the enemy and used primarily as a first strike infantry unit and in swarming attacks. Even among these large units, 25% have no human supervision.

A **division** is composed of three or more battalions of up to 5760 troops. As of this time, there has never been an entire division exclusively made up of Skelebots, but during the Tolkeen offensive, there were divisions where half the troops were Skelebots and half were humans or humans and Dog Boys.

Comprehensive Coalition Army Data

Basic Coalition Military O.C.C.s, combat gear and Skelebots are described in the pages of **Rifts® Ultimate Edition**. The new and different Skelebots, power armor, robot vehicles, tanks, rocket bikes, and other weapons and data are all waiting for you in **Rifts® World Book 11: Coalition War Campaign**. Also check out the too often overlooked **Sourcebook Four: Coalition Navy**. Both books also offer a number of threads for spinning adventures. They are set in 105 P.A. but designed to be valid through the Siege on Tolkeen to present. The massive 356 page **Rifts® Game Master Guide** also contains abbreviated stats for all CS gear along with hundreds of other weapons, robots, power armor, vehicles, O.C.C.s, R.C.C.s and other data. Just thought we'd let you know.

Robot Creation Rules

Robot R.C.C. (Optional)

The robot is considered a *Racial Character Class* only when the character has an advanced artificial intelligence (A.I.) and thinks for itself. A.I. does not apply to robot vehicles, suits of power armor or even creations like the Coalition's *Skelebots*. Robot R.C.C.s are unique, *synthetic beings* with their own distinct personalities, skill sets and abilities directly related to the robot's physical design, purpose and intelligence. The film character *Data*, from *Star Trek: The Next Generation*, is an example of a Robot (android) R.C.C., and so are the *Terminator, C-3PO* and *R2-D2*. Which means a robot character is likely to have some level of human-like personality and traits.

The character may be the result of lost pre-Rifts technology from the Golden Age of Man, an experimental prototype created by a high-tech power like the Coalition States, Triax, or A.R.C.H.I.E. Three, or an alien/D-Bee construct from another world or dimension such as the Splugorth of Atlantis, Naruni Enterprises, Phase World or any number of unknown worlds that could be momentarily connected to Rifts Earth.

There are some definite advantages and disadvantages to playing the 'Bot Racial Character Class ("'Bot" is the Rifts slang term for robot, of course).

Some of the obvious advantages are that robot characters start off incredibly skilled and capable, are Mega-Damage constructs (made of M.D.C. armor and materials), and have superior physical attributes, i.e., faster reflexes, speed and greater physical strength (Robotic) than humans. Furthermore, the robot is not vulnerable to disease, is impervious (or at least resistant to)

fatigue and can withstand extremes of cold and heat, and does not need to eat, drink or breathe (can survive in a vacuum). The character may also possess an array of sensors and/or some built-in weaponry.

Some of the disadvantages: 1) A damaged 'Bot does not heal like a creature of flesh and blood, consequently it may be difficult to effect physical repairs of any kind, and robot repairs will always be extremely expensive.

2) In most cases, the robot can not learn new things. It is stuck with its initial or primary *programming*. Super-advanced neural robots with *simulated emotions* and the ability to draw their own conclusions are the most sophisticated type of robot, but are *beyond* the technological capabilities of most societies on Rifts Earth.

3) That means repairing a severely damaged *advanced robot* might be impossible or limited to partial repairs, leaving the 'Bot effectively impaired or crippled.

4) *Advanced robots* with advanced Artificial Intelligence (A.I.) must be the constructs of aliens (Splugorth, Naruni, etc.), high-tech D-Bees, or A.R.C.H.I.E. Three (Cyberworks), and can *not* be repaired by the average robot mechanic or Operator O.C.C. of the day. Even the Coalition and Triax lack the knowledge to repair true A.I.s and advanced robots of alien origin (not of this Earth). Even internal workings, advanced sensory capabilities, alien weapon systems, programs, and reprogramming may be beyond their capability. The high-tech Earth civilization *may* be able to substitute their own technology, sensors or weapons, but may *not* be able to repair or re-engineer something more advanced and/or alien — at least not without years of study, experimentation and reverse engineering.

5) And that leads to a disadvantage many don't think about. The advanced A.I. or alien robot may be highly desired and coveted by tech nations and manufacturers like the CS, Triax, Northern Gun, Manistique, Whykin, the Black Market, Atlantis, etc., but for the purpose of being dismantled and studied so that they can figure out and copy the tech-advancements for their own gain. Or the advanced robot may be considered a threat – spy, alien invader, etc. – to be destroyed!

Types of Robots

Accessory Units
Drones
Artificial Intelligence (advanced)
Neural Intelligence (advanced)
Transferred Intelligence (advanced)

The distinction between robots is a bit different from those found in the pages of Palladium's super-hero game, **Heroes Unlimited**, although many of the rules and procedures for creating robot characters are taken from that role-playing game. There are five distinct types of robots. Each distinction is based on the robot's *intelligence* and *programming*.

1. Robot Accessory Units are the most common 'Bots in the world. Many players may already own and operate one. The typical accessory unit is a robot designed for human augmentation; not cybernetics, but a complete robot that *requires a human operator*. This includes *power armor* which are advanced robotic exoskeletons and *robot vehicles* of all kinds. The best power armor or robot vehicles possess various computer systems that *enhance* the human operator by giving him or her mechanical superhuman strength, agility, machine-level speed and augmented senses such as radar, targeting, optic systems, and so on. The human, by *piloting the robotic construct*, becomes a super-powered, Mega-Damage being. **The mechanical unit** is a robot, but it is the *human pilot* who serves as *the brain*. Without the human pilot to govern the robot/power armor, it is just a bunch of inert machine parts, servos, electronics and armor – a flesh and blood pilot is needed to bring it to life, so to speak, and direct and control its every action.

In some ways, this is the best of both worlds. The robotics engineers can focus all of their attention to the power and capabilities of the *robot body* and not have to worry about the difficult problems of an artificial brain, because the human pilot is the robot's brain!

Typical Level of Intelligence: As per the sentient pilot/operator required to run this robotic accessory.

2. Robot Drones or Simple Intelligences are the next most common robots in the world. These are robots that have a complex computer brain with set programs and often extensive, but limited knowledge. The *Skelebot, Dyna-Bot* and *simple work bots* are examples of the **Robot Drone**. In all cases, the 'Bots can perform human-like tasks and have human-like reactions to situations and even be humanoid in shape, but they lack the true human capability to make decisions. They also lack any sort of emotional response, they are *machines* programmed to do a job, nothing more.

In a role-playing context, the Drone would be difficult and unpleasant to role-play, because the human player will be driven by emotions and ideas that the robot would never have. These 'Bots follow very limited and direct programs like seek and destroy or a particular range of labor. They do not question their purpose, work or commands, nor do they speculate, ponder or dream. They don't have desires or fears and never digress from their programming. The Drone simply does its assigned task without hesitation and exactly as programmed. If the robot is programmed to clean a house, it will perform all the tasks it is programmed to execute. If that program does not include straightening the carpets or moving furniture to clean underneath them, the robot will *not* do so. Nor will it wash windows unless that is part of its "work" program.

Typical Level of Intelligence: I.Q. 1D4+7

3. Robotic Artificial Intelligence (A.I.) is found in sophisticated and advanced robots a bit beyond the current capabilities of the Coalition States, Triax Industries and the rest of Rifts Earth. In addition to the complexity in creating an artificial intelligence (A.I.), the practical application and prohibitive costs have encouraged most robotics manufacturers to focus on the popular and efficient *robot accessory units* (robot vehicles, power armor, etc.). Triax Industries is close, but currently only Cyberworks (A.R.C.H.I.E. Three) and the occasional alien from a dimensional Rift have the capabilities of creating robots with an artificial intelligence that seems to be on par with the human mind and personality. All of *Cyberworks'/Archie's* robots fall into the robot intelligence category, because they are able to perform complex and varied tasks. Some, like the *Shemarrian* androids, are designed to look and act as if they were *alive*, complete with A.I.s and programming that *mimic* emotions and human responses. Shemarrians are even programmed with an elaborate sense of history, personality, and purpose that has everyone believing they are some sort of D-Bee. This ruse has lasted for more than 12 years. Most Robot Intelligences are also able to assess data, draw a conclusion and act on that conclusion within the parameters of their programming. Unfortunately, if the data is insufficient or the conclusion is contrary to the program, the robot can not take action or must *fake* what it believes is an appropriate response. As human as one of these robots may *seem*, it is not a living being with a soul, but a mechanical construct with programming that simulates human responses. **Note:** Shemarrians are described in greater detail elsewhere in this book, in the section on Archie 'Bots.

Typical Level of Intelligence: I.Q. 1D6+10

4. Neural Intelligence (N.I.) is the most advanced robot A.I. possible and a hundred years or more beyond the understanding and technology of the Coalition States and the rest of Rifts Earth. *Neural intelligences* are super-high-tech computer brains, created through nano-technology and sophisticated and complex technology that gives the 'Bot an artificial brain that simulates the thought processes of the human brain. In most cases, the A.I.'s "brain" is even constructed in such a way that it actually has millions of tiny nerve cells and information centers like a human brain. The machine-entity, *Archie*, was created as a neural intelligence, although he has mutated into something much more than a mere machine. Cyberworks/Archie has the capabilities of creating other neural intelligences, but seldom does so. For one thing, neural intelligences take a great deal of time and

resources to create. For another, they are somewhat unpredictable, with the robot exhibiting a genuine personality, quirks of character, and even desires, fears and anxieties that can get in the way of machine functionality. N.I. robots are much more resistant to stress and insanity than humans, but may develop quirks and mental illness as the result of severe emotional or physical trauma. Otherwise, robots and androids with neural intelligence can behave very human and think beyond the capabilities of their basic programing. This means they can learn new skills, extrapolate on existing skills, modify their behavior, adapt to their environment, make judgements, have an alignment, speculate, theorize and think outside the box. Many believe N.I.s can eventually develop a truly distinct personality just like a person, and even develop a soul. However, few ever exhibit the full range of imagination and artistic creativity (art and writing) that humans and other humanoids exhibit. Instead, they tend to be analytical, calculating and a bit reserved.

Archie sometimes creates N.I.s to blend among humans and be his "face" to the outside world, where they observe and spy on humans. However, these creations are not always loyal pawns of the machine-entity, and may experiment and pursue interests other than those of their creator. A human-like mind means the freedom to make choices, act on their own, be curious and take independent action, even defying Archie.

Robots with Neural Intelligence may also step through a Rift from an alien world or dimension. Such robots have the capacity to make conclusions on minimal data, act on hunches, formulate plans and execute them. They can also learn or be programmed with local customs, speech patterns, slang and behavior to the degree that they may appear completely human or D-Bee, thus making them effective spies and advance scouts for invaders.

Typical Level of Intelligence: I.Q. 2D6+11

Note: Of course, no matter how human a 'Bot may act, it is all an illusion created by ingenious programming and an advanced machine brain. A.I.s and N.I.s do not register as a living presence, they cannot be affected by psionics, have no biological aura, no P.P.E. or I.S.P., or any other aspect attributed to organic life. They are complex and frequently, friendly and pleasant machines. That being said, advanced androids, like the *Shemarrians*, may have artificial systems and measures that appear to be biological and alive, especially in the wilderness or field of battle, but an autopsy or careful medical examination would reveal otherwise. An N.I. *may* become human-like with its own mind, personalty and soul, but it is NOT, and can never be, physiologically human nor "alive" in the same sense as a human being.

5. Transferred Intelligence (T.I.) is a completely *alien* technique found only in rare robots created on some alien world or dimension. It is not an artificial intelligence at all, but an as of yet unknown process in which the mind of a living being is transferred from the mortal body into the robot body. Actually, the transference is more than intellect. It's more of a *life essence* transferal, because the complete mental, emotional, and energy (P.P.E./I.S.P.) essence of a living, intelligent being is transferred and housed inside the robot! The process leaves the physical body an empty, but living, shell. The original organic body can be stored and sustained for years by high-tech medical systems, although muscles will atrophy and body weight and strength is lost. In some cases, the living subject may volunteer to perma-nently forsake the mortal body in favor of the artificial one. In some ways, this may sound like a full conversion cyborg, but the process is far more dramatic and complete, leaving absolutely no organic brain, tissue, organs or fluids. The entire body is a machine and only the electrical impulses that are the mind have their origins in flesh and blood long forsaken.

The *transferred essence* is housed in an artificial brain similar to the design and function of the neural intelligence. The brain or essence *housing unit* is usually quite small, about the half the size of the human brain to that of a chicken's egg, and is located either in the head or chest (the latter provides main body protection). Because the intelligence and essence are of organic origin, the robot will have a strange but living aura, will register as a psychic presence, can be affected by psionic attacks, and will have a small amount of detectable P.P.E. (though never enough to be a spell caster). This character may even possess limited psionic powers, and is subject to stress, insanity and mental fatigue, though not physical pain or disease, and is resistant (+5 to save) to possession. However, the robot does not need to eat or maintain any animal-like bodily functions, and only requires four hours of sleep or meditative rest per day (24 hours). Destroying the brain housing will effectively kill the robot. Once dead, the essence can not be recaptured, it is gone. If the *brain housing unit* is removed intact and without serious damage, the housing unit can hold the transferred essence for 3D6+22 years without a larger, physical body or power source. After that period, the mind and essence will leak out of the housing unit and vanish. However, if placed inside a robot body and given a sense of life and purpose, the transferred essence can last for an estimated 2D6x10+200 years before exhibiting signs of mental degradation or trauma such as memory loss, deterioration of skills (reduce -1D6x10%), delusions, or a range of dangerous insanities. A short 2D4 years later, the failing life essence will cease to exist. **Note:** The T.I. robot character should be extremely rare, probably alien or the result of an unexpected accident.

Typical Level of Intelligence: I.Q. 3D6+2

In the context of the Rifts® game, the typical *robot player character* will only be a robot" with an *Artificial Intelligence, Neural Intelligence,* or *Transferred Intelligence*; numbers 3, 4 or 5 described previously. The Robot Accessory Unit has no personality or intelligence whatsoever, and the Drone is a limited intelligence zombie that performs a regular routine without thought or emotion. Neither is suitable for a player character.

Step One: Determining the type of intelligence

First, Robot R.C.C.s are only allowed if your Game Master says it is okay. The G.M. may feel the character is inappropriate or too powerful for the adventure setting he is planning to run, so please consult with your Game Master before building a robot character.

If a Robot R.C.C. is allowed, the player may simply select one of the three available intelligences (A.I., N.I. or T.I.) described in the previous pages and move on to the building of the machine character's programs/abilities and body.
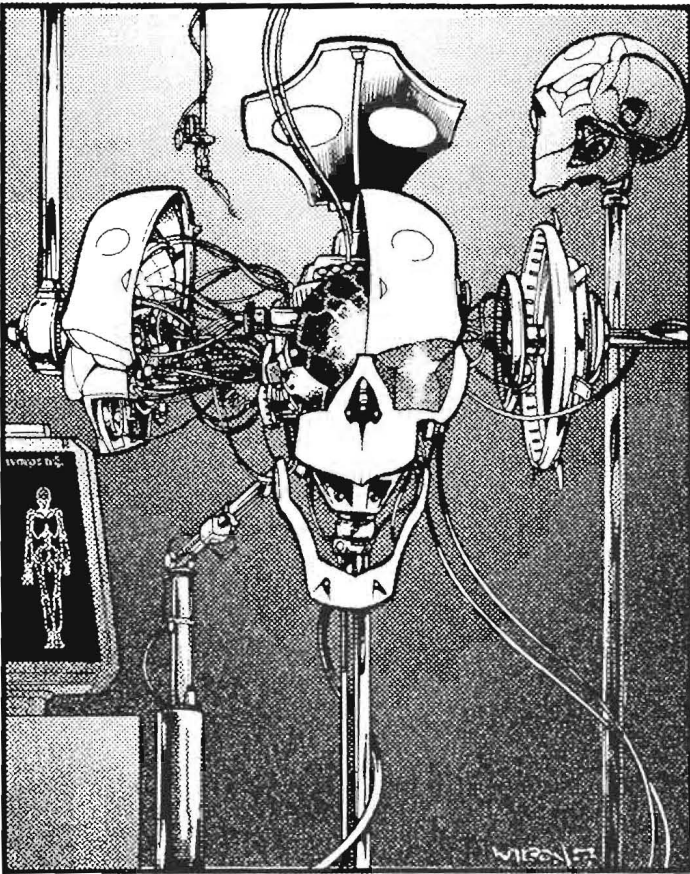
For a *random* determination, roll on the following table.

Random Intelligence and Origin Table

01-10% Artificial Intelligence that is the product of alien technology.

11-20% Artificial Intelligence that is a runaway *experiment* created by some branch of the Coalition States, Triax/New German Republic, Northern Gun, A.R.C.H.I.E. Three, the Black Market (probably the Bandito Arms division) or other source dabbling with A.I. and robotics.

21-30% Artificial Intelligence from the Golden Age of Science shortly before the Great Cataclysm. This robot is 300+ years old, but may have only been activated and let loose on Rifts Earth by an earthquake, discovered and unleashed by adventurers (found in the locker of an old bunker, military compound or basement storage of a corporation, etc.), was scrap parts until an Operator tinkered with putting them all together, or a similar situation. I.Q. Bonus: +2.

31-40% Artificial Intelligence who does not know who his maker was or where he might originate. Could be an Archie 'Bot gone rogue or a creation or experiment by someone else on Earth, but is more likely to originate from an alien world or alternate Earth dimension (e.g., Heroes Unlimited. Aliens Unlimited, Three Galaxies/Naruni, or god only knows where).

41-45% Artificial Intelligence from an alien world. The robot clearly uses advanced, alien technology and may even have alien features and characteristics that may (or may not) reflect the appearance of its maker. Likewise, this 'Bot character may be a stranger to the world of Rifts and human beings, so every encounter and experience for him is new and exciting or challenging.

46-50% Neural Intelligence. A runaway experiment from Cyberworks that has crashed to Earth in a spacecraft (originated from the moon or one of the space stations; see the sourcebook **Mutants in Orbit** for details) or may be a creation or experiment of the Republicans. The 'Bot knows it was created in a robotics factory somewhere in the East, but it does not know the exact location, its intended purpose or who created it. Knows nothing about Archie, but there is a 1-50% chance of remembering something about Hagan Lonovich or a paramilitary group operating in secret (the Republicans) but little else. Finds the world an exciting and wonderful place. I.Q. Bonus: +1.

51-60% Neural Intelligence. A creation of A.R.C.H.I.E. Three deliberately released into the world. The robot may have been released because it is defective/unsatisfactory to Archie, but rather than scrap it, he's "set it free" to live its own life. Or the 'Bot may be one of Archie's experiments, or a spy sent out to observe humans in general or a specific group (the other player characters?). In either of the latter cases, the 'Bot will have a tracking device built inside of it and a means of recording key events or transmitting data that Archie can retrieve and monitor for his own purposes or amusement. The 'Bot is completely unaware of this aspect of its being and the monitoring of the group does not represent any immediate danger to them. However, Archie may use the info he collects about the player group for his own manipulative purpose at some point in the future. The N.I. has no memory of its creator nor the location at which it was built. I.Q. Bonus: +2.

61-65% Neural Intelligence that is a runaway *experiment* created by some branch of the Coalition States, Triax/New German Republic, Northern Gun, or Free Quebec. (The Black Market is not likely to waste money on such costly experiments, there's little profit in it, though if they did create an N.I. it would be the Bandito Arms division located at Area 51.)

66%-80% Neural Intelligence of alien origin. This is a robot or life-like android from another world. It may be a scout deliberately sent to Rifts Earth or accidentally Rifted here with no way of getting home. The N.I. might also be a creation of the Splugorth Kittani or other slave race, an alien captive that has managed to escape the Splugorth of Atlantis, or similar 'Bot who has escaped the Naruni. I.Q. Bonus: +2.

81-90% Transferred Intelligence from beyond the Rift! An alien robot emerged from a dimensional Rift. The character may be on a mission for his people or a group, exploring the Megaverse, or torn from his own world by dimensional or magical energies and brought to Rifts Earth against his wishes. The alien robot's world of origin could include the *Skraypers* solar system, the *Three Galaxies*, the world of *Heroes Unlimited* or someplace unknown.

91-00% Transferred Intelligence resulting from an accident. An experiment in robotics, life essence transferal or life containment, dimensional teleportation, time travel, Techno-Wizardry or other magic has gone wrong, and the accident transferred *somebody's* life essence into a robot body. Here's the thing: the transferral could involve the scientist, technician, Operator or mage working on the project, or the victim could be an assistant or innocent bystander whose life essence was ripped from his body and placed inside the robot. The shocking transferal into the body of a robot is a completely unexpected and unwanted side effect that cannot be replicated nor reversed! The

character cannot switch back into his own body, he is *stuck* inside the robot. Whether he can take measures to preserve his original body will depend on the resources available to the character. In most cases (90%), the body dies in a few weeks. **Note:** An accidental transferal of intelligence/life essence makes the character's mind a *permanent* part of the robot. As a "freak accident," this means *any type* of *robot* found on Rifts Earth (Skelebot, Dyna-Bot, Archie-Bot, drone, etc,) or *robot vehicle* (UAR-1, Hellfire, Spider-Skull Walker, NG-V7 Hunter Mobile Gun, NG-Forager, etc.), possibly even *power armor* (Ulti-Max, SAMAS, etc.) may serve as the mechanical host body; *Game Master's discretion*. However, unlike a deliberate T.I. with a containment unit, the life essence resides somewhere within the robot, probably an onboard computer or the 'Bot's original A.I. or N.I. brain. Completely destroy the robot or the computer/brain where the life essence is contained, and the T.I. is destroyed. Rarely can the T.I. leap from one robot to another, and in the rare event that it does, it is never at will but by pure luck and circumstance (G.M. discretion). However, if the specific accidental containment unit can be identified, it can be carefully removed and placed inside a different robot, provided the unit is not detached from a robot unit for more than one hour.

In all cases, it is the T.I. that is the dominant force operating the robot. It overrides any other type of A.I. or control mechanism, so a robot vehicle does not need a manned pilot, the T.I. *is* the pilot housed inside one of the onboard computers or the robot's original A.I. or N.I. brain. A T.I. controlled robot has the personality, fears, desires and insanities of the mortal person whose life essence now inhabits the machine. A true "ghost in the machine."

Step Two:
Developing the A.I.

After the type of intelligence is selected, the player must choose his robot's skill programs and orientation.

Robot Alignments

### Artificial & Neural Intelligences

Yes, 'Bots with an A.I. have an *alignment* that is the direct result of programming. This alignment program dictates the machine's code of ethics, orientation and response to outside stimuli and interaction with life forms.

The following are some examples of how alignments apply to robots. **Note:** An N.I. or T.I. can be any of these alignments. An A.I. is usually Principled, Scrupulous or Aberrant, and on occasion, Anarchist or one of the others.

Principled (Good) alignment: The 'Bot is 100% loyal, reliable, trustworthy, truthful (cannot lie at all), and law abiding (never breaks the law). This 'Bot will not break even the simplest rule, like walking against a traffic signal, crossing a street anywhere but a corner, littering, etc., unless ordered to do otherwise by someone it knows, and even then it will question the order, citing the law and potential dangers and/or fines for the infraction. The only exception is when a life is in danger, then the 'Bot does whatever is necessary.

A Principled 'Bot will NEVER strike or harm a living being, except to protect another living person, or in self-defense, but will only fight to escape, stop/incapacitate the assailant, or to protect or rescue another person. It NEVER deliberately kills or attacks out of anger or hate. In fact, the Principled 'Bot values life so highly, it will, without hesitation, sacrifice itself to save the life of a human or other intelligent being (D-Bee, alien, etc.). This program dictates that human (and D-Bee) life is important, valuable and to be protected and preserved. A robot with this program will NEVER deliberately hurt a humanoid nor any living creature. If a person is in peril, the Principled robot will calculate the odds of success to rescue or protect a person, and if the percentage is greater than 15%, the robot will attempt the rescue. Unless an A.I. has a *Rescue Program* with specific protocols (like rescue children or women or authority figures first), however, it will generally help/rescue the first person it sees, or the person in greatest need. An A.I. can recognize and go to assist people it knows first, but will not have favorites and usually helps the first "friend" or "acquaintance" it sees. Only an N.I. or T.I. can make subjective choices like a human, such as saving a friend or a child first, deciding who has the best chance to survive, who is in the greatest danger, etc. **Note:** Otherwise follows all the usual standards and guidelines for the Principled alignment.

Scrupulous (Good) Alignment: This robot though fundamentally good, has a bit more flexibility and discretion in its judgement and adherence to the law and rules. It can judge that a situation dictates an infraction of the law or that a rule may be broken. However, it too is fiercely loyal, reliable and protective. A Scrupulous robot will sacrifice itself to save the life of a human or humanoid even when odds of success are as little as 5%.
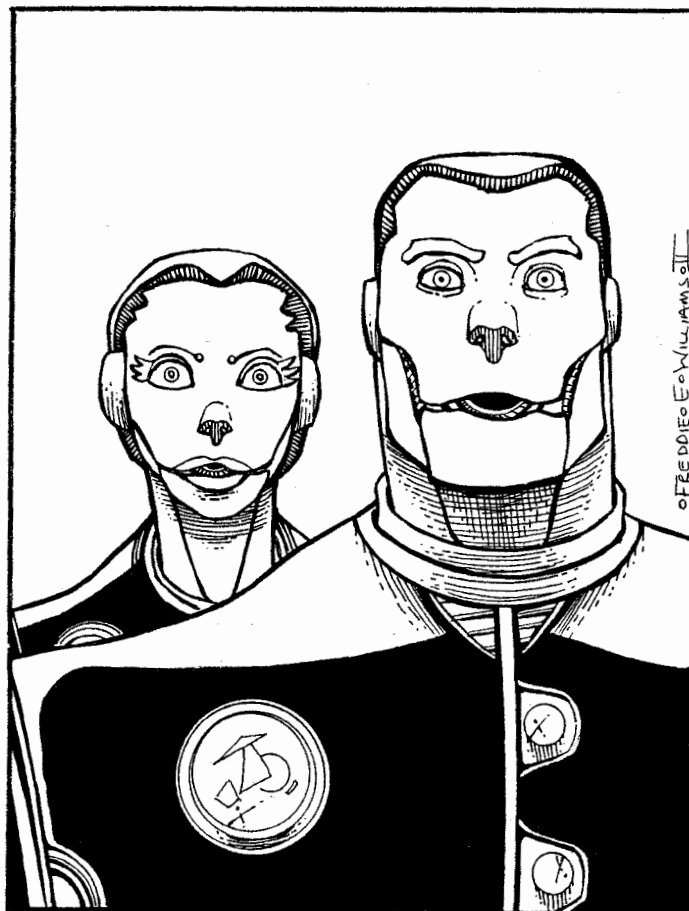
Note: Otherwise follows all the usual standards and guidelines for the Scrupulous alignment.

Unprincipled (Selfish) Alignment: This alignment program is usually reserved for robots who are to blend in with humanoid society and for Black Ops such as undercover work, espionage, robbery and rescue and prison break missions. Being Unprincipled, the robot may engage in acts of deception and bend the rules, work outside the law, lie, threaten and hurt people, interrogate suspects, and engage in other unsavory and illegal acts, but always remains true to its creators/programmers and its mission. Although humanoid life is valued, the robot's *mission* or *purpose* takes precedence, and the 'Bot is able to decide whether it should act to help someone in trouble and jeopardize the mission, or stick to it. However, if there is a better than 60% likelihood that its intervention will save or protect a life, the Unprincipled 'Bot usually takes action to do so. **Note:** Otherwise follows all the usual standards and guidelines for the Unprincipled alignment.

Anarchist (Selfish) Alignment: This alignment program is reserved for robots sent on Black Ops missions, including, espionage, spying, sabotage, vandalism, seek and destroy, and assassination. The Anarchist 'Bot often works alone, in pairs or a small group of six or less, and does whatever is necessary to get the job done. It also has a *high self-preservation instinct* (the selfish aspect), so it is unlikely to blow its cover or risk itself to help, rescue or protect anyone unless it falls within its mission parameters or offers some immediate benefit.

Robots with Anarchist programs are also sent on *suicide missions* and assignments where they are to inflict havoc and chaos usually intended to distract, mislead or otherwise engage the enemy (or specified target). Anarchist 'Bots may also be sent undercover as rogues within human/mortal society, acting as criminals, thugs, instigators and rabble-rousers. As a rule, this robot's prime directive is to do its job and survive to continue to cause mayhem or to return to its master. The unpredictable behavior of the 'Bot works to confound the enemy. Note that the Anarchist 'Bot goes rogue – engaging in activity outside the parameter of its mission objective and/or defies its master, 01-40%, and AWOL 01-33% of the time.

Aberrant (Evil) Alignment: This alignment program is common for robots sent on Black Ops missions of espionage, sabotage, seek and destroy, assassination and mass destruction. The Aberrant alignment enables the 'Bots to lie, cheat, deceive and break the law without hesitation and to do whatever is necessary to get the job done. They are merciless and relentless in the execution of their mission, while at the same time, the Aberrant robot is 100% loyal to its creator/programmer, dedicated to the execution of the mission and driven to get it done at all costs. The 'Bot may work alone, in pairs or in mixed groups of any size. If murder, killing, surgical strikes, terrorism, and organized mayhem are required, this is the best alignment for the 'Bot. The Aberrant alignment makes the mission and the preservation of the robot's master(s) top priority, and the 'Bot will let itself be destroyed before it will reveal or harm either. It also has a *high sense of self-preservation* for the mission at hand, its master(s) and then itself for the purpose of imposing its master's will. Thus, the Aberrant 'Bot is unlikely to blow its cover, break ranks or risk itself to help, rescue or protect anyone unless it falls within the mission parameters or will help toward successful execution of the mission. This 'Bot will lie, steal, manipulate, threaten and kill to get the job done, as well as to protect the identity and safety of its master(s).

Miscreant and **Diabolic alignments** are seldom used except for robots reserved for hunt and destroy, suicide missions, massacres, and wanton destruction. Laws and life are meaningless and the 'Bots kill and destroy without mercy or hesitation. They are literally, killing machines, whether their opponents/targets be women and children or armed troops. Likewise, these alignments may be programmed into robots designed to interrogate and torture, intimidate and extract information by any means necessary.

Note: Programmed alignments can*not* change, unless the program is changed. Robot Drones and A.I.s cannot feel the emotions of anger, hate, sorrow, love, etc., nor do they enjoy what they do, although their alignment program and behavior may emulate human emotion. For example, a 'Bot may say "I hate him for what he did to you," or "Demons turn my stomach," or "I'm going to enjoy killing you," but they cannot actually *feel* any of those things, they are just making a preprogrammed response to put fear into an opponent, or reflect the programmer's emotions, or which is part of a human personality emulation program. Likewise, a robot may be programmed to seek out, target and attack a particular race, occupation or type of individual, but is only responding to its program, not feelings.

Note: Only a robot with **Neural Intelligence (N.I.)** can develop and change its alignment as it learns more about emotions and how to respond to them. In some ways, you can handle this character in a similar way as the Dragon Hatchling, new to the human experience and learning how to respond to humanoids and deal with its own feelings. However, the N.I. will start with one of the alignments above.

A Transferred Intelligence (T.I.) has the same mindset, personality, range of emotions and insanities he had in life before becoming a machine-being. Unlike the other two artificial intelligences, the transferred essence has its roots in the living and emotions. Thus, the robot is driven by real feelings of emotion and acts on those emotions like any human. This also means that the alignment can change and insanity is a genuine danger to both the bot and those around him (nothing worse than a berserk robot driven by anger).

Step Three: Robot Budget

The next step is the actual *construction* of the robot's body, but first one must determine how much money can be spent on the project. The player does not have to spend all of the credits, but whatever is left is lost.

The amount of credits available for the initial construction of the body can be chosen and assigned by the Game Master, or randomly determined by rolling on the following table.

Robot Body Construction Budget

01-20% 14 Million Credits.
21-40% 16 Million Credits.
41-60% 18 Million Credits.
61-80% 20 Million Credits.
81-00% 22 Million Credits.

Step Four:
Skill Programs

Robot skill programs are generally *complete areas of knowledge* that have been instilled in the mechanism's memory. As such, the robot has near expertise in many areas, although the program is only as good, or complete, as the program designer can make it. Some programs have glitches or holes that reduce the level of skill proficiency or leave out a particular area of knowledge. Furthermore, robots are often *very specialized* in one or two particular areas. As a result, the robot may be an amazing automated fighter, medic or mechanic, but may lack a huge range of skills, including simple skills like driving a vehicle, reading text, or climbing.

The average level of skill proficiency is 94%. Some skills such as Mathematics are even higher at 98%, while skills that require a human perspective, appreciation or senses, like Art, Begging, Disguise, Impersonation, and Creative Writing, may range between 60-80%. *Alien Robots* whose programs are designed for a world other than Earth, may find the proficiency level dramatically reduced; *-60% skill penalty* unless it has a close human equivalent. Only getting a new, Earth program installed will raise those skills to an expert level.

Robot skills do not increase with experience.

Note: Cyberworks and Archie's robots do not always conform to the level of skill proficiency listed, because Archie's knowledge is a bit limited and a trifle alien, so percentages of specific skills in his 'Bots sometimes digress from the norm.

The Number of Programs Available

All 'Bots automatically get the *General Non-Combat Skill Program* or *General Military Program*. As the names of these programs suggest, one is technical and the other is combat oriented. The robot is either designed with military/combat intentions or non-military purposes, not both. Thus all skills are selected from either the *Non-Combat Skill Programs* or *Military Skill Programs*.

Initial skill programs are part of the robot's basic construction and are not purchased with funds from the robot construction budget.

To add skills costs additional money. The Black Market prices listed are the average cost on the open market. As usual, prices may be as much as double depending on supply and demand, availability, and when and where one buys the programs.

Artificial Intelligence: Automatically gets one of the General Programs (non-military or military) at no cost. Two additional skill programs may be purchased at *half* the price listed. This is considered to be the 'Bot's original purpose and orientation.

Two additional skill programs can be purchased at the list price and added to the basic skill set. The purchase can be made at the time the Robot R.C.C. is initially created or as upgrades at some point in the future. This is the maximum number of programs the robot can hold in its A.I. However, one or more (even all, except for the General Skill Program) can be "dumped" and *replaced* by new and different programs. Any such change costs the current going price on the open market (the minimum of which is the list price).

Neural Intelligence: Automatically gets one of the General Programs (non-military or military) at no cost. Three additional skill programs may be purchased at *half* the price listed. This is considered to be the 'Bot's original purpose and orientation.

Two additional skill programs can be purchased at the list price and added to the initial skill set. This is the maximum number of programs the robot can hold in its artificial brain. Unlike the A.I., these skills can *NOT* be purged and replaced by new and different skill programs. However, the N.I. can *learn new skills* the same as a human through observation, study and tutelage. Thus, the N.I. may select two *Secondary Skills* at levels 2, 4, 6, 9, 12, and 15. Secondary Skills start at the Base Skill level and increase per level of experience. The only bonus applied to these learned skills is the I.Q. bonus, when appropriate (applicable to an I.Q. of 16 or higher).

Transferred Intelligence: Skills are equal to those possessed by the individual before his mind and essence got transferred into the body of a robot. To determine the mental attributes and skill knowledge do the following: **1.** Make the normal die rolls for the character's I.Q., M.A. and M.E.; all other attributes are irrelevant. **2.** Select an Occupational Character Class (O.C.C.) from any of the *Adventurer & Scholar Categories* or the following Men at Arms/Combat O.C.C.s: *Headhunter, Merc Soldier, Robot Pilot* or the equivalent of a *Coalition Grunt, CS Military Specialist,* or *CS Technical Officer.* Only the skills from this O.C.C. apply, nothing else.

Special & Rare Cases (usually from an accidental transference): If by chance, the character was once a **Practitioner of Magic,** he loses ALL magic abilities, P.P.E. is reduced to 20% and does NOT increase with experience. Only retains all *skills* related to that O.C.C., but not any special magic powers or abilities. O.C.C. bonuses and saving throws are reduced by half (round up). The character can, however, learn twice as many Secondary Skills as usually allowed for that O.C.C.

If by chance, the character was once a **Psychic,** he loses HALF his psionic abilities, does not gain any new ones, and the range and duration of psionic powers are also reduced by half. I.S.P. at the time of the accident is reduced by 1D4x10%, and frozen at that level, gaining new I.S.P. is impossible and does NOT increase with experience. Still retains all *skills* related to that O.C.C., but the number of Secondary Skills the character can learn is *reduced* by half. Any special O.C.C. powers or abilities are lost, and O.C.C. bonuses and saving throws are reduced by half (round up).

Non-Combat Skill Programs
For Drones, Artificial & Neural Intelligences

These programs are the complete skill programs created and installed by the original manufacturer, designer, or a robotics expert. The programs are available only to advanced robot drones, A.I.s and N.I.s.

Robot programs are only available at high-tech cities and places that cater to soldiers and mercenaries such as Upper Michigan, Kingsdale, and Merctown. *The Black Market* or other illegal dealers may also offer robot programs and repair services in the 'Burbs and other environments. Prices can cost double and triple the list price depending on the seller. The converting of a robot's labor program to a combat program is illegal in the Coalition States; the penalty is death. D-Bee transgressors may be executed on the spot.

Non-Military Skill Programs

The following are some of the standard programs used in robots.

Communications, Technical: Select five, excluding Language: Other, Literacy: Native Language and Literacy: Other. All are at 90%. Cost: 150,000 credits.

Communications, Language Program: Other: Understands and speaks all nine major languages at 88% proficiency. Cost: 250,000 credits.

Communications, Literacy: Native Language: Just the one language at 90%. Cost: 100,000 credits.

Communications, Literacy: Other: Can read all major languages as listed in RUE at 90% proficiency. Cost: 525,000 credits. An ILLEGAL program in the CS.

Cowboy Skills: Select four, excluding Horsemanship skills and Trick Riding. Branding and Lore skills are at 90%, all others are at 70%. Cost: 140,000 credits. Also see *Specialized Labor: Farm Work.*

Domestic: Select five, each at 90% proficiency. Cost: 30,000 credits. Also see *Domestic Services.*

Espionage: None.

Horsemanship: General and Exotic Animals only, 64% proficiency. Cost: 55,000 credits per each skill.

Labor Programs:

Basic Labor Programing. All Labor Programs include the following at no extra cost: *Math: Basic 96%, Language of choice at 92%* (typically American, Spanish or Techno-Can), and *basic programming to understand and perform all types of basic labor* such as cleaning, digging ditches, loading boxes, operating machines, using common tools, and so on. The robot can also *recognize and use* (on a basic level) thousands of common everyday *tools and machines* (scissors, hammer, bolt cutter, flashlight, welding iron, blowtorch, ladder, etc.), *appliances* (toaster, can opener, oven, etc.), *basic electronic devices* (radio, telephone, camera, etc.) and related items like nails, screws, bolts, washers, etc. These are in addition to the specialized programs below. The robot also recognizes 20,000 different life forms including humans and common D-Bees, mutants, animals and insects.

A worker robot tends to have skill programs that focus on one or two areas of labor/purpose. The same skill program can*not* be selected more than once. **Triax/Dyna-Bot** programs are not listed in this section as they come only with Triax imported Dyna-Bots.

Domestic Services: Cooking 85%, First Aid 90%, Housekeeping 90%, Preserve Food 90%, Radio: Basic 90%, Recycling 92%, Sewing 92% and Wardrobe & Grooming (includes cleaning of all kinds) 92%. Cost: 40,000 credits.

General Labor: Computer Operation 96%, General Repair and Maintenance 90%, Pilot: Automobile or Hover Craft (ground) 90%, and Pilot: Truck 90%. Cost: 55,000 credits.

Specialized Labor: Demolitions: Basic Electronics 90%, Basic Mechanics 90%, Computer Operation 96%, Demolitions 90%, Demolitions Disposal 90%, Demolitions: Underwater 90%, and Trap/Mine Detection 80%. Cost: 540,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Electrical: Basic Electronics 96%, Computer Repair 92%, Electrical Engineer 86%, and Electricity Generation 86%. Cost: 625,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Farm Work: Animal Husbandry 65%, Branding 88%, Herding Cattle 80%, Horsemanship: General 60% (but can only ride robot horses or horse-like animals that can support 800 lbs/360 kg on its back), Identify Plants & Fruits 92%, Lore: Cattle & Animals 92%, Pilot: Truck 92%, and Rope Works 92%. Cost: 140,000 credits.

Specialized Heavy Labor: Carpentry 85%, Demolitions and Demolitions Disposal 85%, Firefighting 80%, Masonry 80%, Rope Works 88%, and Salvage 90%. Cost: 200,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Mechanics: Aircraft Mechanics 70%, Automotive Mechanics 80%, Basic Electronics 85%, Basic Mechanics 90%, Computer Operation 90%, General Repair and Maintenance 90%, and Salvage 75%. Cost: 250,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Medical: Basic and Advanced Math 98%, Biology 80%, Chemistry 90%, Forensics 85%, and Paramedic 85%. Cost: 225,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Mining: Excavation 85%, Mining 90%, Pilot: Truck 92%, Recycling 88%, Rope Works 88% and Salvage 80%. Plus the mining program includes data on how to build tunnels, brace walls and ceilings, ventilation, and identify fossil fuels, natural gas, and 600 different minerals. Cost: 190,000 credits.

Specialized Labor: Transportation: Pilot: Automobile 96%, Pilot: Hover Craft (ground) 90%, Pilot: Truck 90%, and three Piloting skills of choice 88%, excluding military, robot and recreational vehicles. Cost: 100,000 credits.

Specialized Labor: Tutorial: Computer Operation 96%, History: Post-Apocalypse 70% or Law (General) 70%, Literacy: American 90%, Literacy: Language of choice 90%, Lore: Two of choice 80% each, Math: Basic and Advanced 96%, Play Musical Instrument or Cook 80%. Cost: 170,000 credits. An ILLEGAL program in the CS.

Specialized Labor: Woodworking: Art 55%, Carpentry 88%, Rope Works 90%, and Whittling & Sculpting 75%. Cost: 120,000 credits.

Medical, Advanced: Medical Doctor at 84%/74%, Biology 92%, Chemistry 96%, plus select three others of choice, excluding Cybernetic Medicine, Entomological Medicine, Holistic Medicine and Psychology; all at 80% proficiency. Cost: 950,000 credits. An ILLEGAL program in the CS.

Medical, Basic: Paramedic 90%, Biology 85%, Brewing 75%, and Field Surgery 75% (-20% for serious injuries). Cost: 295,000 credits. An ILLEGAL program in the CS.

Military: None.

Physical, Aquatic: Swimming, SCUBA (can teach and assist others with their equipment and dives), Pilot: Water Skiing & Surfing or Pilot Water Scooter, all at 90%. Cost: 85,000 credits.

Physical, Basic: Climbing, Juggling, and Running, all at 90%. Cost: 45,000 credits.

Pilot, Ground: Select four; excluding robot and military vehicle skills. All at 90%. Cost: 150,000 credits.

Pilot, Air: Select three; excluding robot and military vehicle skills. All at 84%. Cost: 230,000 credits.

Pilot, Water: Select three; excluding robot and military vehicle skills. All at 86%. Cost: 190,000 credits.

Pilot Related: All, except Weapon Systems, at 94%. Cost: 85,000 credits. An ILLEGAL program in the CS.

Rogue: None.

Rescue Program: See Technical: Rescue.

Science: None.

Technical: Commerce: Art 60%, Barter 65%, Appraise Goods 75%, Gemology 80%, and Salvage 90% (+8% if it also has the Mechanical skill program). Cost: 200,000 credits.

Technical: Computers: Computer Operation 94%, Computer Programming 80%, Computer Repair 85%, Literacy: American or Techno-Can 90%. Cost: 310,000 credits.

Technical: Lore: History: Post-Apocalypse or Law 86%, and select four Lore skills, each at 80%. Cost: 160,000 credits.

Technical: Rescue: Excavation 80%, Firefighting 88%, First Aid 90%, Mining 86%, Rope Works 90% and *Rescue Protocol Program* 75%; a program that enables the 'Bot to assess and respond to rescue situations, such as deciding the severity of the situation, best response, who among victims has the best chance for survival, who is in the greatest danger, percentage chance of success, who should be rescued first, who needs medical treatment in order of severity, when to evacuate the site, best route in and out, and similar choices and decisions in rescue operations (+12% for N.I.). Cost: 580,000 credits.

Technical: Resources: Recycling, Research, Salvage or Masonry, and Photography or Computer Operation; all at 90%. Cost: 92,000 credits.

Weapon Proficiencies: None.

Wilderness: Select four; all at 88%. Cost: 190,000 credits.
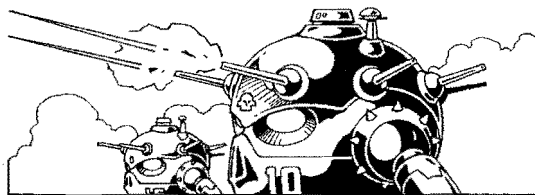
Military Skill Programs

Military programs are illegal in the Coalition States and available only to advanced robot drones, A.I. or N.I. Military robots tend to be designed specifically as *combat units* with support skills such as electronics, mechanics, medical, etc. left to humanoid personnel or non-combat robots. Thus, military robots are primarily programmed to be **killing machines** that seek, kill and destroy!

Standard Robot Military Combat Skill Program

Note: Illegal in the Coalition States.

Climb (96%/86%)

General Repair & Maintenance (80%)

Intelligence (85%)

Land Navigation (94%)

Language: Basic (speaks/understands; cannot read): Typically American, Gobblely, Spanish and Techno-Can (94% each).

Mathematics: Basic (98%)

Military Etiquette (96%)

Parachuting (90%)

Pilot: Boat, Motor Type (86%)

Pilot: Hover Craft (ground) or Hovercycle (92%)

Radio: Basic (94%)

Weapon Systems (90%)

W.P. Paired Weapons

W.P. Blunt

W.P. Sword or W.P. Knife

W.P. Rifles

W.P. Energy Rifle or W.P. Heavy M.D. Weapons

All the W.P.s listed are equivalent to 6th level experience.

Hand to Hand Combat: Programs the Robot for fighting roughly equal to Hand to Hand: Expert, 6th level.

Mega-Damage: As per the Robot P.S.

Attacks per Melee Round: +2; generally a robot will have 4-6 attacks per melee. Currently, only the Triax Dyna-Bot has more, at 8 attacks per melee round.

Bonuses:

Bonuses in Hand to Hand Combat: +1 on initiative, +2 to strike, +4 to parry with fists/arms/foot/handheld weapon, +3 to dodge, +4 to dodge while running, +2 to disarm, +2 to roll with impact, and +2 to pull punch. Impervious to poison, gas, and biological agents, as well as psionic and magic mind control, charms, Bio-Manipulation, and S.D.C. attacks.

Bonuses Using Weapons: +3 to strike with ranged weapons, +4 to strike on an Aimed Shot, +1 to strike with a burst.

+4 to strike and +6 to parry with Vibro-Blades/Knife/Sword.

Basic programming also includes the use of thousands of common everyday *tools and machines* (scissors, hammer, bolt cutter, flashlight, welding iron, blowtorch, ladder, etc.), *appliances* (toaster, can opener, oven, etc.), *electronic devices* (radio, telephone, camera, etc.) and related items like nails, screws, bolts, washers, etc. These are in addition to the specialized programs below.

Military Combat programming includes a recognition program of 28,000 different enemy targets including specific races, monsters, aliens, non-human features and political powers in North America, such as the insignia, uniforms, body armor, military robots and vehicles, power armor, weapons of the Coalition States, Free Quebec, the Federation of Magic, bandits of the Pecos Empire, notable mercenary companies, the Minions of Splugorth, D-Bees, demons, monsters and dangerous animals in general, as well as 2000 enemies the purchaser can add.

Combat programming directs the actions and reactions to encounters and attacks. Most programs offered in North America (excluding the ones used by Archie for his personal robot legion) are much more basic and reactionary than those from Triax and the NGR. A Northern Gun basic combat program makes the robot suitable for sentry duty, armed escort, border patrol, infantry combat and seek and destroy missions. Basically, the drone identifies an enemy target or intruder and attacks. **Triax/Dyna-Bot** programs are not listed in this section as they come only with Triax imported Dyna-Bots.

Cost: 425,000 credits is the list price. However, it often sells for

two and three times more. An ILLEGAL program in the CS, punishable by death.

Supplemental Military Robot Skill Programs

Note: Typically a robot will be programmed for either espionage purposes or flat-out combat – literally a killing machine. A skill program can*not* be selected more than once.

Mechanical: Select four, excluding Bioware Mechanics, Robot Mechanics and Weapons Engineer. All are at 90%. Cost: 350,000 credits. An ILLEGAL program in the CS.

Medical: None.

Military, Communications: Basic: Computer Operation 90%, Literacy: Native Language 94%, Optic Systems 90%, Radio: Basic 98%, Sensory Equipment 90%, and Sign Language 88%. Cost: 150,000 credits. An ILLEGAL program in the CS.

Military, Communications: Specialized: Cryptography 80%, Electronic Countermeasures 94%, Laser Communications 94%, Literacy: Language of choice 94%, Photography 94%, Surveillance 90%, and TV/Video 94%. Cost: 250,000 credits. An ILLEGAL program in the CS.

Military, Communications Language Program: Other: Understands and speaks *all* nine major languages at 94% proficiency. Cost: 240,000 credits. An ILLEGAL program in the CS.

Military Demolitions: See *Military Strike Force.*

Military Espionage: Spy Program: Basic surveillance skills as follows. Electronic Countermeasures 85%, Find Contraband 50%, I.D. Undercover Agent 70%, Intelligence 85%, Imitate Voices & Sounds 72% (applicable only if the robot has a modulating voice synthesizer), Land Navigation 90%, Math: Basic 96%, Military Etiquette 96%, Prowl 60% (applicable only if the robot has padded feet), Radio: Basic 95%, Sensory Equipment 80%, W.P. Blunt and W.P. Energy Pistol. Languages include: American, Spanish, Gobblely, and Techno-Can, each at 90%. Cost: 545,000 credits. An ILLEGAL program in the CS.

Military Espionage: Undercover: Forgery 78%, Intelligence 90%, I.D. Undercover Agent 78%, Undercover Ops 90%, Tailing (74%); +6% to all skills for N.I.s. Note: Includes one skill or choice from the Rogue category at 70%, excluding, Gambling, Hacking, and Seduction. Cost: 515,000 credits. An ILLEGAL program in the CS.

Military Intelligence: Camouflage 80%, Detect Ambush 75%, Detect Concealment 68%, Intelligence 90%, Land Navigation 96%, Tracking (people) 80%; +6% to all skills for N.I.s. Cost: 425,000 credits. An ILLEGAL program in the CS.

Military: Naval/Aquatic: Swimming, SCUBA (can teach and assist others with their equipment and dives), Pilot Water Scooter, and two water based piloting skills of choice, all at 90%. Cost: 85,000 credits. An ILLEGAL program in the CS.

Military Pilot, Ground: Jet Pack 88%, Truck or Tracked & Construction Vehicles 90%, plus select three military vehicle piloting skills, excludes Robot Combat skills. All at 92%. Cost: 325,000 credits. An ILLEGAL program in the CS.

Military Pilot, Air: Select four aircraft piloting skills. Selections may include military vehicles and Jet Pack, excluding Robot Combat skills. All at 86%. Cost: 360,000 credits. An ILLEGAL program in the CS.

Military Pilot, Water: Select four water vehicle piloting skills. Selections may include boats, military vehicles, scooters and Skiing skills, excludes Robot Combat skills. All at 88%. Cost: 320,000 credits. An ILLEGAL program in the CS.

Military Rogue: Thief: Concealment 70%, Find Contraband 72%, Palming 80%, Pick Locks 90%, and Safe-Cracking 80%; +6% skill bonus for N.I.s. Typically reserved for undercover ops and espionage. Cost: 500,000 credits. An ILLEGAL program in the CS.

Military Specialized Physical Program: Acrobatics 85% or Gymnastics 90% and Boxing (adds one attack and applicable bonuses). Cost: 265,000 credits. An ILLEGAL program in the CS.

Military Strike Force: Basic Electronics 90%, Basic Mechanics 92%, Computer Operation 96%, Demolitions 94%, Demolitions Disposal 92%, Demolitions: Underwater 90%, Parachuting 92%, Prowl 66% (applicable only if robot has padded feet), Trap/Mine Detection 85%; +6% to all skills for N.I.s. Cost: 560,000 credits. An ILLEGAL program in the CS.

Military: Support: Camouflage 78%, Military Etiquette 90%, Naval Tactics 70%, Recognize Weapon Quality 86%; +6% to all skills for N.I.s. Cost: 150,000 credit. An ILLEGAL program in the CS.

Pilot Related: All at 94%. Cost: 100,000 credits.

Rogue: None, except as *Military Rogue: Thief,* above.

Science: None.

Special: Hand to Hand Combat Program: This is the poor man's combat program in which a labor robot can be given basic fighting capabilities, but nowhere near those of the Standard Military Combat Program. The number of attacks is as per the design of the robot (typically 3-6 depending on the 'Bot, sometimes more), plus the fundamental combat moves and bonuses of *Hand to Hand: Basic* at fifth level proficiency. The skill does not improve with experience, and do *NOT* add the additional attacks per melee listed in the combat skill. Cost: 255,000 credits. An ILLEGAL program in the CS. **Note:** Not applicable to robots with the **Standard Robot Military Combat Skill Program.**
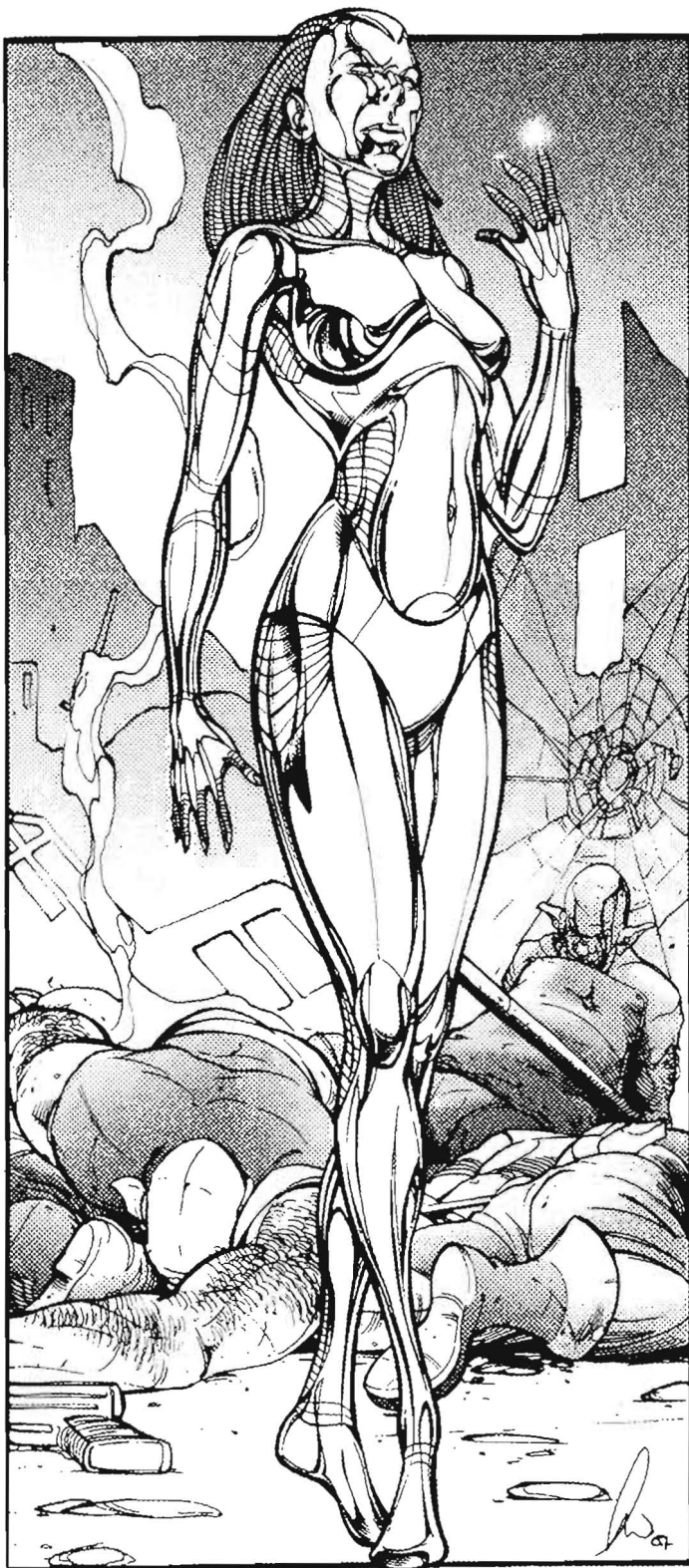
Special: Human Personality Emulation Program: *Mimics* human emotions and human responses. The program recognizes a wide range of human emotions, from boredom and sorrow to joy and anger. The program also provides the 'Bot with a range of appropriate verbal and physical responses. ("Now, now," says the 'Bot as it pats the person on the back. "Don't be sad, things will get better.") The program takes its cues from facial expressions, body language, spoken words and audio intonation (e.g., a sad, quivering voice, or a loud, angry voice, curse words, laughter, etc.). Cost: 460,000 credits.

Technical: Computers: Computer Operation 96%, Computer Programming 82%, Computer Repair 88%, Computer Hacking 45%, Literacy: Techno-Can 96%; +6% to all skills for N.I.s. Cost: 300,000 credits.

Weapon Proficiencies: Ancient: Select Five. Cost: 250,000 credits. An ILLEGAL program in the CS.

Weapon Proficiencies: Modern: Select Four. Cost: 430,000 credits. An ILLEGAL program in the CS.

Wilderness: Select four; all at 88%. Cost: 190,000 credits.

or actions per melee is to purchase them as "Special Features" – so make sure you leave at least a couple million credits to do so. Hand to hand combat training only provides bonuses to strike, parry, dodge, etc., and does not provide additional attacks like it does for humans and D-Bees. Physical attributes can be also be increased beyond the *Basic Physical Attributes* described under each robot type, also described under various **Special Features**. Also note that all robots with an artificial intelligence (A.I.) are capable of speaking, including animals, insects, and vehicles. However, unless the voice is enhanced. it sounds very mechanical.

Basic Humanoid

The frame for this robot is approximately the size, shape and build of a typical human or humanoid, 6-8 feet (1.8 to 2.4 m) tall, but can be as large as 10 feet (3 m). Humanoid also means *two* legs and feet, *two* arms and hands, one head (a nose and mouth, and a pair of eyes and ears are optional depending on the robot style). Other than the general humanoid shape, the robot is clearly a machine.

Basic Physical Attributes: P.S. 14, P.P. 12, P.B. 6, Spd 22 (approx. 15 mph/24 km).

Size: Six to eight feet (1.8 to 2.4 m). Increase cost by 50% if larger, up to ten feet (3 m). Giant-size is below.

Light Frame: 300 pounds (135 kg) and 120 M.D.C. main body.

Body Cost: Two million credits.

Frame Reinforcement (optional): Add 100 pounds (45 kg) and 100 M.D.C. points to the main body for *each reinforcement* to the frame. As many as five reinforcements can be done, but each instills a cumulative skill penalty of -5% to Prowl. Cost: 350,000 per each reinforcement.

Giant Humanoid

The frame for this robot is the shape and build of a humanoid, except that it is giant in size, 10-20 feet (3 to 6.1 m) tall.

Basic Physical Attributes: P.S. 16, P.P. 14. P.B. 6, Spd 22 (approx. 15 mph/24 km).

Size: 10-20 feet (3 to 6.1 m).

Light Frame: 1000 pounds (450 kg) and 200 M.D.C. main body points. **Giant Body Cost:** Four million credits for a bot up to 12 feet tall (3.6 m). Add 200,000 credits and 150 pounds (68 kg)for each additional foot (0.3 m) of height up to 20 feet (6.1 m) maximum.

Frame Reinforcement: Add 200 pounds (22.5 kg) and 120 M.D.C. points to the main body for each reinforcement done to the frame. As many as five reinforcements can be done, but each instills a cumulative skill penalty of -10% to Prowl. Cost: 550,000 credits per each reinforcement.

Partial Humanoid

The upper torso, from the waist up, is approximately the size, shape and build of a typical human or humanoid; two arms and hands, and one head, but the lower body is vehicular or animal construction.

Basic Physical Attributes: P.S. 14, P.P. 12, P.B. 6, Spd 0

Light Frame: 200 pounds (90 kg) and 100 M.D.C. main body points.

Step Five:
Body Construction

There are three types of robot bodies, **Humanoid, Animal, or Vehicular.** The latter is a vehicular-style robot with an independent artificial intelligence capable of independent action, so it does *not* need a pilot to operate it, but may be able to accommodate passengers.

Note: The robot character starts with *three (3) attacks/actions per melee.* The only way to increase the number of attacks

Upper Torso Cost: One million credits.

Frame Reinforcement: Add 50 pounds (22.5 kg) and 50 M.D.C. points to the main body for each reinforcement done to the frame. As many as five reinforcements can be done, but each instills a cumulative skill penalty of -10% to Prowl. Cost: 150,000 per each reinforcement.

Animal: Basic Feline

The frame for this robot is approximately the shape and build of a cat, two front legs, two hind legs suitable for running, leaping and climbing, one tail, one head (eyes, ears, nose, and jaws are optional depending on style and breed/species). Other than the general shape, the robot is clearly a machine.

Note: Most animal 'Bots are designed so that a fingerjack can be inserted into the 'Bot, linking another person or other robot, or computer, directly to the animal robot. This enables the robot to communicate directly without speaking and enables the 'Bot to transmit and receive recorded data, audio and video information. As a result, Headhunters, Combat Cyborgs, Robot Pilots and even the occasional Operator, City Rat, Merc Soldier, Wilderness Scout and Rogue Scientist can use a robot animal as a sort of *mechanical familiar* to scout ahead, stand guard and serve as a traveling companion. Cosmetically enhanced animal robots look like the real animal and can make good spies, companions and allies.

- **Small Size:** Tom Cat size, two feet (0.6 m) long, 70 M.D.C., and about 40 pounds (18 kg).
  Basic Physical Attributes: P.S. 8, P.P. 14, P.B. 6, Spd 11 (approx. 7 mph/12 km).
  Small Feline Body Cost: 700,000 credits.
- **Medium Size:** Cougar, lynx or leopard size, 3-4 feet long (0.9 to 1.2 m), 100 M.D.C., and about 200 pounds (90 kg).
  Basic Physical Attributes: P.S. 16, P.P. 16, P.B. 6, Spd 22 (approx. 15 mph/24 km).
  Medium Feline Body Cost: 1.5 million credits.
- **Large Size:** Tiger or lion size, seven to nine feet (2.1 to 2.7 m), 150 M.D.C. and 1000 pounds (450 kg).
  Basic Physical Attributes: P.S. 16, P.P. 18, P.B. 6, Spd 44 (approx. 30 mph/48 km).
  Large Feline Body Cost: Three million credits.

Frame Reinforcement for Feline Body Types: Add 100 lbs (45 kg) and 100 M.D.C. points to the main body for each reinforcement done to the frame. Only one reinforcement is possible on the small size, two on the medium size, and as many as four reinforcements on the large size, but each instills a cumulative skill penalty of -4% to Prowl. Cost: 350,000 per each reinforcement.

Animal: Basic Canine

The frame for this robot is approximately the shape and build of a dog; two front legs, two hind legs suitable for running and leaping, one tail, and one head. The shape of the head, eyes, ears, nose, and mouth will depend on the type of breed being imitated. Other than the general shape, the robot is clearly a machine.

- **Small Size:** Fox or terrier size, two feet (0.6 m) long, plus tail, 70 M.D.C., and about 40 pounds (18 kg).

Basic Physical Attributes: P.S. 10, P.P. 12, P.B. 6, Spd 22 (approx. 15 mph/24 km).

Small Canine Body Cost: One million credits.

- **Medium Size:** German Shepard, setter, retriever size, 3-4 feet (0.9 to 1.2 m) long, plus tail, 100 M.D.C., and about 200 pounds (90 kg).
  Basic Physical Attributes: P.S. 16, P.P. 14, P.B. 6, Spd 44 (approx. 30 mph/48 km).
  Medium Canine Body Cost: Two million credits.
- **Large Size:** Wolf, Great Dane, St. Bernard size, 5-6 feet (1.5 to 1.8 m) long, plus tail, 150 M.D.C. and 800 pounds (360 kg).
  Basic Physical Attributes: P.S. 18, P.P. 14, P.B. 6, Spd 58 (approx. 40 mph/64 km).
  Large Canine Body Cost: 3.5 million credits.

Frame Reinforcement: Add 100 lbs (45 kg) and 100 M.D.C. points to the main body for each reinforcement done to the frame. Only one reinforcement is possible on the small size, two on the medium size and as many as four reinforcements can be done on the large size, but each instills a cumulative skill penalty of -6% to Prowl. Cost: 310,000 per each reinforcement.

Animal: Basic Horse

The frame for this robot is approximately the shape and build of a horse, with two front legs, two hind legs suitable for running and leaping, one tail, and one head. The shape of the head, eyes, ears, nose, and mouth will depend on the type of breed being imitated. Other than the general shape, the robot is clearly a machine. Cosmetic enhancement, however, can make the 'Bot look like the real animal.

- **Small Size:** Pony or small horse, 5-6 feet (1.5 to 1.8 m) long, 120 M.D.C., and about 500 pounds (225 kg).
  Basic Physical Attributes: P.S. 18, P.P. 14, P.B. 8, Spd. 58 (approx. 40 mph/64 km).
  Small Horse Body Cost: Two million credits.
- **Medium Size:** Race/Running horse size, 7 feet (2.1 m) long, 200 M.D.C., and about 1000 lbs (450 kg).
  Basic Physical Attributes: P.S. 24, P.P. 18, P.B. 9, Spd. 88 (approx. 60 mph/96 km).
  Medium Horse Body Cost: 3.5 million credits.
- **Large Size:** Large work/draft horse or warhorse with a powerful build, 8-9 feet (2.4 to 2.7 m) long, 250 M.D.C. and 1400 pounds (630 kg).
  Basic Physical Attributes: P.S. 28, P.P. 20, P.B. 9, Spd 132 (approx. 90 mph/144 km).
  Large Horse Body Cost: 5.5 million credits.

Frame Reinforcement: Add 100 lbs (45 kg) and 130 M.D.C. points to the main body for each reinforcement done to the frame. Only two reinforcements are possible on the small size horse, four on the medium size and as many as six reinforcement on the large size, but each instills a cumulative skill penalty of -10% to Prowl and reduces Speed by 10% for each reinforcement beyond three. Cost: 500,000 per each reinforcement.

Animal: Basic Bird

The frame for this robot is approximately the shape and build of a bird, with two wings, two lower legs with clawed feet, one tail, and one head. The shape of the head, eyes, ears, nose, and beak will depend on the type of bird being imitated. Other than the general shape, the robot is clearly a machine unless the cosmetic program is used to disguise it as what appears to be a living animal.

- **Small Size:** Falcon, owl or crow size, one foot tall (0.3 m); never smaller. 50 M.D.C., 30 lbs (14 kg).

  Basic Physical Attributes: P.S. 8, P.P. 14, P.B. 6, Flying Spd 77 (approx. 53 mph/85 km).

  Small Bird Body Cost: One million credits.

- **Medium Size:** Eagle, three feet tall (0.9 m), 90 M.D.C., and about 80 lbs (36 kg).

  Basic Physical Attributes: P.S. 12, P.P. 18, P.B. 6, Flying Spd 110 (approx. 75 mph/120 km).

  Medium Bird Body Cost: 2 million credits.

- **Large**, Condor size and powerfully built, five feet long (1.5 m), 170 M.D.C. and 200 lbs (90 kg).

  Basic Physical Attributes: P.S. 20, P.P. 20, P.B. 6, Flying Spd 90 (approx. 90 mph/144 km).

  Large Bird Body Cost: 4 million credits.

Frame Reinforcement: Add 50 pounds (22.5 kg) and 50 M.D.C. points to the main body for each reinforcement done to the frame. Only one reinforcement is possible on the small size, two on the medium size and three reinforcements on the large size, but each instills a cumulative skill penalty of -6% to Prowl and reduces the Speed by 10% for each reinforcement. **Cost:** 200,000 per each reinforcement.

Giant Animals

The frame for this robot is the shape and build of a particular type of animal, except at twice the normal large size. For medium and large animals, that can be 10-18 feet (3 to 5.5 m) long.
Basic Physical Attributes: P.S. 18, P.P. 14, P.B. 7, Spd 58 (approx. 40 mph/64 km).
Light Frame: 1200 pounds (540 kg) and 200 M.D.C. main body points. **Giant Animal Size Cost:** An additional 5 million credits for a 'Bot up to 12 feet (3.6 m) tall or long. Add 250,000 credits and 150 lbs (68 kg) for each additional foot (0.3 m) of height up to 18 feet (5.5 m).
Frame Reinforcement: Add 200 lbs (90 kg) and 125 M.D.C. points to the main body for each reinforcement done to the frame. As many as five reinforcements can be done, but each instills a cumulative skill penalty of -15% to Prowl. **Cost:** 600,000 credits per each reinforcement.

Insect or Spider

This robot has a round body, two sensor eyes, and six (insect) or eight (spider) legs. The six or eight legs offer superior balance and stability even on the most rugged terrain. What would normally be the mouth and mandibles of a real insect or spider can be mechanical mandibles for biting or grasping, or one pair of humanoid arms and hands, tentacles, or weapons. **Note:** Some vehicles and robots are called Spider-this or that (i.e., Spi-

der-Skull Walker) even though they have only six legs, but real spiders have eight.

- **Small Size:** The size of a cat, two feet (0.6 m) tall or long, 70 M.D.C., and 40 lbs (18 kg).

  Basic Physical Attributes: P.S. 8, P.P. 12, P.B. 4, Spd 22 (approx. 15 mph/24 km).

  Small Insect Body Cost: 1.2 million credits.

- **Medium Size:** Man-size, 5-6 feet (1.5 to 1.8 m) tall or long, 110 M.D.C., and 200 lbs (90 kg).

  Basic Physical Attributes: P.S. 18, P.P. 14, P.B. 4, Spd 58 (approx. 40 mph/64 km).

  Medium Insect Body Cost: 2.4 million credits.

- **Large Size:** Equal to the size of a horse, 7-8 feet (2.1 to 2.4 m) long, 5-6 feet (1.5 to 1.8 m) tall, 150 M.D.C., and about 700 lbs (315 kg).

  Basic Physical Attributes: P.S. 20, P.P. 18, P.B. 4, Spd 88 (approx. 60 mph/96 km).

  Large Insect Body Cost: 4.8 million credits.

Frame Reinforcement: Add 100 lbs (45 kg) and 120 M.D.C. points to the main body for each reinforcement done to the frame. Only one reinforcement is possible on the small size, two on the medium size and three reinforcements can be done on the large size, but each instills a cumulative skill penalty of -5% to Prowl. Cost: 400,000 per each reinforcement.

Vehicular Body Styles

Virtually any type of motor driven vehicle, be it motorcycle, automobile, truck, hover vehicle, tank, boat or aircraft, can be given an artificial intelligence, with robot capabilities and special features. What this means is that the vehicle can think, speak, pilot itself, fire weapons, and so on, as if it were an independent, living (robot) being. The following are some basic body styles. A method(s) of propulsion will need to be selected.

Vehicle: Motorcycle

The frame of this 'Bot resembles that of any number of ordinary motorcycles or hover cycles, only it possesses a robot intelligence, and may have arms, weapons and other special capabilities added to it.
Speed: Depends on type of propulsion. Sleek, aerodynamic body provides a bonus of +20 mph (32 km) to the final propulsion speed.
Light Frame: 300 lbs (135 kg) and 100 M.D.C. main body points.
Cost: 600,000 credits up to six feet (1.8 m) long, 1 million credits for 7-10 feet (2.1 to 3 m).
Number of Seats: Two, driver and one passenger. A sidecar can be added to carry one additional passenger for the cost of 380,000 (has 45 M.D.C.), but reduces speed by 5%.
Frame Reinforcement: Add 200 lbs (45 kg) and 100 M.D.C. points to the main body for each reinforcement done to the frame. As many as three reinforcements can be done, but each instills a cumulative skill penalty of -10% to Prowl. Cost: 300,000 credits per each reinforcement.

Vehicle: Sports Car

The frame of this 'Bot resembles that of any number of ordinary sports cars, only it possesses a robotic artificial intelligence and may have a range of other special capabilities.

Speed: Depends on type of propulsion. Sleek, aerodynamic body provides a bonus of +20 mph (32 km) to the final propulsion speed.

Light Frame: 1200 pounds (540 kg) and 200 M.D.C. main body points. **Cost:** 1.2 million credits for a bot up to 12 feet long (3.6 m). You're paying for style and flash.

Number of Seats: Two, driver and one passenger.

Frame Reinforcement: Add 200 lbs (90 kg) and 115 M.D.C. points to the main body for each reinforcement done to the frame. As many as four reinforcements can be done, but each instills a cumulative skill penalty of -15% to Prowl. Cost: 400,000 credits per each reinforcement.

Vehicle: Mid-Size Sedan or ATV

The frame of this robot resembles that of any number of ordinary ground and hover cars, from sedan to Jeep, except it has an artificial intelligence and may have a range of other special capabilities.

Speed: Depends on type of propulsion.

Light Frame: 2000 lbs (900 kg) and 250 M.D.C. main body points.

Cost: 800,000 credits for a bot up to 16 feet (4.9 m) long.

Number of Seats: Four, driver and three passengers, but another one or two passengers could squeeze in under very cramped conditions.

Frame Reinforcement: Add 250 lbs (113 kg) and 125 M.D.C. points to the main body for each reinforcement done to the frame. As many as five reinforcements can be done. *Prowl is not possible.* Cost: 510,000 credits per each reinforcement.

Vehicle: Full-Size Van or Small Truck

The frame of this robot resembles that of any number of ordinary ground and hover vans, large SUVs, and trucks, only it possesses an artificial intelligence and may have a range of other special capabilities.

Speed: Depends on type of propulsion.

Light Frame: 3000 lbs (1350 kg) and 300 M.D.C. main body points.

Cost: 1.4 million credits for a robot up to 24 feet (7.3 m) long.

Number of Seats: Driver and seven passengers comfortably, but another one or two passengers could squeeze in without being too cramped.

Frame Reinforcement: Add 250 lbs (113 kg) and 140 M.D.C. points to the main body for each reinforcement done to the frame. As many as four reinforcements can be done. *Prowl is not possible.* Cost: 600,000 credits per each reinforcement.

Note: The same stats and costs can be applied to small patrol boats and similar *water craft.*

Vehicle: Small Airplane

This robot resembles any number of ordinary propeller, jet and hover aircraft, only it possesses a robotic artificial intelligence and may have other special capabilities.

Speed: Depends on type of propulsion.

Light Frame: 3000 pounds (1350 kg) and 200 M.D.C. main body points. **Cost:** 1.5 million credits for a robot up to 22 feet (6.7 m) long.

Number of Seats: Pilot, co-pilot and six passengers comfortably, but another one or two passengers can squeeze in for cramped quarters.

Frame Reinforcement: Add 250 lbs (113 kg) and 125 M.D.C. points to the main body for each reinforcement done to the frame. As many as four reinforcements can be done. Prowl is not possible. Cost: 400,000 credits per each reinforcement.

Step Six:
Power Sources

Nuclear

Nuclear energy is the most popular form of energy used in robots and high-tech machinery. The power supply is surprisingly compact, safe, and has a long lifetime even under constant use. Any high-tech town, including 'Burbs and places that cater to mercenaries and adventurers, can make repairs.

One Year: One million credits.

Two Years: 2 million credits.

Five Years: 4.5 million credits.

Ten Years: 8 million credits.

Twenty Years: 15 million credits.

Techno-Wizard System

This is an energy system that utilizes magic with technology. The initial creation and powering of the unit is often time consuming and expensive. Repairs can also be expensive or a repair person impossible to find, as it requires a Techno-Wizard who has the expertise and sufficient P.P.E. to do the job. That having been said, TW power supplies are as reliable as nuclear power and completely clean and safe. **Note:** Speed increases by 20% when riding along a ley line, and piloting skills enjoy a +5% bonus.

One Year: 2 million credits.

Two Years: 4.1 million credits.

Five Years: 6.4 million credits.

Ten Years: 12.3 million credits.

Twenty Years: Not possible.

Super-Solar Engine

This system utilizes a power source that collects sunlight into a super high-efficiency conversion engine and generator. This is an excellent, clean power source with an indefinite life span. Of course, it is limited in that it must rely on a source of solar energy. Requires some form of locomotion, preferably wheels or hover system.

The system functions superbly while exposed to sunlight. An energy storage unit stores up to 8 hours worth of power, during which time the robot operates at full capacity. After the eight

hour reserve is used up, the robot must recharge via solar light energy or manually recharge from another source of electrical energy. Without a recharge, an emergency reserve engages, but it has a mere four hour capacity. While the emergency reserve is engaged, all unnecessary functions will be shut down. Speed is reduced by 20%, attacks per melee are reduced by half, and no energy weapons can fire. At the end of the emergency reserve (4 hours), the robot shuts down completely and will remain inert (like a person in a coma or deep sleep) until recharged by sunlight or electricity.

As a superior failsafe, many robots utilizing a super-solar system often combine it with a one or two year nuclear power system. The combination can extend the life of the nuclear battery to approximate five years, by switching back and forth from nuclear power to solar. The nuclear and solar combination means that the nuclear power serves as the reserve and enables the robot to operate at full capability and full firepower at all times. Solar can be a good, reliable system if proper caution is used.

Basic System Cost: Two million credits, complete with a special generator, recharge unit and reserve battery.

Step Seven:
Legs and Locomotion

Variations on the basic robot form are possible. For example, the humanoid torso might have insect legs, or the legs and lower body of a horse (a robotic centaur). Furthermore, it is often possible to combine legs, wheels or treads, as well as flight or aquatic capabilities in most robot types (a bit awkward in animal

style robots). **Note:** The basic frame comes complete with the necessary limbs/legs that are standard. The frames for *vehicles* do not include legs, wheels, engine, propulsion, etc., and must be purchased separately.

Legs

Human Legs: A pair of bipedal, humanoid size legs and feet. Cost: 350,000 credits per pair.

Animal Legs: Two front and two rear. Main style types are canine, feline, horse, and bird. Suitable for all robot frames. Cost: Small: 150,000 credits, medium (human size): 250,000 credits, large (horse size): 350,000 credits.

Insect Style Legs: Usually long, narrow, telescoping legs that resemble a tripod or insect. An excellent, all-terrain method of movement. Suitable for any body frame. Cost: 4 legs: 500,000 credits, 6 legs: 750,000 credits, 8 legs: 1.2 million credits. Add 500,000 for retractable/extendible, concealed, leg units.

Vehicular Walker Type Leg Units. A four or six legged all-terrain vehicle suitable for any vehicle body frame. Cost: Four legs: One million credits, six legs: 1.5 million. Add 500,000 credits to make the legs retractable, folding and concealed. This can be done when there is another means of locomotion such as wheels, hover jets, etc., but when needed, the robot transforms to reveal the legs and the new means of movement.

Increasing the Basic Speed Attribute

Each of the basic body frames that utilize legs are listed with a standard speed attribute. However, the speed attribute for leg units can be increased. The maximum for humanoid legs is Spd 220 (150 mph/240 km). The maximum for animal and insect legs is about a Spd of 423 (approx. 300 mph/480 km). Of course, vehicular propulsion and flight capabilities can be built into a humanoid or other robot form as an alternate, faster propulsion system.

Cost for Additional Running Speed of Legs: 10,000 credits per each Speed point beyond the basic system attribute. Thus, to increase a Speed of 22 to a Speed of 32 costs 100,000 credits.

Vehicular Locomotion

These are engines and propulsion systems designed for ground, air, and vehicular robots. Generally, any of these systems can be utilized in any of the robot types and power systems. These are the costs of the basic means of movement and still require a mode of propulsion.

Wheels: Automobile size and type: 1000 credits per pair.

Wheels: Oversized (truck or tractor size): 2000 credits per pair.

Wheels: Micronized (roller skate size): 1200 credits per pair.

Treads: Small (car size): 15,000 credits per pair.

Treads: Large (tank size): 20,000 credits per pair.

Pontoons: Small (car size): 1000 credits per pair.

Pontoons: Large (airplane size): 4000 credits per pair.

Hover Jets: Small (human size): 20,000 per pair.

Hover Jets: Directional (vehicular): 10,000 per pair.

Hover Jets: Main Thrusters (vehicular): 40,000 per pair.

Note: All wheels and treads are of superior strength and

quality. Wheels have 20 M.D.C. each, Treads: 100 M.D.C. per each unit, Pontoons: 100 M.D.C., Hover Jets: 15 (small or directional) and 45 M.D.C. for each main thruster jet.

Engines and Propulsion Systems

Fuel Injected Engine

Liquid Fuel: Despite incredible technological advancements, liquid fuel engines are still available, desirable, and reliable and the most economical systems available. The major disadvantages of this system are the use of a limited, consumable fuel that must be continually replaced, the need of containers to hold the fuel (gas tanks), the weight of the fuel itself, and uncertain availability of gasoline. (Only major cities, 'Burbs and towns that cater to merchants, mercs and travelers will have petroleum at reasonable prices; 2D4 credits per gallon. At communities where gas is scarce, the price will be 1D4x10 credits per gallon, if it is available at all.) Still, gasoline type fuels are comparatively inexpensive and easily attainable in populated regions like the Coalition States, Free Quebec, the Domain of Man, and anywhere the Black Market operates. It is in the wilderness areas where one may be in danger of running out of gasoline. **Note:** Liquid fuel requires an exhaust system that is not suitable for humanoid and animal type robots. It also requires some form of locomotion, preferably wheels or hover system.

Cost for Engine and One Fuel Tank: 50,000 credits. The player determines the size of the gas tank or tanks. Weight and size may be a problem for small robots. One gallon (3.8 liters) weighs 7 lbs (3.2 kg). A 70 gallon rectangular tank would measure approximately 48x20x18 (122x51x46 cm) inches and weighs 490 lbs (222 kg). Disposable auxiliary gas tanks is one possible solution, cost is about 200 credits per 20 gallon (75.7 liters) capacity. **Estimated Milage:** 60 miles (96 km) to one gallon of fuel. **Maximum Speed:** 200 mph (320 km).

Turbo Engine

Requires liquid fuel. Conventional leaded or unleaded gasoline is suitable, high octane preferable, and requires a fuel tank(s). **Estimated Milage:** 50 miles (80 km) to one gallon of fuel. **Cost for Engine and One Fuel Tank:** 75,000 credits for liquid fuel (175,000 credits if connected to a nuclear or solar power system as a backup system). Maximum Speed: 260 mph (416 km).

Turbo-Jet Engine

Requires high octane fuel or a special mixture, such as those used for jet aircraft, or can be linked to a nuclear power source. This engine cannot be used for speeds under 100 mph (160 km), thus ground vehicles/robots will have to use a two engine system, with one for low speeds and the turbo-jet for high speeds and/or flight. The robot will obviously have some sort of visible hover propulsion system and jet thrusters. **Estimated Milage:** 30 miles (48 km) to one gallon of fuel. And/or can use a nuclear or TW power source (costs an extra 150,000 credits plus cost of other power supply). **Basic System Cost:** 150,000 credits for liquid fuel (300,000 credits connected to nuclear or TW). **Maximum Speed:** 500 mph (800 km).

Hover Jets for Vehicle Type Robots

A super sophisticated twin engine system, with bottom and rear jet thrusters and V/STOL capabilities. This unique propulsion system offers ground and air capabilities. The Vertical Take-Off and Landing (VTOL) means the robot can hover stationary above the ground, make vertical take-offs and landings (fly straight up and down), as well as low altitude flight. The robot will obviously have some sort of visible hover propulsion system. **Estimated Milage** on a liquid fuel is 50 miles (80 km) per one gallon. **Basic System Cost:** 500,000 credits; requires at least four jets, and/or can be linked to a nuclear or TW power source (cost an extra 100,000 credits for the link plus cost of other power supply). **Maximum Speed:** 400 mph (640 km). **Maximum Altitude:** 20,000 feet (6,096 m).

Hover Jet Backpack for Humanoid Frames

This can be a detachable backpack unit or built directly into the robot's back. Directional thrusters and booster jets may also be built into the feet, lower legs, hips and chest. **Basic System Cost:** 150,000 credits; can be linked to a nuclear power source (cost an extra 100,000 credits). **Maximum Speed:** 400 mph (640 km). **Maximum Altitude:** 1000 feet (305 m).

Concealed Micro-Hover System

A concealed hover jet system of tiny jet boosters built into humanoid or animal robots. The hover jets are strategically located in the feet, hips, back, chest and/or underbelly. When not engaged, the jets are completely unnoticeable. **Basic System Cost:** 500,000 credits; can be linked to the nuclear power system for an additional 100,000 credits. **Maximum Speed:** 200 mph (320 km). **Maximum Altitude:** 500 feet (152 m).

Step Eight: Audio, Optics & Sensors

Audio

Advanced Audio System: Amplified stereo hearing in the full decibel range, the same as the cybernetic Amplified Hearing (see page 49 of *Rifts® Ultimate Edition*). The 'Bot can hear frequencies inaudible to the human ear, like a dog whistle (as well as wide-band radio), enabling the character to hear almost inaudible sounds at up to 360 feet (110 m) away. *At 75 feet (22.9 m),* sounds as quiet as one decibel, softer than a whisper, can be heard. *At 150 feet (45.7 m),* sounds as quiet as 10 decibels, a whisper, can be heard clearly. *At 360 feet (110 m),* sounds in the normal conversation range of 30 decibels can be heard as if the character was standing only a few feet (one meter) away. This is the maximum range for eavesdropping on conversations. Only sounds of 70 decibels (e.g., the sound of heavy traffic) or louder can be accurately heard and the location pinpointed from 500 to 1,000 feet away (152.4 m to 305 m).

The Amplified Hearing also enables the character to accurately estimate the distance and location of the sound source, and recognize specific, known sounds and voices at a base skill of 35% plus 5% per level of experience. Background noise, such as other conversations, traffic, machine noise, etc., as well as barriers like closed doors and walls, *will* decrease the range and

clarity of what can be heard. G.M.s should use their discretion and common sense.

Radio capabilities enables the robot to listen to commercial radio stations, citizen band (C.B.), police bands, shortwave and other radio transmission frequencies. Also comes standard with a *Universal Headjack* for tapping into computers, radios and audio equipment directly. Radio Range (transmissions and receiver): 50 miles (80 km) in the city, 100 miles (160 km) in the wilderness, both require a retractable antenna; half range without one. Bonuses: +3 on initiative, +1 to parry, and +2 to dodge.

Cost: 150,000 credits for the entire advanced system. See *Basic Hearing System* for something must less expensive.

Audio Recorder: An audio recording system with external access capable of recording most sounds that the robot can hear. Two hundred hours of digital sound recordings can be stored. Editing capabilities allow the robot to keep sound bites and conversations it wants to preserve and erase or record over unwanted audio recordings. Can also transmit recordings by radio or download onto an audio disc, computer, or audio equipment via headjack or fingerjack. Cost: 75,000. Illegal in the Coalition States.

Basic Hearing System: Stereo hearing capacity equal to the best human hearing, and a narrow band radio receiver enables the robot to hear/receive commercial radio transmissions, shortwave and similar. **Range:** 5 miles (8 km) in the city, double in the wilderness. Cost: 30,000 credits.

Bug Detector: A small device that picks up radio signals from surveillance listening devices (bugs). Range: 60 feet (18.3 m). Cost: 30,000 credits.

Built-In Language Translator: Starts with 13 different languages, including the nine major regional ones, plus Russian, Kittani, Naruni, and Splugorth/Demongogian; 200 others can be added. Level of accuracy is 88.8% when listening to only one or two speakers and languages at a time. Drops to 68% with a six second delay when trying to translate 3-6 speakers simultaneously, 20% if more than that. Cost: 32,000 credits. Illegal in the Coalition States.

Built-In Loudspeaker: The 'Bot can amplify the loudness of his voice, like a bullhorn, to about 80 decibels. Cost: 6,000 credits.

Built-In Radio Receiver & Transmitter Headjack: A fully operational radio is built inside the head or a shoulder, back or hip unit. Range: 20 miles (32 km). Cost: 22,000; add 10,000 for scrambling radio messages and decoding.

Human Voice Synthesizer: Provides the robot with a completely human sounding voice, male or female. This is a pleasant, single voice. The system is not capable of changing the voice/sound or imitating others. Without this feature, the robot's voice sounds mechanical. Cost: 5,000 credits. Also see Modulating Voice Synthesizer.

Inaudible Frequency Transmission: The robot can speak/transmit sound frequencies inaudible to the human ear, but audible to other robots, cyborgs with ultra ear and beings with superior hearing, such as mutant dogs. Cost: 50,000 credits.

Juke Box: The robot has 2000 music titles (songs to instrumentals) stored inside an internal music player. The music can be played so only it hears it, played aloud through concealed speakers or a loudspeaker, or broadcast via radio transmission,

provided those systems are part of the 'Bot's features. Cost: 3,000 credits.

Sound Analysis Computer: Designed exclusively to listen, identify, remember, and analyze sounds. 380,000 different sounds are programmed into its memory, including gunshots by caliber, energy blasts, engine sounds, animal calls, noises made by monsters, and other sounds. 40,000 new sounds can be added. It is also capable of analyzing, comparing, and matching voices and sounds in its files, identifing a sound or voice via computer comparison with 80% accuracy, and imitating another person's voice with 78% accuracy (+10% when imitated over any form of audio transmission). Bonus: +10% to impersonate voices or imitate sounds. Cost: 500,000 credits; illegal in the Coalition States.

Modulating Voice Synthesizer: Enables the robot to change, disguise and humanize its voice by altering tone, bass, pitch, etc. Can also speak in a sound frequency inaudible to normal humans, but audible to normal canines, bats and mutant dogs, as well as other 'Bots, cyborgs, and characters with a cybernetic Ultra-Ear. Base skill at imitating voices is 10% +5% per each additional level of experience. Cost: 30,000 credits. Add 12,000 credits to get a voice disguise program with over 200 different human and D-Bee accents and inflections. Illegal in the Coalition States.

Universal Headjack (or Fingerjack): Same as the bionic version, see page 51 of *Rifts® Ultimate Edition.*

Radio Signal Scrambler System is linked to the radio system to send and receive coded messages. Cost: 10,000 credits.

Wide Band Radio Receiver and Transmitter with directional capabilities. Range: 300 miles (480 km) with a retractable antenna (150 miles/240 km without the antenna). Cost: 38,000 credits.
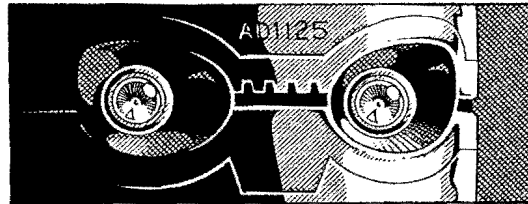
Optics

Advanced Robot Eyes: Optic System: Includes color vision, 3-D analysis and depth perception, passive nightsight, infrared and ultraviolet vision. Range: 2000 feet (610 m). Cost: 160,000 credits. **Note:** *Infrared vision* emits a pencil-thin beam of infrared light, invisible to the human eye, but visible to another infrared system, to illuminate its target in darkness. The narrowness of the beam limits the scope of vision to about a 10 foot width (3 m). *Nightsight* is a *passive image intensifier* that electronically amplifies existing ambient light to provide a visible picture without emitting any trace light of its own.

Other optical features can be added for an additional cost. They are listed elsewhere in this category. Note that a Robot's eyes may be small and relatively human, but more often than not, they look like a large camera lens or a cluster of camera lenses from tiny to the size of a softball. The eye lens may even be telescoping and make a humming, buzzing or clicking sound as the lens adjusts. As many as 10 of the following Optic Features may be added to one robot eye.

Basic Robot Optic System: A color sight system with an analysis computer of 3-D images; 20/20 vision. Cost: 50,000 credits. **Note:** Other optical features like infrared, macro sight, etc., can be added. They are listed elsewhere in this category.

Camera Eye: External Video and Audio Surveillance System: A high resolution video camera, built into the eyes or as a separate optic system (concealed or not), relays images directly to the robot's optic scanners and can be recorded as a record of events. A digital video receiver and transmitter system enables the robot to receive video transmissions for viewing or and recording. The images are recorded on a six hour, three inch, video disc that is slipped into a slot in the skull or chest. The disc can be ejected at will. Range: 40 miles (64 km). Cost: 500,000 credits, outlawed by the Coalition.

Laser Targeting System: A thin beam of light is emitted from the eyes or forehead or the weapon itself. When the light beam hits its target, a computer locks in and registers the fire command. Bonus: +1 to strike when using a distance weapon. Not applicable to hand to hand combat. Likewise, P.P. bonuses do not apply to long-range weapons. Range: 4000 feet (1219 m). Cost: 50,000.

Optical Reader: Designed specifically to "read" words and text, including numbers, letters, diagrams, drawings, maps and other flat images. Cost: 10,000 credits. -50% to read/Literacy without it.

Optical Scanner: Anything the robot "sees" can be digitally scanned and saved in its memory as digital images (e.g., a photograph, a page of text from a book, a drawing, map, and similar) as well as snapshot-like images (photographs) of people, scenery, etc., similar to a cell phone camera with limited zoom (x10 up to 500 feet/152 m away). Does not have a "flash" capability, but other optics like infrared, passive nightsight, telescopic vision, etc. may be tied to the scanner. Cost: 150,000 credits.

Live Video Transmission (and Receiver): Transmission range is 20 miles (32 km) in the city, 60 miles (96 km) in the wilderness, unless hampered by some sort of interference. Live feed is most common, but up to two hours of digital video can be recorded and stored on a memory chip. Cost: 50,000 credits for a single basic color and sound system, 150,000 credits for a pair of camera eyes. Add 20,000 credits for synchronized digital audio recording and transmission. Add 40,000 credits for broadband capabilities (and double the transmission range). Illegal in the CS.

Eye: Infrared. This type of optical enhancement relies on a source of infrared light, a pencil thin beam of light projected from the eye to the target. The narrowness of the beam limits the viewing area to a small area of about seven feet (2.1 m). Range: 1,200 feet (366 m). Cost: 16,000 credits; 19,000 credits for a pair.

Eye: Macro. A mechanical camera lens that may be part of the robot's eye or an additional system with the eye unit or a separate eye/lens. The Macro unit enables the robot to magnify tiny objects or areas at close range (within three feet/0.9 m) like a magnifying glass to microscope ranges of magnification! It also comes equipped with a variety of filters to block out glare and dust. Microscopic magnification ranges from 2x to 50x. The artificial eye is ideal for robots designed to fill technical or medical roles (great for delicate work). Cost: 40,000 credits per single eye. A photographic camera (still or video) feature can be added for the additional cost of 10,000 credits.

Eye: Light Filters. Reduces glare like invisible sunglasses. Filters slip into place as needed. Cost: 1000 credits.

Eye: Passive Nightvision. Light amplification system that uses ambient light (the moon, starlight, etc.) to see clearly in the dark. 2,000 foot (610 m) range, but can be increased if combined with a telescopic lens feature. Cost: 30,000 credits.

Eye Stalk: Being synthetic, the robot can possess features a normal human and even cyborgs cannot have. Robotic eye stalks are one of them. An eye stalk may be concealed and extendible or protrude from the head, neck, shoulders and even the forearms. As many as four are possible on the head and/or neck, one per shoulder or forearm, and any of the optic systems, in combination or individually, may be part of the eye on the stalk. The stalk may be a few inches tall to 18 inches (0.45 m), or a flexible, tentacle-like appendage that can turn 360 degrees in every direction. Cost (for just the stalk): Short: 12,000 credits. Medium: 20,000. Long (two feet/0.6 m): 32,000 credits each, *plus* the specific optics for each. An eye stalk can have up to eight optic features, but the more features, the larger the camera-like eye lens.

A tentacle eye stalk can be up to seven feet (2.1 m) long and thin enough to slide under a door, go through a small opening as well as bend to peek around corners (has 8 M.D.C. and an attacker must make a Called Shot at 17 or better to hit such a small target). However, to be used as a small spying device, it cannot have more than basic robot vision, passive nightsight or infrared, and one other optic feature. Anything additional increases the size of the lens at the end of the tentacle stalk to baseball-size and bigger.

Eye: Telescopic. In addition to normal 20/20 vision, the eye has a telescopic lens for long distance viewing (4-10x50 magnification). Range: 6,000 feet (1829 m). Cost: 10,000 credits; 16,000 for a pair.

Eye: Targeting Display. Imposes crosshairs on a target, adding a bonus of +1 to strike with any ranged weapon (both eyes). **Note:** Two targeting eyes still provide only a +1 bonus to strike, not +2. Cost: 4,000 credits.

Eye: Thermal-Imager. The lens converts the infrared radiation of warm objects into a visible image, enabling the robot able to see heat as represented by bands of color. Ideal for targeting and tracking at night; can see in darkness, shadows, and through smoke, but can only see the heat radiation clearly, not all the details of the surrounding area. Range: 3000 feet (914 m). Bonus: +1 to strike in darkness. Cost: 32,000 credits for a pair. Illegal in the CS.

Searchlight: Built into the eyes, or as a separate light feature built into the head, shoulder(s), chest or eye stalk. A 90 degree arc up and down and 180 degree rotation is standard. High-powered light beam used to illuminate an area like a flashlight or used as a beacon. Range: 300 feet (91.5 m). Cost: 1000 credits.

Visual Recognition: Combat Computer: A special system tied to the optic systems. The computer recognizes 30,000 enemy targets including vehicles, robots, insignias, uniforms, known monsters, D-Bees and enemies. An additional 2000 targets can be added to the memory. Bonus: +5% to Intelligence

skill. Range: Equal to optic system; usually 2000 to 6000 feet (610 to 1828 m). Cost: 200,000 credits.

Sensors

Biometric Scanner: A sensor unit that measures the barometric pressure, humidity and air temperature around the robot. Besides the obvious, the scanner indicates changes in these areas which may indicate the coming or end of a storm or an unnatural environmental event. Cost: 11,000 credits.

Bio-Scan Medical Survey Unit: A computer system designed to monitor the life signs of biological life forms. Sensors are built into the robot's hand or forearm and must be removed from a concealed compartment and attached. Monitors vital signs, such as respiration, blood pressure, brain waves, and body temperature. A computerized medical system tied into the Bio-Scan computer will indicate trauma to the brain and nervous system, blood loss, presence of drugs or other unnatural agents in the bloodstream, and coma condition. Cost: 350,000 credits.

Depth Gauge & Alarm: An internal device that can calculate underwater depth. A digital counter can indicate the exact depth via internal audio or HUD system imposed over the 'Bot's vision, and make warning sounds when the character is within 100 feet (30.5 m) of his maximum depth tolerance. Cost: 3,000 credits.

Explosives Detector: Sniffs out and detects explosives within 12 feet (3.6 m). Is also used to scan an individual, vehicle or container to detect even small amounts of explosive materials and residue from explosives (less than one ounce), but such a scan must be done at close range, within three feet (0.9 m), to pinpoint the location of the explosive. The type is not known, although the signal will be larger/louder if there is a large quantity of explosives or it is an extremely powerful device. Cost: 50,000 credits.

Gyro-Compass: A device that can be implanted almost anywhere on the body. It enables the 'Bot to always locate north and the other directions, as well as up and down. Ideal for pilots of aircraft and power armor as well as underwater operations. Cost: 600 credits.

Motion Detector and Warning System: Registers vibrations in the air indicating movement. A collision warning system will sound an internal alarm to warn of an impending collision/impact. Range: 60 feet (18 m). Bonus: Adds +1 to initiative and +1 to parry and dodge. Cost: 75,000 credits.

Motion Detector: The reliability of the detector is quite limited, but it can be used to accurately assess wind direction and wind speed, and to detect the rapid approach of large moving objects, such as a vehicle, aircraft, power armor, etc., whose rapid approach or large size causes a disturbance in the air. A motion detector is especially useful in the dark because the speeding object must usually be within 500 feet (152 m) to create a detectable air current. Likewise, the motion sensor will detect the movement of somebody/thing moving nearby, within 40 feet (12 m), but only if the sensor user is motionless or barely moving itself. The sensor can also detect sudden changes in air current and pressure caused by somebody opening a door or window, and can estimate speed of travel when inside an open-air (or open window) vehicle. Cost: 15,000 credits.

Radar Detector: A tiny radar receiver that alerts the robot when he is being scanned by radar; 80% accuracy. Unfortu-

nately, determining the direction or source of the radar probe is only 60%. Cost: 10,000 credits.

Radiation Detector: Detects and measures the amounts of harmful types of radiation and warns its owner. Includes nuclear, atomic, and microwave radiation. Cost: 1,200 credits.

Robot: Micro-Radar: A small, but sophisticated radar system usually used in human and animal-size robots 10 feet (3 m) and smaller. Can identify up to 30 targets and simultaneously track 12 bogies as low as 700 feet (213 m). Rate of travel, direction, and location are all indicated. Range: Two miles (3.2 km). Cost: 200,000 credits.

Robot Radar System: A sophisticated radar system, suitable for ground to air monitoring. Can identify up to 96 targets and simultaneously track 42. Requires a special unit with an extendible dish attached to the 'Bot's back. Range: 50 miles (80 km) and is able to detect a cruise missile-type target, rocket bike or power armor flying as low as 500 feet (152 m)/200 feet (61 m) in an open area/plains without other ground clutter. Lower than that and the target is lost. Can also identify the speed of ground vehicles when a radar beam is directed at one specific target; works like a police officer's radar gun. Cost: 600,000 credits. Ideal for giant and vehicular robot types.

Sensory Antenna: Registers vibrations in the air indicating movement, as well as having touch and heat sensors. The antenna enables the 'Bot to maneuver even in total darkness by feeling its way around. Range: Touch, usually 3-10 feet (0.9 to 3 m) depending on the size of the robot (never larger than one third the robot's height). Bonus: Penalty for blindness is half and adds a bonus of +1 to dodge. 1D4+4 M.D.C. per antenna. Cost: 120,000 credits per pair. Whether the 'Bot has two or 10 antennas, the bonuses and abilities remain the same.

Step Nine:

Weapons

Robot Strength and Damage: Type of P.S.: Robotic. P.S. of 16 or higher does M.D. with a normal punch and power punch. A restrained punch does S.D.C. damage, and a successful *pulled punch* can inflict whatever level of M.D. or S.D.C. damage is desired (player's choice) within the range of his character.

The *Robot Strength & Damage Table* is found on page 285 of the *Rifts® Ultimate Edition.*

Bionic Equivalent Weaponry & Tools

The following weapon systems are available and are identical to the bionic systems found in **Rifts® Ultimate Edition**, pages 51-53 (or **Rifts® RPG**, pages 239-241). All have energy weapons have an effectively unlimited payload as they draw from the robot's power supply. Robot prices are bit higher than bionics.
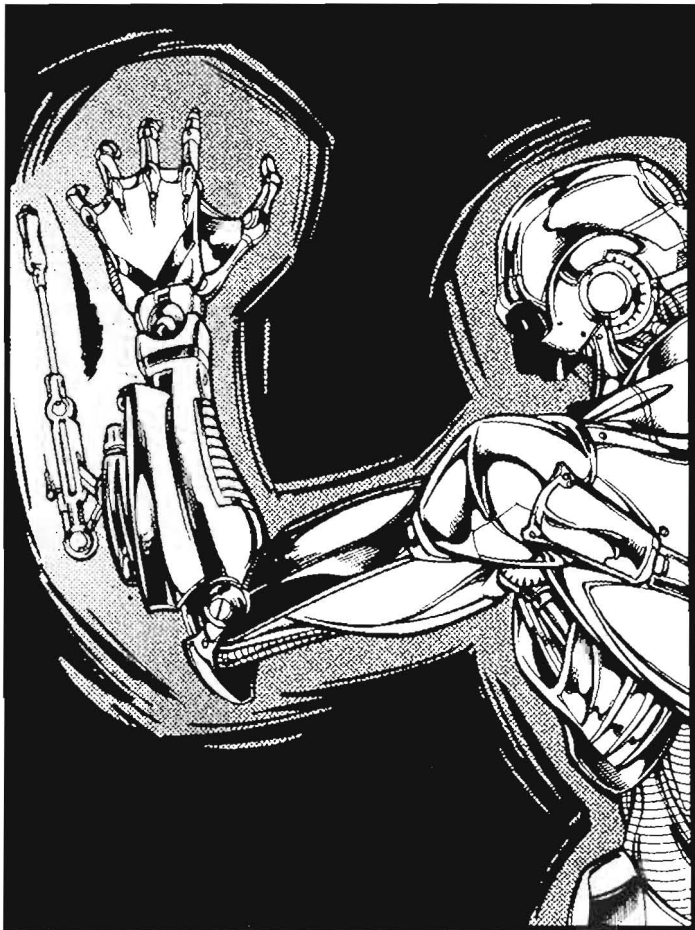
Blade: Extendible Finger Blades: 1500 credits per finger for S.D.C. blades, 11,500 for Vibro-Blades.

Blade: Extendible Forearm Blade (Vibro-Sword): 20,000 credits.

Blade: Extendible Knuckle Blades: 3000 credits each knuckle for S.D.C. blades, 11,500 for Vibro-Blades.

Blade: Forearm (Vibro-Blades): 6,000 to 18,000 credits.

Chemical Spray: 60,000 credits, double range.

Climb Cord: 2000 credits.

Concealed Leg Laser Rod: 75,000 credits.

Concealed Leg Ion Rod: 50,000 credits.

Concealed Arm Laser Rod: 50,000 credits, double range.

Forearm Ion Blaster (Standard): 35,000 credits.

Forearm Light Laser: 32,000 credits.

Forearm Medium Laser: 50,000 credits.

Forearm Heavy Laser: 56,000 credits.

Forearm Mini-Machine-gun: 30,000 credits.

Forearm or Shoulder Mini-Missiles: 58,000 credits.

Forearm Plasma Ejector (Standard): 56,000 credits.

Forearm Particle Beam: 80,000 credits.

Forearm Vibro-Blade(s): 40,000 credits.

Garrote Wrist Wire: 400 credits.

Grapnel & Launcher: 7,000 credits.

High Explosive Finger Joint: 1,000 credits per joint.

Knuckle Spikes (S.D.C.): 1,200 credits.

Laser Eye: 150,000 credits each.

Laser Finger Blaster: 25,000 credits.

Laser Utility Finger: 6000 credits.

Pneumatic Punching Jackhammer Arm: 72,000 credits.

Tool: Jackhammer: 72,000 credits.

Tool: Heavy Mining Drill: 76,000 credits.

Tool: Precision Mining Drill: 72,000 credits.

Tool: Plasma Torch: 80,000 credits.

Weapon Rod Concealed in Leg: 42,000 or 36,000 credits.

Wrist Needle & Drug Dispenser: 5000 credits plus chemical cost per dose.

Weapon Modifications

Additional Hand and Arm: A pair of additional hands and arms can be built into the robot just below the usual pair. The second set of limbs are a bit smaller and lighter than the normal ones, but are still quite formidable additions. Maximum Robotic P.S. is 30 and P.P. is 24 (base is 12 for both). M.D.C. of each hand is 20 and each arm is 45. Bonuses (for a pair): +1 attack per melee and a bonus of +1 to strike and parry to the character's overall combat skills. A single hand and arm adds only a bonus of +1 to parry. Cost: 425,000 credits for a pair, 245,000 credits for one.

Additional Mini-Hand and Arm: This may be one or two small, thin, retractable appendages that fold up to fit in a concealed compartment. These are typically as long as the other arms, but are much more spindly, with long, delicate fingers and/or tools for fingers (laser, camera, etc.) and used for precision work (electronics, mechanics, computer operation, surgery, etc.). Maximum Robotic P.S. is 18 and P.P. is 16 (base is 10). M.D.C. of each hand is 10 and each arm is 25. Cost: 350,000 credits for a pair, 175,000 credits for one; reduce cost by 20% if the arms are NOT concealed.

Additional Non-Human Appendage: Tentacles. Tentacles are like prehensile steel cables, the mechanical equivalent of octopus arms minus the sucker cups. Most can extend and retract to about half their true size, and on larger robots (bigger than 10 feet/3 m) and robot vehicles, tentacles can be concealed until needed. In addition to their normal limbs, as many as two pairs of tentacles (that's four arms) can be built into humanoid and most large animal shaped robots.

Tentacles are typically used for entangling, grabbing, holding and carrying, as well as climbing. Although prehensile and capable of using weapons or tools, they do so at a penalty, even if the tentacles end in clamp-like hands or fingers.

Length can be up to half the height or length of the robot. Maximum Robotic P.S. is 28 and P.P. is 20 (base is 10 for both). M.D.C. of each tentacle is 40. Bonuses (for a pair): +1 attack per melee, +1 to parry and disarm, and +3 to entangle to the character's overall combat skills and +10% to Climbing skill. A second pair adds +1 to parry and +5% to Climbing skill, nothing else. A single tentacle adds a bonus of only +1 to parry and +4% to Climb. Penalties: -2 to strike with melee weapons, -3 to strike with a gun, -1 to M.A. and P.B. attributes (tentacles are creepy looking), and -20% to any skill that requires hands, except Acrobatics, Gymnastics and Climbing (no penalties apply to those). Cost: 390,000 for a pair or 265,000 for one. Up to two pairs (4 tentacles total) can be added to most human or animal sized robots, but giant robots can have as many as four pair (8 arms).

Robot Forearm Weapon can see the range increased by 1000 feet (305 m) at a cost of 150,000 credits.

Handheld Weapons: Robots with arms and hands may also use any type of handgun, rifle or energy weapon, provided the hand and fingers can fit the trigger of the weapon. Furthermore, traditional "guns" can be modified (the trigger guard removed, a larger/long trigger put in, the stock extended, etc., even mounted and fixed to a forearm or shoulder turret) to make them suitable for use by a large robot.

Cost of such conversion can range from 50 credits to a couple hundred, to 1-5,000 credits depending on what needs to be done, but most are simple and cheap.

Note: Most combat robots tend to lean toward M.D. energy weapons, and heavy weapons like rail guns, plasma ejectors, and others with a lot of firepower and which are normally too large or heavy for use by humans or, perhaps, even cyborgs.

Flame Thrower: A small unit with a retractable nozzle and hose, usually housed in the hip or back of humanoids (occasionally mouth or hand of giant robots), mouth of insect and animal frames, and the front or rear of vehicles.

Range: 140 feet (42.6 m).

S.D.C. Damage: 4D6 S.D.C. per blast, plus a 60% chance of setting combustibles on fire.

M.D. Damage: 3D6 M.D. per blast, plus an 80% chance of setting combustibles on fire.

Rate of Fire: Each blast counts as one melee attack.

Payload: 30 blasts per standard fuel tank mounted on the upper or lower back. Refilling or charging the fuel tank takes two minutes. Double capacity for giant-sized 'Bots and vehicles.

Cost: 50,000 credits; double the cost for giant-size. S.D.C. fire chemical costs 2,000 credits per 30 blasts, M.D. costs 15,000 credits

M.D.C. Animal Features: Claws, fangs, tails, etc., are all features typical of animal robots, but features such as a tail, claws, etc., can also be applied to humanoids as well.

Small Claws: 1D4 M.D. Cost: 24,000 credits per pair.

Medium Claws: 1D6 M.D. Cost: 34,000 per pair.

Large Claws: 2D6 M.D. Cost: 70,000 per pair.

Note: Add 30,000 credits for Retractable Claws. A maximum of two pairs of claws per four fingered hand. A restrained claw strike inflicts 4D6 S.D.C. damage plus P.S. bonus. Penalty: -5% skill penalty to all skills that require manual dexterity and a delicate touch.

Biting Jaws and Teeth: Small 1D6 M.D., Medium 2D4 M.D., Large 3D6 M.D. Cost: 40,000 credits, 60,000 and 100,000 credits respectively.

Prehensile Tail: Designed for climbing (+5% to the skill) and balance (+5% to Acrobatics and Gymnastics skills), the tail can also pick up and carry items from small and delicate to weighing hundreds of pounds. The tail's P.S. is the same as the robot's arms. Bonuses (for the tail): +1 attack per melee but only when the tail is used, +1 to entangle, +5% to Climbing skill. Penalties: The tail is -3 to strike with melee weapons, -5 to strike with a gun, and -40% to any skill that requires hands, other than pressing a button or pulling a switch or lever. Cost: 180,000 credits.

Prehensile Tail with Stinger or Blade: This tail is designed for combat and hitting and stabbing combatants. This tail cannot entangle, grab or hold opponents or items. **Note:** Bonuses apply only to *tail attacks* and are NOT added to the robot character's overall hand to hand combat bonuses. Penalties: The tail is -3 to strike with melee weapons, -5 to strike with a gun, and -40% to any skill that requires hands, other than pressing a button or pulling a switch or lever. Cost: 280,000 credits (20% less for Blunt).

Mega-Damage by Type of Tail Weapon: Blunt: Tail may end in a mace-like ball or just a tail tip. Damage is as per Robotic P.S., but at -30% the normal P.S. for the robot. Bonuses: +2 to strike and parry.

Electrically-Charged Tail Tip: 2D6+2 M.D. and +2 to strike; hand to hand combat, no long-range blast.

Injection Stinger: Same as *Wrist Needle & Drug Dispenser,* only it can hold 40 doses, +2 to strike and +1 to dodge.

Laser Blaster: 2D6 damage, Range: 2000 feet (610 m), but gets no bonuses to strike, unmodified rolls only.

Vibro-Blade or Stabbing Stinger: 2D6 M.D., +2 to strike, +1 to parry and disarm.

Weapons for Giant Robots

Giant robots and large vehicles, 16 feet (4.9 m) or larger, can support large, powerful weapons which is reflected in the weapons' range. Consequently, use the same weapons as listed previously, but add 1000 feet (305 m) to the range and 1D6 M.D. to damage. In the case of machine-guns, rail guns, and missiles, double the payload.

Missile Launcher Pods for Giants and Vehicles: Missile launcher pods must be mounted on the shoulders or back of giant robots or in a housing on the top or side(s) of a vehicle's exterior.

Missile Launcher Types:

Mini-Missiles Cost: 200,000 credits per launcher, payload of 10 missiles.

Short-Range Missile Cost: Small: 300,000 credits, payload of three missiles. Medium: 500,000 credits, payload of six missiles. Large: 800,000 credits, payload of twelve missiles.

Medium-Range Missile Cost: Small: One million credits, payload three missiles. Medium: 1.5 million credits, payload of six missiles. Large: 2.5 million credits, payload of twelve missiles.

Long-Range Missile Cost: Small: Five million credits, payload of three missiles. Medium: 8 million credits, payload of six missiles. Large: 12 million credits, payload of eight missiles.

Step Ten:
Special Features

Many are basically the same as Bionic equivalents.

Climb Cord: Similar to the cybernetic garrote wire, this is a 50 foot (15.2 m) length of 1,500 lb (675 kg) test cord, no thicker than string. It can be pulled out of a housing in the robot's wrist or arm. The cord is primarily used for espionage and scaling walls. A weight can be attached and used as a chain-type weapon (2D4 S.D.C. damage), or a small grappling hook can be attached. Cost: 2,500 credits; grappling hook and other attachments can be made or bought for under 30 credits.

Clock Calendar: An internal device that keeps continuous track of the exact time, down to a 100th of a second, as well as the calendar date. Cost: 200 credits.

Cosmetic Enhancements: A variety of techniques and materials can be used to create an accurate simulation of a living creature.

Often used for animal 'Bots. All bonuses are cumulative.

Realistic Skin Overlay: Looks and feels like the real thing. Complete with fake musculature. Fire resistant and tough, 5 M.D.C. main body. Increases P.B. +2. Cost: 75,000 for a six foot (1.8 m) humanoid or animal. Add 5,000 credits for every additional foot (0.3 m).

Human Hair Implants: Looks and feels just like real human hair. Cost: 5,000 credits for head only, 20,000 full body; looks completely natural, +2 P.B.

Fur: Any variety of animal fur/body covering is available. Cost: 50,000 credits on human or large size animal robots, 30,000 for small and medium, +4 P.B.

Realistic Eyes: Conceal the artificial appearance of the robot eyes, +2 P.B. Cost: 10,000 credits.

Sculpted Facial Features: A unique, individual face and teeth designed by skilled artists, complete with simulated muscle movement to complement full facial expressions, frowns, smiles, angry looks, etc., +3 P.B. Cost: 50,000 credits. Movie star face adds 40,000 credits to the initial cost and another +3 P.B.

Minor Body Characteristics: Finger and toe nails, teeth/fangs, beard stubble, moles, pimples, scars, etc. Cost: Approximately 2,000 credits each.

Customized Paint Job: Basically the same as customizing body armor with special colors, designs, insignias, and so forth. Cost: 1,000-5,000 credits depending on the amount of work and detail.

Customized Face or Armored Face Plate: Handsome, beautiful, monstrous, robotic, ornate, or whatever the purchaser may desire. Cost: 2,000 to 20,000 credits, depending on the complexity.

Cyber-Nano-Robot Repair Systems (CNRRS): Similar to the RMK and IRMSS medical repair systems used by humans, these nano-bots can be released when needed most to make minor repairs. They use available spare materials to effect mechanical and armor repairs, but can also reroute, patch, and secure internal circuits and repair internal systems -- at least to some degree. As much as 40 M.D.C. can be restored to armor or any one single limb, the head or main body – or any *one* optic system (eye), sensor, implant, weapon or internal system can be repaired completely (or close to it). Time required varies with the task. Something small and simple (10 M.D.C. or less): 3D6 minutes. Something medium-sized (15-25 M.D.C.): 1D6x10+30 minutes, and large or complicated, like an entire hand and arm, leg, major system, major weapon, main body, etc. (40 M.D.C. maximum): 2D6x10+90 minutes. Payload: Good for two repair jobs before used up. Cost: 250,000 credits.

Depth Tolerance: The robot is designed for use in and underwater without ill effect or damage. Includes watertight internal compartments and the ability to withstand depths of up to 1,000 feet (305 m). Cost: 60,000 credits. Depth Tolerance can be increased by 200 feet (61 m) at a cost of 100 credits up to 17,800 feet (5425 m), roughly 3 miles (4.8 km).

E-Clip Port: A standard E-Clip port very similar to the connector unit found on most energy weapons. While such ports are often intended to power a built-in weapon or as a power backup for weapons, E-Clips can also be used to power independent nodular units and non-weapon systems like special sensors, cameras and such. Cost: 3,000 credits.

Expanded Memory: This increases the number of skill programs one can place into the robot. **Artificial Intelligence:** Add one program. **Neural System:** Add two programs. **Transferred Intelligence:** None. Cost: See Robot Programs in the pages that follow.

Finger Camera: A tiny still camera fits inside the tip of one finger. The camera can shoot 48 photos on microfilm and is designed to automatically adjust for low light and bright light exposures. The camera shoots a picture each time a concealed stud in the finger is pressed. Cost: 1,200 credits. Film costs about 50 credits per micro roll and takes about 30 seconds to reload.

Fingerjack: The artificial finger can plug directly into communication systems, radios, sensory equipment, and robots, to receive direct data transmissions. Cost: 2,400 credits.

Headjack: Basically the same as the bionic equivalent. Cost: 10,000 credits.

Increased Attacks per Melee Round: Remember, the typical robot automatically starts with *three attacks* per melee round. Maximum number of attacks per melee round for Non-Combat 'Bots is six, and for military robots, eleven, but 5-8 are most typical.

The following is the cost, per number of attacks per melee, when purchased at the time of initial creation. Upgrades at a later date will cost *double*. And no, the creator cannot buy just one attack at 500,000 credits and then another attack at 500,000 credits, he or she must decide now, how many attacks are desired and purchase that total number.

1 additional attack per melee costs 500,000 credits.

2 additional attacks per melee costs 1.1 million credits.

3 additional attacks per melee costs 1.8 million credits.

4 additional attacks per melee costs 2.9 million credits.

5 additional attacks per melee costs 4.5 million credits.

6 additional attacks per melee costs 6.4 million credits.

7 additional attacks per melee costs 9.4 million credits.

8 additional attacks per melee costs 15 million credits.

Increased I.Q. Attribute: Costs 500,000 credits per each I.Q. point beyond the basic system attribute. Thus to increase an I.Q. of 15 to an I.Q. of 20 costs 2.5 million credits! The maximum for small robots is I.Q. 20, humanoid and all other types, I.Q. 28. High I.Q.s enjoy the usual I.Q. bonus.

Increased P.S. Attribute: First, P.S. is Robotic. Costs 10,000 credits per each P.S. point beyond the basic system attribute. Thus, to increase a P.S. of 12 to a P.S. of 22 costs 100,000 credits.

Small robots is a maximum P.S. 30.

Medium/humanoid-size (5-10 ft/1.5 to 3 m) is a max P.S. 40.

Large (11-24 feet/3.3 to 7.3 m) is a maximum P.S. 50.

Increased P.P. Attribute: Costs 10,000 credits per each P.P. point beyond the basic system attribute. Thus to increase a P.P. of 12 to a P.P. of 22 costs 100,000 credits. The maximum for small 'Bots is P.P. 20, medium and humanoids P.P. 26, and Large (11-24 feet/3.3. to 7.3 m) is a maximum P.P. of 24.

Increased Speed Attribute: Costs 10,000 credits per each Speed point beyond the basic system attribute. Thus to increase a Speed of 22 to a Speed of 32 costs 100,000 credits. The maximum for humanoid legs and tread/track vehicles is Spd 220 (150

mph/241 km). The maximum for animal, insect legs, and flyers is about a Spd of 423 (approx. 300 mph/480 km).

Legs for Leaping: Robotic legs specifically designed for leaping and quick movement; may be a bit over-sized or thick. Can leap 20 feet (6.1 m) high and 32 feet (9.7 m) across. Increase by 30% for a running start or if combined with booster jets in the legs. <u>Bonus</u>: +1 to dodge and +1 on initiative when attempting a dodge or leap of any kind. <u>Cost</u>: An additional 250,000 to the usual leg costs.

Locking Joints: This means that the joints lock into place and cannot be moved or bent until unlocked (equal to a P.S. 40). <u>Cost</u>: 10,000 credits each.

Molecular Analyzer: This microchip based sensor is used for testing and analyzing impurities in the air. It can specifically identify any chemical, or strange and dangerous molecules, like the presence of gas, oil, pollution, or other chemicals in the air. It does not enable one to track. <u>Cost</u>: 50,000 credits.

Monitor Jack/Connector Plug: This is a simple connector that enables technicians to plug in diagnostic readers and monitors to access system readings and basic sensor and communications/video data from the robot. <u>Cost</u>: 1,000 credits each.

Prowl Capability: The robot's feet are padded and cushioned, the legs designed for precision movement, and the overall body made for stealth, meaning no lose or jangling appendages or parts, nor rubbing, clicking, or clanking, and muffled motor/engine sound. **Note:** Can NOT be used with *Legs Made for Leaping* or *running* at great speeds (faster than 150 mph/240 km). <u>Bonuses</u>: Automatically gets the Prowl skill at 76%, +5% to Acrobatics, Climbing, and Gymnastics (if applicable). <u>Cost</u>: 420,000 credits.

Remote Probe: An optics video probe with hover capabilities is concealed inside the robot or in a small shoulder or back launcher. The probe can be launched and remote controlled, following radio directions from the robot. The basic unit includes a video camera with telescopic lens (600 foot/183 m range) that transmits everything it sees and hears to its master robot. **Range of transmissions and control** is 2000 feet (610 m). **M.D.C.:** 10. **Size:** Equal to a soccer ball. <u>Cost</u>: 50,000 credits.

Secret Compartments: Same as bionics; see *Rifts® Ultimate Edition*, page 49 (or *Rifts® RPG* page 241). Giant and vehicular robots can have twice as many normal size compartments, or the usual number but twice as large. <u>Cost</u>: 20% more than bionics prices.

Self-Destruct System: Robot explodes when an internal command is given. Safety features include a triple confirmation sequence followed by a one minute countdown, during which the command can be canceled. Inflicts 1D6x10 damage to a 20 foot area (6 m). <u>Cost</u>: 80,000 credits.

Space Worthy: A body designed to withstand extreme cold, radiation and the vacuum of space. <u>Cost</u>: 50,000 credits.

360 Degree Rotating Body Segment: Head, shoulders, hands at wrist, and upper torso at waist, can rotate in a 360 degree circle. <u>Cost</u>: 15,000 credits per small joint, 30,000 credits for waist rotation.

Common Robotics Features

Power Armor Standard Features

Power armor might be thought of as a sort of super-suit of body armor with built-in weapons.

All Power Armor have the following features:

1. Nuclear Powered: Which means they have an effectively unlimited fuel capacity and power source. Average life: 15 to 20 years.

2. Radar: Can identify and track up to 48 targets simultaneously at a range of 30 miles (48 km).

3. Combat Computer: Calculates, stores, and transmits data onto the heads-up display (H.U.D.) of the pilot's helmet. It is tied to the targeting computer.

4. Targeting Computer: Assists in tracking and identification of enemy targets. Ten mile range (16 km).

5. Laser Targeting System: Assists in the selection and focusing of specific targets and adds a bonus of +1 to strike when using long-range weapons. Does not apply to hand to hand combat or SAMAS.

6. Radio Communications: Long-range, directional communication system with an effective range of about 500 miles (800 km), as well as a directional, short-range radio. Range is 5-10 miles (8 to 16 km). Plus a built-in loudspeaker; 80 decibels.

7. Complete Environmental Battle Armor: Suitable for use in all hostile environments, including underwater (500 foot/152 m maximum depth unless stated otherwise). Includes the following features: