986.

Estimated cost of construction in 1969 was approximately \$100,000,000. No other submersibles of this type are known, although modern techniques could build smaller power plants, and less detectable hulls. With the ability to obtain oxygen from the electrolysis of seawater, the underwater endurance of such a vessel is limited only by the food supply on board.

Note - While the Soviets have a number of small research submersibles, some with bottom-crawling tracks, none have nuclear power plants, and have a maximum endurance of a few days underwater, at relatively slow speeds (3m/sec). It is suspected that some of these could be used for Spetznavt commando operations in time of war.

OK Porsche 911 - A traditional, easily recognizable sports car, made in various incarnations by Porsche in Germany since 1963. A rear-engined, two-seat convertible, the 1,400kg vehicle is capable of reaching 70m/sec (252kph/154mph) in the standard version, and with some performance and turbo tweaking, can reach 75m/sec. The cargo space is split between a Size 1 area behind the seats (which you can cram 1 or 2 people in), and a .5 space trunk. Base cost is \$65,000.

Porsche 911

Front	4
Top	4
Sides	4
Rear	4
Bottom	4
Windows	1
Controls	2
Engine(r)	13

Max	70
Acc/Dec	7/7
Turn	9

Passengers	2
Cargo	1.5
Range	490
Fuel	80

4.3m x 1.7m x 1.3m



1 100 scale

OK S-10 - A generic, medium-size pickup truck, manufactured by Chevrolet in the US, massing about 1,500kg. Use these stats for most pickup trucks in this size range. These stats reflect the largest engine, cargo bed and fuel tank available on this model. Normal options include a camper top (up to \$1,000), which restricts the maximum size of a cargo item, but which does provide protection from the weather (and an AV of 2). Two points of the vehicle's cargo capacity is behind the seats in the extended cab, and may be equipped with folding seats. Under ideal circumstances, the bed can carry up to double the rated cargo capacity, in which case the area is filled to some height above the vehicle's roof, adversely affecting the vehicle's Turn as well as acceleration, deceleration and top speed. Four wheel drive is an option, but this usually raises the body of the truck enough to subtract 1 point from its Turn. Base price of the truck is around \$10,000.

Chevrolet S-10

Front	4
Top	4
Sides	4
Rear	4
Bottom	4
Windows	1
Controls	2
Engine(l)	13

Max	45
Acc/Dec	4/6
Turn	7

Passengers	2
Cargo	6(2)
Range	700
Fuel	75



4.9m x 1.6m x 1.6m

1:100 scale

OK **SAR 33 Fast Strike Craft** - A generic patrol boat, manufactured by Abeking & Rasmussen in Germany. In larger countries, it might serve in a coast guard or local interdiction capacity, while in smaller countries it could be a regular naval vessel. In small countries, it might be a major part of the total navy. It is suited to a variety of roles. There are shallow draft variants for river work, a slightly longer version with a helicopter pad, provision for carrying light anti-ship missiles, and it can carry weapons as large as a 76mm rapid-fire gun in front, and 40mm rapid-fire gun in the rear. The SAR 33 has a range of over 2500km at cruising speed, and can maintain its top speed of 21m/sec (75kph/47mph) for 800km. The normal crew of 21 is only necessary for complete manning of all stations, and maintaining reliability at sea.

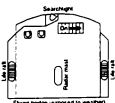
The SAR 33 is unarmored except for its basic structure, which provides a degree of protection against small arms. The version illustrated is armed with a pair of twin 20mm mounts, each of which has a Range of 11, an ROF of 5 and an Initiative of -4. These are equipped with AV30 gun shields, which protect the front arc of the weapon, and the guns may be pivoted up to 60° per second.

SAR 33 Strike Craft

Front	10
Top	10
Sides	10
Rear	10
Bottom	20
Windows	5
Controls	40
Engine(rx3)	35

Max	21
Acc/Dec	1/1
Turn	3

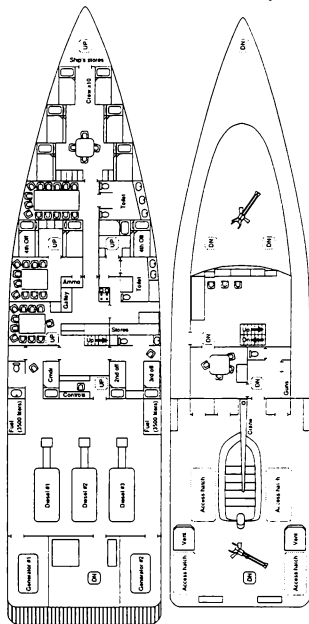
Passengers	21*
Cargo	2*
Range	1600
Fuel	7000



34.6m x 8.6m x 6.8m

1:300 scale

*Passengers and cargo used do not affect Acc/Dec



OK **Ski Doo Elite** - Manufactured by Ski Doo in the US, this is a 360kg, two-man snowmobile. It has a base cost of around \$4,000. It can operate on snow or ice (w/difficulty), and will run on any flat surface if you are willing to ruin the tracks and skis in the process. Fast snowmobiles can *theoretically* stay afloat on water if they are going full speed. The base Difficulty of this task is 4, and it is compared to the average of the vehicle's Acc and driver skill, rounding down. The Difficulty is increased by 1 if the vehicle is over half loaded in cargo or passengers, and by 2 if over half in both. In addition, if a turn is made, the Turn used is added to the Difficulty, and if going less than full speed, the Difficulty is increased by 1 for each 10% less than full speed, rounding fractions to slowest 10%. Success (each second) means the vehicle moves at its current speed. Failure means it loses 10% of maximum speed for each point failed by.

Transport

Example - If going 90% of full speed, and not loaded down, you need to make a Difficulty 5 task on the average of your skill and the snowmobile's Acc to keep going at that speed. If you failed by 2, you would drop to 70% of full speed next second. Note that there is no way to gain back lost speed.

Ski Doo Elite

Front	3
Top*	3
Sides*	3
Rear	3
Bottom	4
Windows	n/a
Controls	5
Engine(f)	6

2.5m x 1m x 1.3m



Max	45
Acc/Dec	4/6
Turn	7

Passengers	2
Cargo	1
Range	200
Fuel	30

*Does not protect passengers

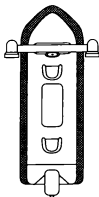
1:100 scale

OK₃ Subskimmer - This is a very specialized semi-inflatable boat made by the Submarine Products Ltd. company in Northumberland, England. It has all the characteristics of an outboard-powered inflatable boat, with a top speed of 14m/sec (50kph/31mph) and a range of 160km. However, the 800kg boat can be inflated (60 sec) and deflated (60 sec) up to 6 times, and once deflated, the boat sinks, and can be powered by two on-board electric motors at 2m/sec for up to 8km (these are front mounted, with an AV of 6). The watertight outboard engine can be restarted immediately upon surfacing. Its obvious purpose is the covert delivery of up to 4 people, for purposes best left to the imagination. The passengers are expected to have their own air supply, but up to two people can breathe from the boat's on-board compressed air tanks for several hours. Base price is unknown, but probably more than \$20,000, and does not include equipment like inertial navigation or other electronics.

Subskimmer

Front	1
Top	1
Sides	1
Rear	1
Bottom	1
Windows	1
Controls	3
Engine(r)	7

5.0m x 1.6m x 1.0m



Max	14
Acc/Dec	3/5
Turn	8

Passengers	2
Cargo	2
Range	160
Fuel	50

1:100 scale

OK₂ TR300 Coastal Submarine - The European company of Thyssen Nordseewerke has recently completed a design for a 300 ton submarine for covert or coastal operations. It runs on a closed cycle diesel, underwater use facilitated by liquid oxygen tanks mounted around the pressure hull like bicycle innertubes. For silent operation, the TR300 can operate on batteries. Maximum recommended diving depth is 150m, and the minimum depth at which it can operate submerged is 10m.

Armament consists of four retractable, 48cm torpedo tubes (no reloads), and it is also equipped for minelaying or diver deployment. Normal crew is 8, but since it is has facilities for diver deployment, it can probably carry more for short missions.

TR300 Sub

30.0m x 5.7m x 6.2m

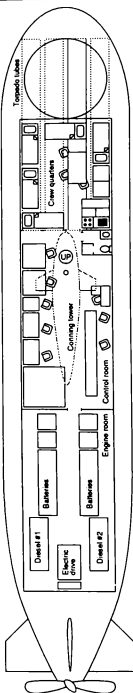
Front	30
Top	30
Sides	30
Rear	30
Bottom	30
Windows	n/a
Controls	30
Engine(r)	??

Max	7/2
Acc/Dec	1/1
Turn	1

Passengers	8*
Cargo	12*
Range	3200/70

Fuel	?
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*Passengers and cargo used do not affect Acc/Dec



1:100 scale



Security - Normally in CORPS, you can simply assign a difficulty and a time rating to a given security system or access control device, and take it from there. However, this leaves less room for player creativity, and is a bit bland as well.

This section gives you detail on a number of these systems, ranging from the simple to the extremely complex.

Personal ID - Personal identification takes a number of forms. Each has advantages, disadvantages, a level of security and cost.

The simplest forms of ID are those like driver's licenses. These are usually a simple photo ID, with name, ID number, address, color picture and some physical identification characteristics of the holder (weight, height, hair and eye color, etc.). To forge one of these simply requires computer, typesetting equipment and access to reasonable quality printing equipment. Lesser quality forgeries can be made with a laser printer and color photocopier. While these may pass visual inspection, they will not match computer-based cross-referencing, like would be expected at a routine traffic stop (unless the data matched an already-existing entry).

Next are ID's that contain some single, simple form of anti-forgery technology. This may or may not contain identifying information in and of itself. The identifying way may be by something like a simple magnetic stripe, like a automatic teller machine card. Each time the card is used, there is the possibility that the use is recorded and stored somewhere by computer. The non-identifying way might be by an embedded material that returns a given electrical or magnetic signature when hit with a radio or magnetic signal, like a Wiegand strip. Again, the use might be recorded, but exact user of the card might remain unknown, or only narrowed to a list of card-holders for that door/computer/etc. The first is easy to duplicate, but you must first have a sample to work from, and the latter requires a source of the material, and then knowledge of how the specific organization you are forging an ID for encodes the material. This level of security is usually combined with a simple cross-referencing technology, like embossed name and ID#, and possibly a small color photo. Typical examples include automatic teller machine cards, or corporate ID's for people with access to sensitive materials.

Next are ID's that include both inherent identification and visual inspection anti-forgery traits. A good example would be a modern credit card, which has embossed name and unique, computer-referenced ID number, plus a magnetic stripe and a hologram imprint to counter simple visual forgery. Manufacturing these requires sophisticated machinery, but is possible on the small scale if access to key components is available (like spare holograms and a few valid credit card numbers).

Last are the modern "smart cards", which contain a battery-backed computer chip, perhaps with a small amount of optical memory or non-volatile RAM chips. These may combine all of the previous technologies, plus, they have the ability to communicate with a host computer. So, a card might contain a encrypted code which changes with the day of the week, and the computer is programmed only to accept a card if it has the right code. Or, the computer could give a signal to the card, and if the card did not give the proper reply, again, access would be denied. Such a card could itself store access records

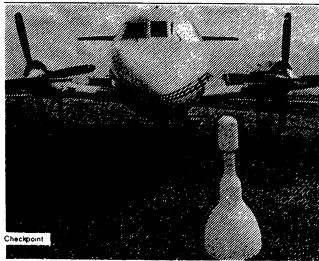
of when and where it was used, and again, if this did not match the records of a central computer, access would be denied. Or, it could store the encrypted retinal patterns of the card holder, which could be verified elsewhere. Basically, anything that could be stored on computer disk can be placed in the card, and used to verify that the person using the card has a valid reason to do whatever is being asked.

Naturally, these are the most difficult to forge, and might be used for smart credit cards (currently in trial use), high-security access, access to sensitive computers, or fool-proof personal identification.

Non-card systems rely on some physical or mental characteristic of a person to confirm identification. For instance, while a person may be able to forge a signature very well, they probably cannot match the timing and pressure the actual person uses when signing their name, factors which are more dependent on the person, rather than the shape of the letters. A pressure-sensitive plate underneath the item to be signed can transmit the information to a computer, both on visual appearance, timing and pressure, and has over a 95% reliability rate. Fooling one of these is a Difficulty 10 Forgery task, but Tertiary skill can be gained with a specific signature, if you have access to the pressure signature.

Another form is the retinal scan or fingerprint scan, both in common usage at high-security facilities, usually in combination with entering a code number. Again, these have over a 95% reliability rate.

While a certain difficulty or influence level could be assigned to having a reliable false ID of any type made, in reality, how reliable or useful it is depends more on the exact circumstances the ID is used for. For instance, no matter how well it is done, no false ID will convince a policeman that you are president of the United States, or an MP that a long-haired bearded individual is actually a Ranger. In general, assume the following Influence or cash is necessary for a valid ID with the following qualities, valid meaning that the card will pass official scrutiny, regardless of whether there is an actual individual or that name who holds such ID. This cost and influence covers technology needed, people to bribe, etc., and the ID should be good for up to a year from the time acquired (unless the GM feels otherwise). Ones that simply have to pass visual scrutiny are less complex and costly, and do not need or have the ability to pass any cross-reference checks.



Another type of high security lock is the angled-pin lock. A normal pin-tumbler lock requires that the key push up a number of pins an exact amount before the key will turn. The angled-pin lock requires that each pin be rotated a certain amount as well, which is done by specially beveled cuts on the key. These are available in forms from padlock to door lock, and range in Difficulty from 10-12. A lock gun will not work on them, although conventional picks can be used for attempts. The most common version of these goes under the trade name Medeco, the company which holds many patents on the technology. They will make locks for which there are no master keys, and for which they will not make duplicates under any circumstances, if the customer requests that level of security (Omega keyed locks).

Loopholes - Many alarm systems are designed to stop "dumb" criminals, or ones who have few talents or planning skills. The next time you see a place with an alarm, see if there is a keypad deactivation system. If there is, can you see it from outside? If so, all you need is a vantage point and a telescope. If not, there is probably a key-driven override. If so, no matter how sophisticated the alarm, all you have to do is make a lockpicking roll to turn the whole system off! On a similar vein, if the system has perimeter security, but no internal sensors, simply find a place to hide inside during hours when it is open, and wait.

Master keys - Most commercial locks are "master-keyed". This means that one key will open several locks, whose keys will not work in the others. For example, an executive might have a key to his office, which will not work in anyone else's. However, the head security officer might have a key which opens all the locks in the building. In many operations, these are not given the security they should, and all you would have to do is mug the janitor to get access to an entire building. Other places have more reasonable control of these keys, and they are kept locked up, with sign-out sheets for when they are required. Still, anyone could have a quick copy made, then return the key and wait patiently for several months to keep from being an obvious suspect when the key is used illegally.

Another class of master key is for vehicles. Perhaps you weren't aware of this, but your car company has a set of keys which will probably open every vehicle that company has made over a 5 year period. Copies have made their way into outside hands on occasion, since a few notorious criminals have been found with different sets when apprehended (think of the getaway car potential). The same applies to your house or apartment door. The locks are bought in huge lots by a builder, and the person who built the subdivision or manages the apartment complex probably has a master key to your door, whether you like it or not.

Pressure sensors - The simplest of these are like you would see at an older supermarket, a rubberized pad that has a weight-sensitive switch underneath. Avoiding one of these is a simple matter of spotting it and going around, noting that they could be under carpets, and only visible by the wear marks their edges would generate in the carpet under heavy foot traffic. Deactivating one of these is a relatively trivial Electrician, Electronics or Security systems task (Difficulty 6, 1 minute).

Strain gauges are another matter. These are small devices that are glued to a structural member (like a stair support or floor beam), and they detect the very slight flexure a person's weight would cause on that structure. These are very difficult to avoid, since they can be placed virtually anywhere. Conceivably, a Difficulty 10 Stealth task (1 minute) could let a character move slowly and carefully enough to avoid detection, by placing their weight in places that would cause less stress or flexure.

OK, **Sabretape** - Made by Pilkington in England, this is a barbed steel tape, with an embedded fiberoptic strand, undetectable from the outside. Trying to move or crawl through a tangle of this (or any other well-prepared barbed wire) is a Difficulty 10 AGL task (10 seconds per meter), and failure means you take as many DV1 lethal attacks as the amount you failed by, to random locations. Of course, if you cut the strands, the fiberoptic cable is broken, and any security system hooked to it will go off. Stats are for a 15m roll. Size 40, AV2, \$50, 30.0kg.

OK, **Sentrax intruder detection system** - Manufactured by Cerberus SA, Männedorf, Switzerland, it is typical of new "buried cable" intrusion detectors. It is based on two buried cables, one of which has a signal passed through it and acts as a transmitter, and a parallel cable which acts as a receiver. The cables are usually separated by 2-3 meters, and protect an area 4m wide, 1m high, and the entire length of the cables. Any object passing through this area will alter the signal received, and possibly set off an alarm. Whether or not an alarm is triggered is determined by a computer, which analyzes the signals, and has a very reliable chance of ignoring small animals, birds and other natural phenomena. All results are shown on computer screen or printout, and a computerized map of all protected areas is also available, with the usual sector length being 50, 100 or 150 meters. The basic system can handle 32 sectors.

The detection threshold for movement is about 1 meter per minute. A character who can complete a Difficulty 8 task on the average of their AGL and WIL has the coordination and willpower to move at this speed or less through the detection area, which will take 5 minutes or more, depending on how well you know the area. Since the cables are buried, their location is not immediately obvious.

Silent alarms - Many businesses have silent alarm systems, monitored by a private security firm. In this way, they don't have to worry about how long a loud alarm will take to draw the notice of police, or how much goods can be taken in that interval. The alarm is sent silently, the company calls the police, and the police quietly arrive, hopefully while the unsuspecting thieves are still there. For places with large numbers of employees, or a range of employees who need access at odd hours (night managers, etc.), a keypad system is used. Entering the premises triggers an alarm. If the proper code is entered in 30 seconds, the alarm is ignored, and a computer simply records whose code was used to enter with. A nice feature on many systems is the "anti-hostage" code. This is something like the employee's code number, plus 1. It appears to deactivate the alarm, but in reality sends a signal that the person was forced to use the code under duress, and that there is a possible hostage situation in progress.

❖ **TV Cameras** - Television cameras come in any number of shapes and sizes for both indoor and outdoor security work. The most common is a type using a light sensitive integrated circuit (a CCD) instead of the bulkier vidicon tubes used in the past. The viewing area is a 60° arc, and if a rotating system, can be changed by up to 60° per second. The AWR of the viewer takes an automatic -1 penalty due to the lower resolution of the camera as compared to the human eye, and will take an extra -1 under poor lighting conditions. This does not take into account human boredom at having to watch the same scene for hours on end, and a general AWR roll should be necessary to see how alert a human watcher is. A failed roll means an additional penalty on their AWR of the amount failed by.

A way of countering this is to hook a computer into the system. The computer monitors the output of each camera, and compares the image from second to second, alerting the operator if there is a difference in the images corresponding to the size of a predefined object, like a person. Such a system is counted as having a base AWR of 4 for detection purposes, and never gets bored. Stealth can work against this type of system, and may in fact work in situations where a human operator would immediately notice something.

Any visual enhancements possible for normal vision are possible for a TV system, at an appropriate increase in cost. The stats below are for a normal camera, with a fixed lens. Options are shown separately.

Size 8, AV1, \$400, 1kg. Outdoor housing, Size 10, AV3, \$100, 2kg. Automatic/remote tracking mount, Size 10, AV3, \$300, 5kg. Remote operated 3x zoom lens, Size 3, AV1, \$300, 1kg. Wireless microwave video/control link, Size 12, AV2, \$1,000, 5kg.

❖ **Tyre trap** - Manufactured by Wallop Industries, Hampshire, England, this is a portable anti-vehicle barricade. In operation, it is an accordion-like barrier of hollow, detachable steel spikes. When a vehicle runs over them, they do an automatic DV3 attack, which automatically causes an eventually fatal result on any affected tire (-1 impairment per tire per 1d10 minutes).

The stored unit masses 15kg, and deployed, will cover a 7m wide stretch of road. It is a Difficulty 7 AGL task to deploy in 15 seconds, although preparation time can decrease this. Size 30 (stored), AV8(stored), 15kg, \$200.

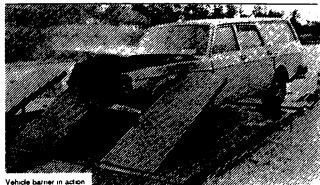
❖ **Ultrasonic detectors** - These are a common low-to medium-security detection device. They operate on the Doppler principle. They send out a certain frequency of ultrasonic sound, and listen for the echo. If an object is moving in their path, the frequency of this echo will be different, and an alarm will be sounded. Normally, they would be placed so that they cover a closed door. If the door is opened, the alarm is sounded by the time a person sees the sensor. This would be a typical setup for a small business, with a 30 second delay on the alarm. The control panel to deactivate the alarm is close by, and it assumes the owner can use their key or combination in this interval to keep the alarm from going off. The pattern covered by a typical sensor is a 10m x 3m x 3m lozenge. The detector can easily be bypassed electronically if you know where the wires are (Difficulty 4, 1 minute). If you have access to the area during the day, this can be done, or an object which absorbs the sound from the transmitter, or muffles it for the receiver can be placed over the sensor. This need not be obvious. Spray varnish, a wad of paper or foam, or a small

piece of duct tape will usually do the job. A character who can complete a Difficulty 7 task on the average of their AGL and WIL has the coordination and willpower to move through the detection field slow enough to avoid being spotted, although this will take several minutes, and a single failure by anyone sets off the alarm.

Simple microwave or infrared detectors operate in much the same fashion. The ultrasonic and microwave versions can be detected or jammed because they have an active transmitter, while the infrared version relies on passive sensors only. In order to be immune to things like curtains moving because of a heat vent, changes in temperature or humidity due to air conditioning or sunlight through a window, and other factors, an object which changes position or temperature gradient very slowly can avoid setting off an alarm of this type. Very few people have the coordination and patience to move this slow, however.

❖ **Vehicle barriers** - These take a wide number of forms, the simplest being a steel and cement obstacle course to prevent a vehicle from being driven through at high speed. The rest generally fall into the categories of low and high (anti-fanatic) security. Low security barriers usually rely on some form of tire-shredding device, like pointed steel rippers that emerge from the roadway and cause immediate, catastrophic failure of all a vehicle's tires. These can be triggered, like a control from a central gate that lowers or raises them, or automatic, triggering when anyone tries to cross in the wrong direction, or triggered by structural failure of a crossbar or other lightweight gate. All are visible on a casual AWR roll, since they must have some part showing on the surface of the roadway. The most common civilian application is the one-way version, which prevents people from leaving a parking deck via the entrance, to avoid paying.

High-security vehicle barriers are designed to stop vehicles of virtually any size, moving at high-speed. Common traits are fast operation and massively tough construction. These can be built into the roadway, and are unobtrusive in a non-activated state, or can be transportable (barely) for emergency use (12 hours to deploy). Examples include steel plates that rise from the roadway at a 30° angle to impale oncoming vehicles, steel plates that pivot into concealed pits, with the upper edge of the plate showing steel spikes, and steel and cement pyramids that instantly rise .6m from the roadway, impaling the undercarriage of a vehicle, or preventing its passage. All of these can stop a 10-ton wheeled vehicle (dump truck) moving at 20m/sec, although most will not be able to do more than once. Taking out a normal car, however, would do little more than require a new paint job on the barricade.



Vehicle barrier in action



Personal gear - This covers a wide variety of hand-held or worn equipment that doesn't fall into the other categories, or applies only in a secondary sense.

OK1 **Bodyguard briefcase** - This is a customized attaché case that can hold a submachine gun, which can be fired by a trigger on the case's handle. Anyone can make a device of this type, although a few weapon manufacturers make them for specific models of their line, like Hechler & Koch does for their MP5K 9mm SMG. It can be fired while closed, opened, can mount a laser sight, and the weapon can be removed quickly for conventional use. In the case, the 32 round clip cannot be reloaded, but once opened, an extra clip is available for use. Size 20, AV2, 1.3kg (empty), \$250.

OK1 **Bugs** - Electronic eavesdropping devices come in so many varieties it is impossible to list them all. Ones commonly available to civilians have an AWR of 3, are easily detected by counter-measures systems, and have a useful range of about 100m (strength of -10, see Radio Detonator Jammer). The counter-measures equipment is a bonus or penalty to the skill of the user, and the basic bug is a Difficulty 5 item to spot in a 1 minute room sweep. More sophisticated ones simply increase the range and decrease the chance of detection.

OK **Data Diskman** - Probably the first mass-market electronic book, manufactured by Sony in Japan. It accepts a single CD ROM and displays the contents on a folding LCD screen. Considering that a CD can hold the text contents of an encyclopedia, this makes it the portable equivalent of a small library. Text can be searched through and browsed, and more advanced models will undoubtedly have cross-referencing and index features. For now, the Data Diskman is only available in Japan, and the only titles are in Japanese, but the technology should appear in English-speaking countries sometime in 1991 or 1992. Size 4, AV0, .5kg, \$500 (disks are \$100 each).

OK **Dry suit** - An advanced cold-weather diving suit, it is a head-to-foot garment that keeps the wearer completely dry while underwater, effectively raising the temperature the wearer feels by 20°C. A person in one of these could survive in the North Sea water temperatures for days, and in fact, these suits are standard gear on many cold-water oil drilling platforms, in case of an accident which would sink or capsize the platform. Due to the bulky nature of the suit, all AGL skills will take an extra -1 modifier, and skills involving fine or detail work will take a -2. Size 30 (folded), AV1, 6.0kg, \$500.

OK **Electronic organizer** - A vest-pocket sized appointment calendar, address book and information source, with removable memory and function cards. It will act as a normal calculator and very small spreadsheet for complex calculations, and can hold the equivalent of 5 pages of text in memory. This can be uploaded or downloaded via cable to a personal computer, and password protected. Function cards include language translation (Skill 2), travel guides (Skill 2), extra memory (double base amount), and basic business travel (expense accounts, itinerary, etc.). Most also have a built-in alarm clock, which can be slaved to the calendar if necessary. Size 2, AV0, .1kg, \$250. Function cards, \$70 each.

OK **Fanny pack holster** - With the popularity of the belt or fanny pack, it was only a matter of time before someone put a concealed holster into one. The entire pack has a concealment Size of 10, of which 3 is a hidden compartment in the back, so the base spotting Difficulty for a hidden gun (or other item of Size 3 or less) is 7 or more. Getting at the weapon is like drawing a normal gun, but with a -1 penalty to reflect that you have to rip open a velcro closure to get at it. This pack serves as visual concealment only. Any manual search would spot the concealed weapon as soon as the pack was removed. Size 10, AV1, .2kg, \$60.

OK1 **Gas mask** - A military/police version, which protects the eyes and lungs from the effects of tear gas, vomit gas and low concentrations of other toxic chemicals (chlorine, etc.). It does not provide protection against nerve agents, although it could with the addition of the proper filter cartridge. Neither provides extra oxygen to the wearer, but a fire emergency mask would have a 5-10 minute supply, and about the same physical stats. All vision AWR rolls take an extra -1, the character's front vision arc is reduced to 60°. Size, cost, AV, mass.

OK1 **Gyrostabilized binoculars** - These are a pair of 10x binoculars with full gyrostabilization built in. This negates up to a -3 penalty to visual AWR because of movement, which is normally applied to binoculars, camera mounts, etc. because of vehicle vibration or maneuvering. The gyros take about 60 seconds to reach operating levels, during which time the binoculars act normally, and after which the full benefit is gained. It is powered by 6 AA-size rechargeable batteries, which last for about 2 hours, or can be powered directly from a vehicle power supply. Size 13, AV3, 2.0kg, \$5,000.

OK1 **Handheld thermal imager** - This device converts the far infrared spectrum into colors that the human eye can see. While the user takes a -1 modifier to AWR rolls, the device does have a 2-4x magnification capability. The user takes no minuses for darkness, and only half of any modifiers for most visual obscurity, like smoke, fog, foliage, etc. In addition, it can be used to spot heat traces from objects that are no longer present. The GM should assign a base spotting difficulty for such a trace, which gets 1 point weaker after a minute, and each doubling of time after that (2,4,8,16, etc.).

Most current portable imagers require cryogenic cooling of the IR sensor, which is supplied by a compressed air bottle. This, plus the battery pack will provide about 5 hours of operation, with about a 10 second "cool-down" time once it is turned on. Newer models may have built-in cooling via thermionic semiconductor modules. Size 14, AV2, 5.5kg, \$10,000.

OK1 **Laser communicator** - A set of binoculars with an integrated electronics package and microphone, which allows intercept-free communications to a similar unit. Unless the coded laser signal is spread by fog or dust, it is undetectable by outside parties, and cannot be jammed unless they both know it is operating, and the location of one of the users. Size 8, AV2, 1.0kg, \$600.

OK1 **NBC suits** - Most First World armies have NBC (Nuclear/Biological/Chemical) protective suits, usually with associated filter masks. These are made of a charcoal-impregnated fabric, with rubber gloves and boot protectors, to be worn over normal clothing. Getting into a suit properly is a

Difficulty 6 AGL task (3 minutes). The mandatory lack of air circulation through the suit means the wearer will feel uncomfortably warm, as it adds 10°C to felt temperature, and the gloves and mask will cause a -1 on all AGL skills and AWR rolls. There is some question as to the effectiveness of the suits. Independent testing of US models showed little or no protection to direct exposure to nerve gas droplets, results denied by the US military. Soviet suits are heavier, but probably more resistant, as they are made of rubberized cloth (which adds 15°C to felt temperature). Similar stats apply to lightweight hazardous waste protection suits. Size 10 (folded), AV2 (folded), 1.7kg, \$50.

OK₁ **Pager watches** - There are two separate brands of pager watch currently available. Both operate as a standard pager, with a small audio and/or visual paging alert, and with a small alphanumeric display showing a short message or phone number. Size 0, AV1, .1kg, \$300, plus \$50 per month for services.

OK **Pocket contractor** - This is a small ultrasonic rangefinder combined with a special-purpose microcomputer. The result is a pocket-sized device which can calculate all the construction parameters for a room or number of rooms, such as lumber, drywall and paint required, as well as more mundane things like size and volume of the room. These calculations can be entered manually if the area is too large for the 15m maximum of the rangefinder. Devious characters or GM's could surely think of other applications possible with a custom memory chip transplant, like alarm jamming, how much explosives to get a given effect, etc. Size 3, AV0, .2kg, \$100.

OK₁ **Portable explosives detector** - This is a backpack unit which can be used for the detection of any high explosive compounds, and which might be found in use at roadblocks, sites of bomb threats or other locations where explosive detection is necessary, protracted searches are impractical, and where bulky or immobile equipment cannot be used. The user has a "wand" which can be used to "sniff" under cars, in ventilation grilles, etc., and a control panel which indicates the presence and concentration of explosive vapors, if any. It is capable of detecting vapor from explosives in concentrations as low as one part in several million, and takes less than 5 seconds to make an analysis. This will not detect explosives at range, but will work anywhere where vapors could be expected to collect or pass through. Usually, a positive result would result in a much more thorough search of the area in question. Size 40, AV2, 15kg, \$15,000.

OK₁ **Portable GPS** - Or Global Positioning System. This is a unit about the size of a large walkie-talkie, which has a satellite antenna, and chips to decode the data from civilian or military navigation satellites (depending on version). These work over most of the world, are entirely passive in nature, and provide a latitude and longitude readout that is accurate to within 20m. This latitude and longitude data must be translated into a human-understandable form by having appropriate maps of the area in question. A single battery charge would be good for several hundred readings. Size 3, AV2, .7kg, \$2500.

OK **Rebreather** - A rebreather is a specialized form of underwater breathing gear which filters the diver's exhaled air of impurities, and injects oxygen to make up what was consumed by use. The system is sealed, and does not generate a tell-tale

stream of bubbles like standard scuba gear. The main disadvantage is cost, as it is expensive and requires recharging with chemicals and oxygen after every use. In appearance, it looks like a streamlined backpack, with regulators and hoses.

The endurance of the system is 6 hours at a Level 0 or Level 1 exertion. Any exertion higher than this divides the 6 hours by its level, i.e. a Level 3 exertion would use up the time 3 times as fast. Size 40, AV2, 11.0kg, \$2,000 (+\$200 per use).

OK₁ **Series 50 grapnel launcher** - Manufactured by Ferranti Instrumentation, of Surrey, England, this is a portable, air-powered launcher. While the application listed above shows the device as a grapnel launcher, it could just as easily fire any payload relatively silently. It can fire the following masses the listed distances:

Mass	Max. horizontal	Max. vertical	Flight time
.5kg	500m	400m	18 sec
1.0kg	250m	200m	12 sec
2.0kg	125m	100m	9 sec
5.0kg	50m	40m	6 sec

High quality climbing rope (holds 1000kg) masses about 2kg per 25m, and a lightweight grappling hook would be .5kg. For aiming purposes, the stats are on the firearms list. Assume that the device can only make a +3 called shot at point blank, and ability to make called shots on small targets decreases by 1 point per range step.

OK₁ **Sound attenuation earphones** - These are made by a number a civilian and paramilitary firms for hunting, target shooting, and police work. Normally, close gunfire precludes almost all verbal conversation, and causes a -1 to all hearing AWR rolls for an hour just from the ringing in the ears. These earphones completely cover the ears, and let in sound via small stereo microphones and a battery-operated amplifier. They amplify normal sounds at little loss of clarity, but restrict the maximum volume the wearer can hear, damping down things like gunshots, for instance. The makers claim that you can carry on a normal conversation simultaneously with target shooting, losing only words that are simultaneous with a gunshot. Size 6, AV2, .7kg, \$100.

OK₁ **Speedline linethrowing rocket** - Manufactured by Schermuly Ltd. in England, this is a one-shot, rocket-powered linethrower. It will noisily (+2 to hearing AWR rolls) launch a rope capable of holding 200kg out to a range of 250m. The line has no grapnel or hook, and must be manually tied by a person at the receiving end to be of any use. For combat and initiative purposes, it is a +0 Initiative device, has a Range stat of 3, but cannot do called shots, as it is always hipfired. Size 6, AV2, 4.6kg, \$200.

OK₁ **Tactical headsets** - Small, scrambled, multichannel headsets like those worn by the Secret Service. There are several variants, but they usually consist of an earphone containing a small inductive receiver (unnoticeable under overhanging hair, and a -3 to spot on AWR checks otherwise). This receives signals from a concealed transmitter on the body, which is hooked up to a voice-activated microphone taped to the neck. A control on the transmitter changes channels, scrambler status or manual activation. The strength of the transmitter is anywhere from 0 to 10, with range of up to 1km.

Personal gear

Units designed for SWAT teams are more obvious, and may look like normal headset radios, but have better range, and may not have scrambling. Civilian headset radios have a range of about 200m under good conditions, and cost about \$50-\$70 per pair. Size 2, AV1, .2kg, \$400.

α₂ TV glasses - This is a device that has not appeared on the commercial market, but which has been made in prototype form. It is a tiny, fixed focus TV camera concealed between the lenses and nose bridge of a pair of sunglasses. A thin cable sends a signal to a mini-VCR, using the cartridges popular for camcorders. This VCR is usually worn on the belt or strapped across the kidneys in the back, allowing covert use while wearing a jacket. The VCR could easily be replaced by or used with a transmitter, allowing more flexibility. Power would be provided by a pack of AA cells, which would last for about 2 hours in recording mode, and 12 hours on standby. Due to the low quality of the picture, all AWR rolls to spot something on tape or monitor take an extra -2 modifier. Size 0 (camera), Size 5 (recorder), AV0, .8kg, \$3,000.

α₂ TV watch - Manufactured by Seiko of Japan, this is a small LCD TV screen and watch combination. The item normally functions as a watch, but with the addition of a Size 1 control unit (usually kept in a pocket), it can be used to get a marginal TV picture (-4 to AWR rolls to spot detail). The control unit contained a separate battery pack for its power, which would last about 5 hours. This did not affect the watch's functioning in any way. The device did not enjoy commercial success, but may still be available through jewelers, or a similar item may be introduced by some other manufacturer in the future. Size 0/1, AV0, Mass. .2kg, \$300.

α₂ Underwater camera - Manufactured by a number of firms, a typical example being the Nikonos 35mm line. These look like slightly bulky 35mm cameras, but will work perfectly well in water up to 50m deep, and have oversized controls which can be operated with diving gloves on. Like regular 35mm cameras, they will accept a variety of special purposes lenses, filters and photographic attachments, all with the same underwater capacity. Size 4, AV2, .8kg, \$500.

α₂ Video still camera - Manufactured by Canon of Japan, this is a TV camera that takes up to 50 single frames of video (up to 2 per second), and stores them on a magnetic disk, which can be erased and reused indefinitely. Quality of the image does not match normal photographic detail, and in general, divide the width of the scene taken by 500 to get the smallest item that can be resolved, like .1m for an object 50m wide that fills the entire picture. Images can be viewed on TV, printed, or stored on other disks for later use. Size 3, AV0, .3kg, \$700.

α₂ Wet suit - Standard equipment for scuba divers in areas with non-tropical water temperatures. It raises the effective water temperature the wearer feels by 5°C. This will not prevent local losses of manual dexterity due to things like chilled hands, but it will prevent or delay hypothermia. In addition, it will act as armor to the extent that it will stop any damage from a 0 point lethal attack, like a small weapon graze. Size 10 (folded), AV0, 2.5kg, \$200.

etc.

Other - Other is the catch-all category that handles things that didn't already fit somewhere else, mostly items that are barely man-portable, or which are usually vehicle mounted.

α₁ Antenn-Eye AE60 - This is manufactured by CCS Communication Control, Inc. in the US. It looks like a standard car radio antenna, but has a pinhole lens for a TV camera, and can be electrically traversed through 360°. As a result, an empty, parked car could be used as a discreet video surveillance platform. The technology could also be applied elsewhere, like on a large portable radio, for instance. Despite its visual camouflage, it could be detected by the trained eye on an AWR roll with size and range modifiers, and with a +2 if it is rotating at the time. Size n/a, AV0, 2.0kg, \$2,500.

α₁ Bomb shield - This is a folding, 3 or 4 section semi-rigid screen of metal mesh and ballistic fabrics designed to contain and deflect an explosion and resulting fragments. The screen has an AV of 5 vs. fragments, shrapnel and blast, however it will add an extra point to any blast in directions it does not protect in (up and down). The shield is also knocked down (violently) in the process of absorbing the blast. It can be set up by 1 person in 1 minute as a Difficulty 6 STR task. Size 50 (folded), AV5, 25kg, \$2,000.

α₁ Drugs - There are thousands of drugs legally available, either over the counter, or by prescription, and hundreds of others that are illegal or severely restricted. If a drug has an addiction rating, this is the maximum Difficulty for a WIL task to avoid taking the drug if there is an opportunity to do so, or once per day. This number starts at 0, and increases by the second number each time the character fails the roll and takes it. A character can take the Psych Lim "predisposed to addiction", which lowers their WIL by the level of the limitation. A person who fails an addiction roll by more than their current WIL will perform irrational and/or criminal actions to get a new "fix", like theft, prostitution, assault, and the like. Should this ever happen to a character, the GM has complete control of the character until they complete these actions, get a new dose, and come off the effects. The character may have some, little or no memory of events during that time.

Withdrawal can lower a character's addiction number by 1 per day, but with possible side effects like flashbacks, cramps, fever, vomiting, etc. In general, they take a -1 to all actions per 2 points of addiction, so a person trying to break a Level 6 crack addiction would be at -3 for all their actions due to psychological cravings for it, which would abate to -2 after 2 days, -1 after 4 days, and -0 after 6 days. Even then, they would still have lingering desire or memory of the effects, which may or may not translate into a game effect, at GM discretion.

A sampling or drugs is below, along with a few nicknames for the substance in question. All of these are rolled against the *current* HLT of the user to see if they take effect. Note that all of these are capable of being given in lethal doses, and administering one (or taking it yourself) is a Difficulty 4 Medicine skill task (Difficulty 3 if inhaled). If the roll is failed by more than the user's HLT, they have somehow overdosed or underdosed. In the former case, you take a lethal impairment to HLT of the amount failed by, which can kill you if it drops you to 0. In the latter case, you get a point less effect per point missed by.

LSD (acid) - May be absorbed through any mucous membrane, or through the skin if mixed with an agent which can cross this barrier (like DMSO). The user must complete 4 Difficulty 10 HLT tasks to avoid taking effects, at 10 minute intervals. Each failure reduces the user's AWR by 2, in the sense that 2 points of their AWR is experiencing things that aren't there. This can be very confusing when reality and hallucination are mixed, but once "real" AWR goes to 0, the character becomes totally inert, lost in a world of their own. This lasts for 30 minutes per failed roll, after which the effects reverse at the same rate they occurred at. Addition rating 4/1.

Chloral hydrate (mickey finn) - This is usually ingested, and is mixed with strongly flavored food or drink to disguise its taste (Difficulty 9 AWR task). The user must complete 4 Difficulty 10 HLT tasks at 15 minute intervals to avoid taking effects. Each failure is a cumulative -2 to all skill use and attribute rolls (except HLT). When both AWR and WIL drop to 0, the character slumps into unconsciousness. The first effects reverse after 2 hours, and other failed rolls revert at 30 minute intervals. Addition rating 0/0.

Heroin (horse) - May be ingested, injected or smoked, with varying onset time for each. If injected, the user must complete 2 Difficulty 12 HLT tasks to avoid taking effects, at 5 minute intervals. Each failure cumulatively increases the user's WIL (pain tolerance) by 1, and reduces their AWR by 2, in the sense that 2 points of their AWR is experiencing things that aren't there. The user is likely to have some form of hallucinations, but is not likely to be extremely energetic or overtly violent. Think "opium den" for visualizing the effects. These last 4 hours, and other failed rolls revert after another hour. Addition rating 12/1.

Cocaine (snow, crack) - In the more popular crack form, it is smoked, and the user must complete 2 Difficulty 12 HLT tasks to avoid taking effects, at 2 minute intervals. Failure on either one increases the AWR and WIL of the user by 2, as they experience a sharpening of perceptions and a sense of euphoria. While the user's WIL is increased by 2 for purposes of pain tolerance, it is reduced by 2 for purposes of Psych Lims, so this may bring out latent traits that would otherwise be kept in check by self-control. These effects last 15 minutes per HLT roll failed, and the effect reverse totally at the end of this period, leaving the user feeling "slow" and depressed. Addition rating 12/3.

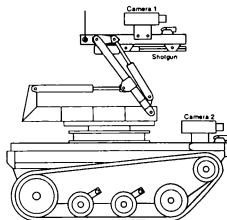
Amphetamines (speed) - May be ingested or injected, with varying onset times. Ingested, the user must complete 3 Difficulty 9 HLT tasks to avoid taking effects, at 15 minute intervals. Each failed roll cumulatively increases the AWR of the user by 1, and negates 1 point of any penalty taken due to exertion, thirst, starvation or lack of sleep. The effect lasts for 4 hours, after which the stats and losses revert back, at 15 minute intervals. If extra exertion or other losses would take the character to a HLT of 0 or lower, they pass out at that time. Likewise, a character at 0 HLT could be made conscious and mobile for a short time by administration of amphetamines. Addition rating 9/1.

PCP (angel dust, gorilla biscuits) - This was originally a surgical anesthetic in the 1960's, but dropped due to side effects. It may be injected or absorbed through the mucus membranes. The user must complete 3 Difficulty 9 HLT tasks to avoid taking effects, at 5 minute intervals. Failure on any of these decreases the AWR and increases the WIL of the user by 2, and multiple failures have cumulative effect. AWR effects only apply to thinking, rather than perception. If AWR goes to 0, the user is incapable of rational thought, and will act purely on animal instinct. This more or less takes the form of violence to anything that gets in the way. In extreme cases, the user can increase their STR by the same amount as their WIL was increased. The result will be an attack vs. the body parts the STR was used with, counting as combination damage. This allows for the phenomenal feats of strength attributed to dusters, and also means they are likely to break bones doing them. The first effects reverse after 2 hours, extra failed rolls reverting at 15 minute intervals after that. Addition rating 6/1.

OK3 EOD robot - An EOD (Explosive Ordnance Disposal) robot is designed for bomb defusing operations that are deemed too hazardous for a human to perform. They can also be used for remote surveillance of sites that have other environmental hazards, like toxic gas, radiation, etc. The stats below describe a typical, medium-size robot, which might be made under a variety of names by major industrial nations. In this case, the manufacturer is Evans Deakins Industries, of Australia.

It is roughly 1.2m long, .7m wide, and 1.3m high. It masses 300kg, and takes up 3 points of cargo space in a vehicle. It is operated by a radio or wired remote control (an AGL skill), which has a maximum range of 1km or 100m, respectively. Top speed is 1m/sec, and it will run for up to 10 hours on a rechargeable battery pack. The vehicle can climb stairs. It is equipped with 2 television cameras and microphones, which may be low-light or thermal versions if necessary. The first camera is body-mounted, and faces forward. The second is mounted on the robot's single manipulator arm. Both apply an extra -1 modifier to all AWR rolls, and only have a 60° field of view.

EOD robot



The manipulator arm can extend up to 1m beyond the vehicle in any direction, and it has a STR of 3. This manipulator arm will usually have 2 of the following: Gripper claw, semi-automatic shotgun, portable x-ray unit, bomb sniffer or bomb disruptor. The manipulator arm moves too slowly and clumsily to allow use of a weapon, or use as a weapon, and the shotgun would likely be used to blow open locked doors.

The bomb disruptor is a special single-shot projectile weapon, designed to blow apart an explosive charge before it can detonate, either with powdered lead, ceramic or a high-velocity jet of water. It has a DV of 5, and a successful "kill" on a charge means that it has been neutralized (as in "breaking" a piece of equipment). An exact roll means the charge goes off, but with 2 points less damage than normal.

For being damaged, the robot is treated as a small rear-engined vehicle with an overall AV of 5. Battery hits (fuel) subtract an hour from endurance per point of impairment. Window and Body hits are counted as Accessory hits, and the possible Accessory items are:

EOD robot accessories:

1. Body camera
2. Manipulator arm camera
3. Manipulator arm traverse
4. Manipulator arm elevation
5. Manipulator arm item #1
6. Manipulator arm item #2

Cost for a large EOD robot is approximately \$100,000, and includes training for 1 operator to a basic level of familiarity (enough to get an "out of combat" bonus, or 1SP).

OK₁ **Ejection seat** - A mandatory accessory for anyone who intends to fly and fight at the same time. The basic ejection seat simply blows you out the top of the plane, hopefully *after* the canopy, and is equipped with a parachute that will open within 300m, and counts as a fall from any distance that is lacking, should you hit the ground without this much clearance. As the violence of ejection can break bones, pull muscles and rupture disks, the user takes an automatic -3 lethal impairment to their whole body. This type of seat might be found in Second or Third World countries, or on light jet trainers or small combat aircraft. It costs around \$10,000. The advanced model is what you would find on a modern fighter. It rockets the passenger out of the plane after blowing off the canopy, and contains its own attitude adjustment system, so even if the ejection takes place upside down at 100m of altitude, the seat will right itself and rocket skyward, far enough that the built-in parachute has time to deploy. The user automatically takes a -3 impairment, of which 2 points are lethal, and 1 point is non-lethal. This version is harder to get a hold of, and costs \$100,000 (or more).

Ejection seats may only be used at flight velocities of less than 150m/sec. Each 20m/sec over this adds an extra point of lethal impairment from the ejection, until the occupant lands gently, but like a lump of raw hamburger. For obvious reasons, neither version works on helicopters.

OK₁ **Fiberoptic surveillance** - An abrasion-resistant fiberoptic cable with a built-in light source. This can be wormed into narrow openings and crevasses to do a visual inspection where normally it would be impossible, like inside vehicle bodies, gas tanks, walls, etc. The field of view is narrow, and extends only several cm past the end of the .5m long device, but it is excellent for customs searches that would have otherwise required disassembly of a vehicle. Counter-terrorist teams are suspected of having a similar device, with a longer reach, wide-angle lens and TV camera. This can be placed at the corner of a window, and provide a fish-eye view of an entire room, or be wormed up to a ventilation grille by means of a hole drilled elsewhere. Size 4, AV1, .4kg, \$150.

Furniture - For those of you who get ambushed in your houses, apartments or favorite restaurants, the following domestic items will generally have the following AVs for slowing down bullets. The first number is how much is needed to get through the case of the item, and how much is required to go completely through. These AVs are not halved for normal gunfire.

Item	AV	Damage to penetrate
Small television	1	3
Large television	1	4
Microwave	1	5
Refrigerator	1	5
Refrigerator door	1	2
Washer or dryer (empty)	1	5
Washer or dryer (full)	1	8
Console television	2	6
Sofa	2	5
Heavy sofa	2	6
Kitchen chair	2	3
Heavy chair	3	4
Table (overturned)	3	4
Heavy table (overturned)	4	5

Example - Attacked in a restaurant, you dive for cover behind an overturned table, fortunately a heavy one. Any damage of 4 or less sticks into the surface or body of the table. Damage of 5 gets too close to the other side for comfort, and any damage *greater* than 5 goes through and hits targets with the remainder.

OK₁ **Hardcase** - Protection from vicious baggage handlers, *par excellence*. This is a mil-spec case of superhard plastic, lined with foam rubber, custom cut for the equipment of the owner. The case provides an AV of 5 against all melee attacks and falling damage to the items therein (AV of 2 vs. guns, AV4 to penetrate both sides with gunfire). In addition, it locks, floats and is waterproof. Size 12 case (holds Size 10), AV5, 3.0kg, \$150. Size 9 case (holds Size 7), 2.2kg, \$120.

OK₁ **Invisible fence** - Used for control of dogs and other wild-life. The animal to be restrained is equipped with a collar which delivers an electric shock if the animal approaches to within 5m of a buried electric cable, which radiates a low-power radio signal. After an initial demonstration and a few weeks experience, the animal will curb almost all natural instincts (anger, mating, etc.) rather than attempt to cross the invisible line (Difficultly 10-12 WIL task, based on situation). In fact, the actual collar can be removed and replaced with a dummy version in many cases, as the animal remembers and has no desire to get close enough for a repeat experience. In CORPS terms, it is a way to channel and control guard animals, while still having them loose on one's property. The cost of the "fence" is about \$3 per meter, more for very short lines, and less for longer ones.

OK₁ **Lineman's set** - A portable telephone set used by repairmen and other troubleshooters. It can be attached with clips onto any phone line, and used to monitor, interrupt or make calls from the line connected to, as well as performing simple diagnostic functions. The extra drain it places on the phone line can be detected by equipment attached to the same line. Size 4, AV1, .4kg, \$300.

✖₁ **Luggage alert** - A useful device for frequent fliers, this consists of two units, a Size 1 transmitter that you carry one your person, and a Size 2 receiver that is in your carried luggage. If you and your luggage are ever separated by more than 6m, the receiver can no long pick up the signal from the transmitter, and squeals a loud alarm to let the owner know that they have either left it behind, or that it has been stolen. They both run for 100 hours on a standard 9v battery. Advanced models might have the receiver also act as a smoke detector and/or "door-touch" alarms for hotel use. Size 3 (total), AV0, .2kg (total), \$50.

✖₁ **Personal library** - Characters may start the game with sources of reference information, or gather such material during play. It is possible to have enough personal material to allow Investigative Research tasks based solely on a character's personal collection of books and documents.

A personal library will be built of books on a number of discrete subjects, each of which will have a rating, which is the *maximum* Difficulty of a research task that can be successfully completed. The library does *not* substitute for a character's skill, but just gives them a convenient way to use it.

A sum of \$500 will get you a Level 5 library on a particular subject. The depth of this subject depends on what it is, but is generally the scope of a single Secondary skill. For instance, you could have reference books on cars, pistols, astrology, etc. But, you would be more likely to have books on the Primary skill of Martial Arts as a whole, rather than just books on punching. The GM has to decide the scope of a given collection. In general, if the library will cover part of the subject rather than all of it, the library's Level is reduced by 3. So, your Level 5 library on Martial Arts might make reference to the ancient arts of the Ninja, but only be useful to a Level of 2, which isn't much.

The Level of a library can be increased in most cases by spending money, the exception being for skills where no reliable reference books are available, like mutant powers, secret organizations, etc. A character may be able to acquire such books through appropriate contacts at double cost, and may start off with a library on these subjects with a Level equal to their personal skill in the matter (if they decide to spend the money on it).

Every time you *double* the cost of the library (on a given subject), its level increases by 1. So, a \$1,000 library is Level 6, a \$2,000 library is Level 7, a \$4,000 library is Level 8, and so on. Characters who have a good library on an esoteric subject may find there are odd people who want to use it, and others who want to steal or destroy it.

✖₁ **Pointer UAV** - A UAV is an Unmanned Air Vehicle, more commonly known as an RPV, or Remotely Piloted Vehicle. The Pointer is manufactured by AeroVironment in the US. It is a militarized, ruggedized, battery-powered plane with a nose-mounted, fixed focus TV camera (-2 to AWR rolls). It has an endurance of 1 hour, and can fly anywhere from 9-20m/sec, and can transmit TV pictures up to 5km. The long battery life is due to lithium battery packs, which cost about \$100 each. Rechargeable batteries only last about 15 minutes, but are sufficient for practicing with the aircraft.

For combat purposes, the Pointer is counted as the same size as a person to be hit, and usually is at significant range and velocity, making it a difficult target, necessary because it has an AV of 0. Target locations are as for any other vehicle.

The only components likely to be damaged are Controls (radio link), Fuel (battery), Engine or Accessory (TV camera), as the foam-core wings and body will accept numerous punctures without significant loss of performance. All internal components are counted as Size 2. In case of control loss, the vehicle automatically lands itself by stalling, and dropping like a leaf. This is also the normal method of recovering the craft after a flight. Spotting the Pointer is as for any other man-sized object, but it may be camouflaged to blend in with the sky, and the electric motor is only a +1 to be heard on hearing AWR rolls.

The complete system takes up two backpack-size cases, and costs \$5,000. The first case masses 16kg, and includes a hard-shell backpack (AV2, Size 50), the disassembled Pointer (4kg), and several sets of spare batteries. Assembling the Pointer is a Difficulty 5 AGL task (3 minutes). The other case masses 18kg, and is also a hard-shell backpack (AV2, Size 40), containing the control unit, TV monitor, 8mm VCR, and folding directional antenna for maintaining the radio link.

✖₃ **Portable door** - Or linear shaped charge. The same principle that allows the conical shaped charge in a HEAT round to blow through tank armor, also works if the shaped charge is laid out like a strip of rain gutter. These charges come in various weights, a heavy commercial variety massing 3.5kg per meter, and containing .25kg of high explosive per meter, and a lighter variety massing 1.8kg per meter, and only containing .1kg of explosive per meter. The heavy variety has a cutting, armor-piercing DV of 40, and the small having an armor-piercing DV of 18. The salvage and demolition uses are obvious. In addition, it sees use as a counter-terrorist tool, since it allows instant creation of a man-sized doorway through 20mm of steel plate (like a ship bulkhead), or 120mm of cement (like a cinderblock wall). Naturally, it requires an explosives permit to buy through normal channels. The small size costs \$10 per meter, and the larger size costs \$25 per meter. Size, mass and concealability of the material depends on how much is carried, and in what lengths.

✖₁ **Portable factory** - One of the benefits of computer technology is that you can now manufacture almost any small mechanical device in the safety and privacy of your own home. This system is a computer aided design (CAD) system, attached to a computer-controlled lathe, milling machine and a few other tools. The result is that any mechanical object you can create on-screen, can be duplicated in plastic, wood or metal on the machines. All that is required is that you move the partially completed part from station to station, and change tools if needed. The maximum size object that this particular setup can make is Size 7, which means that as long as no component of the object is larger than Size 7, you can make it.

The time spent in making an object depends on its complexity and the hardness of the material to be worked, and cannot readily be quantified. What will take a lot of time is the design of the object to begin with. The GM will assign a task Difficulty and a time increment for a given object or component, and the character will have to succeed on it vs. their mechanical engineering ability to complete the task. Failure means wasted time and material, as you did something wrong somewhere along the way. Or, you could pay someone to design something once, and run off as many copies as you want of the item from the information stored on disk. The total setup is Size 300, varies in AV from 1 to 10, masses 300kg, and costs \$25,000.

Other

ακ₁ Portable radar - In use with most First and Second World armies. This is a man-portable radar package, which can detect a walking man at 1.5km, or a moving vehicle at 3km, regardless of weather conditions. Naturally, the object has to be moving in an unobstructed area, but it provides early warning capability beyond the range of most night vision equipment. Proper use requires a skilled operator to interpret the audio and visual signals generated, and the AWR of 8 the unit has is averaged with the skill of the operator for detecting and classifying targets. Battery life is about 20 hours, but it will run off a vehicle's power supply if necessary. Size (packed) 40, AV2, 20kg, \$10,000.

ακ₁ Radio detonator jammer - This prevents the operation of most radio-detonated explosives by creating too much radio noise to let a coded signal get through. Most modern radio detonators will not work unless they receive a proper combination or sequence of tones on the proper frequency, to prevent accidents, and the radio noise prevents this from coming in clearly. The strength of the jammer drops off like the chance to hit for ranged weapons, losing a point of effect per range step. As long as its strength stays greater or equal than the detonator's strength at the site of the bomb, the bomb cannot be detonated by radio. A typical vehicle-mounted jammer will have a jamming strength of 20, and a typical detonator will have a strength of 5. If unopposed, this detonator will have a range of about 600m (20 steps past its strength). Size 20 (1/5th a vehicle cargo space), AV1, 10kg, \$5,000.

Os Sikorsky Cypher - This is another UAV, under development by Sikorsky in the US. It looks like a flying donut (and might easily be mistaken for a UFO). It is powered by a small internal combustion engine, driving a pair of shrouded, contra-rotating rotors. It can carry a variety of payloads (up to 10kg), has a control radius of 30km, and can maintain any speed from a hover to 25m/sec. The exhaust noise will be a +2 to spot on hearing AWR rolls, but the type of sound will depend on whether the final powerplant is a small gas turbine or conventional rotary engine. For combat purposes, treat it like the Pointer UAV, but it is +1 to be hit due to size, it has an AV of 1, and components are Size 6 instead of Size 2.

ακ₁ Simulators - These are made for almost every vehicle type and weapon system known to man, and a few that aren't (i.e. BattleWarMechBots, etc.). If characters have access to simulators, they may be able to acquire experience with systems they would otherwise have no access to, or which are too expensive to let them mess up with ("...sorry about your \$10,000,000 fighter plane..."). It might also be good for gaining familiarity with "enemy" equipment, or training for anticipated situations, using simulated models of a building to get a small Area Knowledge, for instance. Characters gaining experience in this way may apply it normally, but do not get to use any "out of combat" bonuses until they gain experience with the "real thing". Likewise, no simulator is perfect, and if a roll takes any negative modifiers at all, the *total* negative modifier is increased by 1 until the character gains experience through actual use. "Experience" in both these cases is counted as 3SP (the number of SP it would take to get to a skill of 2 from an Aptitude of 1).

ακ₁ Trip flares - These are made by any number of firms. In their simplest form, they are a spring-loaded trigger attached to a blank shotgun shell. If you hit the tripwire, it goes off, alerting people to your presence. 12ga flare cartridges provide a visual indication of intrusion if there are several trip flares in the area. These only mass about .1kg, and can sometimes be found in hunting or survivalist catalogs for \$20 or less. They will not fire normal cartridges, as they would rupture without a gun barrel to support the pressure.

Military trip flares operate on the same principle, but are louder, brighter, or last longer. For instance, there are versions which will set off a number of reports in quick succession, or send a number of illumination flares up over a period of 1 minute to light the area of intrusion like daylight. A dispenser of these would have the stats below. Size 10, AV3, 2.0kg, \$50.

ακ₁ Vehicle navigation system - Still in experimental stages in the US and Europe, but currently available in Japan. This combines a CD ROM map of an area with an inertial movement sensor and special-purpose computer. Once an accurate location is loaded into the unit, it will provide continuous, accurate location of the vehicle, which may be enhanced by the computer figuring an optimum travel route to a given destination, continuous time-to-destination readouts, or location of certain objects of interest. For an area like Japan, a half-dozen disks are sufficient for most of the country, with most of the memory devoted to high-density urban areas. Size 20, AV0, 4.0kg, \$3,000.

ακ₁ Wescam camera mount - This is a remotely-controlled, fully gyro-stabilized platform which can mount a camera, sensor or other object which does not have a large mass or recoil. The user's skill with the system (+0 difficulty, based on AGL) adds to their AWR modifier for visual identification purposes. In addition, any camera mounted may use a magnification of the operator's skill as well, without suffering any minuses for movement. For instance, a person with a skill of 3 could add +3 modifier to AWR rolls for visual identification, and divide the apparent range by 3 as well (if the camera had a 3x lens).

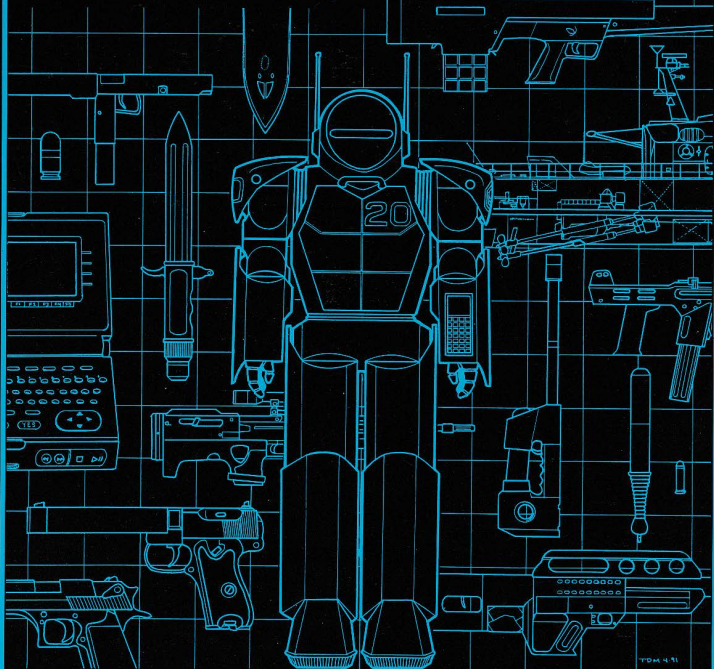
As an example of the capabilities of the device, the manufacturers have a video tape which shows the legible license plate of a car, taken from a helicopter 1km away and at a relative velocity of 45m/sec (160kph/100mph). Size 40, AV3, 25kg, \$10,000.

X-Jet - A personal VTOL craft that is still in the prototype stage (officially), manufactured by Williams International in the US. About the size of a phone booth, but only waist-high, it runs off a single turbofan engine, and can fly a single man (100kg) up to 30m/sec (108kph/66mph), up to a maximum altitude of 3,000m, with a climb rate of 4m/sec. It has an endurance of about 30 minutes, regardless of speed, since the engine has to work hard to simply hover. It was first proposed to the US Army, but they apparently had no use for it. Its current status is unknown.

It is an extremely interesting vehicle, but its light carrying capacity limits its ability to carry armor or other safety devices in case of engine failure. While a parachute would be useful for any altitude over 200m, there is the gap between about 20m and 200m where a fall would prove very fatal. Its +10db turbine engine can be heard over long distances, and is +3 to spot on hearing AWR rolls. Size 150, AV1, 170kg, \$50,000.

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