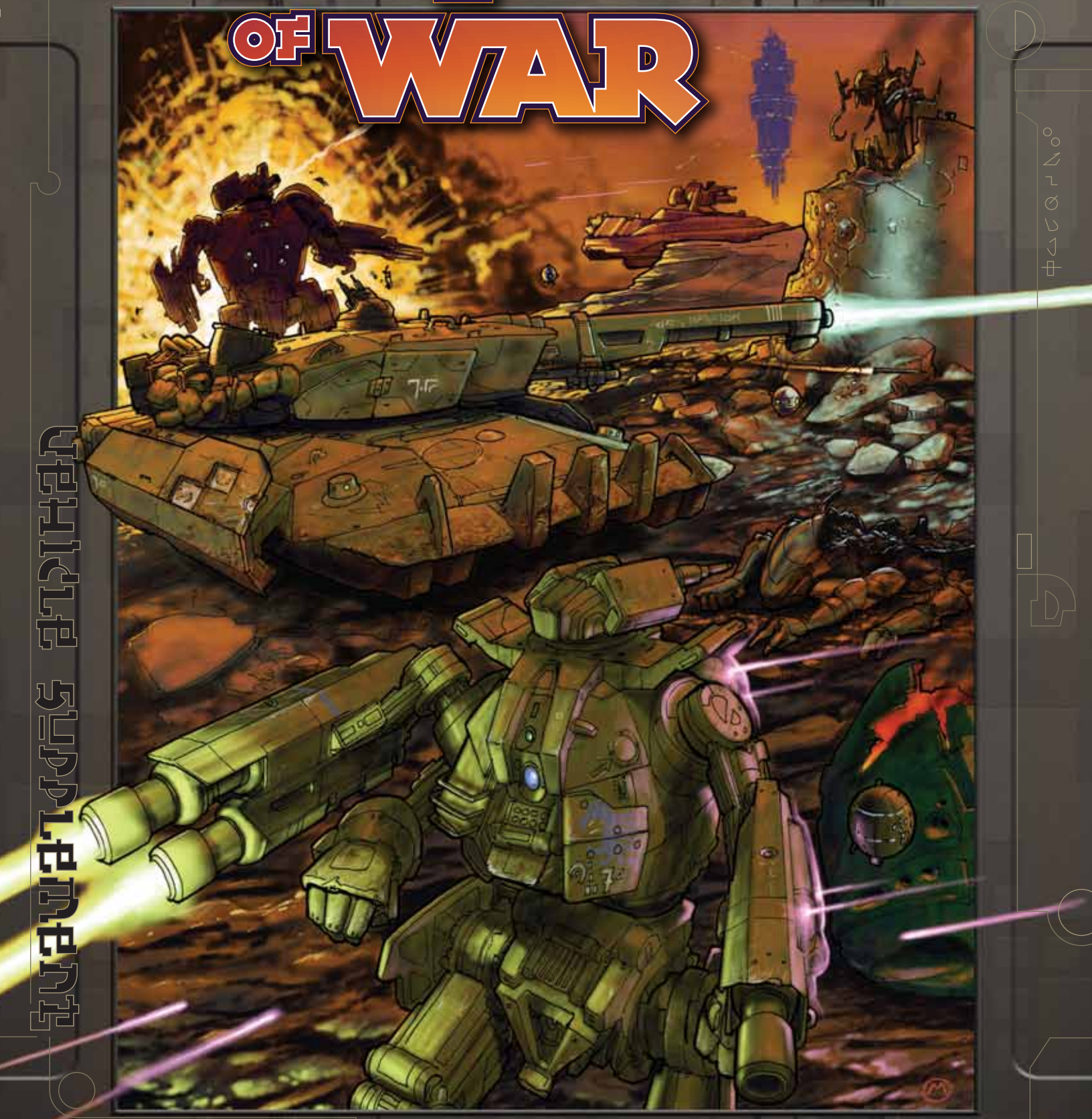
ENGINES OF WAR

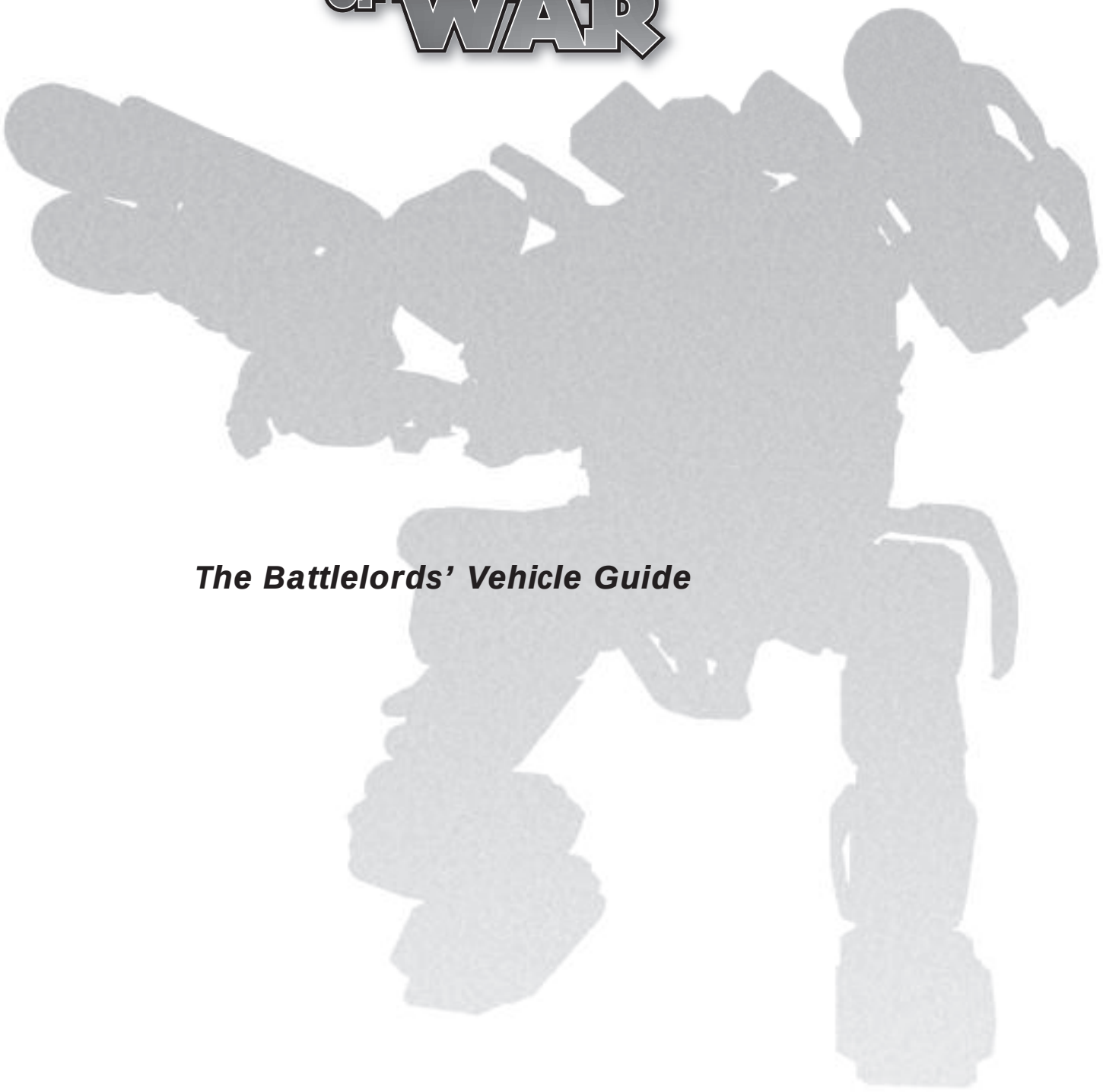


Official Supplement

BATTLELORDS™
OF THE TWENTY-THIRD CENTURY

The Battlelords' Vehicle Guide

Engines of War



The Battlelords' Vehicle Guide

Credits

Written By
Louis Norton, Ph.D.

Additional Material
Lawrence R. Sims, Michael Osadciw

Artists
Richard Jeferies, Michael Osadciw, Nick Vasi, Kasey Quevedo, Andreas Schroth

Cover Art
Michael Osadciw

Art Director
Michael Osadciw

Technical Advisers
Louis Norton, Tony Oliveira

Editors
Tony Oliveira, Aaron Thies, Christopher Amidon, Tom Javoroski, Wayne Bohrn, Brian Womack

Design
Michael Osadciw

Contributors & Playtesters
The Warmongers (Tony Oliveira, Keith Klee, Dave Walls, Kurt Willis), Christopher Amidon, Tom Javoroski, Tony Oliveira, Wayne Bohrn, Brian Womack

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Table of Contents

The War of Nightmares

Louis Norton

Ir-Ratha awoke with a jolt. He quickly looked around, afraid he had overslept. No—the clock showed 0600 hours, plenty of time to prepare before the Council of Timar would decide the fate of the Misha. At noon, the Council would vote on motion 2278.05234 … the petition of the Misha to join the Galactic Alliance. Ir-Ratha grimaced as he realized this would be his people's last hope for salvation from the Krakeds. The relentless onslaught against Mishon worlds was now projected to result in Kraked victory within less than 4 years. Unless the Misha could win a major military victory in the next year, the Kraked raids would inevitably destroy all Ti-Tritium mining operations on Rinex IV. After that… it was just a matter of time until Vego III, the Mishon homeworld, would fall. He rechecked the alarm on his bed, which would send 50 volts of electricity into his foot, ensuring he would wake from the deepest sleep. He rolled over. "*How can they expect us to work under such conditions—only 10 hours of sleep per day?*"

Six hours later, Ir-Ratha joined the Misha diplomatic delegation and took his seat in the Council chambers. The Mishon president, Dormus, had hand-picked Ir-Ratha for this assignment due to his prodigious abilities in the Land of Dreams. But despite his best efforts, Ir-Ratha had been unable to envision or affect the vote that was to be taken today. Somehow, the power of the Vision of Eight was interfering with his dreams. Somehow, this timeline was too important for a single Misha to affect, no matter how great his ability. The fate of the Misha people, so often influenced by its High Seers, would be decided in the waking world.

The delegates from the various Alliance protectorates and colonies assembled first, followed by the emissaries of the twelve Alliance races with full voting powers. The Galactic president, William Hawes, was in attendance to oversee this important vote; a vote for Misha membership was a vote for war with the Krakeds. A vote against Misha membership was a sentence of death for their entire race. After what seemed to Ir-Ratha an eternity, the President rose.

"I, Galactic President William Hawes, do hereby call to order the 499th session of the Council of Timar. Today, we are gathered to vote upon motion 2278.05234, the petition for Alliance membership on behalf of the Misha. We have debated this resolution for 15 standard days as required, and now we shall vote to decide the question as expressed in Article 5 of the Alliance constitution, section 17, which states…"

A sudden wave of exhaustion swept over Ir-Ratha. No! He had forgotten his electric "Wakies" headband which would keep him awake at all costs. His vision swam as the President droned. The entire delegation had agreed to remain awake throughout the proceedings, lest one of the voting members take offense and doom the Misha to destruction. Suddenly, Dormus jabbed Ir-Ratha in the ear with a toothpick, bringing him back to reality. The vote was underway, each delegate speaking for the cameras as they voted.

"…The Eridani people want no part of an Alliance with inferiors. It is plainly evident that the Misha are not warriors, they add little to our economy, and they do not excel in the development of technology. Therefore, I, Erash-ican, forswear alliance with the weak and cast our vote against membership for the Misha." A chorus of mixed boos and cheers echoed throughout the chamber as Erash-ican yielded to the Chatilian King, Atish Catam. Ir-Ratha's attention wandered and his gaze fell upon Markuss, Lord of Timar, who seemed to be smiling at him. Ir-Ratha pondered this odd event… Markuss looking at a junior member of the delegation rather than watching the speech of the King of Chatil. Markuss's powerful gaze hypnotically drew Ir-Ratha's attention almost hypnotically. Here was a being who had crushed entire space fleets and slain untold numbers of enemies… and what could he be thinking now, as the existence of the Misha hung in the balance? Sleep washed over Ir-Ratha like a tidal wave. He dreamed…

. . .

In the darkness, Ir-Ratha saw an entire squad of Kraked raiders. Their laser weaponry bristled as they crawled over a hilltop, preparing to rush down upon a Misha settlement in the valley below. Using their coded scent language, the Krakeds moved in precision through the night, finding a high point from which to set up plasma artillery. Ir-Ratha had heard of attacks like this many times before, in after-action reports and newscasts which recorded the carnage that would ensue. The Misha would spend the days before the attack waking in terror, experiencing their inevitable fate several times before the actual battle ever began. However, the Kraked made up for the Mishas' natural foresight by launching attacks from multiple directions; the armed forces would respond to one column of the advancing force, but the other Kraked squads would press the attack while the first fought a pitched battle with the Misha defenders. Ir-Ratha admired the bravery of the young Misha women who fought in the armed forces, knowing that they took the field despite the recurring visions of their own deaths. Equipped with their AKMB armor, small laser rifles, and "Wakies" set to maximum, the overmatched defenders would hold off as many Kraked columns as possible, but in the end, the Kraked would slaughter and enslave the Misha.

But this time, something was different.. For some reason, from a great height, perhaps 7 meters above the ground, Ir-Ratha watched the Kraked move by his position. perhaps 7 meters above the ground. He had never experienced this before… The Krakeds went by him as if he were invisible, even though he couldn't be more. Although the Land of Dreams was often strange, Ir-Ratha could not recall a time he had felt so large and strong. It was as if his senses were enhanced beyond any dream he could recall. What could it mean?

Suddenly, laser fire erupted from the valley. The Mishon defenders were encamped in a standard defensive position, utilizing portable bunkers to delay the advancing Kraked assault teams. Unfortunately, Kraked fire began from four directions; the attackers outnumbered the defenders by a large margin. In only a few minutes, the battle would be over. Ir-Ratha had to do something, but what? He was a diplomat, not a warrior! Yet this was a dream… maybe he could change the future… WHOOSH!!! A missile launched from Ir-Ratha's right shoulder, streaking skyward and annihilating a Kraked hopper. "*Where the @#$! did that come from!!!!*" was all that the Misha processed before he ran forward—towards the Kraked positions.

None of this made sense. This dream was clearly a stress-induced hallucination; why else would he wade into the middle of a Kraked squad and crush them with his feet? *What's happening to me?*

. . .

Ir-Ratha woke with a start as Dormus jabbed him with a miniature cattle prod. The audible gasp from the startled Misha echoed through the silent chamber, and Ir-Ratha shrank down in his chair. Dormus glared at him as Markuss, Lord of Timar, took the podium.

"Your position in this universe is not clear, Misha. Your dreams will not save you against the coming storm, but neither can we ignore them as some of the fools present would. The Vision of Eight has considered your application for over a hundred years."

Ir-Ratha pondered that statement. The Misha had first applied for Alliance membership only four years ago. However, it seemed that the Mutzachans had been sizing up his people much

longer than that. He glanced over at the vote tally… it was 5 "yes" votes and 5 "no" votes. Another "no" would mean a five year wait before the Misha could reapply for membership … and that would be too late to save his people. While Markuss continued to discuss the formalities of the situation and its implications for the universal balance, Ir-Ratha examined the vote tally more closely. The Cizerack, Eridani, Chatilian, Zen, and Mazian had voted "no" to Misha membership; the Human, Gen-Human, Python Lizard, Ram Python, and Orion Rogue had voted "yes." Ir-Ratha grimaced as he considered the situation. The Phentari and Mutzachans would decide the fate of his people; the diplomatic efforts to sway the Chatilian and Mazian votes had failed. Most of the Alliance races did not relish the thought of war with the Krakeds, and this application had always been in doubt. However, if the Mutzachans voted "yes", the matter might be brought to a tie. Ir-Ratha had no idea what happened in the event of a tie. He turned again to listen to Markuss speak.

"There is much to recommend your people to the Alliance, but we can ill afford a second front against the Krakeds. You must show us you can affect the Balance for the good of all. Only by taking matters into your own hands can you prove this. Our best efforts to decide the issue among the Vision of Eight cannot resolve this enigma: what does your future hold, and will your existence further the Balance? Therefore, it is with regret that I must announce our vote.

"The Mutzachan race decrees that it shall abstain from the matter at hand."

Turmoil gripped the Council chambers. The Mutzachans had never abstained on any matter of significance. In fact, it was almost unheard of for the votes of the Humans and Mutzachans to differ. This spelled doom for the Misha. The vote tally remained 5 to 5. Ir-Ratha felt nauseous.

The President called for order.

"Order! Order! "I call on the audience to return to their seats! Voting is not yet completed. One vote has yet to be cast; and the Phentari choose to delay their vote as per rule 38 of section 9…"

"Silence, fool … I have the floor." Thus spoke Overlord Quarmiss Darmine Phentari, who rose to pronounce sentence upon the Misha race.

"You are weak and pathetic with your clear skin and frail bodies. You are slaughtered like cattle, led to destruction by an unworthy foe. By any measure, the Phentari would hunt your people for amusement and hang your clear legs as wind chimes. I would gladly vote to let the Kraked take you and your women as slaves."

Dormus rose to leave the council, unwilling to listen to further insults when the cause was clearly lost. Ir-Ratha pulled him back to his seat, reminding him not to let his pride cause his people harm. It would only speed the Misha's doom if they offended the Phentari.

"However, I must wonder: what if I had your vision? Instead of sleeping my life away, what if I could use my power to strike at my enemies before they struck at me. Instead of relying on my natural cunning, I could see those plotting against me and destroy them. I survive and prosper using only my wit; you have a glimpse of the future, and still you are slain. Perhaps this is the natural order. But I have received a message from the One."

Again, shouts of "TREASON!" and the guttural cheering of Phentari dissolved any semblance of order in the Council chambers. Python Lizards streamed into the room and carried off the unruly spectators. Order was eventually restored.

Quarmiss continued: "Here are his words which I shall consider. 'Do not be quick to destroy that which you do not understand. Consider that this may prove useful some day.' I say to you, pathetic Misha, that I cannot believe you will be useful to me. But I do not understand your power; and so the Phentari people abstain from this vote."

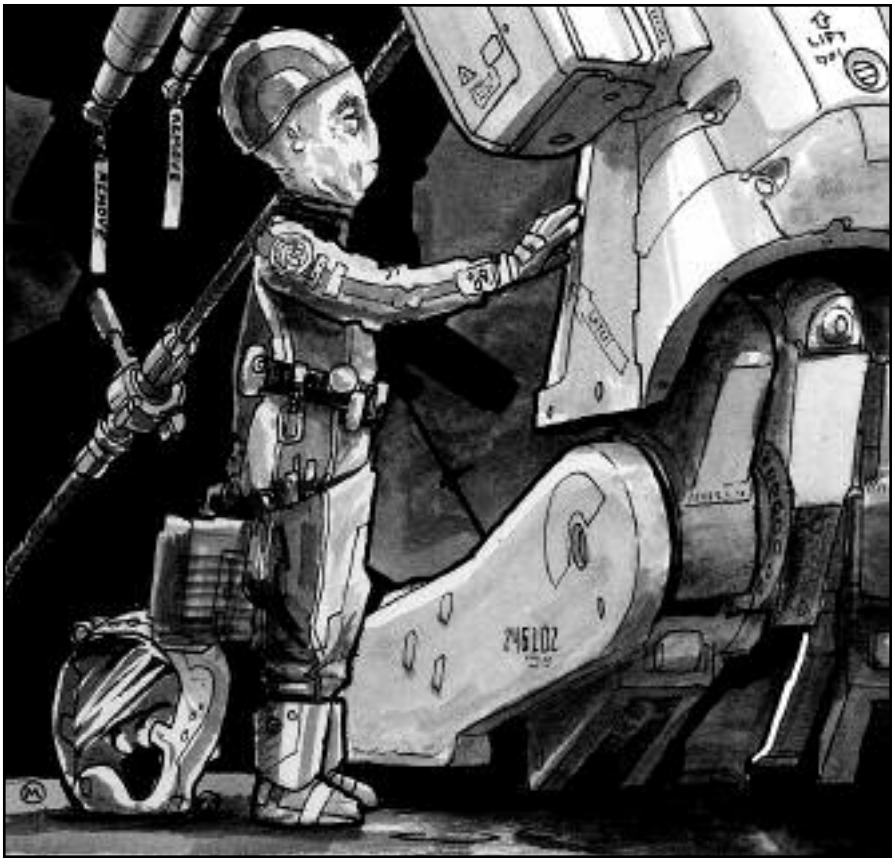
Ir-Ratha fainted.

Four months later, Ir-Ratha stared at the panel of blinking indicators in front of him. He thought back to recent events… only two days after the disaster in the Council chambers, Dormus had stripped Ir-Ratha of his position as a High Seer, citing his irresponsible lapse into sleep as a contributing factor in the failure of the vote. Subsequently, two of Ir-Ratha's wives filed for divorce, citing humiliation and loss of financial support due to the fact no one on Mishon Prime was likely to hire him.

This was all too true, and in only a few weeks, Ir-Ratha had decided to head off planet and get a job as an EDC specialist with Orionus Konglomerates. The last few months had been uneventful, although there was a bit of mystery about the ship's current cargo; the only thing anyone knew was that it was headed for Fortress. Ir-Ratha refocused on the control panels and checked out the ship's status. All systems were nominal. Nothing to worry about…

"ALL HANDS TO BATTLE STATIONS! XARIAN PIRATE VESSELS DETECTED!!"

The message blared across the comm system, jolting Ir-Ratha into action. He began going through the emergency checklist, focusing on rerouting power away from auxiliary systems and into primary defensive measures. According to protocol, he had 2 minutes before combat decompression. If he finished his tasks in 30 seconds, he could easily "suit up" in the next....



WHOOOOSHHHH…. The cargo bay doors opened behind him. Ir-Ratha gasped and held his breath, trying to reach the ES-3 suit stored in the emergency locker. The atmosphere in his section would be gone in seconds. If he could just get the helmet on, he would be safe. At that moment, however, everything went wrong. The artificial gravity system went out, and Ir-Ratha began to float away from his station. *How odd*, he thought. *The ship hasn't even been hit by weapons fire.* There was nothing more he could do. As he started to black out, Ir-Ratha glanced at the EDC panel to see why the gravity had gone out, dooming him and the rest of the unprepared crew.

The indicator lights clearly showed that gravity and life support systems had been deactivated from the bridge. Ir-Ratha stared at them, confused.

. . .

Ir-Ratha awoke with a start. It had all been a dream! Well, at least all of that weird stuff about being onboard a freighter for Orionus Konglomerates. He was safe in his bed at home, although unemployed, divorced, and nearly broke. Only two weeks had actually passed since the Council vote. The Tri-V was on and displaying footage from the most recent Kraked strikes … Ti-Tritium was becoming scarce, and there was talk of a shipping blockade across two of the Misha worlds. The Black Market would be getting very rich off of the Misha in the next year.

Ir-Ratha stopped to consider the details of his strange dream. He had served in the Mishon Navy for two years, but had never considered work aboard a corporate vessel. Maybe there was an opportunity there… If he could prevent the pirate attack, by using his natural abilities, he might provide some positive press for the Misha and atone for his mistake in the Council chamber. If he failed, he might be sucked into the vacuum of space, just as he had dreamed. *Better than being slowly tortured to death by Kraked raiders.*

Ir-Ratha gathered his few belongings and headed for the spaceport. He left his old life behind. He was now starting a new career—as a Battlelord.

. . .

After three months of service, Ir-Ratha had adjusted to his life onboard the *Plasma Dawn*, a Marauder-class battlecruiser which specialized in escort duty and high-value cargo transport into a dangerous sector of space. He waited for the sign he needed to activate his plan. As soon as he learned of the secret cargo, he would let the captain know a Xarian pirate ambush would endanger the ship and an insider would betray the vessel and its crew. Certainly this information would earn him prestige and a promotion to Senior Damage Control officer. If they caught the Xarian pirates, the press coverage might be enough to clear his name with his own people.

When the *Plasma Dawn* departed Mulligan's Rock, Ir-Ratha realized *this was it*. The cargo, huge Flex steel containers labeled "GX-128", bore no corporate markings and no "Ship To" destinations. He should have immediately notified the captain that an ambush would occur somewhere between here and Fortress, but curiosity got the better of him, and Ir-Ratha decided to have a little Scry inside the secret containers…

Most Misha could only scry other beings, but Ir-Ratha was a High Seer, well versed in the art of matrix manipulation and Dream powers. Envisioning his dream self, Ir-Ratha slowly floated in the cargo bay, closer… closer… he was inside the containers now.

A change of plans was in order. *To hell with saving the ship and the crew…* He had to steal this shipment. Xarian pirates, Alliance battle stations, and Orionus Konglomerates notwithstanding. *Won't Quarmiss be impressed*, he thought, and slept peacefully.

. . .

Two weeks had passed, and the ship was departing Mulligan's Rock. There was only one final leg of the journey to Fortress, and Ir-Ratha knew the ship would never make it there. Based on what he saw in the Dream Scape, the vessel was going to misjump into the Maze of Orion, where a Xarian vessel would seize the cargo after the crew of the *Plasma Dawn* had been jettisoned into space. Ir-Ratha had been unable to determine who was going to betray the ship, but it didn't matter now. The only thing that mattered was the cargo. And Ir-Ratha was sure his abilities would deliver that cargo into Misha hands, regardless of the cost.

Ir-Ratha headed for Cargo Bay 3, carrying his EVM-1 gear and a box of goodies he had purchased on Mulligan's Rock. His credit cards were maxed out, but soon there would be no reason to worry about debt payments… Shane McDermott, first lieutenant on the Plasma Dawn, spotted Ir-Ratha headed away from the EDC station. "Aren't you supposed to be on duty today, little one?" he inquired.

"Not to worry, sir. I asked Henmus to swap shifts with me. I'm going to practice some of my zero-grav maneuvers in the bay."

"Make sure you're out of there at 1215 sharp, because Henmus will be over his allowed hours at 1230. In the future, I want your shift swaps reported to the duty commander ahead of time."

"Not a problem, sir. I won't forget to report next time."

Ir-Ratha hated to lie, but it hardly seemed to matter when the person you were lying to would soon be dead. Anyone standing at that EDC station would suffocate along with the rest of the Plasma Dawn's crew. If there were any way to save his friends, he would… but there wasn't. He had to focus on saving himself and the cargo. Too many people were counting on him now.

Ir-Ratha entered the cargo bay, suited up his EVM-1, strapped on his web gear, and waited. He wouldn't have to wait long.

"ALL HANDS TO BATTLE STATIONS! XARIAN PIRATE VESSELS DETECTED!!"

His muscles tensed, waiting. Three seconds… two… one…

WHOOOSH!!! The cargo bay doors opened, exactly as Ir-Ratha had expected. Explosive decompression picked up everything , including the Misha, and sent the debris hurtling into space. Ir-Ratha fired his grappling line at the top of the bay doors, and swung out into the abyss, exactly as he had planned it. A few taps on his boot jets and he arced back towards the ship, out of the path of the crates, furniture, and flailing bodies of the crew. Now the real work would begin. He needed to get to Cargo Bay 1 in under two minutes. Fortunately, that wasn't going to be a problem, thanks to the Rent-A-Skill chips he had picked up for just such an occasion. Ir-Ratha accessed his memories and went to work.

. . .

Ir-Ratha stood outside the bridge door. He had successfully reentered Cargo Bay 1, passed the huge unmarked crates with the precious cargo, and climbed the ladder to the command deck. There was just one problem with his plan, one little thing that he had missed. Based on Ir-Ratha's precise instructions, a Mishon frigate would drop out of warp in 30 seconds and put the Xarian pirate ship in a world of hurt. Ir-Ratha had assumed this would be the easy part, because the *Plasma Dawn*'s crew was out of action. But the weapons systems on the Marauder class *Plasma Dawn* were still active. Whoever lay beyond this bridge door was still in control. If Ir-Ratha didn't find a way to neutralize the ship's weaponry, he had no doubt that the *other* traitor on board this ship would tear the Mishon frigate a new @#@! with the *Plasma Dawn*'s Peace Bringer slug thrower and twin Desecration implosion torpedoes. Quite simply, the Mishon frigate was more than a match for either vessel, but couldn't possibly hold out

against a combined attack.

The entire plan depended on Ir-Ratha stepping through that door, into the bridge, and facing an unknown enemy. He started forward … and a wave of sleep washed over him. Perhaps he could use Dream Alley to prevent this situation. Maybe the Land of Dreams would show him an answer. His mind started to wander…

ZZZZZZTT! His "Wakies" headband jolted Ir-Ratha back to reality.

"*Your dreams will not save you against the coming storm*," Markuss had said. Ir-Ratha now understood that sleep was not going to save the Misha people. Only the cargo on this ship would do that, and only if he took action in the real world, not the dream world.

Ir-Ratha pulled the pin on two Super Plas grenades and stepped onto the bridge.

. . .

The bodies of the bridge crew slumped over their positions, many grasping at their throats as they tried to breathe an environment without air... Ir-Ratha saw no signs of life, but gravity appeared to be normal on this deck. He moved to the center of the bridge, clutching his grenades tightly. The captain's body was slumped in the command chair, almost as if he had fallen asleep…

Suddenly the captain leapt into the air, kicking Ir-Ratha in the head and knocking him over. Ir-Ratha fell backwards, a Super Plas grenade rolling from his grip when he hit the ground as the Misha briefly panicked.

"*You think you can stop me, little one!*" hissed the captain. The captain's face looked as if something had burst from inside his skull.

A genetically altered Doltharian, planted to betray the Alliance and deliver the cargo to the Xarians.

Fifteen seconds to Plas grenade detonation. Ir-Ratha struggled to his feet.

The Doltharian raced after the loose grenade. "Your toys cannot stop me!" the captain shouted as it reached the first grenade and hurled it out the entry door, beyond. The Doltharian drew his static pistol.

Just at that moment, the Mishon frigate appeared on the viewscreen, 1000km behind the Xarian vessel and closing fast. The computers aboard the *Plasma Dawn* automatically sounded battle stations. The Doltharian, shocked, shouted orders for the computer to engage the enemy vessel.

Ir-Ratha threw his second grenade at the weapons console.

The Doltharian ran to the weapons station, following the grenade, and Ir-Ratha realized it was wearing a PDS screen. It was going to smother the grenade under its Flux, then activate the ship's full weaponry.

Ir-Ratha activated his Henderson Flux Interference Generator and targeted the Doltharian's back. *Seven seconds to detonation. Six.. Five…*

The Doltharian activated the ship's Implosion Torpedo Generators; two devastating balls of Flux-encased plasma hurtled towards the Mishon frigate. "I will die before I lose this cargo. You will regret this, foolish Misha!" The Doltharian plotted a firing solution for the ship's main slug thrower.

Three…

Beep. The Henderson notified Ir-Ratha that it no longer detected the Doltharian's Flux shield. *Two…* "Goodbye, captain." Ir-Ratha activated his Displacement Device.

. . .

Three months later, Ir-Ratha looked upon a familiar scene. In the darkness, he saw an entire squad of Kraked raiders. Their fearsome laser weaponry bristled as they crawled over a hilltop, preparing to rush down upon a Misha settlement in the valley below. The Krakeds passed below him, not able to scent him due to the many rotting Misha corpses in the surrounding field. Ir-Ratha's unit had placed the bodies here for this purpose.

It had taken Mishon engineers weeks to defeat the security systems on the high-tech cargo containers without activating their self-destruct mechanisms. He recalled the month of recovery from the painful surgery which had enabled him to be here today. He even thought of the crew of the *Plasma Dawn*, which had been reported missing and was never recovered. None of that mattered now; all of the effort would be worth it.

Ir-Ratha had studied human history, and today was to be the "Mishon Battle of Saratoga." On this world, the Misha would make their stand against the Krakeds. A stand so bold and violent, that it would surely convince the Alliance to ally with the relatively small Misha nation.

Laser fire erupted from the valley. The Mishon defenders were encamped in a standard defensive position, utilizing portable bunkers to delay the advancing Kraked assault teams. Kraked fire began from four directions; the attackers outnumbered the defenders by a large margin. In only a few minutes, the battle would be over. It was time for Ir-Ratha, and nineteen others like him, to enter the battle. *Aerial threat detected*, a voice in his head warned. WHOOSH!!! A Cobalt Tensor missile launched from Ir-Ratha's right shoulder, streaking skyward and annihilating a Kraked hopper. His position uncovered, there was no longer a need to hide. He deactivated his cloaking device and ran forward—towards the Kraked positions.

The Krakeds turned and saw Ir-Ratha's unit charging towards them for the first time. It almost seemed to Ir-Ratha that they moved in slow motion. Some of the enemy broke ranks and fled immediately. A few Kraked soldiers fired their sidearms in a futile gesture. Others tried to bring anti-tank weaponry to bear, but Ir-Ratha simply stepped on them and kept running. They so easily crushed and oozed fluids, like the domestic vermin they resembled. Plasma erupted in all directions as Ir-Ratha willed it, striking down dozens of Krakeds in a matter of seconds. His Flux shield showed 95% strength remaining. Nothing to worry about.

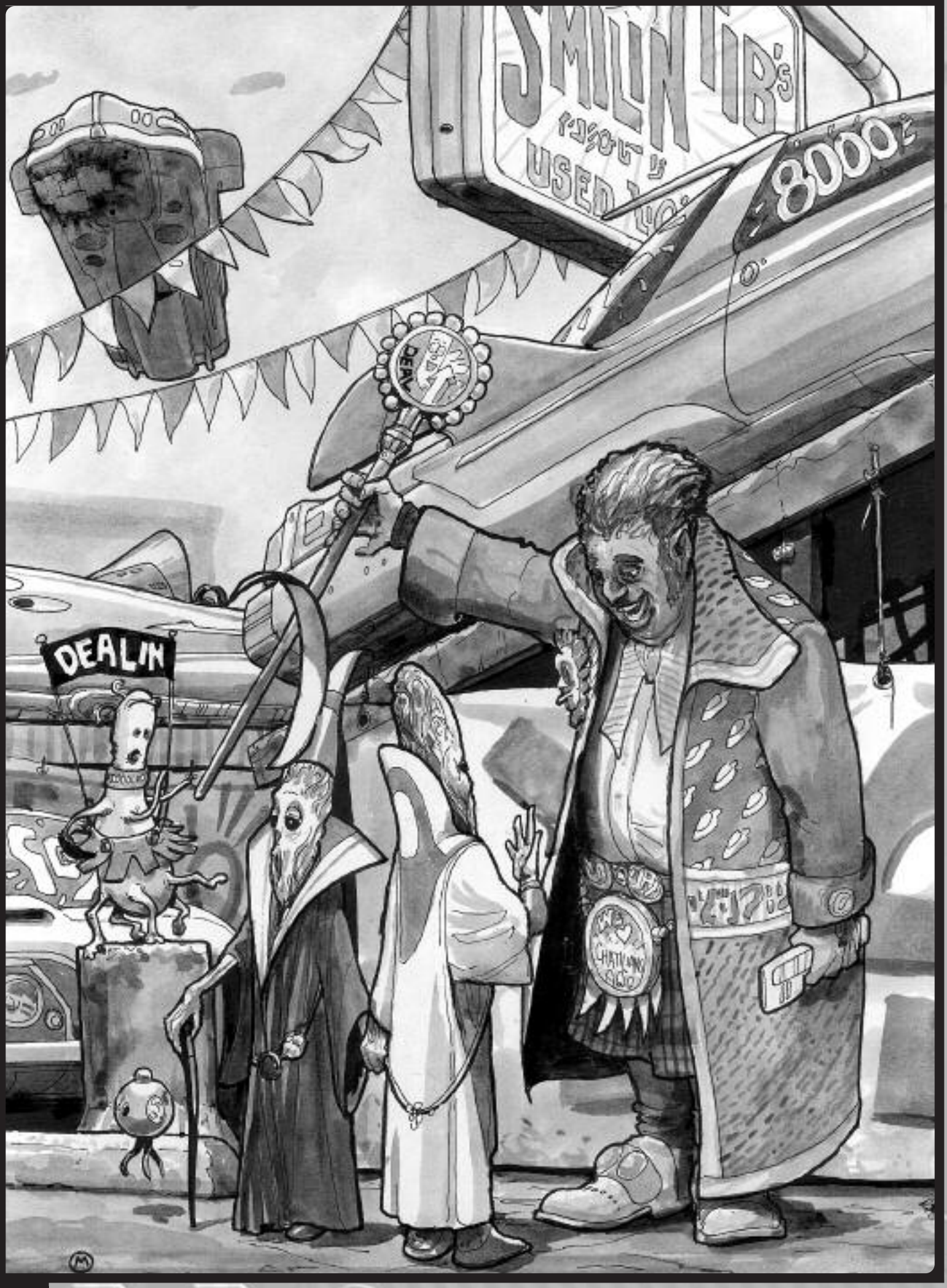
Finally, Ir-Ratha came upon the center of the Kraked unit, where the heavy artillery had been setting up to decimate the village below. He rushed towards the battery before it could turn around, and ripped the barrel from its mountings. Swinging it like a club, Ir-Ratha beat the entire crew to death before pausing to look around the battlefield.

"*Only by taking matters into your own hands can you affect the Balance for the good of all*," Markuss had said in the council.

Ir-Ratha and his unit had routed the Kraked advance. They would go back into hiding. More battles lay ahead, but Ir-Ratha knew that his people now had the edge they needed, thanks to the stolen cargo. Ir-Ratha often wondered why such an important shipment had been left exposed on an unescorted private vessel, but some mysteries were best left unsolved. He would simply command his elite squadron of 20 Peacemaker Ultra Armors.

. . .

Postscript: Col. Ir-Ratha is the commander of the Mishon unit known as the Hungry Ghosts, formed in 2279, and responsible for over 2,280 Kraked kills so far. The Kraked government has placed a formal protest with the Alliance over an alleged transfer of weapons technology, but the Alliance denies any knowledge of missing Ultra Armor shipments. No units of Peacemaker armor belonging to the Alliance military have ever been lost, and no definitive proof exists that the Misha possess unauthorized Tech Level 7 weaponry. Public speculation is centered on the role of Galactic X, but as usual, no one is talking.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CHAPTER 2

General Vehicle Rules • 2

IN THIS CHAPTER...

‹ As soon as the myriad sentients of the Milky Way and Andromeda Galaxies rose from their primitive origins to walk upright, their first thought was "Hmmm. Nice, but not very quick. I need a hot ride."

Used or new, expensive or cheap, well-made or a piece of junk, we all need to get around, and the choices of twenty-third century transportation are staggering. Even a Battlelord needs a car sometimes.

VEHICLE CONCEPTS

Vehicles in the Battlelords universe come in all types, shapes, and sizes, each suited to a different task. The variety of alien races and tech levels means that the number of different vehicle types is vast, far more than can be covered in this book. However, there are several basic categories of vehicles that are important in any Battlelords campaign: automobiles, skimmers, and military skimmers (futuristic tanks). In addition, there are the Humpty Dumpties, walking machines of great size and power used to deal death on the battlefield. Other types of vehicles, such as aircraft (hoppers), spacecraft, helicopters, trains, or ships, will not be covered in this supplement.

Definitions

Vehicle statistics are represented using standard templates, some of which require additional description. The headings below correspond to items in the vehicle statistics block.

Acceleration: Acceleration ratings are given in m/s^2 (meters per second per second). This means that a vehicle can increase its speed by the listed amount in 1 second.

• **Example:** A Go class skimmer has an acceleration rating of 2 m/s^2. This means that it can increase its speed by 2 each second. If it is starting from a stationary position, it can reach a speed of 10 m/s in 5 seconds, or its top speed of 43 m/s in 22 seconds.

Autopilot: The level of piloting provided by the onboard vehicle autopilot (an entry of "Level 8" indicates that the autopilot performs as a character with level 8 Piloting skill). Not all vehicles have this capability. Autopilot systems respond to simple commands such as "Travel to (a specific destination)." The autopilot will attempt to avoid all collisions as the highest priority. Other commands may be prioritized by the crew as well. An autopilot is most useful in urban areas when those areas support the standard autopilot information systems, allowing it to detect traffic lights, road signs, etc along its travel path. All tech level 5 and higher cities can be assumed to support this system, as well as most tech level 4 areas. Outside of urban areas, the vehicle must have some form of sensor system connected to its computer to detect obstacles. This can be a Visual Analysis Module (see the Computer Equipment section) or any radar package. In addition, Land Navigation capabilities are required to plot a course over such terrain.

Cargo: The first number is the amount of cargo, expressed in encumbrance, that this vehicle may carry. The second number (in parenthesis) represents the number of vehicle spaces free (this represents space in the vehicle not otherwise occupied by crew, components, or weapons; 1 vehicle space = 0.2 m^3).

The amount of encumbrance that may be carried as cargo is in addition to the listed crew and vehicle equipment.

• **Example:** A vehicle with a Cargo entry of 1,000 (5) may carry up to 1,000 ENC of items, in addition to its crew and in addition to any equipment carried by the crew members.

If a vehicle has less than a full crew complement, additional cargo may be carried in that crew member's seat. The amount of equipment which may be

carried in a passenger seat is equal to 2x(standard crew weight). The standard crew weight can be found on the Crew Size & Weight table.

• **Example:** A vehicle is short a size class 5 (equipped) crew member. The standard weight for a Size 5 character with equipment is 135kg. This vehicle may carry an additional 270 ENC of cargo, on top of its regular cargo capacity.

Optional Rule (Limited Cargo Space): If a vehicle is carrying more cargo than (400 x its vehicle spaces free) encumbrance, the additional cargo must be carried outside the vehicle. Do not take cargo carried "in lieu of crew" into account.

• **Example:** A vehicle with a Cargo entry of 4,000 (5) is carrying 2,500 ENC of cargo. Only 2,000 ENC (5 x 400) of this may be carried inside the vehicle; the remaining 500 ENC must be carried outside the vehicle.

Crew: The number of individuals (and their total size class) which can normally fit into the vehicle. For example, an entry of "3 (15)" indicates that this vehicle is intended for 3 size class 5 beings. In addition, the entry for crew may mention "eq", "hvy", or "MBA." For example, the Hunter skimmer has a listing of 2 (10+eq). This means that the crew may use regular body armor and carry non-body-mount weaponry while riding in the vehicle. An entry of "hvy" represents heavy armor, while "MBA" represents mechanized battle armor.

• **Example:** A Guardian class skimmer has a crew entry of "2 (10+eq) + 2 (10+hvy)." This means that the Guardian can accommodate 2 size class 5 individuals wearing body armor and 2 size class 5 individuals wearing heavy armor.

Smaller characters can easily fit into larger seats, as long as they are not trying to pilot the vehicle or operate weapons systems. If a character who is more than 2 size classes below the intended size for the vehicle attempts to pilot the vehicle, the character incurs a -40 penalty to Piloting checks. A character who is more than 2 size classes below the intended size class for the vehicle incurs a -20 penalty to hit when operating vehicular weapons. Any wheeled vehicle or skimmer may be refitted with seats intended for smaller crewmembers at a cost of 50cr per seat. This will also free up one vehicle space per size class reduced (down to size class 4, after which no further space is freed up).

• **Example:** A size class 3 Mutzachan normally incurs a -40 to Piloting checks when operating a vehicle intended for size class 6 occupants. By refitting a size class 3 seat into the vehicle for 50cr, this penalty is eliminated and 2 vehicle spaces (Size 6 – Size 4) are freed up for other uses.

Larger characters may "cram into" seats which are smaller than their size class. If the character is 1 size class larger than the seat, a -20 penalty applies to all skill checks related to operating the vehicle or its systems, as well as to any skill checks based on Agility or Manual Dexterity. A character that is 2 size classes larger than the seat will incur a -40 to these skill checks. If the character is 3 or more size classes larger than the seat, he cannot cram into the space, unless there is another empty seat available in the vehicle. If there is additional seating available, the character can straddle two seats, incurring a -40 to skill checks while so seated. Larger seats can be installed into wheeled vehicles or skimmers if there is available cargo space; this typically costs 100cr per seat and uses one vehicle space per size class added. The additional weight of larger crew should be taken into account when this is done, since it is possible to overload some skimmers if you fill them with Ram Pythons!

Characters wearing armor in a vehicle not designed to accommodate armored occupants will incur a -40 to all skill checks related to operating the vehicle or its systems, as well as a -40 to all skill checks based on Agility or Manual Dexterity. All pilots wearing armor incur a -40 to Piloting checks, even in vehicles with seating designed for armored occupants.

Note: Attempting to wear mechanized battle armor while sitting in a seat intended for unarmored individuals is impossible, unless you are at least 2 size classes smaller than the seat. Wearing heavy armor while sitting in a seat intended for unarmored individuals is not possible unless you are at least 1 size class smaller than the seat.

Note: It is completely impractical for a pilot or gunner to function while carrying a body-mount weapon (-80 to piloting checks or -40 to hit).

Note: The size class listed for Ultra Armor is the maximum size character that can operate the vehicle. Since each Ultra Armor is customized for the pilot, smaller characters never incur a penalty when using a Humpty Dumpty. Larger characters simply cannot fit in the confined space of the theater. It is not possible to use someone else's HD without significant modifications or bypasses (d4+1 hours and Level 20 Reroute (Computers) and Level 20 Micro-Electronics checks).

Use the values from the following table as estimates for characters of various sizes, assuming a moderate amount of equipment carried.

CREW SIZE & WEIGHT

SIZE	WEIGHT	EQ WEIGHT	HVY WEIGHT	MBA WEIGHT
1	30kg	40kg	90kg	195kg
2	45kg	60kg	165kg	370kg
3	65kg	90kg	245kg	550kg
4	80kg	110kg	320kg	730kg
5	95kg	135kg	395kg	910kg
6	120kg	165kg	480kg	1,095kg
7	145kg	200kg	565kg	1,285kg
8	250kg	310kg	730kg	1,550kg

Max Deceleration: The deceleration that the vehicle can generate in a single second by applying maximum brakes. This is only given for wheeled or tracked vehicles. For skimmers, this value should always be equal to the highest acceleration the vehicle can generate plus 1. If the vehicle has a max deceleration of 5 m/s^2 then it can reduce its speed by 5 per second. This is important when trying to determine if you can stop a speeding vehicle before it slams into something. All walker Ultra Armors decelerate at 15 m/s^2, while crawler vehicles decelerate at 20 m/s^2.

Max Weight: The normal maximum weight of the vehicle, including all contents (measured in kg). The current weight of the vehicle (Weight + total crew weight + (Cargo ENC/2)) should be less than the Max Weight value. For skimmers, this is a firm maximum—above this weight, the vehicle will lose lift and come to a stop on the ground. For wheeled or tracked ground vehicles, this can be exceeded for short periods, but characters will incur piloting modifiers as the weight added increases. Over time, overloading such a vehicle will result in damage to the suspension and chassis, wrecking it permanently.

Piloting Modifier: Some vehicles add a piloting modifier to skill checks when operating the vehicle. This modifier (bonus or penalty) should be applied to all maneuvers with that vehicle.

Range: The distance that the vehicle can travel at normal speeds (60% of top speed) on a single refueling. At top speed, this range is decreased by 33%; at half of normal speed, it is increased by 20%.

Size: This entry gives the maximum dimensions (length, width, and height) for the vehicle. Not all parts of the vehicle are as large as the maximum dimension. In addition, the size rating of the vehicle is given in parenthesis; this represents the relative overall size of the vehicle (in vehicle spaces). A subcompact vehicle might be size 20, while a medium tank could easily be size 250. Vehicle sizes are not the same as character size classes and should not be used in an interchangeable fashion.

Size Modifier: This entry represents the modifier to hit the vehicle when it is fired upon. The value is represented as (personal weapon modifier)/(vehicle weapon modifier). For example, the Guardian class skimmer has a modifier of +35/-05; this represents a +35 chance to hit this vehicle with a personal weapon such as a pistol or rifle, but a -05 chance to hit this vehicle with another vehicle weapon, such as a cannon or anti-tank missile.

Top Speed: The maximum speed that this vehicle can travel. All vehicle speeds are normally expressed in meters per second, similar to that of a character. Therefore, a vehicle with speed 10 is traveling 10 m/s. However, it may be useful to know how fast a vehicle can travel across large distances; therefore the top speed is also given in kilometers per hour (kph). Whenever a conversion is needed, 1 m/s = 3.6 kph.

Weight: The weight of the vehicle, without any passengers, crew, or equipment. The total weight of the vehicle at any time is equal to the Weight value, plus the total weight of any crew, plus the weight of the cargo (divide the total ENC of cargo carried by 2).

• **Example:** An Argent skimmer has a Weight of 2,490kg. If it is carrying 2 unarmored Size Class 5 individuals (95kg each) and 500 ENC of cargo (500 / 2 = 250kg), the vehicle's current weight is 2,930kg.

Abbreviations

The vehicle templates list the firing arc of each weapon in parenthesis by its name. An entry of (F) indicates a forward-firing weapon, (B) indicates a rear-firing weapon, and (360) indicates a weapon which can fire in any direction.

AI: Armor Integrity
AR: Absorption Rating
ATK: Attack Number
AV: Availability
DAM: Damage
HD: Humpty Dumpty (slang for Ultra Armor)
HP: Heavy Point
ROF: Rate of Fire
THR: Threshold
TL: Tech Level

Racial Considerations

Andromeni: Andromeni utilize whatever vehicles their hosts typically pilot. As energy beings, they do not otherwise produce vehicles.

Aeodronian: Aeodronians produce few vehicles of their own. Mostly, they are modified Human or Orion designs. Amphibious vehicles are popular among Aeodronian military units.

Ashanti: Vehicles are driven with four limbs (-30 penalty for 2-limbed pilots). All Ashanti vehicles are blue and have relatively light armor. Military vehicles utilize multiple weapons of multiple types to engage multiple targets for various reasons, as Ashanti military codes specify many rules regarding engagement of various target types. Military vehicles also tend to have large crews (packed in) with strict occupations. Ashanti traffic laws are the most complex in the known universe.

Chatilian: Chatilians prefer vehicles with fully automated drive systems so they can relax in the cabin while the vehicle accomplishes its mundane transportation task. Most Chatilian vehicles are designed for only a single occupant, as they find the presence of others to be distracting. Some extremely expensive Chatilian vehicles use mental command interfaces to pilot the craft.

Cizerack: Cizerack vehicles are typically fast, open top skimmers with a capacity of 1-4. For large scale transport, very large skimmers are used in urban areas. Because of the 4-legged nature of Cizerack vehicle controls, bipedal creatures suffer a -40 to Piloting checks when using a Cizerack craft (-20 for Phentari or Ashanti).

Eridani: The Eridani traditions of decoration level by class extend to their vehicles. Therefore, the vehicles used by the lower classes will tend to be more utilitarian, while the Buddon have very flashy or ornate craft. Interiors are kept at a cold temperature for comfort, and typically these craft cannot be taken to very hot or desert type environments due to their extreme cooling needs. Almost all Eridani vehicles are fully enclosed and often are heavily armored; even civilian vehicles have military overtones with reinforced hulls. Most Buddon vehicles lack the basic safety equipment taken for granted by other races (air bags or crash gels).

Fott: What else—Fott drive pickup trucks and tractors exclusively. Typically, these are decked out with a gun rack and cage for dog-equivalents. Many have brush guards and other off-road features; some even mount a winch. Occasionally, a Fott may be found driving a mobile home.

Furbl: Furbls do not produce vehicles of their own. The typical Furbl travels around Taos 4 utilizing mass transit. However, there are a few Orion-produced vehicles which accommodate Furbl-sized pilots. Other than a small seat size, these craft are similar to other low-end Orion skimmers.

Gemini: Gemini do not generally utilize vehicles, except for sailboats. When on alien worlds, they utilize skimmers meant for Pythons or other creatures of like size.

Goola-Goola: All Goola-Goola vehicles are basically kit vehicles from mass-produced parts. Each owner likes to customize his or her own automobile or skimmer to their liking; therefore, Goola-Goola vehicle parts are built for total interchangeability. Typically, the result is an unwieldy and difficult to repair vehicle which may or may not always get you to your destination safely.

Ikrini: The Ikrini have abandoned the use of most technology, including space travel. The only remaining vehicles are large skimmers for mass transit, primarily between Ikrini cities on Enilari. Otherwise, the Ikrini have little need for vehicles as their cities are set up as "walking cities."

Jezzedeic Priest: The priests use large, heavily armored and customized skimmers for personal transport. These sport exotic designs, artwork, and sometimes enchantment. Typically, these are only capable of moderate speeds.

Kizanti: The Kizanti utilize vehicles which are derivative of Eridani designs, and are primarily produced by Eridi-Corp. The primary difference is that Kizanti vehicles generally do include safety features and use climate controls appropriate for the Kizanti.

Mazian: There are no native Mazian vehicles other than heavy armor "tanks." However, a Mazian can use anyone else's craft without penalty, as long as some method of seeing outside the vehicle can be established. This is typically accomplished by utilizing an internal camera system (costs 4,000cr and has encumbrance of 1; see the Mazian racial description in Battlelords of the 23rd Century). A Mazian with no camera may still utilize any vehicle with an external viewing system, as long as they are able to place part of their body within 5cm of the viewing screen. This will definitely create suspicions among viewers if the Mazian is currently impersonating another race.

Misha: Misha civilian vehicles tend to be very large (in order to carry a male and 10 wives, plus children). They have a high-level autopilot to allow for sleeping rather than driving, and feature a circular or semi-circular arrangement with the male in the center. Mishon military vehicles tend to be lightly armored and armed scout skimmers, with few heavy weapons available.

Mutzachan: Mutzachans are fond of A-grav cycles, as well as disc platforms, enclosed discs with bubble heads, spheres or geometric shapes (pyramid, cube, octahedron, dodecahedron, and icosahedron). Energy manipulation controls are used to drive the vehicle; use by other races requires a special module to produce a computer interface on the vehicle. Military vehicles are small discs with one pilot onboard, and are completely silent with no IR signature.

Orion: Orion vehicles are very similar to standard human automobiles, tanks, and skimmers, but tend to place a greater emphasis on speed and stealth for military applications. Fuzzy dice are a must!

Phentari: Many civilian Phentari vehicles feature a "bubble" on top for the pilot; this allows the Phentari to take advantage of his natural 360-degree vision and eliminates the use of rear view mirrors. Phentari

vehicles are steered with four controls; therefore, most races suffer a -30 to all Piloting checks when attempting use them (Cizerack suffer only -10 and Ashanti suffer no penalty). Military vehicles are typically very maneuverable and/or stealthy, with laser and missile armaments.

Python Lizard/Ram Python: Humans and Orions produce mass-market vehicles for use by Python races. These vehicles are very large, with seats designed to accommodate the lizard's tail and viewing screens to compensate for their nearsightedness. Generally, high quality autopiloting modules are also used and the speed of these skimmers is regulated. However, Pythons with cyber eyes often pilot very large, loud, and fast cycles that are also extremely dangerous.

Tanndai: Naturally, almost all Tanndai skimmers incorporate interfaces to allow direct connection with a variety of cybernetic systems. This means that it is nearly impossible for unauthorized owners to operate the vehicle (level 12+ Bypass Security check). Military vessels rely on a variety of technologies but are typically pulse-armed with heavy armor and rarely focus on missiles.

Zen Rigeln: Besides ambulances, Zen use sleek, unarmed vehicles with moderate speed and extensive safety features. Often, there is a co-pilot station for extra reliability. Many Zen prefer van-like skimmers with built in sleeping or meditation spaces.

General Vehicle Rules

Piloting

Each vehicle has a piloting modifier which affects all maneuvers attempted by the pilot. A positive modifier (bonus) is added to the pilot's skill, while a negative modifier (penalty) is subtracted. The possible maneuvers are explained in the section of this book dealing with that vehicle type. Sample difficulty tables are also included in the vehicle sections.

The BM is encouraged to modify these checks as necessary, depending on the situation. For example, if you are trying to avoid an obstacle, but you have just driven over a curb at 100kph while being fired at by a Panther battle tank, and your scalding hot coffee-equivalent has just spilled in your lap, there might be a -70 penalty to your evasion check!

As a general guideline, pilots should not need to make any piloting checks under normal driving/flying conditions unless you are either involved in combat, traveling at greater than normal speeds, facing extreme weather conditions, or unskilled in the vehicle you are piloting. Even a pilot with level 1 skill will automatically succeed at tasks such as making a right-hand turn under normal driving conditions, executing a computer-guided landing, or stopping at a stop-sign equivalent.

Vehicle Combat

Modifiers to Targeting

The chance to hit a vehicle with a weapon is modified by the vehicle's size modifier. The weapon type fired determines which size modifier should be used, the "personnel" size modifier or the "vehicle" size modifier. A personal weapon which uses the standard range brackets and tables from Lock-N-Load: Weapons & Tactics uses the first size modifier, except for Chainguns (which use the second size modifier). Any weapon which uses extended range brackets (including Anti-Tank Missiles, SAMS, Mortars, or Compact Artillery) uses the second modifier. In addition, any weapon which utilizes the weapons tables found in this book uses the second modifier, because all of the weapon tables in this book use extended range brackets. Arm rockets and Reflex missiles utilize the first size modifier, while Heavy missiles use the second modifier.

Note: Any weapon with extended range brackets (including any weapon using the vehicular tables from this book) suffers a -40 penalty to hit when fired at personnel.

• **Example:** Fred fires his M-20 Blaster at Henry's modified Companion class skimmer, which is 10m away (personal range bracket 2). The base chance to hit at range bracket 2 is 55. Fred gets a +30 bonus for firing at a compact skimmer, for a total "to hit" chance of 85. Since Fred has level 10 Pulse skill (+40) and the skimmer is moving roughly perpendicular to Fred at speed 35 (-30), there is a 95% chance to hit. Fred rolls an 87 and blasts away happily!

• **Example:** The skimmer survives the assault thanks to its trusty (but illegal) Flux shield. Henry, at the controls of the skimmer, zips by the astounded Fred and quickly moves out of Fred's 50m range of vision. Henry swings around, pulls to a stop, and out pops his hidden KPV 14.5 mm machine gun! Since Fred is now 120m away (vehicle range bracket 2), the base chance to hit is 90. However, since Fred is not a vehicle (barely), there is a –40 penalty, reduced somewhat by the +20 bonus since Fred is size class 8. This gives a base chance to hit of 70, further modified by Henry's 3 levels of Archaic Powder Gunnery (+12) and the fact that Fred is standing still (+10), because he is confused. Henry has a 92% chance to hit Fred, and he lets loose on full auto. Unfortunately, he rolls a 97. Fred was standing on a crowded street corner, and 3 innocent bystanders catch hot lead!

The *Battlelords of the 23rd Century* rulebook contains modifiers for targeting vehicles moving at different speeds (see the Combat Modifiers table). For example, the penalty for firing at a vehicle moving at speed 11-20 is -10; for a vehicle traveling at speed 51–100, the modifier is -70. These modifiers make it very difficult to hit a fast-moving target. However, there are certain situations which the Battle Master should be aware of when determining the chance to hit a moving target. If the target is moving generally towards or away from the firing position, the effective speed of the vehicle should be halved when determining the penalty. If the target is on a direct collision course with the shooter, the effective speed should be divided by 4 when determining the "to hit" modifier. The same would apply if the target is moving directly away from the shooter (although this circumstance will be fairly rare in play). Finally, certain computer or target acquisition systems may reduce the penalty.

• **Example:** Henry drives directly at Fred, accelerating to 25 m/s as he reaches a distance of 50 m from Fred's position. Fred has taken cover behind an ATM-equivalent, and lets loose with his M-20 as soon as the skimmer comes into view. The M-20 has a 0% base accuracy at range bracket 4, +30 for a compact skimmer, +40 for Fred's skill, and +10 because Fred is braced against an ATM-equivalent. The penalty for a target moving 25 m/s is normally -20; as Henry is traveling directly towards Fred, this is reduced to -05. Fred has a net (0+30+40+10-05 = 75%) chance to hit. He rolls a 46 and strikes Henry's Flux shield again, causing 20 points of damage.

All of the penalties for firing from a moving vehicle are calculated the same as those for firing at a moving target.

Optional Rule: The penalty for a vehicle's speed should not be reduced for indirect fire weapons such as grenades, grenade launchers, or artillery. Whenever these weapons are used in indirect fire mode, apply the full penalty for target speed, even when the target is moving towards or away from the firing position.

• **Example:** Henry returns fire again with his KPV machine gun. His base chance to hit Fred is 113 at vehicle range bracket 1, -40 because Fred is not a vehicle, +20 for a size class 8 target. In addition, there is a +12 bonus for Henry's Archaic Powder Gunnery skill, a +10 for firing at a stationary target, and a -25 penalty due to 50% cover (the ATM-equivalent). Henry's speed of 25 m/s would normally result in a -20 penalty, but because the skimmer is moving directly towards Fred, this is reduced to -05. The overall chance to hit is (113 – 40 + 20 + 12 + 10 – 25 – 05) = 85. Henry rolls a 72, ripping into Fred's armor with his heavy machine gun!

Determining the Location Hit

Once you have rolled to hit a vehicle, you must determine the location struck. In most cases, the BM will be able to determine which side of the vehicle is struck. If a skimmer is bearing down on your position, most likely your feeble attempt to stop it with your Walther PPK is going to strike the front of the vehicle.

In some cases, however, the side hit will be partially or completely ambiguous. In this case, the BM will determine the side struck randomly.

• **Example:** Erak, the Kizanti assassin, fires a LAW rocket at the local Phentari governor's limousine. Erak is concealed in a 5th-floor window, and the limousine is 180m away, approaching his position. There is a good chance the rocket will strike the front of the vehicle, but it may also strike the top. The Battle Master must approximate the situation. In this case, I would give Erak a 75% chance to strike the front, and a 25% chance to strike the top of the limo.

In order to reflect the variety of situations that can occur, the vehicle location tables have two columns to roll on. If the side struck has already been determined by the Battle Master based upon the situation, roll 1d20 and read the second column of numbers to determine the location struck. If, however, the damage is completely random, then use d100 and read the first column of numbers to determine the location struck.

Open-Top Vehicles

Some vehicles are "open-top"—in other words, they have equipment or personnel on an exposed surface outside the vehicle. Examples of open-top vehicles include the World War II Jeep, or a pickup-truck equivalent with characters riding in the bed. When firing at these vehicles, there is a chance that shots will strike the exposed personnel or equipment rather than the vehicle itself. This chance is given in the vehicle description and is generally higher if the shot is fired from above the vehicle. Additionally, persons firing at such vehicles may choose to target the exposed areas or persons directly. If weapons fire from above the vehicle strikes components in the exposed area, and the damage is sufficient to destroy the item struck, remaining damage should be applied to the top armor. Also, it is possible to damage all the exposed persons or equipment through the use of explosive devices such as grenades.

Firing at Specific Targets

In many cases, it will be desirable to fire at specific components of a vehicle. If the target is a specific vehicle section (the front of a skimmer, for example), apply the vehicle's size modifier normally before adding the penalty from the following table.

VEHICLE CALLED SHOT

TARGET	PENALTY
Bottom (from below)	-10
Bottom (skimmer)	-20
Crew Compartment	-30
Engine Compartment	-40
Front/Rear	-30
Front/Rear Glass	-50
Side (any)	-15
Side Glass	-60
Tire (wheeled)/Lift Unit (skimmer)	-30
Top (from above)	-15
Top (when visible)	-30

Note: To target an internal location that cannot be seen, the observer must make an Identify Vehicles check (difficulty determined by the BM, but usually a level 8-12 check). To strike the target, damage must penetrate the armor.

• **Example:** Johnny Scumbag is out for a stroll when he notices Erak the Eridani whizzing by in his rented Bristol. Johnny only wants to talk with Erak so he tries to shoot out one of the Bristol's tires. Johnny whips out his Nightstalker and fires.The Bristol is 10m away, so Mr. Scumbag has a base chance of 60 to hit (personal range bracket 2). The size of the vehicle gives him a bonus of +30 but trying to hit a tire incurs a -30 penalty. Erak is traveling roughly perpendicular to Johnny at speed 20 so there is a further -10 penalty. Johhny has 5 levels of APW skill so that adds a +20 bonus but incurs a snapshot penalty of -40. The overall chance to hit is (60 + 30 - 30 - 10 + 20 - 40)=30. Johnny rolls a 68. Miss! Maybe he should try calling?

When a specific system is targeted, the penalty is determined by the size of that target, not the size of the vehicle. Do not include the vehicle's size modifier when making a called shot; instead use the following table for examples of called shot penalties. As with vehicle size modifiers, the penalty is expressed as (personal/vehicle); apply the first modifier to personal weapons and the second to vehicle weapons.

Note: The penalty for targeting a vehicle occupant is further modified by the target's size class.

VEHICLE SYSTEM CALLED SHOT

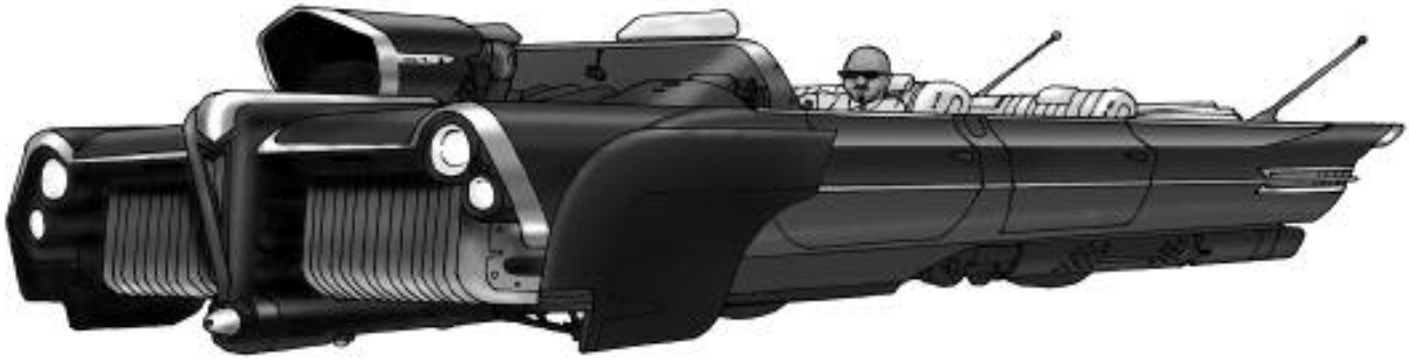
TARGET	PENALTY
LAMS system (external)	-35/-75
Missile Rack	-25/-65
Occupant (through window)	-30/-70
Tire (car)	-30/-70
Tire (truck)	-25/-65
Vehicle weapon mount	-55/-95
Weak Point in Armor	-60/-100

Note: To target a weak point in the armor, the observer must make an Identify Vehicles check of at least level 15 (BM's discretion). Striking such a weak point effectively reduces the target's threshold by 1/3 when determining penetration.

Firing Vehicle Weapons

Just as with personal weapons, any shot that is not carefully aimed will suffer a -40 penalty to hit (the "snap shot" penalty). Vehicle weapons even incur this penalty at range bracket 1 (since this range bracket extends to 50m, not 5m as with hand weapons). It requires one half action to manually aim at range bracket 1, a full action to aim at range bracket 2, 4 half actions at range bracket 3, and 5 half actions at range brackets 4-5. Aiming at targets in range brackets 6-8 requires 3 full actions, as a scope must be used on the weapon at these distances.

However, it is possible to reduce these aiming times for vehicular weapons with a computer-aided targeting system, utilizing gun cameras and software to hone in on targets. Any vehicle that utilizes an onboard computer is assumed to have built-in targeting systems for its weaponry, unless those weapons are held in tripod or ring mounts (which are always manually targeted). When utilizing a targeting screen, aiming times are one half action at range bracket 1-2, 2 half actions at range brackets 3-4, 1 full action at range brackets 5-6, and 4 half actions at range brackets 7-8.



It can be quite difficult to pilot a vehicle and fire weapons at the same time. If the vehicle does not utilize targeting systems, then the pilot must be able to see the target, and cannot establish careful aim due to distraction; therefore, all weapons fire by the pilot incurs the -40 Snap Shot penalty. In addition, the pilot will receive a -20 penalty to any Piloting checks made in the same round, due to distraction. Note that a pilot may not fire a manually targeted weapon which does not face forward.

A vehicle utilizing targeting systems offers a substantial improvement: the pilot can choose to aim shots normally. While aiming a weapon, the pilot incurs a -30 penalty to any Piloting checks. Once the weapon is aimed, the pilot may fire at the target with no penalty to hit, and a -10 penalty to any Piloting checks made in the same segment. If the pilot chooses to take unaimed shots with the targeting system, he will sustain a -10 penalty to any Piloting checks made in the same round, while incurring a -40 Snap Shot penalty to weapons fire.

Because of the difficulties inherent in simultaneously piloting and firing weaponry, most armed vehicles maintain separate crew to fire the weaponry or utilize computer systems capable of independent engagement.

Note: Guided weapons such as missiles never require aiming time once a lock-on has been established. It generally requires one half action to select a target for a missile (or set of missiles) and fire.

Note: If any Piloting checks are missed while anyone in the vehicle is aiming a weapon, the weapon's aim is ruined and must be re-established.

Note: It is possible for a single pilot or gunner to fire multiple weapons at a target, if all of those weapons are of the same type and mounted in the same firing arc. For example, a Street Sweeper skimmer mounts 4 V4G PAWS in the Front firing arc. These weapons can be fired at a single target or used together to produce spread fire in a large area, requiring only a single gunner to operate the set of weapons.

Weapon Damage

What exactly happens when your weapon strikes some poor schlub's skimmer? Well, it all depends on the vehicle, its armor, and what kind of weapon you are using. Here is a general rundown on how it works.

Vehicle Armor

Vehicle armor may have up to 3 attributes: Threshold (THR), Absorption (AR), and Integrity (AI). Much like body armor, the threshold represents the resistance to damage, absorption represents the ability of the armor to "absorb" damage, and integrity represents the ability of the armor to hold together after repeated poundings. However, the effects of weapons on vehicle armor can be quite different from the effects on personnel, as noted below.

Note: Most vehicles don't actually use absorption polymers for protection; this book still uses the Absorption (AR) designation to represent the ability of the vehicle's armor to "absorb" damage.

Optional Rule (Simplified Damage Resolution): Instead of treating vehicle armor as detailed in these rules, you may simply treat vehicles just like big suits of body armor. This is a simplification which you may find useful, but it produces less realistic results overall.

Vehicle Glass

Many vehicles have some form of "glass" which allows the occupants to see out. Unfortunately, others can also see in… and frequently snipers target the hapless crew, leaving the vehicle relatively intact. The easiest solution is to purchase tinted or mirrored windows. This reduces the ability of outsiders to target you with weapons fire. The best protection available is in the form of complete, virtual-reality navigation systems

which eliminate the need for windows altogether. Most military vehicles utilize these kinds of systems. As far as protection, "glass" works like vehicle armor, but is generally weaker. Vehicle glass is not considered a "soft target" (see below).

Optional Rule: The threshold of "glass" areas is halved against laser fire.

Flux Shields

Advanced vehicles may be equipped with Flux shields. Like their personal counterparts, these shields reduce damage on a point-for-point basis. The effect of weapon systems on Flux shields is detailed in *Lock-N-Load: Weapons & Tactics* (Weapon Effect on Flux Shields). However, a vehicle may not operate multiple Flux shields at the same time, nor may vehicle occupants utilize Flux shields or other field generating armor options while the vehicle's Flux shield is in operation (unless otherwise noted). As noted in Lock-N-Load: Armor, Equipment, & Cybernetics, occupants of a vehicle may use PDS technology while the vehicle's Flux shield is in use.

Soft Targets

Tires, and other external objects at the BM's discretion, are considered "soft targets." Therefore, these items are treated the same as personnel when hit by weapons fire. Soft targets do not utilize the special damage rules presented in this book for vehicles. For example, tires take full damage from flamethrowers and frost guns, unlike vehicle armor. The Battle Master should consider the reasonable effects of a weapon when determining damage done.

Damage by Weapon System

The following section details the effects of each weapon type when applied to vehicular targets. Some weapons behave quite differently when applied to hard objects (like tanks) instead of soft, squishy things (like Melon Heads).

Archaic Hand Weapons: Any damage caused by a blunt-force or slashing weapon (e.g. clubs, swords, and the like) is reduced by the vehicle's threshold, and then applied to the integrity of the section struck. Only if an entire section of a vehicle's armor is smashed can these weapons affect occupants or vehicle components. This occurs because these weapons are basically crushing the section hit from the force of their blows.

• **Example:** Fred sees Henry's skimmer sitting unattended on the street. The Mutzachan must be off draining his blood. Fred knows a good opportunity when he sees one. With a huge grin, he pulls out his Honj and brings it down on Henry's front windshield. Fred rolls 12 points of damage and adds his 14 points of Strength and skill bonus for a total of 26 points of damage. The windshield has a 5 point threshold and 12 points of AI. The weapon damage is reduced by 5 (leaving 21) and the remaining damage applied to the AI. The window shatters and 9 points pass through, leaving a huge gouge in Henry's dashboard and driver's seat.

In the case of "piercing" weapons (knives, arrows, ptfaangs, etc.), any damage which surpasses the vehicle's threshold is applied to the vehicle's absorption (if any) before passing through to the interior. The integrity is reduced by the normal amount for such an attack (usually 1 point).

Note: It is impossible to damage most internal vehicle components with short weapons such as knives. The BM must use his discretion when judging the "reach" of these weapons.

Archaic Powder Weapons: All archaic powder weapons from *Lock-N-Load: Weapons & Tactics* have their damage reduced by the target's threshold, after which any penetrating damage is applied to absorption before striking the inside of the vehicle. The only exception is specialized anti-materiel ammunition, which ignores the target's absorption. In addition, all archaic powder weapons inflict integrity damage if they penetrate the threshold.

• **Example:** Lance Goodfellow is on a reconnaissance mission at an AMC outpost when he is spotted by one of the guards. He turns to flee, but is pursued by an AMC thug in a Go class skimmer. Knowing that he is still too far from his vehicle, Lance decides his only chance is to violate his orders and use deadly force. He pulls out the .44 cal pistol he recently acquired, takes aim, and fires at the approaching vehicle (35m away). He rolls a hit to the front armor. The Go class skimmer has a threshold of 4. Lance rolls a 7 for damage. Since the skimmer has no AR, 3 points of damage penetrate to the interior. The shot also inflicts 1 point of AI. Lance's bullet glances harmlessly off the reactor casing. He'd better aim for the driver before he's run down.

Optional Rule: If the weapon is not capable of affecting heavy armor, it is also ineffective against vehicles with a threshold of 7 or higher.

Atomic Particle Weapons: These weapon systems have the same effect upon vehicles as personnel. Damage is reduced by the vehicle's threshold (which is effectively lowered by 2) and ignores absorption. Integrity is reduced by 1 point.

Attractor/Repressors: These powerful weapons have a similar effect on vehicles and personnel alike. When targeting a vehicle, a single armor location is affected. Unlike most weapon systems, threshold does not protect a vehicle against the effects of an A/R beam. Instead, cut all rolled damage in half and apply it directly to the integrity of that section. Absorption is ignored. If the section's integrity collapses, the remaining damage then strikes the exposed internal components or passengers with normal effect.

Note: The Earthquake and BC-Milk Shake only affect 1 vehicle location, but they do 3 times the listed damage.

• **Example:** Sneak, the apprentice assassin, is trying to avoid capture by Serinarious Phentari, but to no avail. The bounty hunter closes in with his Hunter class skimmer. Desperate, Sneak fires his Ravager A/R beam on max power and hits. The Ravager does 4d6 points and the BM rolls a 14. This causes 7 points of integrity damage to the front of the skimmer, not nearly enough to stop the Phentari from running over the fugitive. Another bounty successfully collected!

Optional Rule (Destructive Vibrations): If a section of armor affected by an A/R beam has a "glass" location adjacent to it, that "glass" location sustains 1/2 the integrity damage sustained by the armor section. This damage is in addition to the damage done to the section originally struck by the A/R beam.

Carousel Guns: Rounds from a Carousel gun are unaffected by vehicular absorption; the damage is reduced by the vehicle's threshold (minus any effect from charging the slug). Integrity damage is applied normally. Absorption is ignored.

Chainguns: Chainguns follow the same rules as all other APWs. Note that chainguns fired at vehicles suffer the size penalty (or gain the size bonus) normally used for vehicular weapons fired at that target.

• **Example:** An Allox 20mm Auto-Cannon is fired at a Go class skimmer 75m away (range bracket 5). The base chance to hit at range bracket 5 is 60, but the Go class skimmer has a size modifier of (+25/-15). Because the chaingun is designed for anti-vehicular use, it uses the -15 penalty, for a modified chance to hit of 45%.

Compact Artillery: Vehicles subject to compact artillery fire sustain 50% more fragments than personnel, and all concussion damage is doubled. The damage from artillery fragments is subject to reduction by the vehicle's threshold, and is then applied to absorption.

Concussion Damage: Many types of weapons inflict concussion damage. Concussion damage to vehicles is treated differently from personnel; the damage is reduced by the vehicle's threshold, and is then applied to the integrity of that section's armor. Any damage which surpasses the section's integrity strikes internal components or personnel.

Optional Rule (Blast Damage and Crew): If concussive damage exceeds the integrity of an armor section and strikes the crew compartment, all occupants sustain half of the penetrating damage as concussive damage. This damage should be spread equally among all sections of the body. In addition, each vehicle weapon in the crew compartment has a 50% chance of sustaining the same damage; and there is a 50% chance that one accessory system (randomly determined) sustains 1/2 of this damage.

Optional Rule (Blast Damage and Engines/Cargo): If concussive damage exceeds the integrity of an armor section and strikes the engine compartment or cargo area of a vehicle, and there is more than one component in that area, each component in that section sustains one-half of the damage which exceeded the integrity.

Optional Rule (Spalling): Even if concussion damage is insufficient to destroy the entire section, there may be fragmentation which can damage internal components. There is a base 20% chance that dangerous fragmentation occurs any time concussion damage exceeds the threshold by more than 10 points (this may be modified at the BM's discretion). This creates 1d6 fragments capable of causing 3d4 points of damage each. If the vehicle has absorption, this damage is applied to the absorption first - otherwise the fragments strike the internal location. The chance of fragmentation increases by 10% for every 10 additional points of damage above the threshold. If 35 points of damage penetrate the threshold, there is a 40% chance of fragmentation.

Optional Rule (Section Destruction): If all of the integrity in a section is destroyed by concussion damage, the whole armor section is blown apart and the pieces are sent flying into the vehicle. If this occurs, roll 2d4 for the number of fragments created. The fragments do an amount of damage equal to the concussion damage which exceeded the vehicle's threshold divided by the number of these fragments. The fragments strike the internals of the vehicle (including the occupants). Absorption does not apply in this case, as the entire section of armor has been shattered. This effect occurs instead of spalling, so do not roll for spall fragmentation in the case of section destruction.

Crushing Weapons (Omega): Crushing weapons apply force to the surface of the target and possess no particular penetrating ability. This includes all blunt-force and slashing hand weapons (clubs, long swords, Thwack 'Em Sticks, etc.) as well as Omega cannons, implosion field technology, and concussive damage from any source (grenades, artillery, explosives, etc.). Damage from any of these sources is reduced by the vehicle's threshold, with any remaining damage applied to armor integrity before affecting the interior of the vehicle.

Disintegrators: Damage from these weapons is applied directly to vehicle integrity, without being reduced by the target's threshold. When a side loses all of its integrity, it is vaporized and the contents of the vehicle are exposed to the battlefield. Of course, the damage rating for metal targets should be used, unless the target vehicle is made of flesh.

• **Example:** Schultz, a police informant, is attempting to escape Kigan, a Black Market operative, but unfortunately he is having trouble starting his skimmer. Kigan casually strolls up and fires his Americas disintegrator at the side of Schultz's vehicle. 30 points of damage are applied directly to the front left side armor, which only had 11 points of integrity. 19 points of disintegrator damage pass through, silencing the snitch permanently, with no messy body parts to dispose of!

EMP Cannons: In some circumstances, EMP Cannons can affect external vehicle options. The skin of the vehicle generally protects the internal components. Hand-held EMP cannons simply are not powerful enough to knock out larger devices such as engines or anti-grav lift systems. The BM should determine the systems which may be affected and assign these an SMR of 75-110. If a section is open or the armor has been destroyed, occupants' armor and weapons may be affected along with other vehicle components.

Explosives: When detonated near a vehicle, treat all damage from explosives as concussion damage. However, it is possible for explosives to be used in a shaped charge and attached directly to the hull of a vehicle. When used in this way (use the Demolitions skill check as listed in *Lock-N-Load: Weapons & Tactics*), the explosive damage is reduced by the vehicle's threshold, then applied to absorption. Of course, this type of attack is generally only possible against stationary (or extremely slow-moving) vehicles. Planar explosives do not inflict additional damage when used against vehicles; however, when used against a vehicle other than Ultra Armor, the damage from a planar explosive should be applied equally to every secton of the vehicle on the side facing the blast.

Optional Rule (Internal Explosions and Crew): If explosive damage from a shaped-charge attack penetrates the crew compartment, all occupants sustain half of the penetrating damage as concussion damage (instead of the full weapon damage being applied to a single occupant or system). This damage should be spread equally among all sections of the body. In addition, each vehicle weapon in the crew compartment has a 50% chance of sustaining the same damage; and there is a 50% chance that one accessory system (randomly determined) sustains 1/4 of the penetrating damage as concussion damage.

Flamethrowers: Most vehicular armor is highly resistant to melting. The vehicle's threshold is subtracted from the flamethrower damage, and half of the remaining damage (if any) is subtracted from the armor integrity.

Optional Rule (Melting Glass): Vehicle "glass" locations are much less resistant to melting by flamethrower weaponry. Subtract half of the armor threshold from the flamethrower damage, and apply all of the remaining damage directly to integrity.

Flux Interference Generators: As with personnel, Flux interference generators affect vehicle Flux shields on a point-for-point basis but have absolutely no effect on the vehicle itself.

Frost Guns: Frost guns are used to freeze persons and absorption polymers. When applied to metallic vehicles, they are somewhat less effective; however the "shock transition" effect, which occurs due to the instant freezing, can still cause some damage. Frost guns which strike vehicular targets inflict 1/3 the rolled damage (round down) directly to the armor integrity. Threshold and absorption are ignored.

Optional Rule (Obscured View): Frost Gun attacks that directly hit windows can cause them to frost over, reducing visibility. Subtract the damage done by the frost gun attack from the visual modifier of anyone looking through that particular window. Note that vehicles with any kind of virtual viewing system cannot be affected in this manner.

Gauss Rifles: The effect of Gauss rifles upon vehicles is dependent upon the ammunition used. Anti-Polymer rounds are ineffective against vehicles, inflicting 1d4 points of damage (applied to absorption if the threshold is breached). Anti-Reactive rounds that manage to penetrate a vehicle's reactive armor detonate the plate; otherwise, 1d3 points are inflicted to the vehicle's absorption. High Explosive and Mega Explosive rounds apply any penetrating damage to absorption before affecting internal components. Signature rounds function normally to enhance radar tracking. With all other Gauss ammunition, apply any damage that surpasses the target's threshold (minus reduction) directly to internal components, bypassing the vehicle's absorption in the process. In addition, the round does normal damage to integrity (1 point) if it penetrates the threshold.

Gravitational Effect Weapons: Only the largest GEWs are able to affect vehicles. Vehicle weight is equal to 2 encumbrance units per kg for GEW purposes.

Gravitational Shears: Gravitational shears do the full listed damage to integrity and absorption. In addition, they strike the internal components of the vehicle, even if the armor itself is not breached. Flux shields are capable of blocking the damage on a point-for-point basis, as described in *Lock-N-Load: Weapons & Tactics*.

Grenades: Grenades cause double concussion damage to vehicles, as noted in *Lock-N-Load: Weapons & Tactics*. In addition, a vehicle is struck by 50% more fragments than an individual at the same range. Fragmentation damage is reduced by threshold, and then applied to absorption. Any penetrating damage strikes the vehicle's internals, and penetrating fragments reduce vehicle integrity by the normal amount.

Implosion Field Technology: When applied to vehicles, the damage from these weapons should be treated as concussion damage.

Jammers: The chance for Jammers to affect vehicular weapon systems is halved and the disruption time is also halved, due to the more powerful magnetic bottles these systems employ.

Juicers: Damage from Juicers is reduced by threshold, and then applied to vehicular absorption. The damage is not doubled, unlike the effect of these systems on personnel. Integrity reduction from a penetrating shot is equal to the damage yield. The threshold reducing effect of juicers is also applicable to vehicle armor.

Lasers: Laser damage to vehicles is reduced by threshold, but ignores vehicular absorption. Any penetrating damage strikes an internal location, while integrity is reduced by the usual amount (1 point for most lasers). Non-impact lasers do half damage against vehicles with a threshold of 7 or higher. Impact lasers do full damage to all vehicles.

• **Example:** Shak Tai the Cizerack is involved in an SSDC counter-insurgency operation. She and her team have been sent to Transit, in the Gyran Republic subsector of Hell's Kitchen. Several Rebels, posing as Di-Tritium traders, are being transported through the streets of Teijin in an Exeter limousine. Shak Tai sets up an ambush as they pull into their 5-star hotel. She opens fire with her RKM 5000 impact laser, striking the left front armor with 2 shots. The first shot does 9 points and is ineffective against the skimmer's 10 point threshold. The second shot inflicts 14 points, of which 4 pass through to the interior. The pilot is hit and incapacitated, leaving the stationary skimmer easy prey for Shak Tai's two team members and their LAW anti-tank missiles. In addition, the left front armor of the skimmer loses 3 points of integrity (since an impact laser reduces AI by 3 per penetrating hit).

Mag Guns: Mag rounds happily stick to tanks and skimmers just as well as they do to body armor. The effects depend on the round type, but are generally the same as the effects on body armor. However, vehicles do not have absorption polymers to dissolve.

Metal Guns: The effect of a metal gun is to reduce the armor threshold by the specified amount and inflict an amount of integrity damage

equal to five times the listed damage for the weapon, just like hits against personnel armor. Metal guns have no effect if they strike a vehicle "glass" location.

Micron Body Weapons: Micron body weapons do not pack enough punch to damage even the weakest vehicles. It is possible to target exposed occupants or unarmored persons sitting behind glass with a threshold of 2 or less.

Mines: Most mines that are not anti-vehicular in purpose operate like grenades, dealing concussion and fragmentation damage. Treat these effects in a manner identical to grenades (i.e. 50% more fragments and double concussion damage). However, the SC-1000 mine and the E1, E3, and E4 anti-tank mines inflict pure concussion damage. The E2 Snake mine, the SC-2000 mine, and the Wedge Cutter mine cause damage that should be considered a plasma attack. The Nuclear mine has effects as described in *Lock-N-Load: Weapons & Tactics*.

Missiles: Arm rockets, Reflex missiles, PMS missiles, SAMS, Heavy missiles (see the Weapons section) and most Anti-Tank missiles cause damage which is reduced by threshold, then applied to absorption. Exceptions include: the Cobra anti-tank missile (causes concussion damage), the Gustaf Whistler (when loaded with plasma round; see *Lock-N-Load: Weapons & Tactics* for effects), the Milan-AS (the damage to the tank is concussion damage), and the PLG (treat as a plasma attack). In addition, the target's integrity is reduced by the standard amount by a penetrating missile (see *Lock-N-Load: Weapons & Tactics*, Weapon Threshold and Integrity Reduction Table). Rocket Launchers inflict concussion and fragmentation damage; treat these in the same manner as a grenade attack.

Optional Rule (Internal Explosions and Hit Locations): Penetrating damage from a high-explosive attack is divided among 1d4 internal vehicle locations. The first location damaged should always be the location rolled for the attack, and additional locations damaged must be on the same side or section as the first location struck. If this rule is used, divide the damage before applying it to any of the components.

Optional Rule (Internal Explosions and Crew): If explosive damage penetrates the crew compartment, all occupants sustain half of the listed damage as concussion damage (instead of the full damage being applied to one occupant or system). This damage should be spread equally among all sections of the body. In addition, each vehicle weapon in the crew compartment has a 50% chance of sustaining the same damage; and there is a 50% chance that one accessory system (randomly determined) sustains 1/4 of the penetrating damage as concussion damage.

Modern Hand Weapons: Modern hand weapons have varying effects upon vehicles, depending on their mode of operation. The Bash 'Em Hammer, Energy Mace, Quabals, and the Teg Staff cause concussion damage (see the end of this section). The Chainsaw and Thwack 'Em Stick have the same effect as Archaic slashing or bashing weapons; the Spear Gun is identical to an Archaic piercing weapon. The Light Sword, Plasma Jet, and Plasma Whip are plasma weapons for vehicle damage purposes. The Hajab is ineffective against vehicles. The Ghost Staff inflicts integrity damage to vehicle armor, ignoring any threshold.

Mortars: Mortar attacks should be resolved in the same manner as grenade explosions (50% more fragments and double concussion damage).

Neuro Cannons: These weapons are only effective if a passenger is struck. As with armor, the threshold of the vehicle is added as a bonus to the victim's SMR. Any vehicle with a threshold greater than 1HP completely protects enclosed passengers from Neuro Cannon attacks.

Omega Cannons: Omega damage is pure concussive damage. This substantially reduces their effectiveness against vehicles, because the damage does not ignore threshold.

Personal Nuclear Weapons: Half of the damage from nuclear weapons that is listed as "concussion and heat damage" should be considered concussion damage, and the other half should be considered heat damage. Heat damage affects vehicles in the same manner as a flamethrower.

Pulse Weapons: Plasma weapons produce a combination of explosive and penetrating effects when applied to armor. This produces gaping holes in armor while also blasting the vehicle interior with horrific effect. When a plasma weapon strikes a vehicle hull, reduce the rolled damage by the threshold. Any remaining damage is divided equally between armor integrity (round up) and penetrating damage (i.e. ignoring absorption), which strikes an interior location. If the armor integrity in a section is totally destroyed, apply all remaining integrity damage, as well as the penetrating damage, to an interior location. Pulse Cannons, Pulse Automatic Weapons, Pulse Blasters, and Static Pistols all affect vehicles in the same manner.

• **Example:** A Panther Light Battle Tank engages a rogue Battlelord who is piloting a Legend class Humpty Dumpty. The Humpty has already lost its Flux shield in a previous engagement and is on the run. Lining up the target with its main weapon, a Venomous-2 pulse cannon, the tank gunner lets loose and strikes the walker in the torso. The BM rolls 3d4 HP for damage and the result is 7 HP of damage (which is equal to 700 points of damage, since 1HP = 100 points). The Legend HD has a threshold of 425, therefore (700 - 425 = 275) points of damage penetrate. This damage is divided equally between integrity (138 points) and penetrating damage (137 points). The penetrating plasma travels into the crew compartment and instantly vaporizes the pilot.

Specialized Weaponry: Tasers and sonic disruptors have no effect on vehicles. Sonic disruptors cannot affect persons inside fully enclosed vehicles.

Thermatics: Thermatics are designed to heat up the target. Unfortunately, heating up the side of a vehicle has very little effect on its occupants or internals. Therefore, these weapons are generally ineffective when fired upon vehicular targets. All damage from these weapons is divided by four when applied to vehicles (due to the large surface area). Furthermore, unless the thermatic damage exceeds the vehicle's threshold, there is no lasting effect on the vehicle. Any heat damage that exceeds the threshold of the vehicle is applied to integrity. Only when the integrity of a section has been destroyed does the thermatic damage penetrate to the inside. Thermatics function normally against vehicle components designated as "soft targets."

Thunderbolt Generators: Thunderbolt generators typically are ineffective against the metal skins of vehicles. Some external systems on the affected side may be shut down by the blast (again, the BM should assign an SMR of 75-110 to these systems). Against vehicle armor, a thunderbolt generator inflicts 1/4 of any damage which surpasses the threshold directly to integrity.

Optional Rule (Thunderbolt Damage to Windows/Tires): Due to the high resistance, thunderbolt generators do full damage (subject to threshold) against vehicle "glass" locations. The threshold is subtracted from the damage and the remainder is applied to integrity. If the window is compromised, the remaining bolt passes inside of the vehicle. Thunderbolt generators do half damage against vehicle tires.

Web Generators: Web generators have little effect on vehicles unless the glue strikes a vehicle "glass" location. Each splatter which sticks to the front "glass" of a vehicle causes a -02 to piloting checks, while splatters on the side or rear "glass" of a vehicle cause a -01 to piloting checks (cumulatively). The maximum penalty for glue splatters is -40. Note that vehicles with any kind of virtual viewing system cannot be affected in this manner. At the BM's discretion as to the exact results, other possible effective targets include air intake and exhaust ports, communications antennae (particularly motorized antennae), and doors—which, like windows, may be sealed either open or closed with an accurate shot.

Reactive Armor

A detailed description of reactive armor is given in *Lock-N-Load: Armor, Equipment, & Cybernetics*. However, reactive armor on vehicles is far more common than personal reactive armor, since it is a much older and less expensive technology to apply. As described in *Lock-N-Load: Armor, Equipment, & Cybernetics*, reactive armor has its own Threshold, (also known as a Break Point Rating), as well as its own Armor Integrity. Treat these statistics exactly the same as those for normal vehicle armor.

Reactive armor also has a Maximum Damage Capacity (MDC) rating. This represents the amount of damage negated when an attack penetrates the reactive armor's threshold. After this occurs, the reactive armor plate is destroyed and any additional attacks will affect the vehicle's armor. For most vehicles, one plate of armor covers a single section of the armor; however, Ultra Armors utilize a front and back plate on each section of the armor (i.e. front of left leg, back of left leg, etc.). The cost to replace a reactive armor plate is listed in the vehicle's description. When a vehicle's reactive armor plate detonates, any external equipment (including external LAMS systems) mounted on that section are destroyed.

Just like personal reactive armor, weapons which do not actually penetrate the armor with an impact cannot detonate reactive armor. This means that hits from disintegrators or metal guns reduce the integrity of the reactive armor, but never cause it to explode. When all of the integrity is lost, that section of reactive armor has been destroyed.

• **Example:** A Foe Hammer Humpty Dumpty has reactive armor with a Threshold of 8 and an MDC of 4HP. Each leg plate has armor integrity of 49. When struck by weapons fire, any weapon which cannot penetrate the threshold of 8 is ignored. However, upon being struck by an impacting weapon which inflicts more than 8 points of damage, the reactive armor will detonate, reducing any incoming damage by 4HP. If the attack was a Sabot Reflex missile capable of inflicting 3HP of damage, the Foe Hammer is unaffected, but the reactive armor on that section must be replaced.

Internal Damage

Determining the Location Struck

So, your Browning .50 blew right through the thin skin of your enemy's Skim-Truck. Now what? Well, now we have to consider the effects of flying metal on engines, anti-grav systems, fusion reactors, and (the best part) the vehicle's occupants! But first, which of these did you hit? This can be determined by looking at the "Internal Location" column on the location table.

• **Example:** Fred is walking down the street (as usual, packing an M-20 Blaster) when he sees a Go class skimmer that he thinks is Henry's. He fires a snap shot at the left side of the skimmer, and rolls a 02. He hits! Fred rolls a d20 to determine location, and gets an 11. That's the left front glass of the skimmer, which has a threshold of only 3. Fred rolls 14 points of pulse cannon damage, of which 11 pass into the vehicle. Since the location rolled was 11 (left side), the "Internal Location" struck is the crew compartment.

Internal Locations

Once damage strikes an internal location, the BM must be able to determine the effects. This depends on the type of location struck. The detailed effects will be listed after the hit location tables for each vehicle. In general, for simplicity's sake, treat all internal components as personnel for purposes of damage. The component may have a threshold and absorption, and has BP for the purposes of sustaining damage. Any component that is reduced to 0 BP is totally destroyed and must be replaced (rather than repaired).

Note: Do not apply damage multipliers for weapons such as frost guns, flamethrowers, and disintegrators, as the components are not actually made of flesh.

If an internal location contains multiple components (for example, the result is "Front Weapon" and the vehicle has three front weapons), the BM should randomly determine which component is damaged. Explosive damage (such as that from mines or missiles) may be spread amongst all components, at the BM's discretion.

Note: An internal component's threshold should not be added to the vehicle's threshold for purposes of determining whether the target is considered "heavy armor." For example, if a laser strikes a vehicle with threshold 4 and 12 points of damage are inflicted, 8 points penetrate the vehicle's armor and strike an internal component. If that component has a 5 point threshold, the laser causes 3 BP of damage to the target.

Optional Rule (Continuing Weapon Damage): If the damage inflicted is sufficient to totally destroy the component struck, and additional damage remains, the BM should roll another internal location (on the opposite side or a random side as the situation warrants). The "leftover" damage should be applied to this location. In the event that there is even more damage remaining after the second internal location is destroyed, any additional damage should be applied to the armor of the vehicle at that location.

Detailed Damage Effects

The hit location tables for each vehicle list the internal components that may be struck by penetrating weapons fire. The following section details the effects of damage to systems found in various types of vehicles.

Accessory System: One of the auxiliary systems may be damaged or destroyed by the incoming damage. Roll d100 on the following table:

ACCESSORY SYSTEM DAMAGE

ROLL	RESULT
01-15	Environmental Controls (no immediate effect on an unsealed vehicle; compromises the air supply in a contained vehicle)
16-30	Computer (if any); otherwise no effect
31-60	Virtual viewing system (if any); otherwise no effect
61-75	Radio (if any); otherwise no effect
76-90	Crash Protection System (air bag or crash gel, if present); otherwise no effect
91-100	BM's choice

Regardless of the system struck, any remaining damage will continue on to strike another area of the vehicle. Roll again on a random side table (1d6/1d20) and the penetrating damage starts with the internal location and moves outward. If the 1d6 roll indicates the same side that was initially affected by the damage, re-roll.

Note: If a vehicle with a virtual viewing system loses visibility, consult the Situational Modifiers table for that vehicle type to determine the penalty to Piloting checks that should be applied. On military vehicles, it should be assumed that there is an emergency periscope for frontal viewing which allows continued visibility in a 30 degree arc in front of the vehicle. While using this periscope, the pilot may not fire any weaponry and suffers a -60 penalty to all Piloting checks. On some vehicles, it is also possible for the pilot to stick his head (or equivalent) out a window, providing good visibility but still incurring a -40 to Piloting checks. The worst case scenario is that the pilot must take direction from another crewmember who is looking out a hatch; this situation produces a -100 penalty on all Piloting checks.

Driver, Passenger, or Seat: The BM should determine randomly which individual is struck. If the vehicle has currently empty seats, the damage may strike an empty seat (in which case it will generally keep moving on to another location). Otherwise, the person sustains damage in the normal fashion. If there is enough damage to completely obliterate the victim (see catastrophic damage in the main rulebook), roll another vehicle hit location and apply remaining damage. A normal seat has 5 BP.

Engine (power system): If the power system is destroyed, the vehicle immediately loses all power for radar systems, vehicle computers, and other electronic devices. This can present a serious problem for vehicles which utilize external viewing systems in lieu of windows. All Piloting checks are made at a -20 penalty. For wheeled vehicles only, the max acceleration and max deceleration of the vehicle are cut in half. Flux shields and weapons are not disabled by this effect.

Whenever the power system is damaged, there is a chance that a critical hit occurs. The chance for a critical hit is 25% if the cumulative damage sustained is less than 1/4 of the power system's BP. If the system has sustained at least 1/4 of its BP in damage, then a critical hit automatically occurs. Roll on the following table whenever a critical hit occurs.

ENGINE (POWER SYSTEM) DAMAGE

ROLL	RESULT
01-25	All radio communications lost
26-50	Computer failure
51-70	-10 to all piloting checks (not cumulative)
71-90	Wheeled Vehicles: Max Acceleration and Max Deceleration cut in half (not cumulative with multiple hits); Skimmers: Optional system failure (1 vehicle accessory ceases to function; if none exist, no effect)
91-100	External viewing system lost

Engine (block) (Wheeled Vehicles Only): This result applies to non-fusion powered vehicles. It represents the main engine components for internal combustion (IC) engines or the motor for fuel cell powered vehicles.

If this component is destroyed, the vehicle loses all power to accelerate, decelerates at 2 m/s^2, and makes all piloting checks at a -30 penalty. Furthermore, in the case of internal combustion-powered vehicles, a fire automatically occurs in the engine compartment. The Engine (Power System), Engine (Drive), and Flux Shield (if any) will sustain 1 point of damage per second regardless of threshold. This fire has a 40% chance per round of spreading to the crew compartment. A fire in the crew compartment will inflict 1d6 points of fire damage per round to all occupants and equipment (note that fire damage is doubled against absorption polymers). Any armored personnel must roll a Fire SMR for their armor (and helmet) or suffer the effects described in the Armor section of *Battlelords of the 23rd Century*.

Whenever the engine is damaged, there is a chance that a critical hit occurs. The chance for a critical hit is 25% if the cumulative damage sustained is less than 1/4 of the engine's BP. If the engine has sustained at least 1/4 of its BP in damage, then a critical hit automatically occurs. Roll on one of the following tables whenever a critical hit occurs, based on the type of engine.

ENGINE (IC) DAMAGE

ROLL	RESULT
01-25	Inoperative Cylinder: Acceleration reduced by 1 m/s^2, top speed reduced by 5 m/s
26-50	Engine Knock: -10 to all piloting checks (not cumulative)
51-70	Cooling system leak: Engine will overheat in 3d4 minutes and be destroyed, shutting the vehicle down, unless the driver turns the vehicle off. An engine destroyed in this manner will not catch fire.
71-90	Severe Damage: Acceleration and top speed are halved. There is a 30% chance of an engine fire.
91-95	Electrical system failure: All engine power is lost. The vehicle loses all power to accelerate, decelerates at 2 m/s^2, makes all piloting checks at a –30 penalty, and cannot operate any electronic device (including Flux shields).
96-100	Catastrophic Failure: The engine breaks apart and fragmentation occurs. Each passenger and nearby vehicle component is hit by 1d4 fragments, each inflicting d6 points of damage. Additionally, a fire occurs and the engine is ruined (see above for effects).

ENGINE (FUEL CELL) DAMAGE

ROLL	RESULT
01-25	Power loss: Acceleration reduced by 1 m/s^2, top speed reduced by 5 m/s.
26-50	-10 to all piloting checks (not cumulative)
51-70	Flux shield systems inoperative until repairs made
71-80	Corrosive fluid release: One of the vessels holding a reservoir of chemicals is punctured and spills out onto the engine, which suffers an additional 1d4 BP of damage. Also, there is a 50% chance of an electrical system failure.
81-90	Power surge: Pilot must make Electrical SMR (-20 penalty) or take 1d3 points of real damage (armor can protect against this damage as normal).
91-95	Electrical system failure: All engine power is lost. The vehicle loses all power to accelerate, decelerates at 2 m/s^2, makes all piloting checks at a -30 penalty, and cannot operate any electronic device (including Flux shields).
96-100	Catastrophic Failure: The engine breaks apart and fragmentation occurs. Each passenger and nearby vehicle component is hit by 1d4 fragments, each inflicting 1d6 points of damage. Additionally, the engine is ruined and all power is lost (see above for effects). There is a 25% chance of an engine fire.

Engine (drive system) (Wheeled Vehicles Only): If the drive system is destroyed, the vehicle immediately loses the ability to accelerate or maintain its current speed. The vehicle will decelerate at 2 m/s^2 until it comes to a stop. Before the vehicle comes to a complete stop, all piloting checks (except for braking) are at a -30 penalty.

If the drive system is damaged, but not destroyed, the vehicle loses 1 m/s^2 of acceleration each time it is damaged beyond 1/4 of the system's BP. (Note that the acceleration cannot be reduced below 0.5 m/s^2 unless this system is destroyed). Additionally, the vehicle's top speed is reduced by 3 m/s each time the drive system is damaged beyond 1/4 of the system's BP (again, this cannot reduce the top speed to 0 until the system is destroyed).

Engine (fuel line) (Wheeled Vehicles Only): If the fuel line is hit, treat it as having the same threshold as the engine block (or reactor). Should any damage penetrate the threshold, the fuel line is automatically destroyed (it has 1 BP). The result of this is that the engine loses all power. The vehicle loses all power to accelerate, decelerates at 2 m/s^2, and makes all piloting checks at a -30 penalty. Additionally, if the vehicle is an internal combustion or fuel cell engine, there is a 75% chance of an engine fire, which causes 1 point of damage per round to the Engine (Block), Engine (Drive), Engine (Power System), and Flux Shield (if any) regardless of threshold. Engine fires may reduce forward visibility. This fire has a 25% chance per round of spreading into the crew compartment unless extinguished (1d6 BP of damage per round to anything in the crew compartment once it spreads).

Engine (non-critical) (Skimmers Only): Damage which strikes this location should be applied as if it struck the reactor (subtract from the reactor's BP). However, there is no chance of causing any other negative effects unless the damage exceeds the BP of the reactor, in which case the reactor is destroyed (see effects above).

Engine (reactor) (Skimmers Only): If the reactor is destroyed, the following effects occur: First, there is a plasma detonation inside the engine compartment as the remaining fuel explodes. Treat this as a Super Plas grenade going off inside the vehicle. All components near the engine, including the crew, are affected as if they were 1m from the explosion. Secondly, the area is flooded with mild radiation (all persons inside the vehicle must make a Radiation SMR or lose 1 BP per hour for 1d4 hours unless treated). Finally, the vehicle crashes towards the ground, losing all power to maneuver. The vehicle will sustain crash damage from striking the ground, and cannot operate any electronic devices of any kind (including Flux shields).

If the reactor is damaged, but not destroyed, roll on the following table whenever the cumulative damage sustained exceeds 1/4 of the BP. Any result which does not apply should be ignored, not rerolled.

ENGINE (REACTOR) DAMAGE

ROLL	RESULT
01-25	Power loss: Acceleration reduced by 1 m/s^2, top speed reduced by 5 m/s.
26-50	-10 to all piloting checks (not cumulative)
51-70	Flux shield systems inoperative until repairs made.
71-90	Radiation release: Crew must make SMRs at +10 bonus or sustain 1BP of radiation damage.
91-95	Power surge: Pilot must make electrical SMR (-20 penalty) or take 1d3 points of real damage.
96-100	Catastrophic Failure: Reactor sprays hot plasma everywhere. Crew, the Flux shield generator (if any), and weapons near the engine are hit by 4 plasma fragments doing 4d4 damage each. Additionally, the engine is destroyed, causing the vehicle to crash into the ground. The vehicle cannot operate any electronic device (including Flux shields).

Flux Shield Generator: The Flux shield generator generally cannot be damaged while the shield is operational, unless the attack comes from inside the vehicle. However, it may be damaged before the shield is raised in the case of a surprise attack, or after the shield has failed. If a vehicle has more than one Flux shield generator, roll to determine randomly which generator was hit by the attack before applying the damage effect.

If the unit is destroyed, the shield is inoperable (obviously). Otherwise, roll on the following table to determine the effect if the generator sustains damage of at least 1/4 its BP:

FLUX SHIELD GENERATOR DAMAGE

ROLL	RESULT
01-25	Power loss: Maximum field strength is halved.
26-50	Recharge failure: The field cannot be recharged until the unit is repaired.
51-75	Integrity failure: 50% of attacks will bypass the Flux shield until the unit is repaired.
76-100	Total failure: The shield cannot be raised until the unit is repaired.

Fuel Tank (Wheeled Vehicles Only): This location does not apply to fusion-powered vehicles (treat as Rear Cargo Area instead). The damaging effects for each type of power system are detailed below. In all cases, the vehicle will lose all engine power if the fuel tank is destroyed.

Internal Combustion-powered Vehicles: The fuel tank contains volatile liquids, which tend to catch fire and occasionally explode. If the fuel tank is destroyed, a fire engulfs the entire vehicle. This fire inflicts 1d6 BP per round to all vehicle components and occupants until extinguished.

If the tank is damaged but not destroyed, there is a 25% chance of a fire occurring anytime the tank is damaged beyond 1/4 of its BP. This fire will have a 50% chance per round of spreading to the crew compartment and inflicting 1d4 BP of damage per round until extinguished. A damaged fuel tank will also cause the vehicle's range to be reduced due to lost fuel (range is lost in proportion to the amount of damage, so a vehicle which has lost 50% of its BP has its maximum range halved).

Fuel Cell-powered Vehicles: The fuel tank contains highly pressurized flammable liquids, which have a strong tendency to explode. If the fuel tank is destroyed, there is a 50% chance of an immediate explosion which inflicts 3d6 points of fire damage on all vehicle occupants, as well as bystanders within 2m of the vehicle. After this explosion, or if an explosion does not occur, the vehicle will be engulfed in flames inflicting 1d6 points of damage per round until extinguished.

In the event that the fuel tank is damaged, but not destroyed, there is a 10% chance of a similar explosion followed by fire whenever the tank is damaged beyond 1/4 of its BP. If the tank does not explode, there will be no ill effects from damage.

Lift Unit (Skimmer Only): If the unit is destroyed, the vehicle immediately loses the ability to maneuver. It will quickly crash into the ground, as given by the following table (skimmers normally do not exceed 10m in height, but city grids may be an exception).

When crashing into the ground, calculate the damage as if the vehicle was traveling at 1/2 its forward speed plus the impact speed from the table below.

LIFT UNIT FAILURE RESULTS

HEIGHT	TIME TO IMPACT	IMPACT SPEED
1-5m	1 second	10 m/s
6-20m	2 seconds	20 m/s
21-45m	3 seconds	30 m/s
46-80m	4 seconds	40 m/s
81-125m	5 seconds	50 m/s

LIFT UNIT DAMAGE

ROLL	RESULT
01-50	Minor Instability: All of the vehicle's Piloting checks are at a -05 penalty for 6 seconds.
51-75	Variable Output: As it flies, the vehicle sways and bobs. Piloting checks are at a –10 penalty; weapons firing from the vehicle are at a –10 penalty. Passengers experience discomfort and may suffer motion sickness. Anyone targeting the vehicle suffers a –05 to hit.
76-90	Controlled Power-down: The lift unit begins overheating. Vehicle safety systems automatically engage and bring the vehicle to rest (deceleration of 2 m/s^2, losing 1m of altitude per 5 seconds). These systems may be overridden (level 15 Piloting check) but after 1 minute of override, there is a 5% chance per 30 seconds of a total anti-grav system shutdown.
91-100	Total Shutdown: The system suffers a power failure. Treat the effects as if the system is destroyed (see above).

Whenever the lift unit is damaged, there is a chance that a critical hit occurs. The chance for a critical hit is 25% if the cumulative damage sustained is less than 1/4 of the lift unit's BP. If the lift unit has sustained at least 1/4 of its BP in damage, then a critical hit automatically occurs. Roll on the table above to determine effects whenever a critical hit occurs.

Tires (Wheeled Vehicles Only): If a four-wheeled vehicle's tire is destroyed, it immediately loses 1 m/s^2 in acceleration (minimum is 0.5 m/s) and its top speed is reduced by 10 m/s. Additionally, all piloting checks are at a -30 penalty. These penalties are cumulative for each tire lost. If the amount of damage received was more than double the amount needed to destroy the tire, the entire wheel is ruined. Any four-wheeled vehicle losing a single wheel has its top speed halved, acceleration reduced to 0.5 m/s^2, and a -50 penalty to piloting checks. Any vehicle losing more than one wheel is immobilized (decelerating at 5 m/s^2, with no chance of succeeding at any piloting check).

If a tire is damaged, but not destroyed, and the damage is more than 1/4 the BP of the tire, the vehicle's top speed is reduced by 3 m/s and piloting checks are made at a -10 penalty. These penalties are not cumulative.

For six-wheeled vehicles (2 tires in front and 4 in back), the penalty for losing or suffering damage to a front tire or wheel is the same as a four-wheeled vehicle, but losing a rear tire or wheel (or suffering damage) causes only half the normal penalties. Six-wheeled vehicles are not immobilized unless all tires on 2 corners of the vehicle are lost.

For eight-wheeled vehicles, the penalty for tire damage or loss is one-half the penalty for four-wheel vehicles, and the vehicle is not immobilized unless 4 wheels are lost.

For ten-wheeled vehicles (2 in front, 4 center, 4 rear), the penalties for front tires are the same as four-wheel vehicles. The penalty for any of the other tires is 1/4 of the four-wheel penalty. These vehicles can be immobilized only by knocking out all wheels on 2 corners (the center wheels do not immobilize the vehicle).

Eighteen-wheeled vehicles suffer 1/4 the penalty for any tire or wheel damage and are not immobilized unless 6 wheels are destroyed.

Weapons: If a vehicle's weapon is struck by incoming fire, it may be disabled or destroyed. The threshold for various weapon types can be found in *Lock-N-Load: Weapons & Tactics* (Weapon Threshold and Integrity Reduction). Vehicular weapons which inflict at least 1HP of damage (minimum) have triple the listed threshold. If the weapon is damaged, and the damage received is more than the maximum damage the weapon is capable of inflicting, it is disabled or destroyed. At the BM's discretion, explosive weapons or those utilizing a reactor may explode in this case. If the weapon does not explode, roll a system shock check for the weapon, with a penalty of five times the penetrating damage. The system shock number for all vehicular weapons is 100. Failure on this system shock check indicates that the weapon is nonfunctional, and a malfunction should be rolled.

Losing Sections of Armor

For vehicles other than Ultra Armor, losing all integrity in a single section of armor represents the outer section of the vehicle being destroyed. If this occurs, the vehicle suffers -20 to all Piloting checks per (non-window) armor location destroyed. Should a vehicle lose two adjacent (non-window) sections, its frame begins to collapse and the vehicle will quickly become non-operational. Apply a -60 to all checks related to operating the vehicle (Piloting, Gunnery, etc.). After 10-60 seconds, the vehicle's engine and power systems suffer a complete failure; deceleration will occur at half of the vehicle's max deceleration and no vehicle systems will function. Repairs will cost at least 20% of the vehicle's cost in this case.

Note: Any vehicle which loses a Bottom armor section suffers the same effects as a vehicle which loses two adjacent sections; in addition, there is a 25% chance per round that the vehicle is in motion of a random vehicle component (other than a passenger) falling out of the vehicle through the hole. Vehicle crew will never fall out from this effect, although immobilized or unconscious characters may be an exception (BM's discretion).

Ultra Armor Specific Locations

Ultra Armor takes damage differently than most vehicles. Many "penetrating" hits will do additional integrity damage to the section, in addition to other effects. The sections of an Ultra Armor are completely destroyed when their integrity is lost.

Anvil Turret Mechanism: If the Anvil turret mechanism is struck by weapons fire doing at least 1/4 of the anvil's integrity, the turret freezes in place. This will result in the Ultra Armor having a fixed arc of fire with the weapon (Battle Master to decide based upon situation). In addition, all Anvil weapons fire other than missiles will be at a -60 penalty to hit.

Arm Internals: There is a 75% chance to strike 1 component or accessory present in the Ultra Armor's arm. Determine the component struck randomly. If this does not occur or damage remains after destroying the accessory or weapon, apply the remaining damage to the Ultra Armor's arm integrity. There are no other effects unless the arm's integrity is completely lost, in which case the arm is destroyed.

Elbow: A hit to the elbow never strikes internal weapons or accessories; instead, apply all penetrating damage to the Ultra Armor's integrity. If more than 1/4 of an arm's integrity is lost due to a hit to the elbow, the Ultra Armor's elbow joint freezes in place. All weapons fire from the affected arm is at a -20 penalty to hit. If more than 1/2 of an arm's integrity is inflicted by a hit to the elbow, the arm is severed at the elbow. All components in the lower arm are lost (this generally includes all weapons except missile racks).

Foot: If the Ultra Armor mounts any options in the foot (such as a minelayer), there is a 50% chance that the option is struck first. Apply any remaining damage to the integrity of the leg.

If the damage exceeds 1/4 of the leg's integrity, the Ultra Armor's foot is assumed to be destroyed. In this case, a walker will suffer a -40 to Piloting checks, while a crawler is only penalized -20. Any accessories in the foot (such as a minelayer) are automatically destroyed as well. If the damage was less than 1/4 of the leg's total integrity, there is a 25% chance that the foot freezes in place, and Piloting penalties are half of those for a destroyed foot.

Note: The maximum damage an Ultra Armor can lose from a "foot" hit is 1/2 of the leg's integrity as the foot and lower part of the leg are destroyed. Assume that any future "foot" strikes are leg internal hits if the foot has been destroyed.

Hip: A hit to the hip never strikes internal weapons or accessories; instead, apply all penetrating damage to the Ultra Armor's integrity. If more than 1/4 of a leg's integrity is lost due to a hit to the hip, the Ultra Armor's hip joint freezes in place. In this case, a walker will suffer a -40 to Piloting checks, while a crawler is only penalized -20. If more than 1/2 of a leg's integrity is inflicted by a hit to the hip, the leg is automatically severed from the body (see the effects of losing a limb at the end of this section).

Internals or Missile Rack: If the Ultra Armor mounts a missile rack on the section indicated, there is a 50% chance that it is struck. If it is not struck, treat the result as an "Internals" hit to the appropriate section. Should a missile rack be hit, use the missile rack's threshold (rather than the Ultra Armor's threshold) to determine penetration. Any penetrating hit of less than 15 points has a 50% chance of causing missile detonation; any hit over 15 points automatically detonates the missiles stored in the rack. All external missile racks are designed to channel damage away from the Ultra Armor. Therefore, in the event of explosion, roll damage for all of the warheads left in the rack, and then divide by 5. Apply this damage to the affected section as a concussive attack. In addition, anyone within 3m of the explosion sustains 1/2 the rolled damage in concussion; out to 6m, the damage is 1/4 of the rolled damage; and out to 10m, damage is 1/10 of the rolled damage.

Optional Rule (Catastrophic detonation): If a missile rack explosion results in the complete destruction of an Ultra Armor's limb or anvil and there is additional damage remaining, apply 1/2 of the remaining damage to the torso section as a concussive attack.

Optional Rule (Knockdown): In the event of a missile rack explosion, an Ultra Armor pilot must make a Piloting check at a penalty equal to the rolled damage (in HP). Failure indicates that the Ultra Armor has been knocked over by the explosion.

Leg Internals: There is a 75% chance to strike 1 component present in the Ultra Armor's leg, either a weapon or other system. If this does not occur or damage remains after destroying the accessory or weapon, apply the remaining damage to the Ultra Armor's leg. There are no other effects unless the leg's integrity is completely lost, in which case the Ultra Armor loses its leg (see the effects of losing limbs at the end of this section).

Knee: A hit to the knee never strikes internal weapons or accessories; instead, apply all penetrating damage to the Ultra Armor's integrity. If more than 1/4 of a leg's integrity is done by a hit to the knee, the Ultra Armor's knee joint freezes in place. In this case, a walker will suffer a -40 to Piloting checks, while a crawler is only penalized -20.

Reactor: If the reactor is destroyed, the following effects occur: First, there is a plasma detonation inside the engine compartment as the remaining fuel explodes. Treat this as a Super Plas grenade going off inside the Ultra Armor. All components near the engine, including the crew, are affected as if they were 1m from the explosion. Secondly, the area is flooded with mild radiation (all persons inside the vehicle must make a Radiation SMR or contract radiation poisoning). Finally, the Ultra Armor collapses to the ground, unable to operate in any way—treat this as a collision with a fixed object at the current speed in order to determine effects on the crew.

If the reactor is damaged, but not destroyed, roll on the following table whenever the damage exceeds 1/4 of the reactor's BP. Any result which does not apply should be ignored, not rerolled.

HD REACTOR DAMAGE

ROLL	RESULT
01-25	Power loss: Top speed reduced by 5 m/s.
26-50	-10 to all Piloting checks and initiative modifier penalized by +1 (not cumulative).
51-60	Flux shield systems inoperative until repairs made.
61-70	One weapon system (chosen randomly) loses all power.
71-85	Radiation release: Crew must make SMRs at +10 bonus or sustain 1BP of radiation damage.
86-88	Power failure: Any initiative modifier provided by the Ultra Armor is lost as the primary interface system fails. The Pilot maintains control of the vehicle but at a -20 to all Piloting checks.
89-90	Power failure (computer): The primary computer goes offline, disabling the Ultra Armor's pAI. The pAI may no longer operate weapons or pilot independently.
91-95	Power surge: Pilot must make Electrical SMR (-20 penalty) or take 1d3 points of real damage.
96-100	Catastrophic Failure: Hot plasma sprays everywhere. Crew, the Flux shield generator (if any), and weapons near the engine are hit by 4 plasma fragments doing 4d4 damage each. Additionally, the reactor is destroyed, causing the Ultra Armor to crash into the ground (see above description).

Sensor Array: Any penetrating hit to a Sensor Array location automatically disables one sensor array. There is triple sensor redundancy built into every Ultra Armor section. Therefore, if this result occurs 3 times to any section, that section becomes inoperable. In the event that this occurs to the torso, the Ultra Armor is immobilized and unable to fire weaponry (effectively knocked out of action). In addition, apply all penetrating damage to the section's integrity.

Shoulder: A hit to the shoulder never strikes internal weapons or accessories; instead, apply all penetrating damage to the Ultra Armor's integrity. If more than 1/4 of an arm's integrity is lost due to a hit to the shoulder, the Ultra Armor's shoulder joint freezes in place. All weapons fire from the affected arm is at a -40 penalty to hit. If more than 1/2 of an arm's integrity is inflicted by a hit to the shoulder, the arm is completely severed.

Theater: Many Ultra Armors feature Theater Armor. Hits to the Theater should be applied to this armor first, which is treated as personnel armor for damage purposes. If the theater armor is penetrated, roll on the following table to apply the incoming damage:

HD THEATER DAMAGE

ROLL	RESULT
01-25	pAI computer. If this unit is destroyed or rendered non-functional, the Ultra Armor's pAI ceases to function. Apply any remaining damage to the torso's integrity.
26-50	Theater interface system. If this unit is destroyed, the Ultra Armor loses any bonus initiative modifier. Any time this system is struck, the pilot must make an Electrical SMR at a -20 penalty or sustain d6 points of real damage. Apply remaining damage to the torso's armor integrity.
51-100	Pilot hit by incoming damage. In the event that the pilot is rendered unconscious, the pAI (if operable) will generally attempt to evade and retreat to a safe location. If the pilot is killed, the pAI will continue to function on its last orders. If the pilot is obliterated, remaining damage should be applied to the torso's integrity.

Torso Internals: There is a 75% chance to strike 1 component or accessory present in the Ultra Armor's torso other than the Flux Generator, Reactor, Pilot, or main computer. Determine the component struck randomly. If this does not occur or damage remains after destroying the accessory or weapon, apply the remaining damage to the Ultra Armor's torso integrity. There are no other effects unless the torso's integrity is completely lost (in which case the Ultra Armor is destroyed, and any occupants suffer damage equal to the penetrating damage plus 1-4HP of crushing damage, spread equally among all sections of the body).

Weaponry or Internals: When this result is rolled, a component of the section indicated is struck. Determine randomly whether a weapon or other accessory in the section is hit; if no weapons or accessories remain in the section, treat this result as an "Internals" hit. If a weapon is struck, see the effect for "Weapon" hits. In any case, if the weapon or item is destroyed, apply any remaining damage to the integrity of the section.

COLLISIONS

When vehicles collide with other vehicles, infantry, or the side of a cliff, the results can be devastating. This may occur due to loss of control, or simply because a maniacal pilot enjoys plowing into things!

SIMPLIFIED COLLISION RESOLUTION

It is somewhat complicated to resolve a collision accurately, so your BM may choose to use a greatly simplified collision system. Use the following formula to determine the damage done by any collision:

Collision damage =
(Collision speed (in m/s) / 5) x (Vehicle Weight (in kg) / 1,000) x d8

Take the vehicle weight to be the lesser of the two vehicles involved in the crash, and the collision speed to be that of the vehicle which is impacting the target (in the event of a head-on collision, add the speeds together). Double any damage if the collision is between a single vehicle and a fixed object such as a tree or building. All collision damage should be treated as concussive damage, and both vehicles involved in the collision sustain the same damage.

• **Example:** In a simplified situation, an 1,800kg wheeled vehicle hits a 10,000kg truck while traveling at 20m/s. The damage inflicted (to both vehicles) is (20/5) x (2) x d8 = 8d8 points of damage.

At the end of the collision, both vehicles are stopped in the event of a head-on collision; otherwise their speeds are reduced by 25-75% at the BM's discretion. Generally, a heavier vehicle should slow down less in a collision with a lighter vehicle. A Piloting check will be necessary for any vehicle which is still moving after a collision.

Additionally, the occupants of any vehicle involved in a collision may take damage. If the vehicle's speed is reduced by at least 3 m/s, all occupants take damage according to the following table. This may be reduced by seat belts or other collision protection measures. Size Class 8 characters, or any armored character who weighs more than 300kg, take double damage. This damage should be treated the same as falling damage (ignores threshold and is spread across 3 hit locations).

OCCUPANT DAMAGE

CHANGE IN SPEED(M/S)	DAMAGE
3-7	(1/2)d6
8-12	1d6
13-17	1d6 + (1/2)d6
18-22	2d6
23-27	2d6 + (1/2)d6
28-32	3d6
33-37	3d6 + (1/2)d6
38-42	4d6
43-47	4d6 + (1/2)d6
48-52	5d6
Each additional +5	+(1/2)d6 per additional 5 m/s

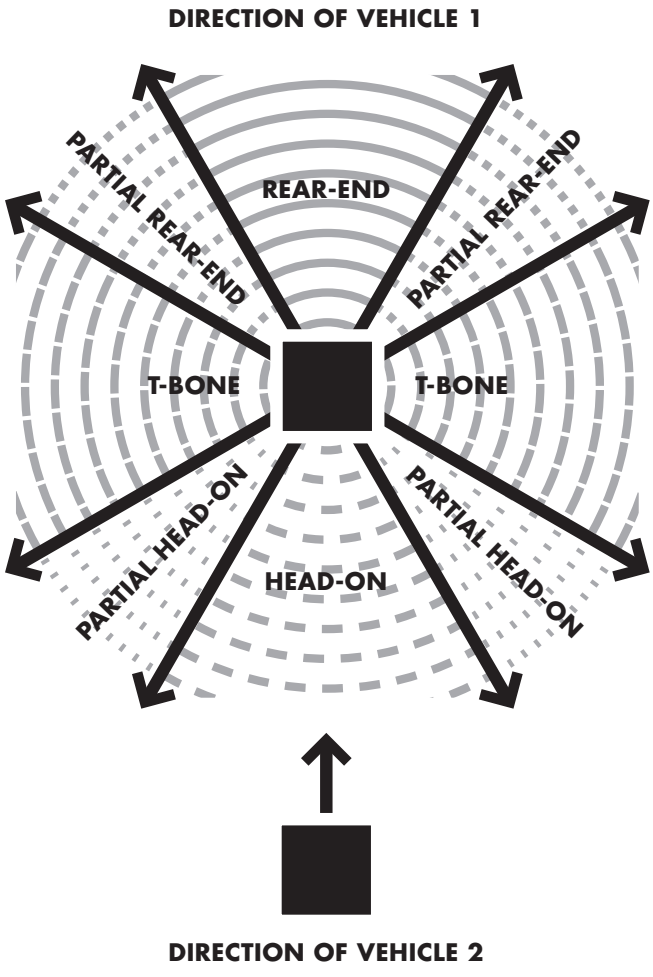
• **Example:** The 1800kg vehicle in the example above comes to a complete stop as a result of the collision. The occupants will suffer 2d6 points of damage, since the change in speed was 20 m/s.

DETAILED COLLISION RESOLUTION (OPTIONAL)

The remainder of this section will describe collisions in more detail if the Battle Master chooses not to use simplified collision resolution.

Step 1: Determine the Collision Angle

The effects of a collision between two vehicles are dependent upon their relative heading prior to the collision. In the event of a single-vehicle collision, or a collision between a moving vehicle and a stationary vehicle, there is no need to consider this effect. If both vehicles are moving, however, consult the following diagram to determine whether the collision is head-on, partially head-on, T-bone, partially rear-end, or rear-end.



Step 2: Determine the Collision Speed

The collision speed can be determined based upon the collision angle, as follows ("Vehicle 1" refers to the faster vehicle in a head on or rear collision, or the "striking" vehicle in a T-bone collision):

COLLISION SPEED

COLLISION ANGLE	COLLISION SPEED
Head-On	Vehicle 1 Speed + Vehicle 2 Speed
Partial Head-On	Vehicle 1 Speed + 1/2 x Vehicle 2 Speed
T-Bone	Vehicle 1 Speed
Partial Rear-End	Vehicle 1 Speed – 1/2 x Vehicle 2 Speed
Rear-End	Vehicle 1 Speed – Vehicle 2 Speed
Single Vehicle	Vehicle's speed

• **Example:** Henry, traveling in his Go class skimmer at 27 m/s, is struck in a partial head-on collision by Fred's Argent class skimmer, which was moving at 10 m/s. The collision speed is 27 + (1/2 x 10) = 32 m/s.

Optional Rule: In the case of a single vehicle striking a fixed object at an angle, the BM may reduce the collision speed. For example, if a skimmer hits a wall at 20 m/s, but strikes at a 30 degree angle instead of head-on, the BM might rule that the effective collision speed is only 10 m/s.

Step 3: Determine the Base Collision Damage

The base damage inflicted by a collision is determined by the weight of the smaller vehicle and the collision speed. Refer to the following tables to calculate the collision damage.

COLLISION DAMAGE (VEHICLE WEIGHT)

VEHICLE WEIGHT	DAMAGE
0-300kg	1/2 x d6
301-600kg	1d6
601-1,000kg	1d8
1,001-2,000kg	2d8
2,001-3,000kg	3d8
3,001-4,000kg	4d8
Each additional 1,000kg	+1d8

COLLISION DAMAGE (SPEED)

COLLISION SPEED (M/S)	DAMAGE MULTIPLIER
1-7	x1/2
8-12	x1
13-15	x1.5
16-18	x2
19-22	x3
23-25	x4
26-29	x5
30-34	x6
35-39	x7
40+	x(speed/5) (round down)

• **Example:** Henry's Go class skimmer is the lighter vehicle involved in the crash, weighing in at only 514kg (with Henry on board). The base collision damage will therefore be 1d6 (weight) x 6 (32 m/s speed) = 6d6 points.

Step 4: Determine the Relative Weight Modifier

Larger vehicles tend to do more damage than smaller vehicles. However, due to conservation of momentum, there is a limit to how much energy can be transferred from a big truck to a smaller object in the form of damage; the bigger vehicle will tend to keep moving and send the small object at high speed away from the collision. This is why, when a bus hits a person, the result is never that the bus stops and the person is blown into chunks of meat. The victim either bounces off to one side, or bounces off and gets run over.

In order to reflect this, compare the weight of the two vehicles involved in the collision and refer to the following table to determine the damage modifier. If the collision involves a single vehicle hitting a fixed object (e.g. a sturdy building, cliff face, or side of a starship), the modifier is always +100%. Always round down when determining the weight ratio.

COLLISION DAMAGE (RELATIVE WEIGHT)

RELATIVE WEIGHT	DAMAGE MODIFIER
Same	No modifier
3:2	+20%
2:1	+33%
3:1	+50%
5:1	+66%
7:1	+75%
15:1 or more	+100%
Single Vehicle	+100%

• **Example:** Fred's Argent class skimmer weighs in at 2750kg (including Fred's massive bulk). This is more than 5 times the weight of Henry's vehicle, so the damage modifier is +66%. This increases the base damage to (6d6 + 66%) = 10d6 damage.

Step 5: Apply the Impact Damage

All collision damage affects vehicles as follows: Both vehicles take equal damage. Threshold is subtracted from the damage, and the remainder is applied to the integrity of the section involved in the collision. If the entire section is destroyed, the damage should be spread among all internal components facing that section, and progress into the vehicle as appropriate.

• **Example:** The BM rolls 10d6 for collision damage, resulting in 32 points of collision damage. Henry's Go class skimmer has a threshold of 3; this means that 29 points of damage are applied to the integrity of the front section. The front section of Henry's skimmer only has 13 points of integrity, leaving 16 points of damage. This damage is split between the reactor and power system (8 points each). The power system only has 18 BP and is critically damaged (more than 1/4 of its total BP inflicted). At the same time, Fred's Argent skimmer sustains 32 points of damage. The Argent also has a threshold of 3, but the front section has 32 points of integrity. 29 points of integrity are destroyed, but the skimmer is otherwise unharmed.

Optional Rule: Skimmers take 1/5 less damage in all collisions due to higher elasticity. This rule has not been applied in the example above.

Step 6: Determine the vehicles' resulting speeds after the collision

After two vehicles have smashed into each other, the results are difficult to predict. Both vehicles may come to a stop, or have their speed substantially reduced. However, when one vehicle is substantially larger than the other, it will tend to change in speed much less than the smaller vehicle. Use the following tables to determine how a vehicle's speed changes after a collision (the BM has final say and may overrule these results).

COLLISION DAMAGE (SPEED CHANGE)

VEHICLE'S RELATIVE MASS	RESULTING SPEED CHANGE
At least 19x other vehicle	-5% of collision speed
At least 9x other vehicle	-10% of collision speed
At least 5x other vehicle	-16% of collision speed
At least 4x other vehicle	-20% of collision speed
At least 3x other vehicle	-25% of collision speed
At least 2x other vehicle	-33% of collision speed
At least 1.5x other vehicle	-40% of collision speed
Same as other vehicle	-50% of collision speed
Up to 2/3 of other vehicle	-60% of collision speed
Up to 1/2 of other vehicle	-66% of collision speed
Up to 1/3 of other vehicle	-75% of collision speed
Up to 1/4 of other vehicle	-80% of collision speed
Up to 1/5 of other vehicle	-83% of collision speed
Up to 1/9 of other vehicle	-90% of collision speed
Up to 1/19 of other vehicle	-95% of collision speed

Note: If the resulting speed in a collision is less than 0, it indicates that the vehicle has reversed its course and is now headed in the opposite direction. The new speed can never be higher than the final speed of the other vehicle involved in the collision.

Head-On Collisions/Collisions with one vehicle stationary

In any head-on collision, at least one vehicle will be sent backwards, unless both vehicles end up stopped.

• **Example:** A loaded Go class skimmer (600kg mass, traveling 10 m/s) is hit head-on by a loaded Exeter class skimmer (2400kg mass, traveling 10 m/s in the opposite direction). The Exeter is 4x as large as the Go class skimmer, so its speed is reduced by (-20% x 20 = -4 m/s) to 6 m/s; the Go class skimmer's speed would be reduced by (80% x 20 = 16 m/s), which means that it is now traveling at 6 m/s in the opposite direction.

• **Example:** If the Go class skimmer had been traveling at a speed of 40 m/s before the crash, the Exeter skimmer would be stopped cold (-20% x 50 m/s = -10 m/s), and the Go class skimmer would also be stopped (-80% x 50 = 40 m/s).

Partial Head-On Collisions

When a partial head-on collision occurs, use the collision speed determined previously to determine speed change; however, the vehicles will also turn 1d3x10 degrees in a direction away from each other.

• **Example:** Henry and Fred's skimmers collided in a partial head-on collision, with a total collision speed of 32 m/s. Since Fred's Argent weighs more than 5x the Go class skimmer, the speed reduction for the Argent is (-16% x 32= -5 m/s). The speed reduction for the Henry's skimmer is (-83% x 32 m/s = -26 m/s). Fred's skimmer continues on at a speed of (10 – 5) = 5 m/s, while Henry's slows down to a mere 1 m/s. Both continue in the direction they were initially traveling, but turn by 1d3x10 degrees away from each other.

Optional Rule (Elasticity): In a Head-On or Partial Head-On collision, BM's may wish to increase the speed change of the heavier vehicle by 1 m/s, and the speed change of the lighter vehicle by (heavier vehicle mass / lighter vehicle mass) m/s. In the case of Henry and Fred, this would mean that Fred's skimmer decelerates by 6 m/s to 4 m/s, while Henry's decelerates by 31 m/s, actually sending his skimmer backwards at 4 m/s. This produces slightly more realistic results and is especially appropriate for skimmers.

T-Bone Collisions

In a T-Bone collision, the two vehicles will turn d4x10 degrees in the direction of the other vehicle's travel, in addition to changing speed. The striking vehicle will lose speed, while the struck vehicle will gain it.

• **Example:** A Go class skimmer (600kg) traveling eastbound at 20 m/s is struck by a northbound Exeter class skimmer (2400kg), also traveling 10 m/s. This is a T-Bone collision with a collision speed of 10 m/s. Both vehicles turn d4x10 degrees in the direction the other vehicle was traveling prior to the crash. In addition, the Go class skimmer gains (80% x 10 m/s) = 8 m/s of speed, while the Exeter loses (20% x 10 m/s) = 2 m/s of speed.

Partial Rear-End Collisions/Rear-End Collisions

When a vehicle is struck from behind, the "striking" vehicle will slow down while the "struck" vehicle will accelerate.

Note: The final speed of the "striking" vehicle cannot be less than the initial speed of the "struck" vehicle.

Note: An unpowered vehicle which is accelerated by a collision will decelerate at its maximum deceleration until coming to a stop. A vehicle accelerated to a speed above its normal maximum will decelerate at half of its maximum deceleration until below its top speed (the pilot may choose to decelerate faster, but cannot accelerate above the vehicle's listed top speed).

• **Example:** A Go class skimmer (600kg) traveling at 40 m/s strikes the rear of an Exeter skimmer (2400kg) which is only moving at 10 m/s. The collision speed is 30 m/s and the Go class skimmer immediately decelerates by (80% x 30 m/s = 24 m/s). The Exeter class skimmer is accelerated by (20% x 30 m/s) = 6 m/s. Both vehicles are now traveling at 16 m/s in the same direction.

• **Example:** An Exeter class skimmer (2400kg) traveling at 40 m/s strikes the rear of a Go class skimmer (600kg) which is only moving at 10 m/s. The collision speed is 30 m/s and the Exeter class skimmer decelerates by (20% x 30 m/s) = 6 m/s. The Go class skimmer accelerates by (80% x 30 m/s) = 24 m/s. Both vehicles are now traveling at 34 m/s in the same direction.

Optional Rule (Elasticity): In a T-Bone, Partial Rear-End, or Rear-End Collision, the BM may wish to increase the deceleration of the striking vehicle by 1 m/s, and increase the acceleration of the struck vehicle by (striking vehicle mass/struck vehicle mass) m/s. In the example above, this would cause the Exeter to decelerate by 7 m/s and the Go class skimmer to accelerate by 28 m/s. This produces slightly more realistic results and is especially appropriate for skimmers.

Step 7: Apply damage to the vehicles' occupants

The occupants of any vehicle involved in a collision, as well as any unsecured objects in the vehicle, may take damage due to sudden acceleration. If the vehicle's speed is reduced by at least 3 m/s, all occupants take damage according to the following table:

OCCUPANT DAMAGE

CHANGE IN SPEED(M/S)	DAMAGE
3-7	(1/2)d6
8-12	1d6
13-17	1d6 + (1/2)d6
18-22	2d6
23-27	2d6 + (1/2)d6
28-32	3d6
33-37	3d6 + (1/2)d6
38-42	4d6
43-47	4d6 + (1/2)d6
48-52	5d6
Each additional +5	+(1/2)d6 per additional 5 m/s

This may be reduced by seat belts (1/2 damage) or other collision protection measures. If the damage is reduced below 1 point, the occupant sustains no damage. Size Class 8 characters, or any armored character who weighs more than 300kg, take double damage. This damage should be treated the same as falling damage (ignores threshold and is spread across 3 hit locations). Mazians sustain 1/4 damage in all collisions.

• **Example:** Henry's skimmer was hit by Fred's vehicle and slowed down by 26 m/s. As a result, Henry sustains 2d6 + (1/2)d6 damage. The BM rolls 5d6 and gets a 19, which is divided by 2 resulting in 10 points of damage. However, Henry is wearing a seat belt which reduces this to 5 points of damage spread across three sections of armor. Meanwhile, Fred's Argent class skimmer decelerates by only 5 m/s. Fred takes (1/2)d6 damage, which is doubled because he is size class 8, for a total of 1d6 damage. Since he is not wearing a seat belt, he takes 3 points of damage from the collision.

Complete Collision Example

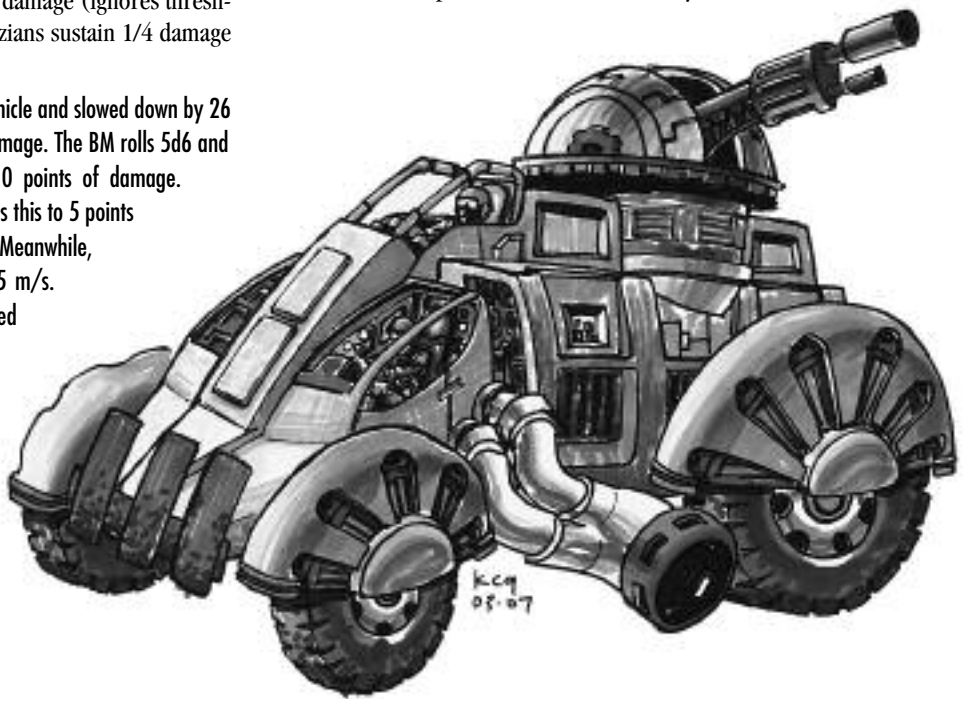
Henry sees his chance for revenge on another day while piloting a heavily loaded Valiant class skimmer (total mass 4,200kg). He activates his PDS and pilots into the side of Fred's stationary Argent class skimmer at 60 m/s. The base collision damage is 3d8 (for the Argent's weight of 2,750kg) x 12 (speed of 60 / 5), or 36d8 damage. This is further modified by the relative weight modifier: because the weight of the Valiant is at least 50% more than the Argent (3:2), damage will be at +20%. The BM rolls 36d8 damage, resulting in a roll of 160, and a total of (160 x 1.2 = 192) points of damage.

Henry's skimmer has the front armor destroyed (4 threshold and 70 integrity); 118 points of damage pass through and are divided equally between the reactor and power system (causing a critical result to the power system). Fred's Argent skimmer fares worse, with the front left side giving way (3 threshold, 31 integrity) and 158 points of damage entering the interior. Half of this damage strikes the Lift Unit (causing a critical result) and Fred sustains 79 points of damage, since he was sitting right at the point of impact! (Fortunately for Fred, his PDS was active.)

Henry's vehicle decelerates by (40% x 60) = 24 m/s, while Fred's skimmer begins moving at (60% x 60 = 36 m/s). As a result of sudden deceleration, Henry sustains 2d6 damage + (1/2)d6 damage, further divided by two because he is wearing a seat belt. A 5d6 roll of 20, divided by 4, indicates that the collision inflicts 5 points of damage on Henry. Fred, on the other hand, sustains 3d6 + (1/2)d6 damage, doubled for his size class of 8 to give 7d6 damage from the collision. The BM rolls 7d6 for a total of 24 points of damage! Ouch! Henry earns himself a big grin of satisfaction.

Modifying Vehicles

It is possible to mount more weapons and accessories on a vehicle, such as installing a Flux shield on a civilian skimmer. Whenever tables refer to size, the units are given in vehicle spaces. The total spaces on a vehicle are listed in parenthesis in its Size entry.



• **Example:** The Ripple skimmer has a Size listing of 5.5m L x 2.4 m W x 2.1m H (90). The 90 in parenthesis at the end of the vehicle's dimensions indicates how many spaces are in the vehicle as a whole, including all of the current crew spaces, engine, weapons, and other equipment.

The cargo area(s) of a vehicle are the only free spaces that can be utilized without removing existing weapons or accessories to make room. The number of free spaces available on a vehicle can be found in the Cargo: section of the vehicle statistics. The Battle Master has final say on whether you can mount a particular piece of equipment to a vehicle.

• **Example:** An Argent skimmer has a Cargo: value of 870 (6). This means that it has a total of 6 vehicle spaces to mount equipment or weapons. However, it may still not be practical to mount a large weapon on this vehicle without first reconfiguring the crew compartment.

Note: The encumbrance (ENC) that can be carried as cargo is reduced when equipment is mounted, due to the added weight of the equipment. Subtract 2x(weight of equipment) from the maximum ENC which this vehicle can carry.

• **Example:** A weapon using 2 spaces and weighing 100kg is mounted to an Argent skimmer. The Argent has a cargo capacity of 870 and 6 spaces available for cargo. After mounting this weapon, the Argent's cargo capacity is (870 – 200) = 670 and there are 4 spaces remaining, so the modified Cargo value should be 670 (4).

The most common types of modifications are to install a shield generator or a new weapon system in unused space, or to swap a weapon for a weapon of equal or similar size. Note that the combined weight of any added weapons and equipment, plus the weight of the vehicle, weight of the crew and any other cargo, must be less than the Max Weight for the vehicle.

• **Example:** The Argent class skimmer has a weight of 2490kg and a Max Weight of 3400kg. If fully loaded with passengers (5 unarmed size class passengers weigh approximately 475kg), it can support roughly 434kg of additional equipment or cargo.

Repairing Vehicles

It is inevitable—eventually, you smash up your fancy ride and need to have it taken to the body shop. The BM will then drain your wallet in every possible way. The brutal fact about vehicle repair: you have to pay anywhere from 250-5,000cr in labor, plus parts, unless you can get the company to take care of it for you. For some items (weapons, accessories, and Flux shields), the cost to replace is listed in the equipment tables section. Repairing a damaged item will cost 10-100% of the replacement cost, depending on the degree of damage. For other types of repairs, the BM will assign a repair cost (for parts and labor) based on your vehicle and the estimated ranges in the following table. Higher tech level vehicles will tend to cost more to repair, and parts will be harder to find across the board if your location is too far removed from the vehicle's tech level (e.g. it's hard to find a distributor cap on Trishmag).

REPAIR COST

REPAIR	COST
Repair Integrity	25-100/point
Replace Tire	50-200
Replace Absorption	100-400/point
Repair Damaged Threshold	100-500/point
Replace Wheel	250-1,000
Repair Internal Combustion Engine	500-2,000
Replace Internal Combustion Engine	1,000-10,000
Replace Skimmer Reactor	5,000-15,0000
Repair Lift Unit	2,000-40,000
Repair Skimmer Reactor	5,000-150,000
Replace Lift Unit	6,000-200,000
Repair Ultra Armor Reactor	15,000-200,000
Replace Ultra Armor Reactor	50,000-1.0M

Vehicle Skills

Note: Any skill stats and descriptions listed here supersede any published previously. Also, please note that for simplicity's sake, the Job Availability, Management level, Job Security, and Business Contact stats have been removed from the game.

Aircraft: Characters can fly aircraft which utilize primarily aerodynamic methods of flight, i.e. old-style airplanes (TL 2-4). SC: 4

Automobile: Characters can pilot most urban land vehicles, such as sandrats, SUVs, pickup trucks, vans, and cars. SC: 1

Boat: Allows a pilot to operate any waterborne craft smaller than 1,000 tons displacement. SC: 1

VEHICLE SKILLS

SKILL	SC	L	T	$	PS
Aircraft	4	25	1mo	10	MD
Automobile	1	25	2wk	1	MD
Boat	1	25	2wk	2	AG
Crawlers (HD)	7	25	2mo	50	AG
Fighter (DS)	6	25	3mo	15	MD
Helicopter	3	25	3mo	12	IQ
Hopper	3	25	3wk	3	MD
Identify Vehicles	1	25	1wk	2	IQ
Motorcycle	1	25	2wk	1	AG
Nav. (atmospheric)	3	25	2mo	10	IQ
Nav. (maritime)	2	25	3wk	3	IQ
Navigation (space)	4	25	3mo	20	IQ
Remote Piloting	5	25	2mo	30	IQ
Ship (naval)	2	25	1mo	5	IQ
Skimmer	2	25	3wk	2	MD
Spacecraft	6	25	4mo	20	IQ
Tank	3	25	1mo	4	MD
Truck	1	25	2wk	2	MD
Walkers (HD)	7	25	2mo	50	AG

Crawlers (HD): Characters (with the proper surgical modification) can operate Crawler type Ultra Armor. This skill takes an extra 2 weeks per level for bipedal characters to learn and is NOT available as a Rent-A-Skill chip. SC: 7

Fighter (Deep Space): Pilots are trained in the use of space fighter craft. SC: 6

Helicopter: This skill is required to fly rotor-driven aircraft. SC: 3

Hopper: Hoppers are high altitude aircraft designed for long range travel. With this skill one can pilot these vessels, including their military variants. SC: 3

Identify Vehicles: Allows a person to identify various types of vehicles (wheeled, skimmer, Ultra Armor, hoppers, aircraft, helicopters, and tracked vehicles) as well as the performance capabilities, armament (if any), and field generators (if any) the vehicle is normally equipped with. It is possible to gain some information (general size/weight and number of wheels or treads) from a vehicle's tracks with an Identify Vehicles check (difficulty depends on the terrain conditions). SC: 1

Motorcycle: This skill is required to operate 2-wheeled ground vehicles. SC: 1

Navigation (atmospheric): Characters can operate planetary navigational equipment on aircraft. SC: 3

Navigation (maritime): Characters can navigate over open water, utilizing naval charts, radio signals, and when necessary, a sextant. SC: 2

Navigation (space): This skill allows characters to plot a course in a ship's computer, and is vital to the operation of a starship. Space is very big, and getting lost out there is no fun at all. Only the very best starships have auto-navigation units, as these devices are incredibly expensive. SC: 4

Remote Piloting: Good to know. One can remote pilot properly equipped vehicles, including advanced maneuvers like bringing a craft from a position in orbit to the ground. Characters can also attempt to remote pilot vehicles from ground to space. This is much more difficult and incurs a -30 penalty to skill checks. Spacecraft, hoppers, and even the occasional skimmer have remote piloting capabilities. SC: 5

Ship (naval): Allows a character to pilot large watercraft, over 1,000 tons displacement. SC: 2

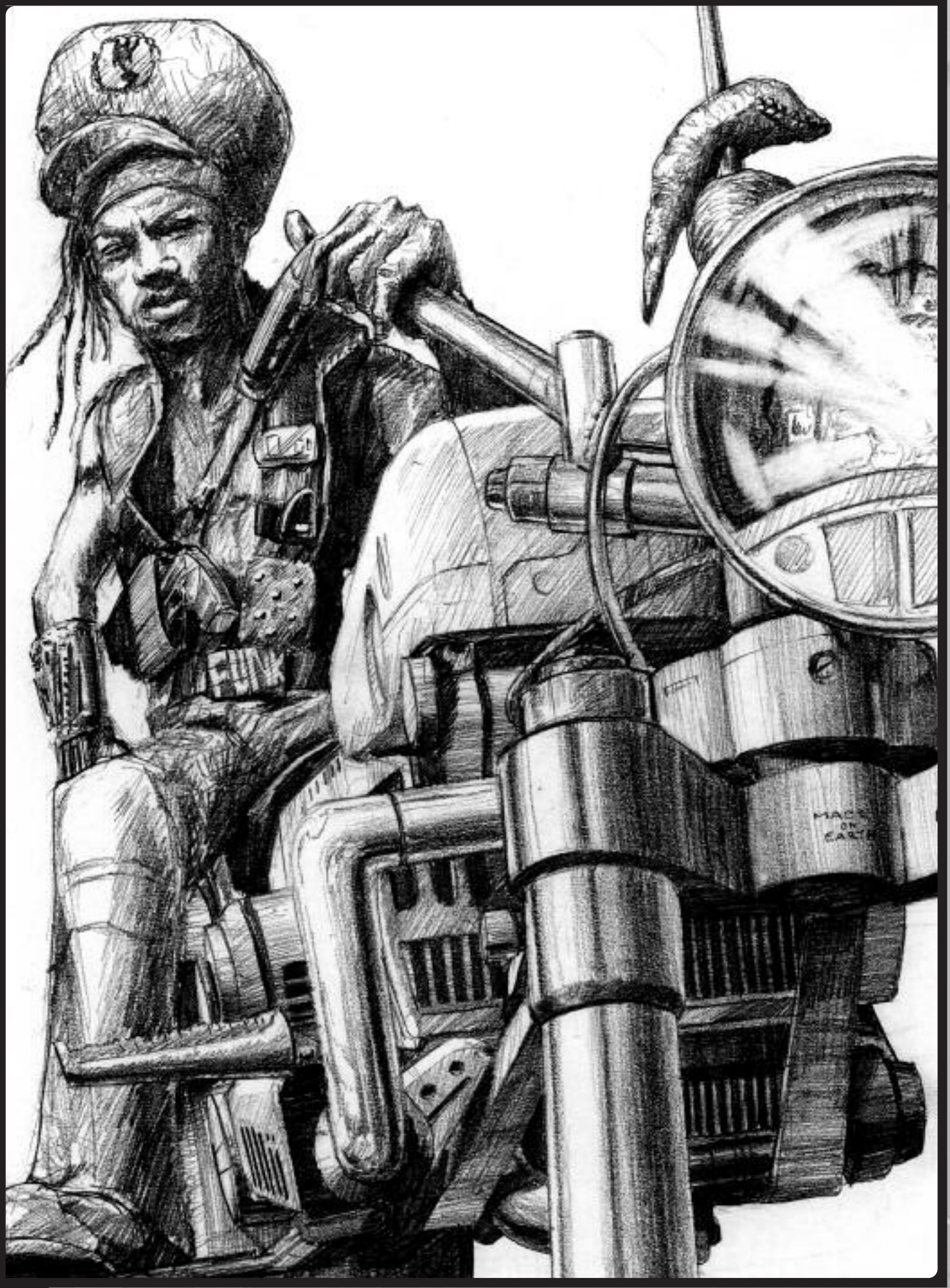
Skimmer: Proficient characters can pilot virtually any type of skimmer, including commercial or military versions. SC: 2

Spacecraft: The training required to pilot space vehicles larger than a fighter. Anyone seeking to pilot spacecraft for the Alliance Navy must have a minimum of 5 levels of proficiency before they will even be considered as a co-pilot. SC: 6

Tank: This skill allows operation of heavy machines, mobile artillery and rocket launcher vehicles, rovers, and tanks, all of which utilize tracks for propulsion. Skimmer tanks are piloted using the Skimmer skill. SC: 3

Truck: This skill is needed to drive large wheeled vehicles, such as tractor-trailers, buses, or dump trucks. SC: 1

Walkers (HD): Characters (with the proper surgical modification) can operate Walker type Ultra Armor. Non-bipedal characters (e.g. Cizerack) must train for an additional 2 weeks per skill level. This skil is NOT avaialble as a Rent-A-Skill chip due to the surgery involved to control an HD and its incompatability with the chip interface. SC: 7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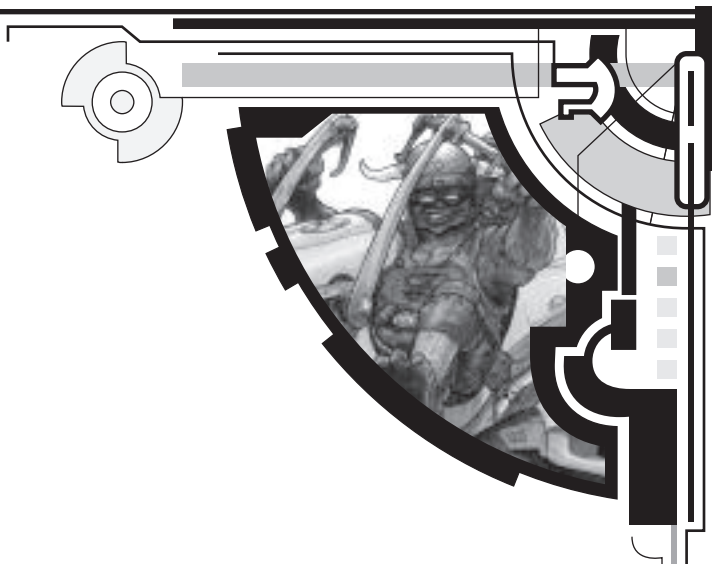
CHAPTER 3

Wheeled Vehicles • 3



In This Chapter...

◂ **Nostalgia lives on, and vehicle manufacturers are ready to capitalize. Here one of the local chapter of the xenophobic Human-Prime gang rides a replica of a 2087 Fatback XR3; a faithful replica but with a massive fusion powerplant with close to twice the power of the original. Note the Phentari tentacle-ends jammed on the trophy spike. Those humans don't seem to like anyone.**

Wheeled vehicles are still in use across the Alliance on many lower-tech worlds, particularly those of tech level 3 and 4, where practical skimmer technology is not available. This category includes any vehicle that uses wheels to propel itself, including motorcycles, cars, trucks, and military transport vehicles. Closely related to the automobile are tanks and other low-tech military vehicles which rely on treads rather than wheels. These vehicles are found on battlefields up to tech level 5 (and above, in rare cases). Lower-tech versions of these vehicles utilize internal combustion engines for power, while more modern vehicles utilize fuel cells or even small fusion plants for energy.

A full refill of a typical wheeled vehicle's fuel costs approximately 25cr (50cr for trucks).

Standard Equipment

All wheeled vehicles come with standard seat belts. Tech level 3-4 wheeled vehicles come with airbags for front passengers, as well as side impact air bags. Tech level 4+ civilian wheeled vehicles come with an Emergency Beacon and a NoSteal Sensor, while TL 4+ military vehicles come with a built-in Military Emergency Beacon. Tech level 5+ civilian wheeled vehicles are rare but include Crash Gel as a standard feature. All tech level 3 or higher wheeled vehicles (except motorcycles) come with standard climate control (air conditioning and heating).

Piloting Wheeled Vehicles

The following table gives the Piloting checks required to succeed at a maneuver in a wheeled vehicle based on the current speed. A positive number represents the level of skill check needed to perform the maneuver. Whenever a maneuver has a difficulty less than 1, there is no need to make a piloting check for success unless the pilot is unskilled or a circumstance penalty brings the difficulty above 0. An entry of "Auto" indicates that no check is necessary. A dash means that the maneuver is impossible at the speed given. Should the pilot fail the Piloting roll, consult the Loss of Control table to determine effects.

• **Example:** Henry is driving an Ellsworth automobile at a reasonable speed of 30m/s, when he notices Fred laying mines in the road 20m ahead. Henry turns the controls sharply to the right, trying to avoid certain doom.

This is a swerve/evade maneuver and requires a level 7 Piloting check. Henry has 4 levels of Automobile Piloting, and the Ellsworth has a piloting modifier of +10. Henry has a (50 + 40 (skill) +10 (modifier) – 70 (difficulty)) = 30% chance of success. He rolls a 97 and blows the check! Now he has to roll on the Loss of Control table.

When combining two maneuvers in the same second, the total difficulty is equal to the more difficult of the two maneuvers, plus 1/2 of the difficulty for the second maneuver. The BM may rule that two specific maneuvers may never be combined (for example, a Long Jump and a Bootlegger Reverse).

• **Example:** Henry tries to perform a Sharp Turn while slamming on the brakes (Hard Brake). He was traveling at 30 m/s, so the maneuver difficulty is 3 (for a Hard Brake) + 1 (1/2 of the difficulty for a Sharp Turn) = 4. He needs to make a Level 4 Piloting check to succeed.

MANEUVER DIFFICULTY

	SPEED (M/S)					
MANEUVER	1-8	9-16	17-28	29-37	38-48	49+
Abrupt Turn	-1	1	4	8	13	20
Accelerate	Auto	Auto	-3	-1	1	5
Bootlegger R.	-	10	11	18	26	-
Drive Straight	Auto	Auto	Auto	-3	1	7
Evasive (-5)	-	13	5	8	13	18
Evasive (-10)	-	17	10	14	20	26
Gentle Turn	Auto	-3	-1	0	1	4
Hard Brake	Auto	Auto	-1	3	9	17
Long Jump	8	11	14	17	21	25
Mod. Brake	Auto	Auto	Auto	-1	1	5
Reverse	Auto	Auto	-2	0	4	10
Sharp Turn	-3	-1	0	2	5	10
Short Jump	-	5	7	11	16	22
Swerve/Evade	-3	0	3	7	12	18
U-turn	-1	3	7	13	21	29

Maneuver Definitions

Abrupt Turn: A turn of more than 30 degrees per second. The BM must decide how sharp a turn a given vehicle can make.

Accelerate: Accelerating at more than half the vehicle's maximum acceleration. Below this, no check is required.

Bootlegger Reverse: Putting the vehicle into a controlled skid in order to reverse the vehicle's bearing (front to back), while continuing to travel in the same direction (e.g. car A is backing away from car B in reverse; the driver of car A executes a bootlegger reverse, spinning the car around so that he is still traveling away from car B, but car A has spun 180 degrees, and is now moving forward). The car will decelerate at maximum deceleration following the maneuver if its front is facing away from the new direction of travel.

Drive Straight: Maintaining the current course, which is only difficult under extreme conditions. This check does not need to be made more than once per minute unless a new hazard causes an additional check.

Evasive (-5): Executing this maneuver will give all opponents a -05 penalty to hit the vehicle for 1 round. Evasive maneuvers do not benefit the vehicle if the check is failed (enemies suffer no penalty to hit).

Evasive (-10): Executing this maneuver will give all opponents a -10 penalty to hit the vehicle for 1 round. Evasive maneuvers do not benefit the vehicle if the check is failed (enemies suffer no penalty to hit).

Gentle Turn: A turn of 10 degrees per second or less.

Hard Brake: Decelerating at a rate of more than 5 m/s^2.

Long Jump: Jumping from a ramp or elevated surface, more than half of the maximum distance possible for a given speed.

Mod. Brake: Decelerating at a rate of 3-5 m/s^2. Below 3 m/s^2 deceleration, no Piloting check is required (the BM may choose to require a Drive Straight check for extremely slippery conditions).

Reverse: Driving straight in reverse at the listed speed. This check should be made once per minute. All other maneuvers are at a -30 penalty when executed in reverse. Note that most wheeled vehicles can only move in reverse at 1/2 of their top speed.

Sharp Turn: A turn of 30 degrees per second or less.

Short Jump: Jumping from a ramp or elevated surface, up to half the maximum distance possible for a given speed.

Swerve/Evade: Moving around a pedestrian-size obstacle that is less than 1 second away from the vehicle at its current speed.

U-Turn: A 180 degree turn, which occurs over as many seconds as the vehicle requires. This will generally require 3 seconds at a minimum.

Jumping

It is not possible for a vehicle to jump without a ramp or elevated "take-off" surface. (A vehicle may jump from a higher surface to a lower surface, such as from the top of one building to another; use the "short jump" maneuver for this, unless the height difference is greater than the vehicle's speed.) The distance jumped depends on the vehicle's speed and takeoff angle. Assuming a proper take-off surface is available, use the following table for short and long jumps (in a normal gravity environment):

JUMP DISTANCE

VEHICLE SPEED (M/S)	MAX DISTANCE (SHORT)	MAX DISTANCE (LONG)
01-10	N/A	1m
11-20	5m	10m
21-30	15m	30m
31-40	30m	60m
41-50	50m	100m
51-60	75m	150m
61-70	154m	207m
71-80	138m	275m
81-90	177m	355m
91-100	220m	440m
101-110	270m	540m

The vehicle lands with a vertical speed of (initial speed/4) for short jumps, or 70% of its initial speed for long jumps. The BM must rule on the vehicle's impact speed for any jump of less than the maximum distance. Treat the landing as a collision with the ground at the vehicle's vertical speed, with the tires taking damage first (spread equally among all tires).

• **Example:** Dolfus McShane has "borrowed" a small Alien Transport Vehicle and is being pursued by the local police. He has no intention of being caught, but up ahead is a drawbridge that is just starting to open. He decides to "gun it", driving up the ramp at an unreasonable speed of 35 m/s (120 mph)! Because

this is a shallow angle ramp, the BM rules that he is attempting a Short Jump maneuver (level 11 difficulty at this speed). Dolfus has only 2 levels of Automobile piloting skill, meaning that he needs a 01 to succeed (50 + 20 - 110 = -40% chance of success). However, he rolls the 01 and sails into the air, leaving his pursuers behind! Dolfus has about a second to gloat before he lands 30m down the road, smashing into the ground at (30/4) = 8 m/s speed.

Situational Modifiers

Depending on the situation, piloting checks may be made at a penalty; the BM must decide the exact modifier. Some suggested modifiers (to the Piloting check roll) are given here for reference. In addition, vehicle damage will cause piloting penalties; see the damage descriptions for details.

SITUATIONAL MODIFIERS

SITUATION	PILOTING CHECK MODIFIER
GENERAL MODIFIERS	
Driving in reverse	-30
Injured Pilot	-40
TERRAIN CONDITIONS	
Off-road conditions	-30
Soft road (dirt/gravel)	-00 to -40
Small Obstacles (debris, curb, etc)	-10 to -30
Significant Obstacles (chairs, paper boxes, corpses, etc)	-40 to -80
VISIBILITY	
Engine Fire	-40
No frontal visibility	-80
No rear visibility	-15
No side visibility (both sides)	-30
No side visibility (one side)	-15
WEATHER	
Blizzard	-40 to -60
Heavy Rain	-20 to -40
High Winds	-10 to -30
Icy conditions	-50 to -120
Light Rain	-10
Snow	-20 to -40

Note: Any obstacle large enough to cause a collision effect has to be avoided using a maneuver. This table gives the effects for simply driving through/over various sized objects which cannot cause substantial vehicle damage, but interfere with control (such as tires in the road, potholes, etc).

Loss of Control

When a pilot fails a check to control a wheeled vehicle, add half the vehicle's speed (in meters per second) to a d100 roll and consult the table on the following two pages to determine effects. You suffer all effects that apply to your maneuver (for example, if the pilot has failed a Piloting check while jumping, apply both the "All Maneuvers" effect and the "Jumping" effect). In all cases, evasive maneuvers do not benefit the vehicle if the check is failed (enemies suffer no penalty to hit) and attempts to evade an obstacle fail if the check is not successful. For any other maneuver, if the maneuver is not listed separately, it succeeds subject to the penalties listed in "All Maneuvers."

Optional Rule: When a Piloting check is failed, add 1/2 the difference between the roll and the number needed to succeed on the check to the loss of control result. For example, if the pilot needed to roll 30 or less to succeed on a maneuver, but rolled an 80, (80-30)/2 = 25 would be added to the ensuing loss of control roll to determine the effect. The number added should never exceed 49, since a roll of 01 always succeeds when making a Piloting check.

• **Example:** Henry loses control of his car and must roll on the loss of control chart. Because he was traveling at 30 m/s, he must add 15 to the dice roll. Henry rolls a 62, which is modified to 77. The result indicates that Henry's vehicle turns sideways, travels forward for a full second, then makes 30% of the turn attempted. His car skids forward 30m and turns sideways, plowing over the mines (which detonate) and smashing into Fred in the process!

Note: Any attempt to swerve or evade an obstacle automatically fails if the piloting check fails (in addition to the listed effects from the table); evasive action attempts that fail do not reduce the enemy's chance to hit your vehicle (in addition to the listed effects from the table).

LOSS OF CONTROL RESULTS d100 (WHEELED VEHICLE)

ROLL: 1-10

All Maneuvers: Minor skidding. Unless attempting to drive straight or accelerate, you end up deviating from your intended course by 1d2 m (in the direction you were traveling before the maneuver). Any further maneuvers in the next 2 seconds are at a +2 level of difficulty.

Jumping: Upon hitting the take-off ramp, your Bottom Armor and wheels sustain 1/10 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. In addition, you jump only 90% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing.

ROLL: 11-25

All Maneuvers: Significant skid. Unless attempting to drive straight or accelerate, you move 1d4+2 m in the direction you were traveling before the maneuver (but never more than half your speed). Any further maneuvers in the next 3 seconds are at a +3 level of difficulty.

Jumping: Upon hitting the take-off ramp, your Bottom Armor and wheels sustain 1/5 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. In addition, you jump only 85% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing.

Turning: If you were turning, you only succeeded in making 80% of the intended turn.

ROLL: 26-50

All Maneuvers: Temporary loss of control. Your vehicle careens out of control for half a second; you may attempt to regain control by repeating your piloting check at +5 difficulty—otherwise, you travel at least half of your speed in your current direction. Any further maneuvers in the next 3 seconds are at a +3 level of difficulty.

Braking: Your deceleration is 1m/s less than intended (but never less than 0).

Jumping: Upon hitting the take-off ramp, your Bottom Armor and wheels sustain 1/4 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. In addition, you jump only 80% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing.

Turning: After regaining control of the vehicle, you make 80% of the intended turn.

ROLL: 51-75

All Maneuvers: Loss of control. Your vehicle continues to travel in its current direction for a full second. In addition, any maneuvers for the next 3 seconds are at a +5 difficulty and at a +2 difficulty for 3 additional seconds.

Braking: Your deceleration is only 1/2 of that intended.

Jumping: Upon hitting the take-off ramp, your Bottom Armor and wheels sustain 1/3 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. In addition, your front sustains 1/5 of the damage you would have sustained for striking a fixed object, with a minimum of 1 point. You jump only 75% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing.

Turning: After traveling in your current direction for a full second (see above), you make 50% of the intended turn.

ROLL: 76-90

All Maneuvers: Major loss of control. You continue traveling in your current direction for a full second. In addition, any subsequent maneuvers are at +10 difficulty for 2 seconds, +5 difficulty for 2 additional seconds, and +2 difficulty for 3 additional seconds.

Braking: Your deceleration is only 1/4 of that intended, and your wheels sustain 1d3 BP of damage. If a tire fails (damage exceeds tire's BP) the pilot must make an immediate Drive Straight check, with the appropriate penalties for the loss of the tire(s), speed of the vehicle, and the +10 difficulty penalty (see All Maneuvers in this section).

Jumping: You have a 50% chance of simply colliding with the surface you were jumping from (if an elevated ramp); otherwise, your Bottom Armor and wheels sustain 1/2 of the damage you would have sustained for striking a fixed object, with a minimum of 1 point, and your front sustains 1/4 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. You jump only 70% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing.

Turning: Your vehicle turns sideways while traveling forward for a full second, then makes 30% of the intended turn.

ROLL: 91-105

All Maneuvers: Dangerous failure. Unless you were attempting to drive straight or accelerate, you continue to travel in your current direction. In addition, any subsequent maneuvers are at +10 difficulty for 3 seconds, +5 difficulty for 3 additional seconds, and +2 difficulty for 3 additional seconds.

Accelerate: You achieve only half of the intended acceleration, and also have a 50% chance of failing to keep your vehicle straight (see Drive Straight above).

Braking: Your deceleration is only 1 m/s^2, your wheels sustain d6 BP of damage, and there is a chance of a rollover. Roll d100, and if your roll is less than half of your current speed (in m/s), you suffer a rollover (effects as listed under Turning). If a tire fails (damage exceeds tire's BP) and the vehicle has not rolled over, the pilot must make an immediate Drive Straight check, with the appropriate penalties for the loss of the tire(s), speed of the vehicle, and the +10 difficulty penalty (see All Maneuvers in this section).

Drive Straight: You fail to keep your vehicle straight, causing a turn of (1d3x10) degrees in a random direction.

Evade/Evasive: There is a chance of rolling over – roll d100, and if your roll is less than half of your current speed (in m/s), you suffer a rollover (effects as listed under Turning).

Jumping: If using an elevated ramp to jump, you automatically collide with it. Otherwise, your jump goes off course (randomly left or right) by (d6x5) degrees from your intended direction (which may cause you to collide with a building or other object when you land). If you manage to land on a suitable surface, your Bottom Armor and wheels sustain 1/2 of the damage you would have sus-

LOSS OF CONTROL RESULTS d100 (WHEELED VEHICLE) CONT.

tained for striking a fixed object, with a minimum of 1 point, and your front sustains 1/3 of the damage you would have sustained for striking a fixed object at your current speed, with a minimum of 1 point. You jump only 65% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing. Finally, there is a chance of rollover upon landing; roll d100 and if your roll is less than your current speed, a rollover occurs (see Turning above for effects).

Turning: Your vehicle turns sideways, and there is a chance of a rollover – roll d100, and if your roll is less than your speed (in m/s), your vehicle rolls over. If you do not roll over, you skid sideways in your current direction (decelerating at 5 m/s^2) until you make a successful "Drive Straight" check to regain control. A rollover will cause 1/4 of normal collision damage to 1d4 random sides of your vehicle, each second, until the vehicle comes to a stop (during a rollover, you decelerate at 10 m/s^2). Passengers will suffer as if they were involved in a collision that changed the vehicle speed by 10 m/s, each second.

ROLL: 106-120

All Maneuvers: Catastrophic failure. Unless you were attempting to drive straight or accelerate, you continue to travel in your current direction. In addition, any subsequent maneuvers are at +12 difficulty for 3 seconds, +7 difficulty for 3 additional seconds, and +4 difficulty for 3 additional seconds.

Accelerate: You achieve only half of the intended acceleration, and also have a 75% chance of failing to keep your vehicle straight (see above).

Braking: You fail to decelerate, your wheels sustain 2d4 BP of damage, and there is a chance of a rollover. Roll d100, and if your roll is less than half of your current speed (in m/s), you suffer a rollover (effects as listed under Turning). If a tire fails (damage exceeds tire's BP) and the vehicle has not rolled over, the pilot must make an immediate Drive Straight check, with the appropriate penalties for the loss of the tire(s), speed of the vehicle, and the +12 difficulty penalty (see All Maneuvers in this section).

Drive Straight: You fail to keep your vehicle straight, causing a turn of 1d3x10 degrees in a random direction.

Evade/Evasive: There is a chance of rolling over – roll d100, and if your roll is less than half of your current speed (in m/s), you suffer a rollover (effects as listed under Turning).

Jumping: If you were using an elevated ramp to jump, you automatically collide with it. Otherwise, your jump goes off course (randomly left or right) by 1d3x10 degrees from your intended direction (which may cause you to collide with a building or other object when you land). In any case, you crash into the ground upon landing – treat this as a collision with a fixed object at your current speed, but divide the damage equally between the front of the vehicle and the Bottom Armor/wheels. You jump only 60% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing. Finally, there is a chance of rollover upon landing; roll d100 and if your roll is less than your current speed, a rollover occurs (see Turning above for effects).

Turning: Your vehicle turns sideways, and there is a chance of a rollover – roll d100, and if your roll is less than your speed (in m/s), your vehicle rolls over. If you do not roll over, you begin to spin out. While spinning, you decelerate at 5 m/s^2, travel generally in the direction you were moving before entering a spin, and the vehicle rotates 180 degrees/second. A spin can only be ended by coming to a stop or making a successful "Drive Straight" check. A rollover will cause 1/4 of normal collision damage to 1d4 random sides of your vehicle, each second, until the vehicle comes to a stop (during a rollover, you decelerate at 10 m/s^2). Passengers will suffer as if they were involved in a collision that changed the vehicle speed by 10 m/s, each second.

ROLL: 121+

Accelerate: You fail to accelerate, and suffer the effects listed under "Drive Straight" above.

Drive Straight: You fail to keep your vehicle straight, turning d6x10 degrees in a random direction. In addition, you must make a "Slight Turn" check in the next second or suffer a loss of control as if you failed a turning maneuver. In addition, any subsequent maneuvers are at +12 difficulty for 3 seconds, +7 difficulty for 3 additional seconds, and +4 difficulty for 3 additional seconds.

Jumping: If you were using an elevated ramp to jump, you automatically collide with it (full damage for a collision with a fixed object at your current speed), and there is a 50% chance that your vehicle ends up on a random side (d6) following the impact. Otherwise, your jump goes dramatically off course (randomly left or right) by 1d4x10 degrees and you land on a random side (roll 1d6), taking full collision damage (for your landing speed) upon impact. You jump only 55% of the distance attempted and suffer the penalties described in "All Maneuvers" after landing, if your vehicle happens to land on its tires. Finally, there is a chance of rollover upon landing; roll d100 and if your roll is less than your current speed, a rollover occurs (see Turning under 106-120 for effects).

Turning/Braking/Evade/Evasive: Airborne. Your vehicle vaults into the air and comes crashing to the ground, or into a nearby building/tree/hillside. Upon impact, you sustain full collision damage (for hitting a fixed object at your current speed) to a random side of your vehicle, and your speed is reduced to 0.

WHEELED VEHICLE HIT LOCATIONS

D100 ROLL	D20 ROLL	EXTERNAL LOCATION	INTERNAL LOCATION
FRONT SIDE			
01-06	1-6	Front Glass(1)	Crew Compartment
07-10	7-10	Front Armor(1)	Crew Compartment
11-17	11-17	Front Armor	Engine Compartment
18	18	Front Armor	Front Weapon (if exists) or Engine Compartment
19	19	Right Front Tire(2)	None
20	20	Left Front Tire(2)	None
LEFT SIDE			
21-22	1-2	Rear Left Wheel Armor	Rear Left Tire(2)
23-24	3-4	Rear Left Armor	Rear Cargo Area
25-28	5-8	Rear Left Armor	Crew Compartment
29-30	9-10	Rear Left Glass(1)	Crew Compartment
31-32	11-12	Front Left Glass(1)	Crew Compartment
33-36	13-16	Front Left Armor	Crew Compartment
37-38	17-18	Front Left Armor	Engine Compartment
39-40	19-20	Front Left Wheel Armor	Front Left Tire(2)
RIGHT SIDE			
41-42	1-2	Rear Right Wheel Armor	Rear Right Tire(2)
43-44	3-4	Rear Right Armor	Rear Cargo Area
45-48	5-8	Rear Right Armor	Crew Compartment
49-50	9-10	Rear Right Glass(1)	Crew Compartment
51-52	11-12	Front Right Glass(1)	Crew Compartment
53-56	13-16	Front Right Armor	Crew Compartment
57-58	17-18	Front Right Armor	Engine Compartment
59-60	19-20	Front Right Wheel Armor	Front Right Tire(2)
REAR SIDE			
61-66	1-6	Rear Glass(1)	Crew Compartment
67-70	7-10	Rear Armor(1)	Crew Compartment
71-76	11-16	Rear Armor	Rear Cargo Area
77	17	Rear Armor	Rear Weapon (if exists) or Rear Cargo Area
78	18	Rear Armor	Fuel Tank
79	19	Right Rear Tire(2)	None
80	20	Left Rear Tire(2)	None
TOP SIDE			
81-86	1-6	Front Top Armor(3)	Engine Compartment
87	7	Front Glass(1)	Crew Compartment
88-89	8-9	Front Top Armor(3)	Crew Compartment
90	10	Front Top Armor(3)	Top Weapon (if exists) or Crew Compartment
91	11	Rear Top Armor(3)	Top Weapon (if exists) or Crew Compartment
92-93	12-13	Rear Top Armor(3)	Crew Compartment
94	14	Rear Glass(1)	Crew Compartment
95-100	15-20	Rear Top Armor(3)	Rear Cargo Area
UNDER SIDE			
-	1-2	Left Front Tire	Bottom Armor / Engine Compartment
-	3-4	Right Front Tire	Bottom Armor / Engine Compartment
-	5-7	Bottom Armor(4)	Engine Compartment
-	8-13	Bottom Armor(4)	Crew Compartment
-	14	Bottom Armor(4)	Rear Cargo Area
-	15-16	Bottom Armor(4)	Fuel Tank
-	17-18	Left Rear Tire	Bottom Armor / Rear Cargo Area

WHEELED ENGINE COMPARTMENT

D100 ROLL	INTERNAL LOCATION
01-15	Engine (power system)
16-30	Engine (drive system)
31-75	Engine (reactor/block)
76-80	Engine (fuel line)
81-90	Flux Shield Generator or Nothing
91-100	Nothing

WHEELED CREW COMPARTMENT

D100 ROLL	INTERNAL LOCATION
01-05	Driver
06-65	Random Passenger or Driver or Seat
66-75	Weapon System or Random Passenger
76-90	Accessory System
91-100	Nothing

Automobile Hit Location Table

Roll d100 and consult the first column for a random hit location. Use a d20 and consult the second column to determine the exact location hit if the BM has already determined what side of the vehicle the attack hit. If the result is "Engine Compartment" or "Crew Compartment", roll on the appropriate table to determine a specific location.

Notes

1: These locations may be covered by glass or armor on different vehicles. The listing shown is standard.
2: Shots to these locations do not penetrate into the vehicle.
3: Some vehicles may not have separate Front and Rear Top Armor. In this case, all of these results strike the Top Armor.
4: Some very large vehicles have their Bottom Armor divided into Front and Rear sections. In this case, treat rolls of 5-10 as striking the Front Bottom Armor and 11-16 as striking the Rear Bottom Armor.

TECH LEVEL 3 SUBCOMPACT AUTOMOBILE

Bristol

VEHICLE STATISTICS

Cost: 7,450cr
Crew: 2 (10)
Size: 3.5m L x 1.5m W x 1.4m H (25)
Size Mod: +30/-10
Weight: 870kg
Max Weight: 1,125kg
Cargo: 130 (3)
Top Speed: 46 m/s (166kph)
Range: 780km
Piloting Modifier: -10
Autopilot: N/A
Acceleration: 2 m/s^2
Max. Decel.: 9 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	2	9
Front Left Armor	2	8
Rear Left Armor	2	8
Rear Armor	2	9
Rear Right Armor	2	8
Front Right Armor	2	8
Front Top Armor	2	9
Rear Top Armor	2	8
Bottom Armor	2	8
Front Glass	1	4
Front Left Glass	1	3
Rear Left Glass	1	3
Rear Glass	1	3
Rear Right Glass	1	2
Front Right Glass	1	2

COMPONENTS	THR	BP
Fuel Tank	2	6
Basic-M Tires (4)	0	3
Engine (Block)	4	16
Engine (Drive)	2	8
Engine (Power System)	2	5

DESCRIPTION

This vehicle is an example of a low-end economy vehicle driven by your average Burger Slammer. Most expense was spared in the design and production of this vehicle; it's not one of Avron's proudest achievements. It was designed to get cheap and easily maintained transportation to the exploding population of people heading to the frontier. Though a bit unreliable, its mechanical simplicity made it easy to maintain with common tools and little expertise.

Avron has been cranking these things out for years, and though some styles and options have changed, most of the parts from the latest iteration can be used to repair one of the earliest models. Avron's options are sparse and on the cheap side, but aftermarket and homemade kits and accessories abound. Because of the vehicle's popularity, whole industries have sprouted just to cater to Bristol enthusiasts and their varied tastes. If you want to add it to your Bristol, chances are someone has produced it, and it'll even come in your favorite shade of mauve to match the faux furbl pelt seat covers.

Despite the kitsch and nostalgia associated with the Bristol, it still remains a relatively fragile and not particularly safe ride. It's often said the best way to avoid injury from an accident while in a Bristol is to undo your seatbelt and hope you get ejected quickly so as not to get caught in the inevitable fire.

Vehicles like this are frequently found in use all across Alliance space. A salesperson will generally try to take advantage of any poor sap who wants to buy one of these. Bristols and equivalent econoboxes can be found in many a used car yard or out in front of a residence waiting for a lucky new owner. Often they can be had for little cash or sometimes even a trade; "All I've got is two Pascians and an MBRI...," "Sold!"

Buzzard

TECH LEVEL 3 LIGHT TRUCK

VEHICLE STATISTICS

Cost: 61,200cr
Crew: 4 (20+eq)
Size: 4.6m L x 2.2m W x 1.8m H (80)
Size Mod: +35/-05
Weight: 3,475kg
Max Weight: 4,800kg
Cargo: 1,570 (5)
Top Speed: 41 m/s (148kph)
Range: 840km
Piloting Modifier: -23
Autopilot: N/A
Acceleration: 3 m/s^2
Max. Decel.: 4 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	5	57
Front Left Armor	5	53
Rear Left Armor	5	53
Rear Armor	5	57
Rear Right Armor	5	53
Front Right Armor	5	53
Front Top Armor	5	53
Rear Top Armor	5	53
Bottom Armor	5	48
Front Glass	3	10
Front Left Glass	3	5
Rear Left Glass	3	5
Rear Glass	3	4
Rear Right Glass	3	4
Front Right Glass	3	4

COMPONENTS	THR	BP
Fuel Tank	5	15
Solid-XL Tires (4)	0	10
Engine (Block)	5	55
Engine (Drive)	3	28
Engine (Power System)	3	16

DESCRIPTION

This vehicle is a typical tech level 3 light truck used by military or paramilitary forces. It is armed with an M2 .50 cal machine gun in a ring mount. This mount requires the gunner to be partially exposed (chest, head, and arms) as he moves the gun on target and fires. The mount has a 360 degree arc of fire, but it requires 1 second to move the gun any large angle (for example to turn 90 degrees and fire at a new target). The 4 crewmen (including the driver and gunner) can have standard military gear, but no heavy or mechanized armor. There is sufficient cargo space to hold the team's additional equipment for a variety of missions. The side and rear windows on this vehicle are smaller than usual, such that 1/4 of shots which would strike the side glass strike the armor instead, and 2/3 of shots which would strike the rear glass strike the armor instead.

Buzzards are quite common in all branches of the military, especially in planetary Guard, corporate mercenary, or police forces. They are relatively tough and can handle extended periods offroad without too much difficulty. Due to the their propensity to be used in military or paramilitary forces, all Buzzards have an open mount in the interior to install a Field Radio (see *Lock-N-Load: Armor, Equipment, & Cybernetics*). Mounting any weapon with a heavier recoil than the M2 requires significant modification to the ring mount.

WEAPONS & EQUIPMENT

M2 Machine Gun (Ring Mount)
Winch (standard)

TECH LEVEL 3 COMPACT AUTOMOBILE

Ellsworth

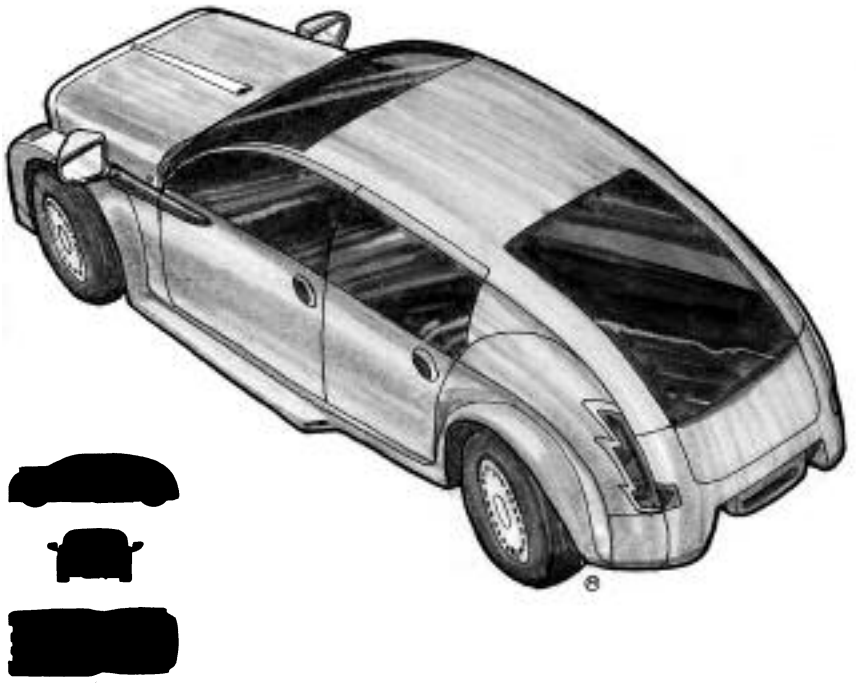
VEHICLE STATISTICS

Cost: 12,000cr
Crew: 4 (20)
Size: 4m L x 1.7m W x 1.5m H (38)
Size Mod: +30/-10
Weight: 1,300kg
Max Weight: 1,710kg
Cargo: 60 (3)
Top Speed: 47 m/s (169kph)
Range: 630km
Piloting Modifier: +10
Autopilot: N/A
Acceleration: 2 m/s^2
Max. Decel.: 8 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	2	15
Front Left Armor	2	12
Rear Left Armor	2	12
Rear Armor	2	15
Rear Right Armor	2	12
Front Right Armor	2	12
Front Top Armor	2	12
Rear Top Armor	2	12
Bottom Armor	2	12
Front Glass	1	4
Front Left Glass	1	3
Rear Left Glass	1	3
Rear Glass	1	4
Rear Right Glass	1	3
Front Right Glass	1	3

COMPONENTS	THR	BP
Fuel Tank	2	6
Radial-M Tires (4)	0	3
Engine (Block)	4	20
Engine (Drive)	2	10
Engine (Power System)	2	6



DESCRIPTION

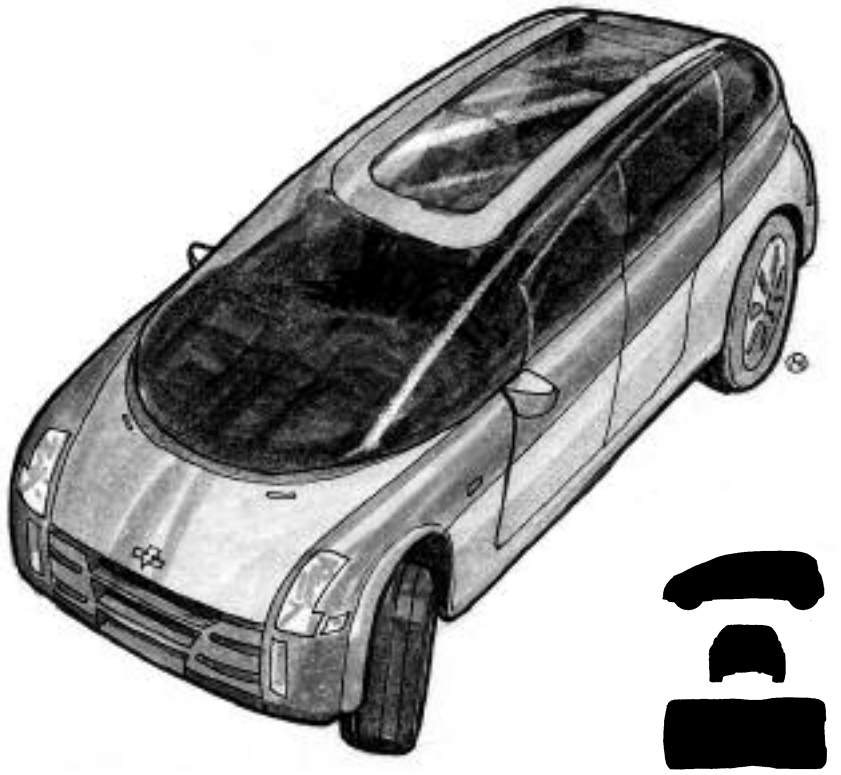
This vehicle is a standard economy car of the type driven by lower middle class humans and Orions on tech level 3-5 planets. Even with skimmers available on tech level 4+ planets, "grunts" who cannot afford such luxury, but still need a multi-person vehicle, are forced to travel in these simple ground-locked vehicles. When loaded with 4 size class 5 individuals (average weight 380kg), the cargo capacity of this vehicle is severely limited.

If you're renting a vehicle on some backwater frontier planet, chances are you will soon be driving an Ellsworth. Plain to look at, boring to drive, and immediately forgettable after you get out of it, the Ellsworth is reliable (if unexciting) transportation made to get you from point A to point B with minimal comfort and difficulty. Manufactured by the Orion transportation giant Gomaker, the Ellsworth is definitely meant for humans and Orions. Watching a Python Lizard trying to cram in the back seat of one of these is worth the price of admission.

Because of their blandness and unremarkable looks, specially modified Ellsworths are often used as getaway cars by criminals (also known as Battlelords). They are so commonplace in some areas that they become virtually invisible. The standard small engine of the stock Ellsworth sits in an unusually roomy engine compartment, so its quite easy to swap in a much bigger powerplant without any external clues. Speeds in excess of 240kph are common in these "modded" vehicles, but the Ellsworth isn't particularly stable or safe to drive at these speeds. Souped Up "Ells" as they are usually called have a -30 piloting modifier.

Metropolitan

TECH LEVEL 3 SUV AUTOMOBILE



VEHICLE STATISTICS

Cost: 25,300cr
Crew: 4 (20)
Size: 5.4m L x 2.0m W x 1.9m H (78)
Size Mod: +35/-05
Weight: 2,635kg
Max Weight: 3,900kg
Cargo: 1,770 (22)
Top Speed: 48 m/s (172kph)
Range: 945km
Piloting Modifier: -10
Autopilot: N/A
Acceleration: 3 m/s^2
Max. Decel.: 7 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	2	37
Front Left Armor	2	34
Rear Left Armor	2	34
Rear Armor	2	37
Rear Right Armor	2	34
Front Right Armor	2	34
Front Top Armor	2	34
Rear Top Armor	2	34
Bottom Armor	2	35
Front Glass	1	5
Front Left Glass	1	4
Rear Left Glass	1	4
Rear Glass	1	5
Rear Right Glass	1	4
Front Right Glass	1	4

COMPONENTS	THR	BP
Fuel Tank	2	15
Radial-XL Tires (4)	0	5
Engine (Block)	4	48
Engine (Drive)	2	24
Engine (Power System)	2	16

DESCRIPTION

This is an example of a typical civilian vehicle driven by wealthier inhabitants of human and Orion tech level 3 cultures. It provides a sense of security to the occupants because of its size, the high driver position, and its superior noise insulation. Of course, it offers very little protection against weapons fire. It is prone to rollover when driven at high speeds (treat the vehicle's speed as 10 higher whenever rolling the chance of a rollover). Though it looks rugged, it lacks the strengthened suspension and frame to be a true off-road performer.

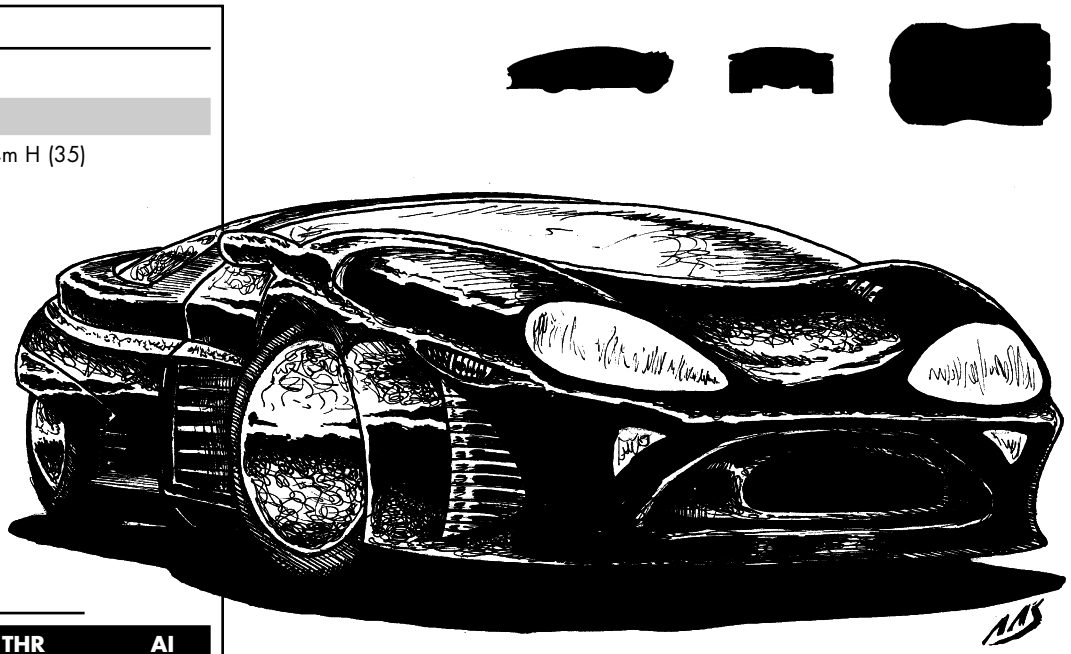
The cargo area can be refitted with extra seats as needed (800cr for the four extra seats), bringing total seating capacity to 8 individuals of size class totaling 40 or 10 individuals of size class totaling 43, though the cargo rating is reduced by 75%. The cargo area has tie downs and handles, so you could forget the seats and just stick two Pythons in there and lash them down. The rear seats fold flat to get longer items in (like full body bags or a Wicked Crimson).

TECH LEVEL 4 SPORTS CAR

Peregrine

VEHICLE STATISTICS

Cost: 31,500cr
Crew: 2 (10+eq)
Size: 3.9m L x 1.6m W x 1.4m H (35)
Size Mod: +35/-05
Weight: 1,085kg
Max Weight: 1,575kg
Cargo: 440 (1)
Top Speed: 68 m/s (245 kph)
Range: 340 km
Piloting Modifier: +40
Autopilot: N/A
Acceleration: 6 m/s^2
Max. Decel.: 11 m/s^2



ARMOR

LOCATION	THR	AI
Front Armor	5	19
Front Left Armor	5	17
Rear Left Armor	5	17
Rear Armor	5	19
Rear Right Armor	5	17
Front Right Armor	5	17
Front Top Armor	5	17
Rear Top Armor	5	17
Bottom Armor	5	17
Front Glass	5	14
Front Left Glass	5	8
Rear Left Glass	5	8
Rear Glass	5	14
Rear Right Glass	5	8
Front Right Glass	5	8

COMPONENTS	THR	BP
Fuel Tank	4	10
Syntex-M Tires (4)	3	9
Engine (Block)	6	65
Engine (Drive)	3	32
Engine (Power System)	3	20

DESCRIPTION

This vehicle is typically used in tech level 4 areas where skimmers may be forbidden for security reasons. It is a favorite of Orion Rogues who like its flashy look and high top speed. The Peregrine has large seats capable of carrying 2 individuals of size class 5 or less, and the passenger may be armored (in non-heavy/non-mechanized armor). The extra cargo area is small, but this is not a "family" vehicle. Some additional protective features have been added, such as the Flex Glass windows, to increase the safety of the occupants.

When one desires to be cool, then one should drive a Peregrine. If you're limited to ground transport, there aren't many faster or stylish ways to get around. Designed with the vain in mind, everything about the Peregrine says "look at me." A selection of incredibly garish colors for the exterior compliments the plush and loaded interior. Massaging seats, multi-atmosphere processor, built-in Fresh-n-Puff personal sanitizer, matching luggage, biometric starter lock (level 20 Defeat Security check), and even a Jum dispenser round out some of the more popular options.

Note: There is room for the driver to wear non-heavy/non-mechanized armor as well, but the Piloting check penalty of -40 deters most drivers.

Ripper

TECH LEVEL 4 ASSAULT CAR

VEHICLE STATISTICS

Cost: 60,000cr
Crew: 2 (5+eq) + 1 (6+eq)
Size: 4.1m L x 2.2m W x 1.8m H (40)
Size Mod: +30/-10
Weight: 1,580kg
Max Weight: 2,400kg
Cargo: 770 (2)
Top Speed: 59 m/s (212kph)
Range: 720km
Piloting Modifier: -15
Autopilot: Level 2
Acceleration: 2 m/s^2
Max. Decel.: 5 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	7	35
Front Left Armor	7	31
Rear Left Armor	7	26
Rear Armor	7	30
Rear Right Armor	7	26
Front Right Armor	7	31
Front Top Armor	7	31
Rear Top Armor	7	31
Bottom Armor	7	28
Front Glass	5	9
Front Left Glass	5	6
Rear Glass	5	36
Front Right Glass	5	6

COMPONENTS	THR	BP
Fuel Tank	5	7
Syntex-Std Tires (4)	3	9
Engine (Block)	6	28
Engine (Drive)	3	14
Engine (Power System)	3	9

WEAPONS & EQUIPMENT

XM3120 Machine Gun (open mount, forward 180 deg. arc)
Navilex Computer
Standard Radio

DESCRIPTION

Human Antique Systems usually sells replica vehicles, but decided to branch out into new design territory with the Ripper. Knowing that few non-Pythons could carry their new XM3120 machine gun, HAS built the Ripper, which appeals to mercenaries on a tight budget. This stylish, compact automobile allows two armored Battlelords to drive around in relative security, sporting a .50 caliber machine gun and substantial protection from most attacks. Unfortunately for the third Battlelord, the machine gun is manned by an individual in an open seat on the back. It is standard practice for teams to alternate the "gunner" position every 50km or so when traveling, since this method of travel gets old very fast. The gun shield on the Ripper has THR 5 and AI 15, providing some cover from frontal attacks. Of course, very few planets will allow openly armed vehicles on the streets. That's why, with 15 minutes and a Level 2 Mechanic check, the Ripper's turret can be dismounted and stowed. The vehicle is now street legal on almost any Tech Level 4 planet. As an added bonus, the Ripper features a refrigerated storage unit in the center console, which can hold 8 ENC of drinks (or grenades).

Note: The Ripper has an off-road suspension which reduces terrain and obstacle penalties to Piloting checks by half.

TECH LEVEL 5 TRUCK

Small Alien Transport Vehicle

VEHICLE STATISTICS

Cost: 61,400cr
Crew: 1 driver (6) + 9 (56+eq)
Size: 5.6m L x 2.6m W x 2.4m H (100)
Size Mod: +40/+00
Weight: 3,035kg
Max Weight: 6,000kg
Cargo: 2,250 (15)
Top Speed: 63 m/s (227 kph)
Range: 1,050km
Piloting Modifier: -05
Autopilot: Level 10
Acceleration: 3 m/s^2
Max. Decel: 5 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	7	89
Front Left Armor	7	83
Rear Left Armor	7	83
Rear Armor	7	89
Rear Right Armor	7	83
Front Right Armor	7	83
Front Top Armor	7	82
Rear Top Armor	7	82
Bottom Armor	7	76
Front Glass	7	34
Front Left Glass	7	22
Rear Left Glass	7	22
Rear Glass	7	34
Rear Right Glass	7	22
Front Right Glass	7	22

COMPONENTS	THR	BP
Fuel Tank	5	15
Syntex-XL Tires (6)	3	15
Engine (Block)	7	50
Engine (Drive)	3	27
Engine (Power System)	3	18

EQUIPMENT

Security Screen (Flex): THR 7, 15 BP

DESCRIPTION

Alien Transport Vehicles are typically found at spaceports or other areas which require the availability of ground transportation for many different races. While large spaceports may have larger vehicles, or skimmers on high tech worlds, the standard "cabbie" drives one of these fuel-cell powered, mini-bus style vehicles. The ATV is capable of carrying up to 9 beings, with 2 size class 8 seats, 6 size class 6 seats, and 1 size class 4 seat. It can comfortably seat armored individuals, but heavy or mechanized armor must be stowed in the cargo area. A Flex Glass screen separates the driver from the passengers. History has shown that these vehicles tend to be involved in violence from time to time; as a result they offer moderate protection for their occupants. The hydrogen fuel tank utilizes special containment features, reducing the chance of tank explosion by 75%.

A typical SATV cab is fairly dirty, has a few nice dents and, if on a frontier world, a few patched up bullet holes. Most cabs become highly customized by their drivers over time and often have a personality all their own. Vid-screens, hyper-net links, and adaptive-atmosphere modules are common additions. In the seedier parts of town, the passenger area is often equipped with bugs, cameras, stunners, and the occasional mine under the seat that the cabbie can detonate with a foot switch when they feel really threatened. In this example one of the size class 6 seats has been moved to the front and the Flex Glass screen surrounds the driver on two sides and has been opaqued.

Though the SATV does come in a civilian version for the cyball-mom equivalent and her offspring, they are typically sold to cab companies, or as corporate vehicles for companies with a high percentage of larger-than-human employees.

Ursa

TECH LEVEL 3 ARMORED TRUCK

VEHICLE STATISTICS

Cost: 152,000cr
Crew: 4 (20)
Size: 5.5m L x 2.5m W x 2.3m H (95)
Size Mod: +40/+00
Weight: 5,220kg
Maximum Weight: 7,125kg
Cargo: 3,050 (3)
Top Speed: 28 m/s (101kph)
Range: 750km
Piloting Modifier: -40
Autopilot: N/A
Acceleration: 1 m/s^2
Max. Decel: 4 m/s^2
Flux Shield: N/A

ARMOR

LOCATION	THR	AI
Front Armor	13	1HP
Front Left Armor	13	1HP
Rear Left Armor	13	95
Rear Armor	13	95
Rear Right Armor	13	95
Front Right Armor	13	1HP
Top Armor	10	150
Under Armor	10	145
Front Glass	3	4
Front Left Glass	3	3
Front Right Glass	3	3

COMPONENTS	THR	BP
Fuel Tank	5	37
Solid-XL Tires (4)	0	10
Engine (Block)	3	64
Engine (Drive)	2	32
Engine (Power System)	2	19

WEAPONS & EQUIPMENT

KPV Machine Gun (turret)
PK Machine Gun (turret)
Standard Radio
Atmosphere Supply
Environmental Containment
1500 rounds 7.62mm ammo (stored)
2 Periscopes (Thr 10, 2 BP)

DESCRIPTION

The Ursa represents a standard military reconnaissance vehicle found on low-tech worlds. The KPV and PK machine guns are coaxial, meaning that either or both may be fired at a single target, but they may not be fired at different targets in the same round. The vehicle is fully amphibious, allowing it to cross calm bodies of water at speeds up to 5 m/s. The "glass" locations on this vehicle represent windows which are normally used when not in combat conditions. Typically, at least one crewmember sits partially outside the hatch, and the windows are open. When a hostile force is nearby, the vehicle can "button up," closing the hatch and covering the windows with armor sections (this process takes 3 rounds). When "buttoned up," the piloting modifier is -60 due to very poor visibility through the periscope system, but all incoming fire strikes the armor rather than the window locations. Even when the glass is exposed, the front window is 1/3 of the size of a normal windshield, and the side windows are 1/4 of normal size; therefore, any shots striking these locations have a 2/3 (front) or 3/4 (side) chance to strike the armor instead. The crew of 4 consists of a driver and co-driver, gunner, and commander. The turret on the Ursa is small and is protected by the Top armor; targeting the turret specifically is at a (-40/+00) modifier.

TECH LEVEL 4 MOTORCYCLE

Vanguard

VEHICLE STATISTICS

Cost: 7,250cr
Crew: 1 (5+eq)
Size: 2.2m L x 0.9m W x 0.9m H (8)
Size Mod: +20/-20
Weight: 345kg
Maximum Weight: 480kg
Cargo: None
Top Speed: 61 m/s (220kph)
Range: 400km
Piloting Modifier: +30
Autopilot: N/A
Acceleration: 5 m/s²
Max. Decel.: 9 m/s²

ARMOR

LOCATION	THR	AI
Front Armor	2	4
Left Armor	2	8
Rear Armor	2	4
Right Armor	2	8
Top Armor	2	8
Bottom Armor	2	8
Front Glass	3	6

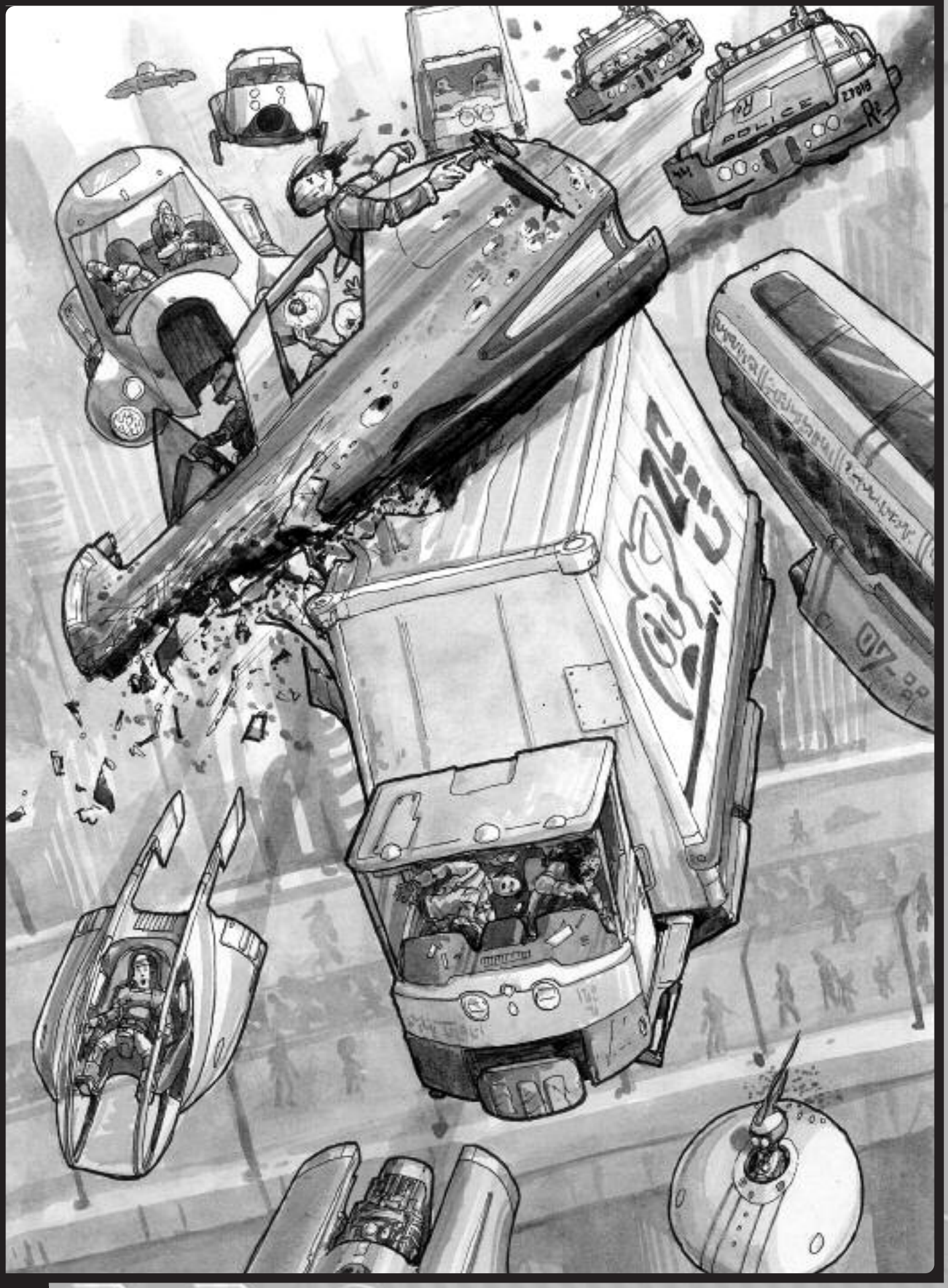
COMPONENTS	THR	BP
Fuel Tank	2	3
Syntex-S Tires (2)	3	6
Engine (Block)	3	18
Engine (Drive)	3	8
Engine (Power System)	3	6

DESCRIPTION

The Vanguard is a fairly large motorcycle, designed for a single human-sized rider (max Size Class 5), with standard body armor and equipment (up to 135kg total weight). It can be very dangerous when operated at high speeds (any collision will cause the driver to be ejected from the vehicle, resulting in a personal impact with the ground at the vehicle's current speed). Naturally, the driver is completely exposed from all sides other than the front, so the "armor" does not protect him. Destruction of any side of this vehicle, or loss of a tire, will effectively wreck the bike. Note that a motorcycle cannot perform a Bootlegger Reverse, cannot be driven backwards at a speed greater than 5 m/s, and receives an additional +10 bonus modifier on all Piloting checks to evade an obstacle or take evasive action against incoming fire.

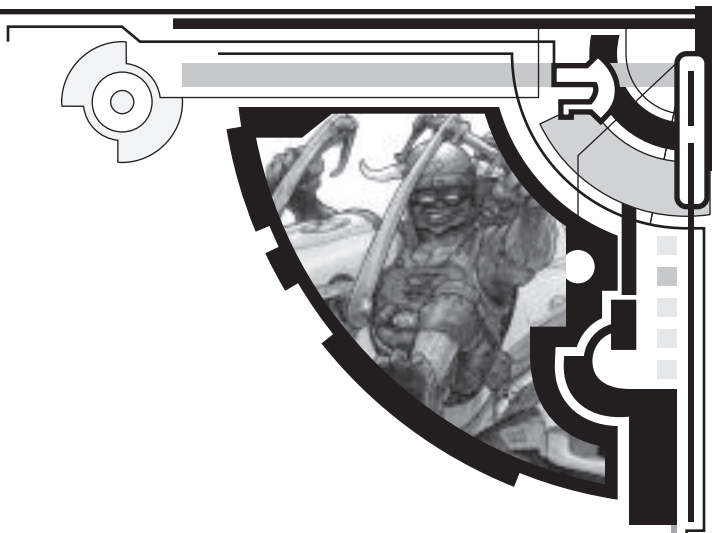
Vanguards come in a wide variety of trim levels and design variations, and can sometimes cost upwards of 40,000cr (none of these modifications affect the vehicles stats). The "chopper" version is particularly popular, with a high-backed seat, and extended front wheel arms (add 1,500cr). They tend to be highly personalized with custom paint jobs, saddlebags, and detailing. Despite their size, they are fairly easy to handle, utilizing a sophisticated suspension and steering system. There is no room for a passenger (though a Mazian or Pascian could fit behind the driver).

This rider has apparently removed his windscreen as it got in the way of swinging his sword. Typical Eridani.


POLICE

CHAPTER 4

Skimmers • 4



In This Chapter...

◂ They were gonna make it, but that idiot fifth generation clone Ollie V just can't drive anymore. Add in Yenarum's butter fingers when he plays with grenades and you get a recipe for disaster. At least Krak-ican was blown clear with the loot.

Skimmers are vehicles that travel above the ground, flying at low altitudes only. Certain urban areas provide grids for skimmers to utilize at far greater heights; these are accessed using special lift areas and are externally powered (via technology similar to that found in Gravitational Effect Weapons) to keep the skimmers on course and airborne. Skimmers for military use are generally employed in a manner similar to that of 20th century armored fighting vehicles, but have additional maneuverability and speed that allows for increased survivability on the modern battlefield. The cost of a reactor recharge (once the skimmer has reached its maximum range) varies, from 20cr for a standard civilian vehicle to 50cr or more for a large military transport skimmer.

Standard Equipment

All skimmers come with standard seat belts, airbags for front passengers, and side impact air bags. Standard climate control (air conditioning and heating) is found on all skimmers other than skim-cycles. Civilian skimmers include an Emergency Beacon and a NoSteal Sensor, while military vehicles come with a built-in Military Emergency Beacon and Altimeter. Crash Gel is standard on all civilian skimmers of TL 5 or higher. All skimmers have a built-in computer (listed in the vehicle description). Civilian skimmers automatically come with the hCar construct pre-installed on their computers. Any military skimmer of TL 5 or higher is assumed to have Infrared vision capabilities as well as zoom optics (20x optical zoom capability). Military skimmers of TL 6+ also have Ultraviolet vision capabilities built into their viewing systems.

Piloting Skimmers

The Vertical Element

Skimmers lack the free-flight capability of aircraft due to their methods of staying airborne. When traveling "off the grid", the maximum altitude a skimmer can achieve is based upon its tech level. Tech level 4 skimmers utilize a combination of thrusters and fans to provide vertical lift, requiring a large amount of energy just to achieve heights of 2m off the ground. Tech level 5 skimmers augment this with anti-grav technology, which greatly improves the efficiency of this lift system and allows heights of 5m to be reached. Tech level 6 and 7 skimmers utilize advanced anti-gravity and inertial-grav systems to provide lift, allowing a travel height as high as 20m above the ground.

Normally, a skimmer gradually gains or loses height by applying some of its acceleration to change its altitude; in one second, a skimmer can generally gain or lose an amount of altitude equal to half of its acceleration rating in meters per second. A skimmer pilot must make a successful Piloting check (for an Accelerate maneuver) in order to change altitude.

• **Example:** An Exeter skimmer has an acceleration of 3 m/s^2; therefore, it can adjust its height by 1.5m per second as a standard maneuver.

Note: No normal skimmer may increase its height by more than 5m in a second.

However, in order to gain or lose height more rapidly, a skimmer can execute a Pop-Up or Pop-Down maneuver. A Pop-Up maneuver puts maximum

power on the vertical thrusters, allowing an immediate increase in height equal to the maximum acceleration for the skimmer. A Pop-Down maneuver actually drops the vertical lift for less than a second, causing the skimmer to drop as far as (acceleration+5) meters in altitude. It is not possible to combine a Pop-Up or Pop-Down maneuver with any acceleration or deceleration in the same second.

• **Example:** An Exeter skimmer (acceleration 3 m/s²) could use a Pop-Up maneuver to increase its altitude by 3m, or use a Pop-Down maneuver to drop 8m.

It is possible to put skimmers into a powered dive. However, this maneuver is very risky and frequently results in a collision with the ground. A successful powered dive allows the skimmer to decrease its altitude by as much as one-third of its current speed plus 5 meters, and the forward speed of the skimmer is reduced by its maximum deceleration or 1/3, whichever is less. It is not possible to combine a Power Dive maneuver with any other maneuver in the same second, and the skimmer may not accelerate or decelerate in the following second.

Skimmers may jump from a ramp or elevated surface in the same way that wheeled vehicles do. Although a skimmer's propulsion system does not provide any vertical lift while "flying" between buildings, cliffs, or other surfaces, the vehicle will still benefit from an angled takeoff ramp. Therefore, a skimmer jumping off a ramp will travel in the same "flight path" that a wheeled vehicle jumping off the same ramp would travel (assuming equal speed). However, a skimmer has minimal ability to absorb the shock of the landing – assume that it crashes upon landing, subtracting the vehicle's acceleration from the actual landing speed before determining collision effects. If the vehicle's acceleration is greater than the landing speed, no ill effects are suffered.

The following table gives the Piloting checks required to succeed at a maneuver in a skimmer, based on the current speed. Whenever a maneuver has a difficulty below 0, there is no need to make a piloting check for success unless the pilot is unskilled or a circumstance penalty brings the difficulty above 0. An entry of "Auto" indicates that no check is necessary. A dash means that the maneuver is impossible at the speed given. Should the pilot fail the Piloting roll, consult the Loss of Control table to determine effects.

When combining two maneuvers in the same second, the total difficulty is equal to the more difficult of the two maneuvers, plus 1/2 of the difficulty for the second maneuver. The BM may rule that two specific maneuvers may never be combined.

MANEUVER DIFFICULTY

	SPEED (M/S)					
MANEUVER	1-10	11-25	26-60	61-90	91-125	126+
Abrupt Turn	-1	1	4	9	14	21
Accelerate	Auto	Auto	-3	-1	1	5
Bank (45 deg.)	1	3	6	12	18	25
Evasive (-5)	-	13	5	8	13	18
Evasive (-10)	-	19	12	16	22	28
Fly Backwards	-1	1	5	12	20	29
Fly Straight	Auto	Auto	Auto	-3	1	7
Gentle Turn	Auto	-3	-1	0	1	5
Hard Brake	Auto	Auto	-1	3	9	17
Long Jump	7	10	15	20	25	30
Mod. Brake	Auto	Auto	Auto	-1	1	5
Pop-Down	-1	1	5	10	16	23
Pop-Up	-2	0	4	9	15	22
Power Dive	8	12	17	23	30	-
Sharp Turn	-3	-1	0	2	6	11
Short Jump	-	5	9	13	18	23
Swerve/Evade	-3	0	4	9	14	20
U-turn	-1	3	7	14	22	-

Maneuver Definitions

Abrupt Turn: A turn of more than 30 degrees per second. The BM must decide how sharp a turn a given vehicle can make.

Accelerate: Accelerating at more than half the vehicle's maximum acceleration. Below this, no check is required.

Bank (45 degree): Attempting to tip the skimmer at a 45 degree angle, while remaining airborne. Success will reduce the difficulty of a subsequent turn. Apply a +20 bonus to any Piloting checks made to execute a turn in the direction of the bank, but for one check only.

Evasive (-5): Executing this maneuver will give all opponents a -05 penalty to hit the vehicle for 1 round.

Evasive (-10): Executing this maneuver will give all opponents a -10 penalty to hit the vehicle for 1 round.

Fly Backwards: Attempting to pilot the skimmer in the direction opposite its normal thrust. Check must be made every minute.

Fly Straight: Maintaining the current course, which is only difficult under extreme conditions. This check does not need to be made more than once per minute, unless a new hazard requires a check to be made.

Gentle Turn: A turn of 10 degrees per second or less.

Hard Brake: Decelerating at a rate of more than 5 m/s².

Long Jump: Jumping from a ramp or elevated surface, more than half of the maximum distance possible for a given speed.

Mod. Brake: Decelerating at a rate of 3-5 m/s². Below 3 m/s², no Piloting check is required.

Pop-Up: Attempting to increase the skimmer's height suddenly.

Pop-Down: Attempting to drop the skimmer's height suddenly.

Power Dive: Putting the skimmer into a powered dive in order to descend rapidly.

Sharp Turn: A turn of 30 degrees per second or less.

Short Jump: Jumping from a ramp or elevated surface, up to half the maximum distance possible for a given speed.

Swerve/Evade: Moving around a pedestrian-size obstacle that is less than 1 second away from the vehicle at its current speed.

U-Turn: A 180 degree turn, which occurs over as many seconds as the vehicle requires. This will generally require 3 seconds at a minimum.

Situational Modifiers

Depending on the situation, piloting checks may be made at a penalty; the BM must decide the exact modifier. Some suggested modifiers (to the Piloting check roll) are given here for reference. In addition, vehicle damage will cause piloting penalties; see the damage descriptions for details.

SITUATIONAL MODIFIERS

SITUATION	PILOTING CHECK MODIFIER
GENERAL MODIFIERS	
Flying Backwards (penalty to other maneuvers)	-20
Injured Pilot	-40
TERRAIN CONDITIONS	
Over water	-50
Significant Obstacles (chairs, tables, corpses, etc)	-20 to -40
Swampland	-10
VISIBILITY	
No frontal visibility	-80
No rear visibility	-15
No side visibility (both sides)	-30
No side visibility (one side)	-15
WEATHER	
Blizzard	-40
Heavy Rain	-10 to -30
High Winds	-10 to -50
Sandstorm / Dust Storm	-20 to -50
Snow (currently falling)	-10 to -30

Loss of Control

When a pilot fails a check to control a skimmer, add half the vehicle's speed to a d100 roll and consult the table an the following pages to determine effects. You suffer all effects that apply to your maneuver (i.e. if jumping, apply both the "All Maneuvers" effect and the "Jumping" effect). In all cases, evasive maneuvers do not benefit the vehicle if the check is failed (enemies suffer no penalty to hit) and attempts to evade an obstacle fail if the check is not successful. For any other maneuvers, if the maneuver is not listed separately, it succeeds subject to the penalties listed in "All Maneuvers".

Optional Rule: When a Piloting check is failed, add 1/2 the difference between the roll and the number needed to succeed on the check to the loss of control result. For example, if the pilot needed to roll 30 or less to succeed on a maneuver, but rolled an 80, (80-30)/2 = 25 would be added to the ensuing loss of control roll to determine the effect. The number added should never exceed 49, since a roll of 01 always succeeds when making a Piloting check.

Note: Any attempt to swerve or evade an obstacle automatically fails if the piloting check fails (in addition to the listed effects from the table); evasive action attempts that fail do not reduce enemy chance to hit your vehicle (in addition to the listed effects from the table).

Skimmer Hit Location Table

The table on page 53 should be used for civilian skimmers and the body of military skimmers without turrets. For military skimmers with turrets, the chance to strike the turret (instead of the body) will be listed in the vehicle description. Any shot striking the turret from the side that penetrates the armor will hit a random weapon (or crewmember, if any sit in the turret). Penetrating shots which strike the turret from above will hit a random weapon (or crewmember) first and then pass into the vehicle itself if any damage remains. If a result of "Crew Compartment" or "Engine Compartment" is rolled, roll again on the appropriate table to determine a specific system hit.

SKIMMER ENGINE COMPARTMENT

D100 ROLL	INTERNAL LOCATION
01-30	Engine (power system)
31-75	Engine (reactor)
76-80	Engine (non-critical)
81-90	Nothing
91-100	Nothing

SKIMMER CREW COMPARTMENT

D100 ROLL	INTERNAL LOCATION
01-05	Driver
06-60	Random Passenger or Driver or Seat
61-75	Weapon System or Random Passenger
76-90	Accessory System
91-100	Nothing

Notes for Skimmer Hit Locations Table

1: These locations may be covered by glass or armor on different vehicles. The listing shown is standard.
2: Some vehicles may not have separate Front and Rear Top Armor. In this case, all of these results strike the Top Armor.
3: Some very large vehicles have their Bottom Armor divided into Front and Rear sections. In this case, treat rolls of 1-10 (or 81-90) as striking the Front Bottom Armor and 11-20 (or 91-100) as striking the Rear Bottom Armor.

LOSS OF CONTROL RESULTS d100 (SKIMMER)

ROLL: 1-10

All Maneuvers: Wobble. Any further maneuvers in the next 2 seconds are at a +2 level of difficulty.

Power Dive: If you were attempting to drop to a height of 5m or less, you scrape the ground in the process. Your under side collides with the ground at an effective speed of 1/8 of your current speed. If your target altitude was higher than 5m, you drop to an altitude of 2m before recovering the dive.

ROLL: 11-25

All Maneuvers: Unstable flight path. Any further maneuvers in the next 3 seconds are at a +3 level of difficulty.

Power Dive: If you were attempting to drop to a height of 7m or less, you bounce off of the ground in the process. Your under side collides with the ground at an effective speed of 1/6 of your current speed. If your target altitude was higher than 7m, you drop to an altitude of 2m before recovering the dive.

Turning: The vehicle only succeeds in making 80% of the intended turn.

ROLL: 26-50

All Maneuvers: Temporary loss of control. Your vehicle careens out of control for half a second; you may attempt to regain control by repeating your piloting check at +5 difficulty—otherwise, you travel at least half of your speed in your current direction. Any further maneuvers in the next 3 seconds are at a +3 level of difficulty.

Braking: Your deceleration is 1m/s less than intended (but never less than 0).

Pop-Down: You drop 1m farther than intended. If you hit the ground, consider it a fall from your initial height.

Pop-Up: You rise 1m less than intended (but never less than 0).

Power Dive: If you were attempting to drop to a height of 10m or less, you bounce off of the ground in the process. Your under side collides with the ground at an effective speed of 1/4 of your current speed, and after the collision you move forward at only 2/3 of your current speed. If your target altitude was higher than 10m, you drop to an altitude of 2m before recovering the dive.

Turning: After regaining control of the vehicle, you make 80% of the intended turn.

ROLL: 51-75

All Maneuvers: Loss of control. Your vehicle continues to travel in its current direction for a full second. In addition, any maneuvers for the next 3 seconds are at a +5 difficulty and at a +2 difficulty for 3 additional seconds.

Braking: Your deceleration is only 1/2 of that intended.

Pop-Down: You drop 1d3 m farther than intended. If you hit the ground, consider it a fall from your initial height.

Pop-Up: You rise 1d2 m less than intended (but never less than 0).

Power Dive: If you were attempting to drop to a height of 20m or less, you collide with the ground in the process. Your under side collides with the ground at an effective speed of 1/2 of your current speed, and after the collision you move forward at only 1/4 of your current speed. If your target altitude was higher than 20m, you drop to an altitude of 1m before recovering the dive.

Turning: After traveling in your current direction for a full second (see above), you make 50% of the intended turn.

ROLL: 76-90

All Maneuvers: Major loss of control. You continue traveling in your current direction for a full second. In addition, any subsequent maneuvers are at +10 difficulty for 2 seconds, +5 difficulty for 2 additional seconds, and +2 difficulty for 3 additional seconds.

Braking: Your deceleration is only 1/4 of that intended.

Pop-Down: You drop 1d4+1 m farther than intended. If you hit the ground, consider it a fall from your initial height.

Pop-Up: You rise 1d4 m less than intended (but never less than 0).

Power Dive: You fly down into the ground, barely pulling up before impact. Your under side collides with the ground at an effective speed of your current speed minus half your max deceleration, and after the collision you are stationary.

Turning: Your vehicle turns sideways while traveling forward for a full second, then makes 30% of the intended turn.

ROLL: 91-115

All Maneuvers: Dangerous failure. Unless attempting to fly straight, fly backwards, or accelerate, you continue to travel in your current direction. In addition, any subsequent maneuvers are at +10 difficulty for 3 seconds, +5 difficulty for 3 additional seconds, and +2 difficulty for 3 additional seconds.

Accelerate: You achieve only half of the intended acceleration, and also have a 50% chance of failing to keep your vehicle straight (see above).

Braking: Your deceleration is only 1 m/s^2.

Fly Straight/Fly Backwards: You fail to keep your vehicle straight, causing a turn of 1d3x10 degrees in a random direction.

Evade/Evasive: You lose control of your direction, causing a turn of 1d3x10 degrees in a random direction.

Pop-Down: You drop 1d6+1 m farther than intended. If you hit the ground, consider it a fall from your initial height.

Pop-Up: You fail to change altitude.

Power Dive: You dive nose-first into the ground. Your front side collides with the ground at your current speed, and after the collision you are stationary; in addition, there is a 30% chance that your vehicle flips onto its top after impact.

Turning: Your vehicle turns sideways while traveling forward for a full second. After 1 second, you must re-attempt the turn or choose to regain your orientation in the direction you are traveling (automatic success).

ROLL: 116-145

All Maneuvers: Catastrophic failure. Unless attempting to fly straight or accelerate, you continue to travel in your current direction. In addition, any subsequent maneuvers are at +12 difficulty for 3 seconds, +7 difficulty for 3 additional seconds, and +4 difficulty for 3 additional seconds.

Accelerate: You achieve only 1/4 of the intended acceleration and also fail to keep the vehicle straight. You turn 1d3x10 degrees in a random direction.

Braking: You fail to decelerate.

Evade/Evasive: You lose control of your

LOSS OF CONTROL RESULTS d100 (SKIMMER) CONT.

direction, causing a turn of (1d4+1)x10 degrees in a random direction.

Fly Straight/Fly Backwards: You fail to keep your vehicle straight, causing a turn of (1d4+1)x10 degrees in a random direction.

Pop-Down: You drop 2d4 meters farther than intended. If you hit the ground, consider it a fall from your initial height.

Pop-Up: You fail to change altitude. In addition, you turn 1d3x10 degrees in a random direction.

Power Dive: You dive nose-first into the ground. Your front side collides with the ground at your current speed, and after the collision you are stationary; in addition, there is a 60% chance that your vehicle flips onto its top after impact.

Turning: Your vehicle turns sideways while traveling forward for a full second. After 1 second, you must re-attempt the turn or choose to regain your orientation in the direction you are traveling (automatic success). In addition, there is a chance of flipping your skimmer. Roll d100, and if the result is less than 1/3 your speed (in m/s), your vehicle flips over. This generally will cause you to lose all lift and crash to the ground. See the section on Lift Unit hits for information on crashing a skimmer.

ROLL: 146+

All Maneuvers: Total loss of control for at least 1 second. Upon regaining control, any subsequent maneuvers are at +12 difficulty for 3 seconds, +7 difficulty for 3 additional seconds, and +4 difficulty for 3 additional seconds.

Fly Straight/Fly Backwards: You fail to keep your vehicle straight, turning d6x10 degrees in a random direction. In addition, you must make a "Slight Turn" check in the next second or suffer a loss of control as if you failed a turning maneuver.

Pop-Down: You fly into the ground at your current speed (plus impact speed). CRASH!

Pop-Up: You fail to change altitude. In addition, you turn (1d4+1)x10 degrees in a random direction.

Power Dive: You dive nose-first into the ground, without even trying to pull up! Your front side collides with the ground at your current speed plus 5 m/s, and after the collision whatever is left of your vehicle will be immobile and either embedded in the ground nose-down, or laying on its top like a helpless turtle.

Turning/Braking/Accelerating/Evade/Evasive: You completely lose control of the vehicle. You spin out of control, either left or right (1d2), at d6x10 degrees from your current direction. This continues for d6 seconds with no chance to regain control. In addition, there is a 75% chance of losing lift, resulting in a ground impact. After this, if you are able to keep moving, any subsequent maneuvers are at +12 difficulty for 3 seconds, +7 difficulty for 3 additional seconds, and +4 difficulty for 3 additional seconds.

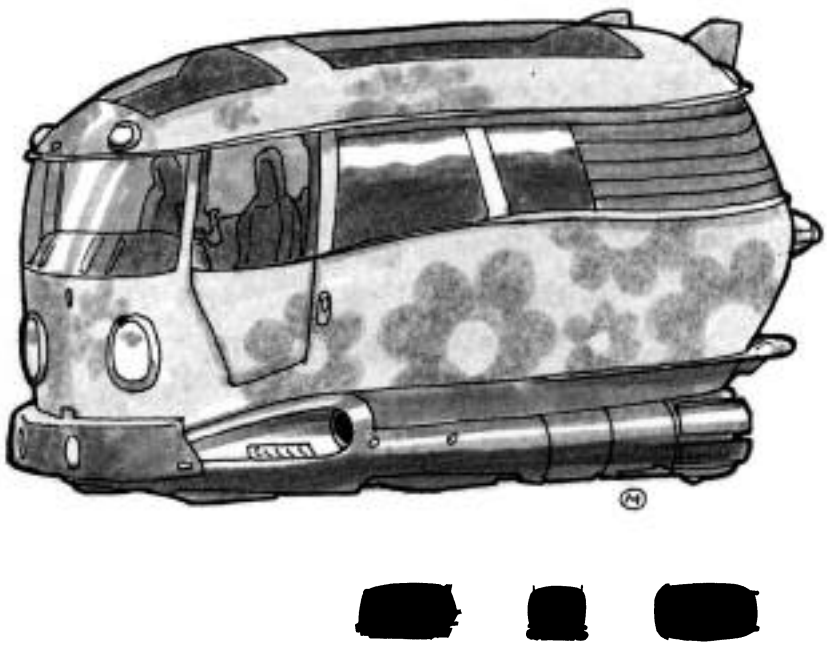
SKIMMER HIT LOCATIONS

D100 ROLL	D20 ROLL	FRONT SIDE EXTERNAL LOCATION	INTERNAL LOCATION
01-06	01-06	Front Glass(1)	Crew Compartment
07-12	07-12	Front Armor(1)	Crew Compartment
13-17	13-17	Front Armor	Cargo Area
18	18	Front Armor	Front Weapon (if exists) or Cargo Area
19-20	19-20	Front Armor	Lift Unit
		LEFT SIDE	
21-22	1-2	Rear Left Armor	Lift Unit
23-24	3-4	Rear Left Armor	Engine Compartment
25-28	5-8	Rear Left Armor	Crew Compartment
29-30	9-10	Rear Left Glass(1)	Crew Compartment
31-32	11-12	Front Left Glass(1)	Crew Compartment
33-36	13-16	Front Left Armor	Crew Compartment
37-38	17-18	Front Left Armor	Front Cargo Area
39-40	19-20	Front Left Armor	Lift Unit
		RIGHT SIDE	
41-42	1-2	Rear Right Armor	Lift Unit
43-44	3-4	Rear Right Armor	Engine Compartment
45-48	5-8	Rear Right Armor	Crew Compartment
49-50	9-10	Rear Right Glass(1)	Crew Compartment
51-52	11-12	Front Right Glass(1)	Crew Compartment
53-56	13-16	Front Right Armor	Crew Compartment
57-58	17-18	Front Right Armor	Front Cargo Area
59-60	19-20	Front Right Armor	Lift Unit

D100 ROLL	D20 ROLL	FRONT SIDE EXTERNAL LOCATION	INTERNAL LOCATION
		REAR SIDE	
61-66	1-6	Rear Glass(1)	Crew Compartment
67-69	7-9	Rear Armor(1)	Crew Compartment
70-76	10-16	Rear Armor	Engine Compartment
77	17	Rear Armor	Rear Weapon (if exists) or Engine Compartment
78-80	18-20	Rear Armor	Lift Unit
		TOP SIDE	
-	1-5	Front Top Armor(2)	Front Cargo Area
-	6	Front Glass(1)	Crew Compartment
-	7-9	Front Top Armor(2)	Crew Compartment
-	10	Front Top Armor(2)	Top Weapon (if exists) or Crew Compartment
-	11	Rear Top Armor(2)	Top Weapon (if exists) or Crew Compartment
-	12-14	Rear Top Armor(2)	Crew Compartment
-	15	Rear Glass(1)	Crew Compartment
-	16-20	Rear Top Armor(2)	Engine Compartment
		UNDER SIDE	
81-84	1-4	Bottom Armor(3)	Front Cargo Area
85-88	5-8	Bottom Armor(3)	Lift Unit
89-92	9-12	Bottom Armor(3)	Crew Compartment
93-96	13-16	Bottom Armor(3)	Lift Unit
97-100	17-20	Bottom Armor(3)	Engine Compartment

Argent

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 33,500cr
Crew: 5 (25)
Size: 5.2m L x 2.1m W x 2.2m H (80)
Size Mod: +35/-05
Weight: 2,490kg
Max Weight: 3,400kg
Cargo: 870 (6)
Top Speed: 89 m/s (320 kph)
Range: 825km
Piloting Modifier: +00
Autopilot: Level 8
Acceleration: 3 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	3	32
Front Left Armor	3	31
Rear Left Armor	3	31
Rear Armor	3	32
Rear Right Armor	3	31
Front Right Armor	3	31
Front Top Armor	3	31
Rear Top Armor	3	31
Bottom Armor	3	70
Front Glass	3	9
Front Left Glass	3	7
Rear Left Glass	3	7
Rear Glass	3	9
Rear Right Glass	3	7
Front Right Glass	3	7

COMPONENTS	THR	BP
Engine (reactor)	9	180
Engine (power system)	6	80
Lift Unit	6	90

EQUIPMENT

Erenex Computer

DESCRIPTION

The Argent skimmer (similar to a 21st century minivan) is designed for use on relatively peaceful planets with wide-open spaces. It allows a "homesteader" and his family to travel long distances at high speed. Unfortunately, it suffers from a lack of maneuverability and protection, making it a poor choice for urban environments.

The business of the Argent is moving people around, and at this it excels. Its cavernous interior and large doors make it easy to get in and out of, and once inside fit comfortably for long distances. Though designed for human- and Orion-sized beings, the Argent can comfortably accomodate some of the larger races as well. For long distances, the Level 8 Autopilot is a big help, but it also assists the annoyed parent who can set it, get up, and head to the back to beat some unruly offspring.

For more cargo space, the rear row of seats can be removed in two minutes, allowing for another 50% more cargo space (only two seats remain for the driver and a passenger).

A popular option is the Campster D-Lux. With this 7,000cr upgrade, different roof and window units are installed which allow the roof to raise enough to allow passengers to walk around upright in the Argent. A half-power Mrs. Fusion is also installed in the cargo area for charging items and powering small appliances and the custom installed camp stove and oven. Note that for you combat types, if a Campster equipped Argent is hit in any side glass or side armor section, there is a 15% chance of a roof strut being hit. If half the integrity is destroyed the roof strut will give way, causing the entire roof to fail and all side and rear glass to break.

TECH LEVEL 5 SKIMMER

ARSAP Skimmer

VEHICLE STATISTICS

Cost: 86,500cr
Crew: 1 (8+hvy) + 7 (56+hvy)
Size: 6.7m L x 2.8m W x 2.6m H (180)
Size Mod: +45/+05
Weight: 4,305kg
Max Weight: 10,500kg
Cargo: 710 (7)
Top Speed: 63 m/s (227 kph)
Range: 400km
Piloting Modifier: -05
Autopilot: Level 5
Acceleration: 2 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	5	90
Front Left Armor	5	85
Rear Left Armor	5	50
Rear Armor	5	50
Rear Right Armor	5	50
Front Right Armor	5	85
Top Armor	5	105
Bottom Armor	5	185
Front Glass	3	13
Left Glass	3	9
Rear Glass	3	13
Right Glass	3	9

COMPONENTS	THR	BP
Engine (reactor)	8	260
Engine (power system)	5	116
Lift Unit	5	245

EQUIPMENT

Reliance Computer

DESCRIPTION

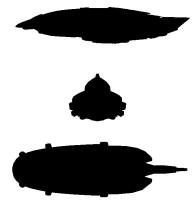
This skimmer is typically given to low-end lancer squadrons for frontier reconnaissance. It can haul up to 8 size class 8 individuals in heavy armor with full equipment, including body-mounted weapons. However, all of these except for the skimmer pilot are exposed on the "deck" of this skimmer, unprotected by armor (unless being fired upon from the front or underneath the skimmer). The pilot is shielded by the armor and windows. Persons on the "deck" may be targeted normally; any shots striking this skimmer from any angle other than the front or bottom have a 40% chance of striking the unprotected crew area. Targeting the enclosed portion of the skimmer is also possible, at a +40/+00 modifier.

This vehicle is heavily used by Xplore Inc. ARSAP teams using this vehicle tend to suffer severe casualties, but the vehicle itself has proven survivable. One major cause of fatalities is inexperienced pilots attempting to maneuver this bulky vehicle at ultra high speeds. The acceleration of this vehicle is reduced by half when fully loaded.

A 75 point Flux shield can be mounted on these skimmers; this costs 100,000 credits, uses 0.4m^3 of cargo space, and weighs 60kg. Some Xplore teams chip in to buy this option "out of pocket" to help guard against sniper fire.

Companion

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 34,200cr
Crew: 3 (15)
Size: 4.1m L x 1.6m W x 1.6m H (40)
Size Mod: +30/-10
Weight: 1,080kg
Max Weight: 1,920kg
Cargo: 1,150 (3)
Top Speed: 107 m/s (385 kph)
Range: 700km
Piloting Modifier: +05
Autopilot: Level 8
Acceleration: 7 m/s²

ARMOR

LOCATION	THR	AI
Front Armor	4	24
Front Left Armor	4	23
Rear Left Armor	4	23
Rear Armor	4	24
Rear Right Armor	4	23
Front Right Armor	4	23
Front Top Armor	4	23
Rear Top Armor	4	23
Bottom Armor	4	55
Front Glass	3	8
Front Left Glass	3	5
Rear Left Glass	3	5
Rear Glass	3	7
Rear Right Glass	3	5
Front Right Glass	3	5

COMPONENTS	THR	BP
Engine (reactor)	12	132
Engine (power system)	8	66
Lift Unit	7	48

DESCRIPTION

The Companion skimmer by Rockwell is a hot seller on Human worlds. Its sleek looks and powerful engine have propelled its sales to the top of the charts for the last two years. The Companion class skimmer has an unusual "teardrop" configuration which accommodates the driver and a passenger in front, as well as one passenger in the rear. The rear passenger exits via an overhead hatch.

Though the design has its detractors, there is no denying the speed and comfort the Companion offers its occupants. The Rockwell ZT40 Turbothrust engine emits a menacing growl as it comes to life, and allows the driver to quickly maneuver in tight traffic or sit back and cruise on long trips. Hit the accelerator and you'll know you're in a sports skimmer.

Amenities are aplenty inside, with excellently supportive seats, high-class materials, and great sightlines out of the tinted canopy. An overpressure system effectively makes the Companion environmentally contained. The tight fitting and supportive seats make it impossible to wear any armor in the companion other than Street. Any attempt to get in and drive wearing anything else has a 75% chance to break an internal component, and a 90% chance to destroy the seat fabric.

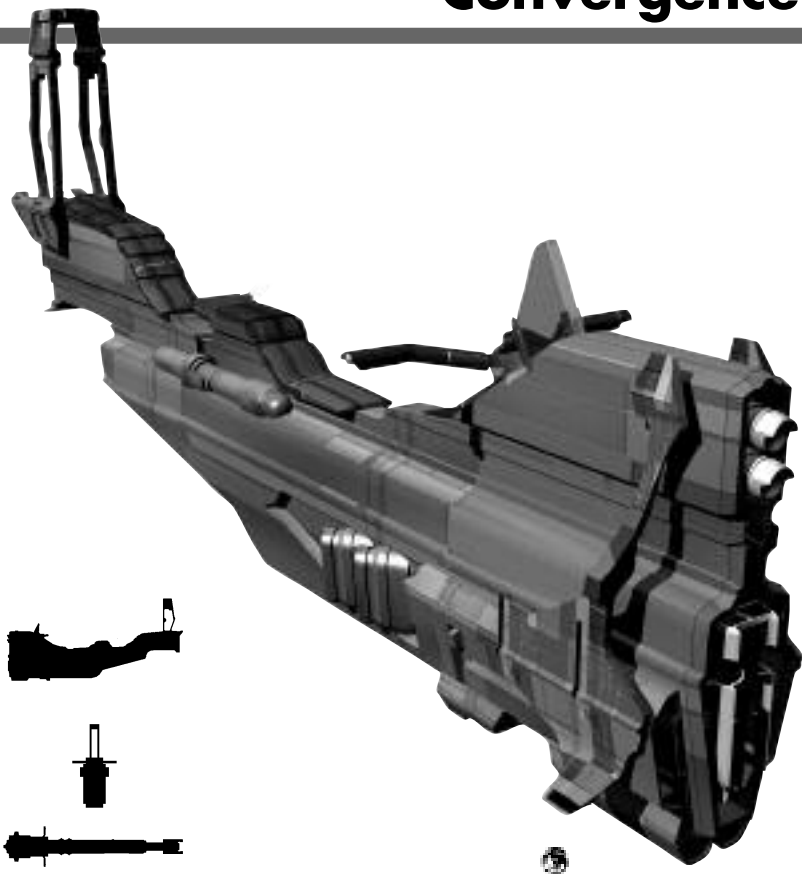
Furnam's Coachworks, a Rockwell subsidiary produces a kit to modify a Companion to fit two size class 7 beings, one in front of the other. The modifications, including parts and labor, cost 3,000cr and must be done at a Rockwell dealer. This work can take up to two weeks to complete.

EQUIPMENT

Environmental Containment
Erenex computer

TECH LEVEL 5 SKIMMER-CYCLE

Convergence



VEHICLE STATISTICS

Cost: 5,500cr
Crew: 1 (6+eq)
Size: 2.0m L x 0.9m W x 0.9m H (7)
Size Mod: +20/-20
Weight: 225kg
Max Weight: 480kg
Cargo: 180 (0)
Top Speed: 89 m/s (320 kph)
Range: 550km
Piloting Modifier: +20
Autopilot: Level 5
Acceleration: 9 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	4	4
Left Armor	4	8
Rear Armor	4	4
Right Armor	4	8
Top Armor	4	8
Bottom Armor	4	8
Front Glass	3	6

COMPONENTS	THR	BP
Engine (reactor)	12	36
Engine (power system)	8	18
Lift Unit	7	12

EQUIPMENT

Reliance computer

DESCRIPTION

The Convergence Skim-cycle is a terribly unsafe vehicle which is popular on many planets. The driver can move at ridiculous speeds, up to 320 kph. However, he is completely outside the body of the vehicle, sheltered behind only a thin piece of plastic (front glass). Therefore, anyone taking a shot at the cycle can easily target the driver. Additionally, any other shots taken at this vehicle should roll on this table before determining a location hit:

ROLL	RESULT
01-50	Cycle body hit – use normal location table (see below).
51-93	Driver
94-100	External cargo location

Note that the driver is only protected by armor when shot at from the front, in which case the "front glass" may protect him. It is common practice for skim-cycle pilots to wear street clothes armor and helmets to provide at least minimal protection. Also, when rolling on the hit location table, this vehicle does not have a "crew compartment" or "cargo area". Treat any "crew compartment" results as an "engine compartment" result, and any "cargo area" results as a "Lift Unit" hit. It is possible to carry approximately 180 encumbrance of cargo on this cycle, but it is totally exposed.

Cybin

TECH LEVEL 6 SKIMMER

VEHICLE STATISTICS

Cost: 34,500cr
Crew: 2 (12+eq)
Size: 4.1m L x 1.6m W x 1.8m H (40)
Size Mod: +30/-10
Weight: 980kg
Max Weight: 1,890kg
Cargo: 1,160 (4)
Top Speed: 109 m/s (392 kph)
Range: 700km
Piloting Modifier: +10
Autopilot: Level 10
Acceleration: 10 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	6	26
Front Left Armor	6	25
Rear Left Armor	6	25
Rear Armor	6	26
Rear Right Armor	6	25
Front Right Armor	6	25
Front Top Armor	6	25
Rear Top Armor	6	25
Bottom Armor	6	58
Front Glass	5	14
Front Left Glass	5	8
Rear Left Glass	5	8
Rear Glass	5	14
Rear Right Glass	5	8
Front Right Glass	5	8

COMPONENTS	THR	BP
Engine (reactor)	12	132
Engine (power system)	8	66
Lift Unit	10	56

EQUIPMENT

Relecon-2 computer

DESCRIPTION

The Cybin is used by Phentari on high tech level planets where armed vehicles are unacceptable. Although it meets the most stringent definitions of a civilian vehicle, it provides a somewhat higher level of protection to its occupants than most skimmers. This skimmer is fully equipped with a methane environment for maximum comfort.

As expected, the controls and the interior design are specifically suited to Phentari anatomy. There are no mirrors or external cameras, and the main control stick requires the use of tentacles. The only non-Phentari that can possibly drive a Cybin is a Mazian. Needless to say any race other than a Phentari or Mazian incurs a -50 penalty when attempting to drive this skimmer.

In keeping with Phentari tradition, like most vehicles, the Cybin has pop-up tie-down points along the larger surfaces of the vehicle. These provide a place to sling the included cargo nets that can be filled with the most recent kills of the driver. It is acceptable and often expected that the kills are left in the slings for quite a while; it's the Phent version of the little dangling pine tree. A 750cr option allows for spikes to be screwed into the tie-down points to allow for the impaling of victims instead of using the nets. Needless to say this causes many problems for the local authorities on non-Phentari worlds. The Cybin is often banned on human-controlled worlds.

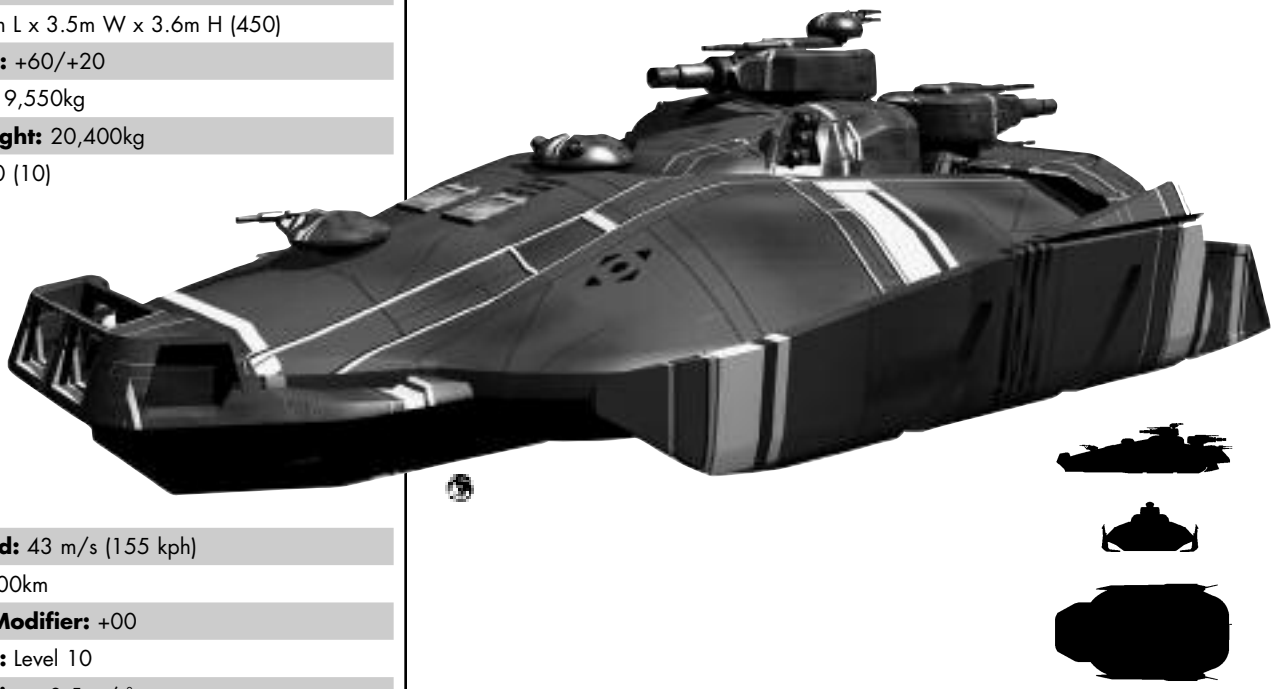
When traveling on worlds that permit the use of vehicular Flux shields (or in lawless areas), wealthy Phentari use Flux shields of 50 points (+65,000cr), 1HP (+150,000cr), or even 2HP (+310,000cr) on this skimmer.

TECH LEVEL 6 SKIMMER

Eliminex Land Cruiser

VEHICLE STATISTICS

Cost: 74.5Mcr
Crew: 5 (30+eq)
Size: 8.6m L x 3.5m W x 3.6m H (450)
Size Mod: +60/+20
Weight: 19,550kg
Max Weight: 20,400kg
Cargo: 50 (10)



Top Speed: 43 m/s (155 kph)
Range: 700km
Piloting Modifier: +00
Autopilot: Level 10
Acceleration: 0.5 m/s^2
Flux Shield: 30HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	5HP	1475	1125
Front Left Armor	5HP	1475	1125
Rear Left Armor	5HP	1475	1125
Rear Armor	5HP	1475	1125
Rear Right Armor	5HP	1475	1125
Front Right Armor	5HP	1475	1125
Front Top Armor	5HP	1475	11HP
Rear Top Armor	5HP	1475	11HP
Front Bottom Armor	5HP	1475	11HP
Rear Bottom Armor	5HP	1475	11HP

COMPONENTS	THR	BP
Engine (reactor)	30	900
Engine (power system)	24	450
Lift Unit	35	960
Flux Shield Generator	40	240

DESCRIPTION

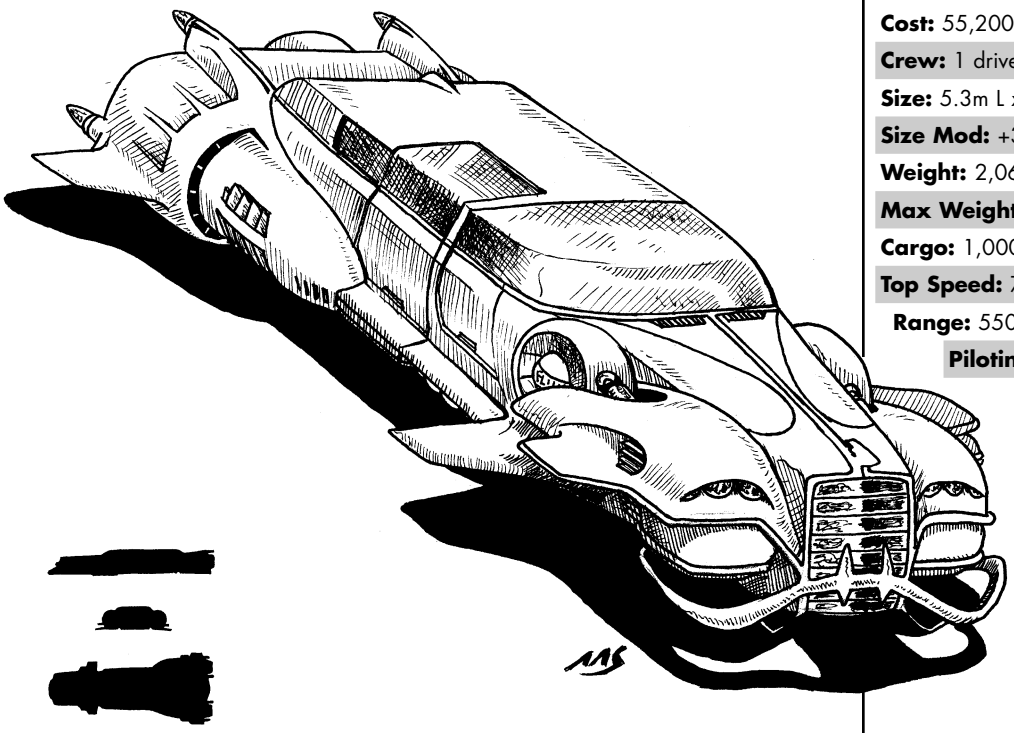
Built for extended combat situations, the Eliminex "land cruiser" is an oversized skimmer that carries an incredible load of 104 heavy missiles for long-range combat. It packs twin heavy pulse cannons in the forward arc for close-in work against vehicles. Against enemy infantry, it can bring to bear its two turrets which each contain an M-800 Pulse Cannon and a Valley Green Laser machine gun. Furthermore, it has an additional laser MG in the rear, as well as SAM capabilities and 2 onboard K-Sats (cost not included). This design works very well as part of a larger force, but is very expensive even for a military vehicle. An external viewing system with triple redundancy is used in place of windows. The system lacks onboard atmospheric supply capability, but crew are generally issued personal breathing apparatus if hazardous environmental conditions are anticipated. The lift unit on this craft is somewhat underpowered for its size.

WEAPONS & EQUIPMENT

2 Battle K-Sat Bays
Calsham-GX Laser MG (Rear)
Cromagnon External Rack: THR 6HP, carries 24 Tomahawk-3 heavy missiles, fire up to 2 at a time
Dynatech Radar System (backup)
Environmental Containment
Farsight Combat Array (primary)
2 Freewill-I LAMS Systems (Top)
2 M-800 Pulse Cannons (turrets)
2 Nike Hercules 4 SAM Systems (Top)
Relecon-2 computer
80 Tomahawk-3 Heavy Missiles: Firing rate limited by radar only
2 Valley Green Laser MG (turrets)
2 Venomous-2 Pulse Cannons (F)

Exeter

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 55,200cr
Crew: 1 driver (7+eq) + 7 (42)
Size: 5.3m L x 2.2m W x 2.0m H (80)
Size Mod: +35/-05
Weight: 2,060kg
Max Weight: 3,600kg
Cargo: 1,000 (4)
Top Speed: 79 m/s (284 kph)
Range: 550km
Piloting Modifier: +00
Autopilot: Level 8
Acceleration: 3 m/s^2

DESCRIPTION

The Exeter is a typical skimmer limousine used on tech level 5 and 6 planets. It comfortably seats 7 size class 6 individuals, but is not designed for rapid deployment like a combat vehicle. Only 2 persons can exit the passenger compartment at a time, 1 on either side of the vehicle. The tinted windows prevent targeting of passengers by outside snipers. Desperate individuals could rip out the seating and transport a squad of up to 6 individuals with (non-heavy) armor and equipment (Pythons or Cizerack count as a person and a half!). There is also an armored partition between the driver and the rear passenger area; it has a 3 threshold and 20 points of integrity. A built in comm unit connects the driver with the rear area.

The Exeter exudes luxury inside, with exotic materials, mood lighting, a built-in hyper-net terminal (with connectors for body computers and PCDs), mini Tri-V, and a refrigerator.

A common option of the Exeter is the installation of improved armored glass. The 10,000cr improvement replaces all of the glass sections with new material with a 9 threshold. No additional integrity is included.

When fully loaded, this vehicle's acceleration is cut to 2 m/s^2. The pilot of this vehicle may wear armor, but will sustain a -40 Piloting check penalty while doing so. The sunroof provides a second means of egress in an emergency, or a convenient place to shoot from. Firing from the sunroof provides 50% cover and is impossible with body-mounted weapons.

EQUIPMENT

Erenex computer
Security Screen (Flex): THR 7, 15 BP

ARMOR

LOCATION	THR	AI
Front Armor	10	65
Front Left Armor	10	60
Rear Left Armor	10	60
Rear Armor	10	65
Rear Right Armor	10	60
Front Right Armor	10	60
Front Top Armor	10	60
Rear Top Armor	10	60
Bottom Armor	10	135
Front Glass	7	34
Front Left Glass	7	22
Rear Left Glass	7	22
Rear Glass	7	34
Rear Right Glass	7	22
Front Right Glass	7	22

COMPONENTS	THR	BP
Engine (reactor)	12	150
Engine (power system)	8	70
Lift Unit	7	84

TECH LEVEL 6 SKIMMER

Gauntlet

VEHICLE STATISTICS

Cost: 4.7Mcr
Crew: 2 crew (10+eq) + 6 (30+hvy)
Size: 5.5m L x 2.4 m W x 2.1m H (90)
Size Mod: +40/+00
Weight: 3,190kg
Max Weight: 5,860kg
Cargo: 60 (1)
Top Speed: 59 m/s (212kph)
Range: 700km
Piloting Modifier: +30
Autopilot: Level 10
Acceleration: 1 m/s^2
Flux Shield: 5HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	175	140	70
Front Left Armor	100	90	27
Rear Left Armor	100	90	27
Rear Armor	100	90	27
Rear Right Armor	100	90	27
Front Right Armor	100	90	27
Top Armor	100	180	55
Bottom Armor	100	180	55

COMPONENTS	THR	BP
Engine (reactor)	30	300
Engine (power system)	24	150
Lift Unit	10	180
Flux Shield Generator	30	60

WEAPONS & EQUIPMENT

Calsham-4V laser (F)
Climax PAWS (360)
Environmental Containment
LMDS-E LAMS (external)
Relecon-2 computer

DESCRIPTION

The Gauntlet skimmer is intended for use as an armored personnel carrier. This vehicle is moderately well protected due to its 5HP Flux shield, but once the shield is down, its survivability on the modern battlefield is low. In addition, it lacks the firepower to take on other vehicles, as its weaponry is primarily intended for anti-personnel use. The standard tactic is to fly in as low as possible, release the squad of troops, and get out! Despite the large load it carries, the acceleration of this skimmer is not significantly better when empty. Note that the configuration of this vehicle allows the crew (pilot and gunner) to use regular body armor, while the squad of 6 troops may wear heavy armor while being transported to the battlefield.

Attempts have been made to add turrets with anti-vehicle weaponry, but without a significant powerplant upgrade, the Gauntlet is simply too underpowered to handle the extra weight. Common in mercenary units, Gauntlets are often heavily modified by their crews for local conditions, and specific jobs. Ambulance variants, ammo-carriers, missile pod platforms, and more are common.

Go Class Skimmer

TECH LEVEL 5 COMPACT SKIMMER

VEHICLE STATISTICS

Cost: 10,700cr
Crew: 2 (10)
Size: 3.3m L x 1.4m W x 1.4m H (20)
Size Mod: +25/-15
Weight: 450kg
Max Weight: 960kg
Cargo: 640 (2)
Top Speed: 43 m/s (155 kph)
Range: 550km
Piloting Modifier: +10
Autopilot: Level 8
Acceleration: 2 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	4	13
Front Left Armor	4	11
Rear Left Armor	4	11
Rear Armor	4	13
Rear Right Armor	4	11
Front Right Armor	4	11
Front Top Armor	4	11
Rear Top Armor	4	11
Bottom Armor	4	28
Front Glass	3	7
Front Left Glass	3	4
Rear Left Glass	3	4
Rear Glass	3	7
Rear Right Glass	3	4
Front Right Glass	3	4

COMPONENTS	THR	BP
Engine (reactor)	12	36
Engine (power system)	8	18
Lift Unit	7	24

EQUIPMENT

Erenex computer

DESCRIPTION

The Rockwell Go skimmer is an absolutely generic skimmer which is very common in working class tech level 5 neighborhoods. It is a "no frills" method of transportation which can carry 2 size class 5 individuals and some personal goods such as groceries.

Despite its mundane looks and middling performance, the combination of utility and affordability has been irresistible, making the Go one of Rockwell's most profitable products. Cheaper than many wheeled vehicles, the Go gets you into a skimmer without breaking the bank; heck, it's cheaper than a Savage-B!

The key to the Go's success is arguably the revolutionary RT-80 fusion-turbine that gives the Go its thrust. Its thrust to weight ratio was unheard of only five years before their introduction, and is still unmatched nearly ten years later. Each of the Go's four turbines only weighs 25kg. Rockwell has been very secretive about the RT-80's design, and while other manufacturers have tried to reverse-engineer the powerplant, no one has yet created something with that combination of efficiency, size, and cost.

The modular design of the Go, meant from the start to be repaired and modified by the owner, makes it easy to swap out engines and other major components without a trip to a repair shop. This has made the Go extremely popular for modifications and upgrades, especially on the Frontier.

Since its introduction, the Go has transcended its mundane beginnings to become a cultural icon. Fan clubs, hate clubs, racing clubs, and everything in between have assured the Go a place in vehicular history.

TECH LEVEL 5 SKIMMER

Guardian

VEHICLE STATISTICS

Cost: 98,500cr
Crew: 2 (10+eq) + 2 (10+hvy) + 1 (8)
Size: 5.0m L x 2.2m W x 1.8m H (68)
Size Mod: +35/-05
Weight: 2,505kg
Max Weight: 3,900kg
Cargo: 170 (1)
Top Speed: 114 m/s (410kph)
Range: 550km
Piloting Modifier: +00
Autopilot: Level 8
Acceleration: 5 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	18	70
Front Left Armor	18	70
Rear Left Armor	18	70
Rear Armor	18	70
Rear Right Armor	18	70
Front Right Armor	18	70
Top Armor	18	150
Bottom Armor	18	150

COMPONENTS	THR	BP
Engine (reactor)	20	240
Engine (power system)	16	130
Lift Unit	7	90

EQUIPMENT

Erenex computer

DESCRIPTION

The Guardian class skimmer is used by special police units called to enter hazardous situations (apprehending dangerous criminals or quelling riots). Its heavy armor and full enclosure (a virtual reality viewing system eliminates the need for any windows) provides an excellent defense against anything short of missiles.

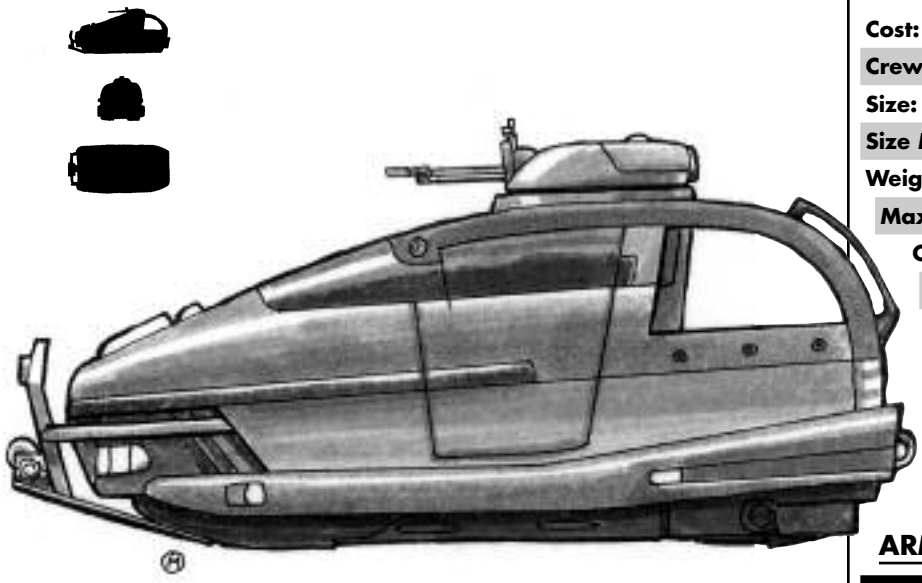
This skimmer is basically a big box, but police and paramilitary units that deploy them add on loads of options to suit their specific mission or environment. Stunner generators are a common addition (25,000cr per stunner). Usually the stunner is mounted to the front of the vehicle where it has a 5m effective radius in a 180 degee arc. More can be added to the sides and rear, but it can become expensive.

The Guardian is generally only mounted with non-lethal weapons, like the aforementioned stunner, web generators, sonic disruptors, and the like. Its lethal weapons are the heavily armed U-CAT force or Galactic Police within. Most police forces feel that if they wanted a vehicle to carry out lethal force, there are plenty of military vehicles that would provide a better solution.

The interior of the Guardian can also function as a mobile command post if it's outfitted with comm gear and survellance equipment. Or it can serve as a mobile jail cell or confession chamber. There is one small bench near the rear with built in force-cuffs that can accomodate one customer of up to size class 8.

Hunter

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 90,000cr
Crew: 2 (10+eq)
Size: 3.9m L x 1.7m W x 1.6m H (35)
Size Mod: +30/-10
Weight: 820kg
Max Weight: 1,680kg
Cargo: 1,180 (4)
Top Speed: 63 m/s (227 kph)
Range: 550km
Piloting Modifier: +05
Autopilot: Level 8
Acceleration: 3 m/s²
Flux Shield: 40 BP

ARMOR

LOCATION	THR	AI
Front Armor	7	23
Front Left Armor	7	22
Rear Left Armor	7	22
Rear Armor	7	23
Rear Right Armor	7	22
Front Right Armor	7	22
Front Top Armor	7	22
Rear Top Armor	7	22
Bottom Armor	7	50
Front Glass	5	18
Front Left Glass	5	10
Rear Left Glass	5	10
Rear Glass	5	17
Rear Right Glass	5	10
Front Right Glass	5	10

COMPONENTS	THR	BP
Engine (reactor)	12	72
Engine (power system)	8	36
Lift Unit	7	42
Flux Shield Generator	20	15

WEAPONS & EQUIPMENT

Erenex computer
M-240 Machine Gun (360)

DESCRIPTION

The Hunter recon skimmer is intended for light duty use in a variety of situations. It carries a fully equipped crew of two and mounts a turreted machine gun and a light Flux shield. This vehicle is suitable for only the lightest of combat, but it is relatively affordable. A popular upgrade is to replace the machine gun with an XRK-V laser for added firepower (adds 30,000cr to price of vehicle).

Despite its looks, the Hunter is definitely not an armored vehicle. It's rugged, and useful in a variety of environments, but if the enemy starts huzzing reflex missiles at you, it's time to suck up the pride, and turn tail and run. The flux shield is a good addition though, since a vehicle with a mounted weapon does tend to attract unwanted attention.

Hunters have become a staple of many mercenary groups as they are fairly easy to maintain, and can be had for a bit more than the price of a costly reflex missile. They are great for reconnaisance and hit-and-run tactics, or any job where the chances of a prolonged firefight are small, or where the enemy is known to be lightly armed.

Note: Any hits to Top Armor indicate the turret was hit. If the turret is occupied when it is hit there is a 70% chance the occupant is struck.

TECH LEVEL 5 SKIMMER

Kiev Main Battle Tank

VEHICLE STATISTICS

Cost: 23.0Mcr
Crew: 3 (15+eq)
Size: 7.7m L x 3.4m W x 3.2m H (300)
Size Mod: +50/+10
Weight: 15,650kg
Max Weight: 16,500kg
Cargo: 890 (4)
Top Speed: 73 m/s (263kph)
Range: 550km
Piloting Modifier: +05
Autopilot: Level 8
Acceleration: 1 m/s²
Flux Shield: 25HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	550	925	10HP
Front Left Armor	550	925	10HP
Rear Left Armor	425	825	750
Rear Armor	425	800	750
Rear Right Armor	425	825	750
Front Turret Armor	300	175	110
Rear Turret Armor	175	150	65
Left Turret Armor	175	175	90
Front Right Armor	550	925	10HP
Front Top Armor	300	675	5HP
Rear Top Armor	300	675	5HP
Front Bottom Armor	300	675	480
Rear Bottom Armor	300	675	480
Right Turret Armor	175	175	90
Top Turret Armor	175	260	110

COMPONENTS	THR	BP
Engine (reactor)	20	510
Engine (power system)	16	240
Lift Unit	20	660
Flux Shield Generator	30	105

DESCRIPTION

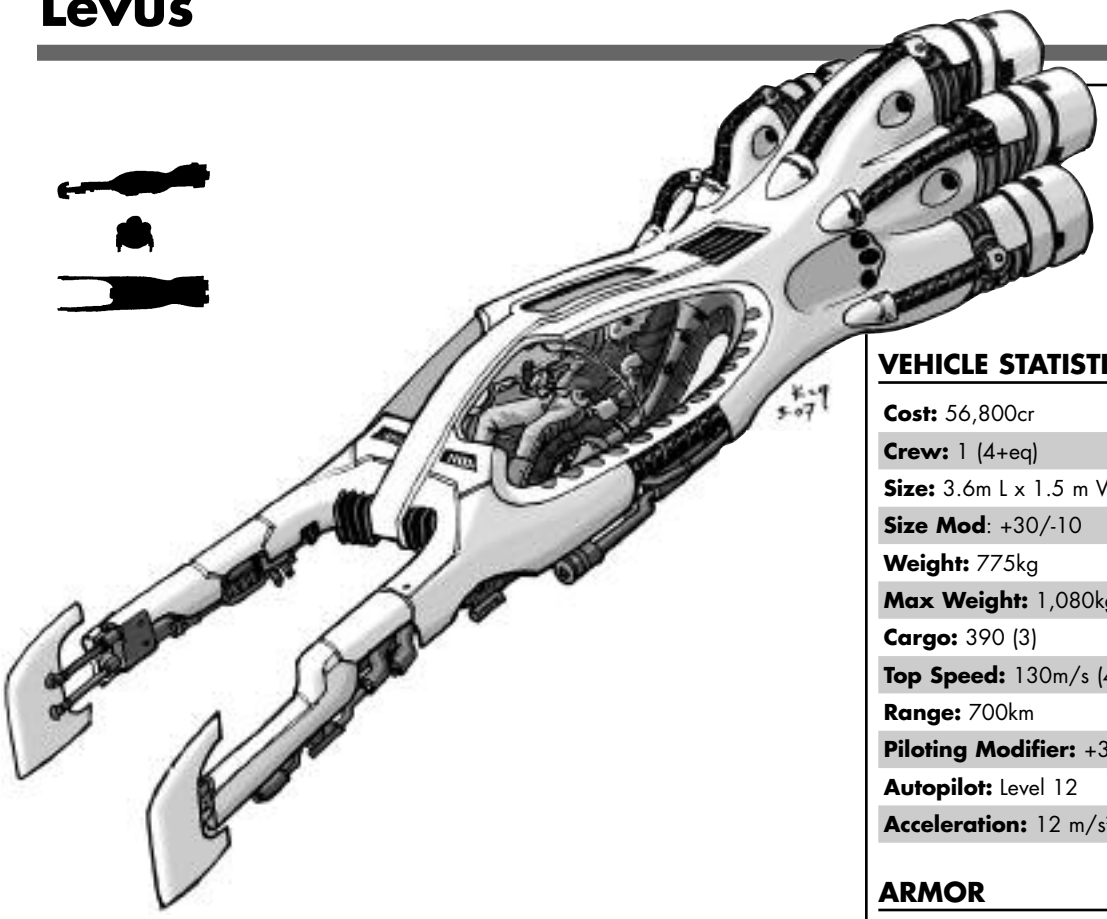
The Kiev Main Battle Tank is a staple in lower-tech armed forces throughout the frontier. Its primary shortcoming is the limited range (300m) of its main weapon; however, this vehicle can take considerable punishment and holds up well against a variety of threats. It can engage targets at longer ranges using its Calsham-2X laser and Quasar FIGs, but is unable to affect armored targets at range except with its limited supply of heavy missiles. However, it is capable of engaging multiple infantry targets simultaneously using its lighter weaponry. The turret of this vehicle is somewhat vulnerable as lower-quality armor has been used there. The crew is safely protected within the body and the turret is fully automated. The turret is struck by 15% of untargeted weapons fire striking the vehicle; there is a (+35/-05) modifier to target the turret of this vehicle directly. On top of the main turret is a small turret for the Calsham-2X laser; this turret is able to reach 90 degree elevation in order to engage airborne targets.

WEAPONS & EQUIPMENT

Atmosphere Supply
Calsham-2X laser (360, top turret)
Dynatech Radar System
ECM/ECCM: 10/10
Environmental Containment
Epsilon-2 laser (Rear)
Erenex computer
EWES-E LAMS (external)
HB-250 Pulse Cannon (turret F)
(2) MIRV-H heavy missiles (internal turret F)
(2) Quasar FIGs (F)

Levus

TECH LEVEL 6 COMPACT SKIMMER



VEHICLE STATISTICS

Cost: 56,800cr
Crew: 1 (4+eq)
Size: 3.6m L x 1.5 m W x 1.1m H (25)
Size Mod: +30/-10
Weight: 775kg
Max Weight: 1,080kg
Cargo: 390 (3)
Top Speed: 130m/s (468kph)
Range: 700km
Piloting Modifier: +30
Autopilot: Level 12
Acceleration: 12 m/s²

ARMOR

LOCATION	THR	AI
Front Armor	10	24
Front Left Armor	10	24
Rear Left Armor	10	24
Rear Armor	10	24
Rear Right Armor	10	24
Front Right Armor	10	24
Top Armor	10	46
Bottom Armor	10	47

COMPONENTS	THR	BP
Engine (reactor)	18	160
Engine (power system)	12	80
Lift Unit	10	32

EQUIPMENT

Laranet computer
VR Wrap Virtual Viewing System

DESCRIPTION

The Levus skimmer is an advanced Chatilian design, used by the well-to-do on Chatil and other civilized worlds. It is capable of extremely high speeds, is composed of a high-strength advanced Flex steel composite, and allows the occupant to rest comfortably as it travels. In fact, the vehicle is narrow and low because the pilot literally lies flat inside the craft. Chatilians find this position very natural, while others must orient themselves to driving while horizontal (-05 to Piloting checks until at least 10 hours of experience have been gained). The pilot's accommodations are very spacious for a Chatilian, and a size class 4 pilot—with equipment and/or body armor—can fit comfortably. The Levus is equipped with projection screens around the pilot's cabin which provide the illusion of windows by broadcasting a picture of the interior. At any time, these screens may be deactivated to provide complete privacy to the occupants, since the vehicle is equipped with a fully functional virtual viewing system.

Chatilians love to be alone in a single-seater skimmer, and the Levus is one of their favorites. Traveling at high, often reckless speeds is a must. Apparently, the faster one goes, the less likely a Chatilian can be bothered by stray thoughts of those around them, as their brains do not have time to lock onto a mind before it is out of their range. Therefore, being alone in a vehicle allows the Chatilian a welcome respite from the unmanaged minds around them, and the faster they go, the more soothing it becomes. Chatilians tend to be good drivers, but appear just as reckless as Orions.

TECH LEVEL 6 SKIMMER

Panther Light Battle Tank

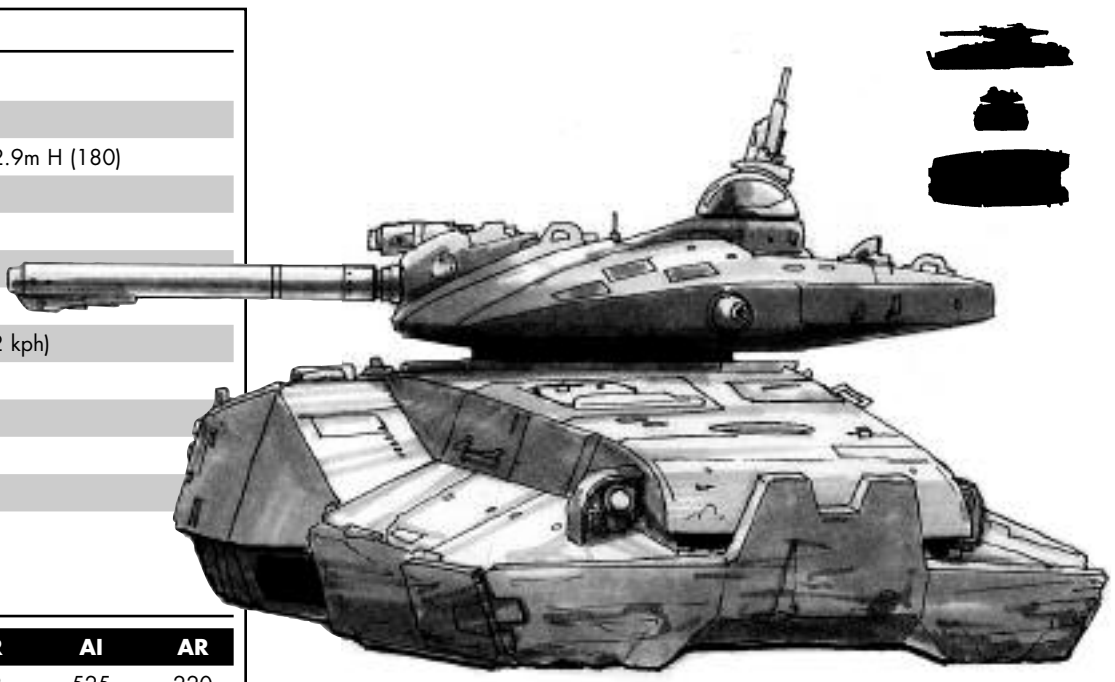
VEHICLE STATISTICS

Cost: 20.0Mcr
Crew: 3 (21+eq)
Size: 6.8m L x 2.8m W x 2.9m H (180)
Size Mod: +45/+05
Weight: 8,860kg
Max Weight: 10,500kg
Cargo: 2,080 (2)
Top Speed: 134 m/s (482 kph)
Range: 700km
Piloting Modifier: +15
Autopilot: Level 10
Acceleration: 4 m/s^2
Flux Shield: 15HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	3HP	525	220
Front Left Armor	3HP	500	220
Rear Left Armor	2HP	370	100
Rear Armor	2HP	370	100
Rear Right Armor	2HP	370	100
Front Right Armor	3HP	500	220
Top Armor	2HP	700	200
Bottom Armor	2HP	700	200
Front Turret	3HP	200	80
Left Turret	2HP	190	55
Right Turret	2HP	190	55
Rear Turret	2HP	170	55
Top Turret	2HP	250	90

COMPONENTS	THR	BP
Engine (reactor)	30	810
Engine (power system)	24	420
Lift Unit	25	450
Flux Shield Generator	40	40



DESCRIPTION

The Panther Light Battle Tank is produced by the Avron Corporation and exported to a variety of tech level 6 worlds for use in planetary defense forces. It operates with three crewmembers: a commander, pilot, and gunner. The commander operates the 360 degree laser turret (from his safe position within the main hull) and directs the crew on firing priorities. The pilot is responsible for the missile systems in addition to operating the vehicle. The gunner operates the main weapon assembly; while the main pulse cannon is recharging, he can continue to blast Flux shielded targets with the twin coaxial Flux Interference Generators. While this system is relatively effective in terms of offensive capability, it has been criticized for the lack of reactive armor and its inability to engage multiple infantry in heavy armor. However, the ability of this vehicle to operate at extremely high speeds makes it quite dangerous. Note that 20% of incoming shots strike the turret unless specifically aimed. There is a (+30/-10) modifier for shots directed at the tank's turret.

WEAPONS & EQUIPMENT

Atmosphere Supply
4 BC-Boomer Heavy Missiles (internal F)
Digiton Battle System
Environmental Containment
Gamma 4V laser (360, top turret)
LMDS-E LAMS (external)
(2) Quasar FIGs (turret F)
Relecon-2 computer
16 Saylon Warhead Reflex Missiles (internal F, fire 2/sec)
Venomous-2 Pulse Cannon (turret F)

PS-1 Personal Skimmer

TECH LEVEL 4 SKIMMER

VEHICLE STATISTICS

Cost: 19,300cr
Crew: 2 (10)
Size: 4.1m L x 1.6m W x 1.6m H (40)
Size Mod: +30/-10
Weight: 1,260kg
Max Weight: 2,000kg
Cargo: 1,150 (4)
Top Speed: 65 m/s (234 kph)
Range: 400km
Piloting Modifier: +05
Autopilot: Level 5
Acceleration: 3 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	3	18
Front Left Armor	3	17
Rear Left Armor	3	17
Rear Armor	3	18
Rear Right Armor	3	17
Front Right Armor	3	17
Front Top Armor	3	18
Rear Top Armor	3	18
Bottom Armor	3	40
Front Glass	3	8
Front Left Glass	3	5
Rear Left Glass	3	5
Rear Glass	3	7
Rear Right Glass	3	5
Front Right Glass	3	5

COMPONENTS	THR	BP
Engine (reactor)	8	96
Engine (power system)	5	48
Lift Unit	5	50

EQUIPMENT

Reliance computer

DESCRIPTION

One of the first mass-produced skimmers, this vehicle can carry two people in relative comfort and safety. There is nothing remarkable about this vehicle.

(Since that was the lamest description in this book, we'll embellish it a bit below. I guess Louis must have been tired when he wrote this one)—Editor

Very few pieces of military technology have been adopted by civilian manufacturers as well or as widely as the anti-gravity platform. The rise in popularity of the skimmer has changed the way cities and planets dealt with transportation across the Alliance. Though available to the military for some time, and later only to the very wealthy, breakthroughs in the manufacture of the major components of the a-grav platform by several manufacturers ignited the civilian skimmer market.

Though a bit awkward to control compared to more recent models, the PS-1 proved simple to fly and made the transition from wheeled vehicle to skimmer fairly easy for most drivers. Many older PS-1s have had the mandatory city traffic control systems retrofitted to them, since those systems didn't exist when the PS-1 was introduced. There is a thriving aftermarket parts market for the PS-1s, though it never attained the cult status of the Go since it was overshadowed by follow up models so quickly. PS-1s are still manufactured on many planets on the frontier.

A warning to drivers used to newer skimmers: PS-1s CANNOT drive over water, deeper than their normal lift height. The PS-1s first generation a-grav platform cannot work atop water.

TECH LEVEL 6 SKIMMER

Quartet

VEHICLE STATISTICS

Cost: 890,000cr
Crew: 4 (24+eq)
Size: 5.3m L x 2.2m W x 2.0m H (70)
Size Mod: +35/-05
Weight: 1,800kg
Max Weight: 2,700kg
Cargo: 480 (5)
Top Speed: 82 m/s (295 kph)
Range: 700km
Piloting Modifier: +05
Autopilot: Level 10
Acceleration: 3 m/s^2
Flux Shield: 2HP

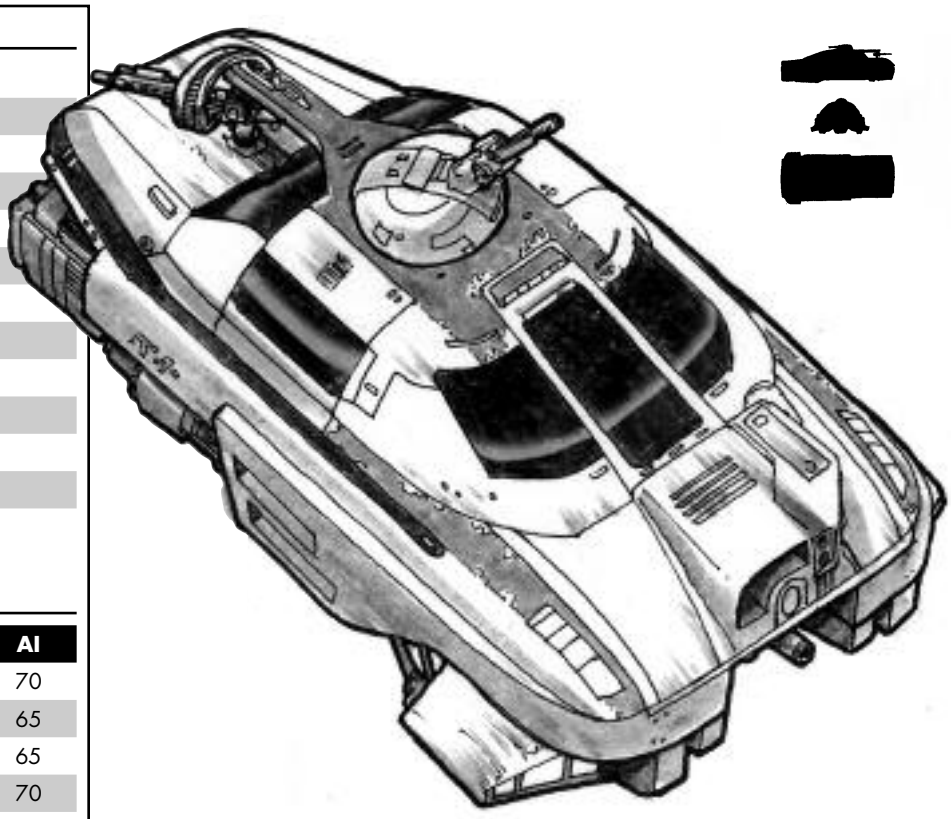
ARMOR

LOCATION	THR	AI
Front Armor	15	70
Front Left Armor	15	65
Rear Left Armor	15	65
Rear Armor	15	70
Rear Right Armor	15	65
Front Right Armor	15	65
Front Top Armor	15	65
Rear Top Armor	15	65
Bottom Armor	15	160
Front Glass	10	60
Front Left Glass	10	39
Rear Left Glass	10	38
Rear Glass	10	60
Rear Right Glass	10	38
Front Right Glass	10	39

COMPONENTS	THR	BP
Engine (reactor)	18	180
Engine (power system)	12	90
Lift Unit	10	80
Flux Shield Generator	30	36

WEAPONS & EQUIPMENT

(8) Digiton Warhead reflex missiles (ext. Encasement rack, F)
Doppler-1 Radar System
MG3 machine gun (Rear)
Relecon-2 computer
Vector-4E2 pulse cannon (F)
XRK-VG laser (360)



DESCRIPTION

The Quartet skimmer is used for reconnaissance missions in hostile areas. The pilot and forward gunner sit in the front; in back, facing the rear, are the turret gunner and rear gunner. This allows simultaneous engagement of up to four enemies (the pilot generally targets enemies with the reflex missiles when necessary). The external reflex missiles are in an Encasement rack (Thr 35), which is struck by 10% of attacks to the front left section. The turreted laser can fire at airborne targets, including those directly overhead.

Though a bit more heavily armed than the Hunter, the Quartet is still a get-in-get-out-quick type of vehicle. The flux shield is a helpful addition and gives the occupants a chance should they get noticed.

Ripple

TECH LEVEL 6 SKIMMER

VEHICLE STATISTICS

Cost: 9.6Mcr
Crew: 2 (10+eq)
Size: 5.5m L x 2.4 m W x 2.1m H (90)
Size Mod: +40/+00
Weight: 3,860kg
Max Weight: 5,040kg
Cargo: 1,820 (1)
Top Speed: 75 m/s (270kph)
Range: 700km
Piloting Modifier: +30
Autopilot: Level 10
Acceleration: 2 m/s^2
Flux Shield: 5HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	175	140	72
Front Left Armor	100	90	27
Rear Left Armor	100	90	27
Rear Armor	100	90	27
Rear Right Armor	100	90	27
Front Right Armor	100	90	27
Top Armor	100	180	54
Bottom Armor	100	180	54

COMPONENTS	THR	BP
Engine (reactor)	30	300
Engine (power system)	24	150
Lift Unit	10	156
Flux Shield Generator	30	60
Missile Autoloader	5	30

WEAPONS & EQUIPMENT

Calsham-4V laser (F)
Dynatech Radar System
Environmental Containment
LMDS-E LAMS (external)
180 Reflex missiles (60 in rack, fire 15/sec)
Relecon-2 computer
Vector 4H pulse cannon (360)

DESCRIPTION

The Ripple class skimmer is a purely military vehicle used for fire support against massed infantry. It carries a reflex missile rack capable of firing 15 missiles per second with a 60 missile capacity. Any time it is not firing missiles, it may engage the autoloader which is capable of loading up to 6 missiles per second from the stockpile of 120 stored missiles. The built-in Dynatech radar system allows for tracking up to 6 targets at one time. This vehicle is typically loaded to the gills with reflex missiles and will go up like a fireworks display if its "cargo area" is breached. A standard load of 30 Mirv-System, 30 Sabot, 40 Horizon, and 80 Jack Rabbit missiles costs 6.8Mcr (the vehicle's cost, unloaded, is only 2.8Mcr). The weight of 180 missiles has already been factored into the vehicle stats.

A Ripple can throw a lot of hurt down range fast, but it can take more than five minutes to completely reload its missile bays; assuming a missile-laden cargo carrier is nearby that can use the Ripple's reloading equipment (included with the vehicle). Given its other weapons, the Ripple can also make a fairly effective anti-personnel weapons platform.

Note: There is a 20% chance that any hit to the cargo area will strike the autoloader.

TECH LEVEL 5 SKIMMER

Sentry Police Skimmer

VEHICLE STATISTICS

Cost: 62,000cr
Crew: 2 (10+eq) + 1 (8)
Size: 4.8m L x 2.0m W x 1.8m H (60)
Size Mod: +35/-05
Weight: 2,110kg
Max Weight: 3,900kg
Cargo: 2,540 (5)
Top Speed: 126 m/s (454kph)
Range: 550km
Piloting Modifier: +00
Autopilot: Level 8
Acceleration: 10 m/s²

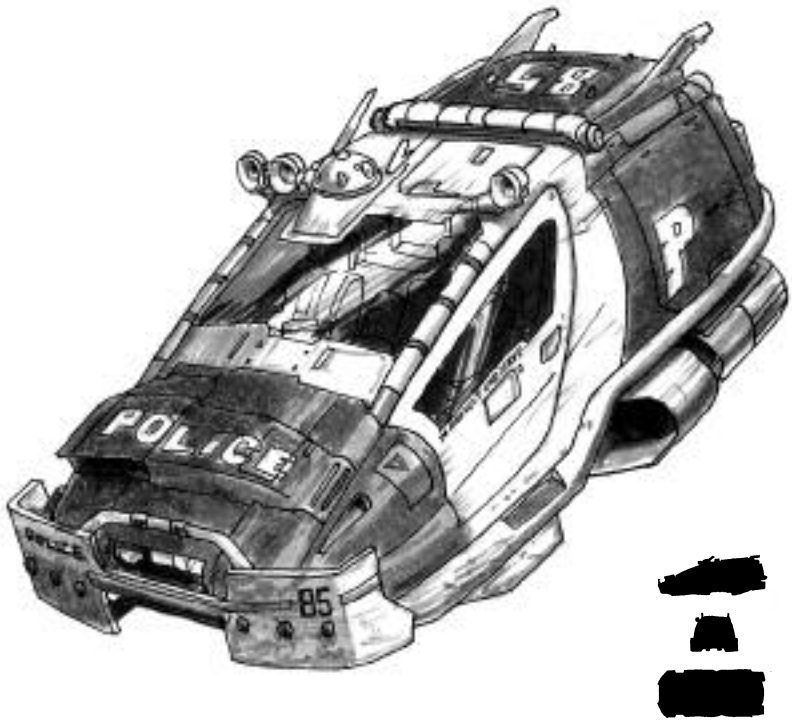
ARMOR

LOCATION	THR	AI
Front Armor	10	55
Front Left Armor	10	50
Rear Left Armor	10	55
Rear Armor	10	60
Rear Right Armor	10	55
Front Right Armor	10	50
Front Top Armor	10	50
Rear Top Armor	10	50
Bottom Armor	10	120
Front Glass	8	40
Front Left Glass	8	26
Front Right Glass	8	26

COMPONENTS	THR	BP
Engine (reactor)	12	225
Engine (power system)	8	105
Lift Unit	7	91
Security Partition	10	30(AI)

EQUIPMENT

Erenex computer



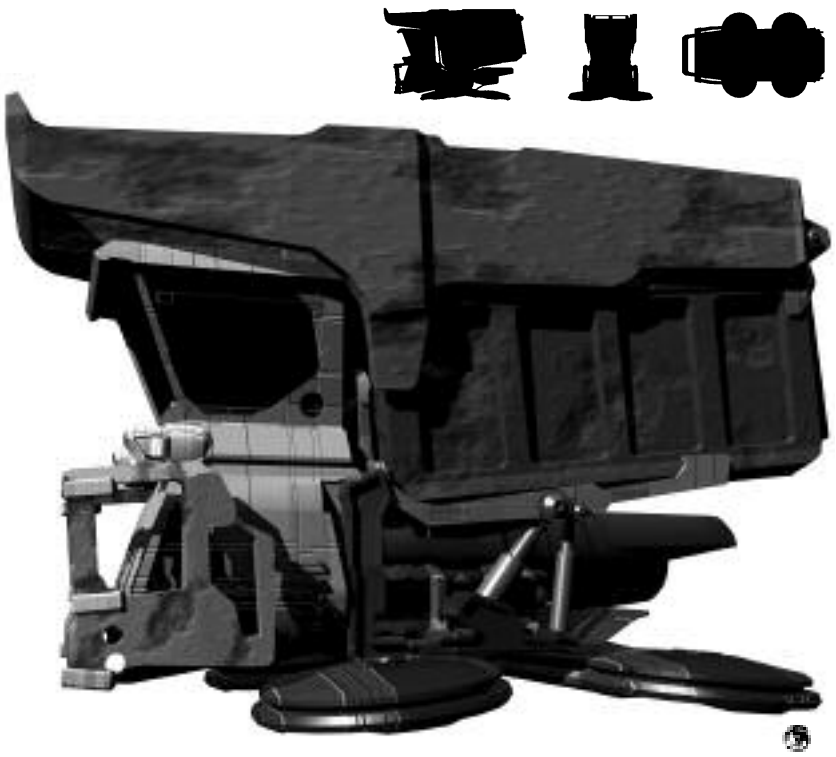
DESCRIPTION

The Sentry police skimmer is designed to carry up to 2 size class 5 officers and 1 prisoner (of any size up to 8). It is a typical example of a skimmer encountered on tech level 5 worlds. The police possess superior speed and armor when compared to most civilian vehicles, allowing them to pursue and catch Battlelords who are carelessly caught when committing crimes (Tell me this doesn't happen to your group). There is a security partition to protect the officers from the prisoner; however, it is not invulnerable. The use of force cuffs and removal of all harmful objects is standard procedure before placing a prisoner in the vehicle. In addition, the prisoner is placed into the vehicle in a horizontal position, face down. Note that this vehicle does not have rear or rear side windows, making it especially difficult to escape. A virtual reality viewing system covering the rear is used to pilot the vehicle.

The Sentry has become a very popular design because of its speed, quickness, and rugged body. Different departments outfit them with a myriad of accessories, from a multi-atmosphere prisoner chamber to traffic grid override systems. A police skimmer's computer is notoriously difficult to hack (level 22 Bypass Security check), and on some planets police vehicles maintain a remote kill switch for any registered vehicle in their jurisdiction to prevent any chance of a chase. The kill switch is easy to bypass (level 7 Bypass Security), but finding it is another story (level 17 Skimmer Repair check).

SkimDump (Dump Truck)

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 144,000cr
Crew: 2 (10)
Size: 5.9m L x 2.5m W x 2.8m H (160)
Size Mod: +45/+05
Weight: 5,825kg
Max Weight: 15,300kg
Cargo: 18,570 (30)
Top Speed: 46 m/s (166 kph)
Range: 550km
Piloting Modifier: -05
Autopilot: Level 5
Acceleration: 1 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor (body)	4	105
Front Left Armor	4	110
Front Right Armor	4	110
Rear Armor (body)	4	120
Front Top Armor	4	120
Bottom Armor	4	220
Rear Left Armor	4	90
Rear Right Armor	4	90
Front Armor (bed)	4	80
Rear Armor (bed)	4	70
Front Glass	3	19
Left Glass	3	12
Right Glass	3	12

COMPONENTS	THR	BP
Engine (reactor)	12	390
Engine (power system)	8	180
Lift Unit	7	350
Truck Bed Lifting Mechanism	7	150

EQUIPMENT

SkimComp computer

DESCRIPTION

This vehicle is used to move heavy loads such as concrete, sand, or other construction materials. Much like the 20th century dump truck, it can release its load off the back end of the truck. Because the cargo bed is mounted on the back of the truck frame, the bed has separate armor from the rest of the vehicle. Incoming fire has a 38% chance of striking the bed rather than the truck body. Any shot which strikes the bed will affect its cargo if it penetrates. All shots that strike the truck body use the normal location table: however, there is no cargo area, so these results should be considered to be Lift Unit hits. Note that the bed has no top armor; also, it is possible to strike the bed lifting mechanism only if the bed is elevated (if the bed is hit when it is up, there is a 50% chance that the mechanism is actually struck). The mechanism may be targeted (if elevated) with a modifier of +30/-10. When fully loaded, this vehicle's acceleration is cut to 1/3 m/s^2.

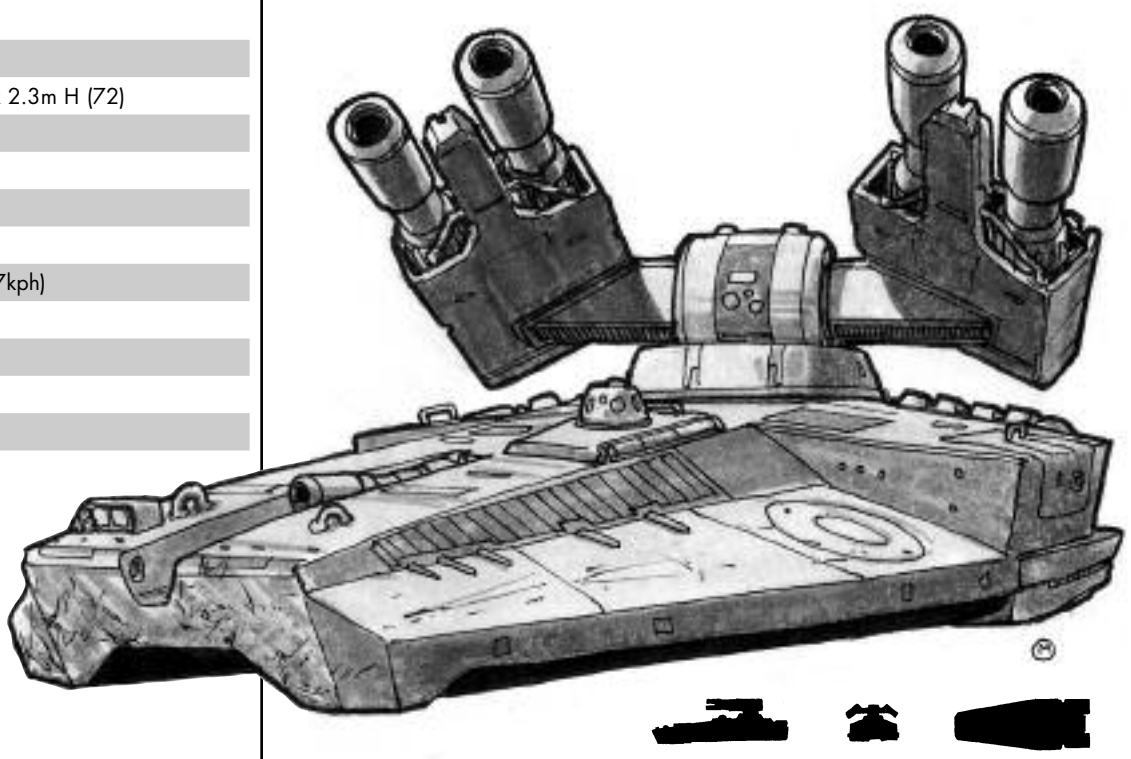
Note: It is not normally possible to strike the front armor of the bed unless the bed is elevated or the shot is made from above, as this section is shielded by the truck. Re-roll any hit locations that the BM determines do not make sense.

TECH LEVEL 5 SKIMMER

Street Sweeper

VEHICLE STATISTICS

Cost: 7.1Mcr
Crew: 2 (12+eq)
Size: 4.7m L x 2.2m W x 2.3m H (72)
Size Mod: +35/-05
Weight: 2,590kg
Max Weight: 3,300kg
Cargo: 470 (0)
Top Speed: 63 m/s (227kph)
Range: 550km
Piloting Modifier: +15
Autopilot: Level 8
Acceleration: 2 m/s^2
Flux Shield: 3HP



ARMOR

LOCATION	THR	AI	AR
Front Armor	1HP	95	17
Front Left Armor	1HP	95	17
Rear Left Armor	1HP	95	17
Rear Armor	1HP	95	17
Rear Right Armor	1HP	95	17
Front Right Armor	1HP	95	17
Top Armor	1HP	180	35
Bottom Armor	1HP	180	35
Front Turret	1HP	34	6
Left Turret	45	42	3
Right Turret	45	42	3
Rear Turret	45	32	2
Top Turret	45	65	4

COMPONENTS	THR	BP
Engine (reactor)	12	150
Engine (power system)	8	70
Lift Unit	7	77
Flux Shield Generator	30	35

DESCRIPTION

The Street Sweeper has only one use: to kill large numbers of infantry in short order. It uses quad PAWS to engage and destroy enemies (or unruly slaves, protestors, gamers, or other undesirables). It also carries a BC-Ballista for use against heavy armor. By using its onboard ECM booster, it can generate up to 75 points of ECM for protection against missile fire.

Though designed for mowing down hordes of enemy cannon fodder, the Street Sweeper can also make a great urban combat weapon. Its pulse weapons can reduce buildings to rubble quickly and pound away any cover your unfortunate enemy has sought out. As with any urban environment, it still requires infantry support to thrive, but its flux shield affords some protection against anti-armor missiles; just enough to allow it to bring its considerable firepower to bear on the target.

WEAPONS & EQUIPMENT

BC-Ballista Pulse Cannon (F)
Dissector LAMS
ECM/ECCM: 50 (75)/10
ECM Booster
Erenex computer
2 PAWS Batteries (+400 shots)
4 V4G PAWS (F)

There

TECH LEVEL 5 SKIMMER

VEHICLE STATISTICS

Cost: 120,000cr
Crew: 2 (12)
Size: 6.7m L x 2.9m W x 3.0m H (175)
Size Mod: +45/+05
Weight: 3,670kg
Max Weight: 13,200kg
Cargo: 18,580 (60)
Top Speed: 44 m/s (158 kph)
Range: 550km
Piloting Modifier: -05
Autopilot: Level 8
Acceleration: 1 m/s²

DESCRIPTION

"When it just has to be THERE." That's the slogan Rockwell uses to promote sales of the oddly-named There skimmer. Despite the marketing campaign, this is nothing more than the modern delivery truck. It features a large cargo area and a roll-up door in the back. It is great for transporting several palette-equivalents. They are typically white with advertising on the vertical sides.

Common modifications to this truck include adding additional seating in the back (for 500cr, seating can be purchased for a total of 40 size class in heavy armor, or 50 size class in body armor). It costs 500cr to install two firing ports per side in the cargo area of the vehicle. When this vehicle is loaded to at least half its cargo capacity, its acceleration is cut to 1/2 m/s².

The There is one of the most stolen vehicles on the frontier. Too often, a pack of Battlelords are fleeing from a mission gone bad, and the only vehicle nearby which will fit them all, plus the unlooted corpses they are carrying, is a There. Luckily for the police, once found, a There full of Battlelords is fairly easy to stop. Generally, a few pulse cannon blasts into the front cabin will take care of the controls and the driver.

EQUIPMENT

Erenex computer

ARMOR

LOCATION	THR	AI
Front Armor	4	90
Front Left Armor	4	85
Rear Left Armor	4	90
Rear Armor	4	100
Rear Right Armor	4	90
Front Right Armor	4	85
Front Top Armor	4	85
Rear Top Armor	4	85
Bottom Armor	4	195
Front Glass	3	11
Front Left Glass	3	7
Rear Left Glass	3	7

COMPONENTS	THR	BP
Engine (reactor)	12	360
Engine (power system)	8	120
Lift Unit	7	310

TECH LEVEL 7 SKIMMER

Tiger III Main Battle Tank

VEHICLE STATISTICS

Cost: 104Mcr
Crew: 3 (15+eq)
Size: 7.5m L x 3.3m W x 2.9m H (240)
Size Mod: +50/+10
Weight: 11,325kg
Max Weight: 12,240kg
Cargo: 1,020 (5)
Top Speed: 59 m/s
Range: 800km
Piloting Modifier: +20
Autopilot: Level 18
Acceleration: 1 m/s^2
Flux Shield: 75HP

ARMOR

LOCATION	THR	AI	AR
Front Armor	12HP	1375	17HP
Front Left Armor	12HP	1375	1650
Rear Left Armor	6HP	950	6HP
Rear Armor	6HP	950	6HP
Rear Right Armor	6HP	950	6HP
Front Right Armor	12HP	1375	1650
Top Armor	6HP	19HP	12HP
Bottom Armor	6HP	19HP	12HP
Front Turret	12HP	220	280
Left Turret	6HP	2HP	60
Right Turret	6HP	2HP	60
Rear Turret	6HP	150	45
Top Turret	6HP	3HP	90

REACTIVE ARMOR			
LOCATION	THR	MDC	AI
Hull Sides	8	5HP	43
Turret Front/Rear	8	5HP	8
Turret Sides	8	5HP	10
Turret Top	8	5HP	15

COMPONENTS	THR	BP
Engine (reactor)	40	560
Engine (power system)	30	280
Lift Unit	35	625
Flux Shield Generator	50	80

DESCRIPTION

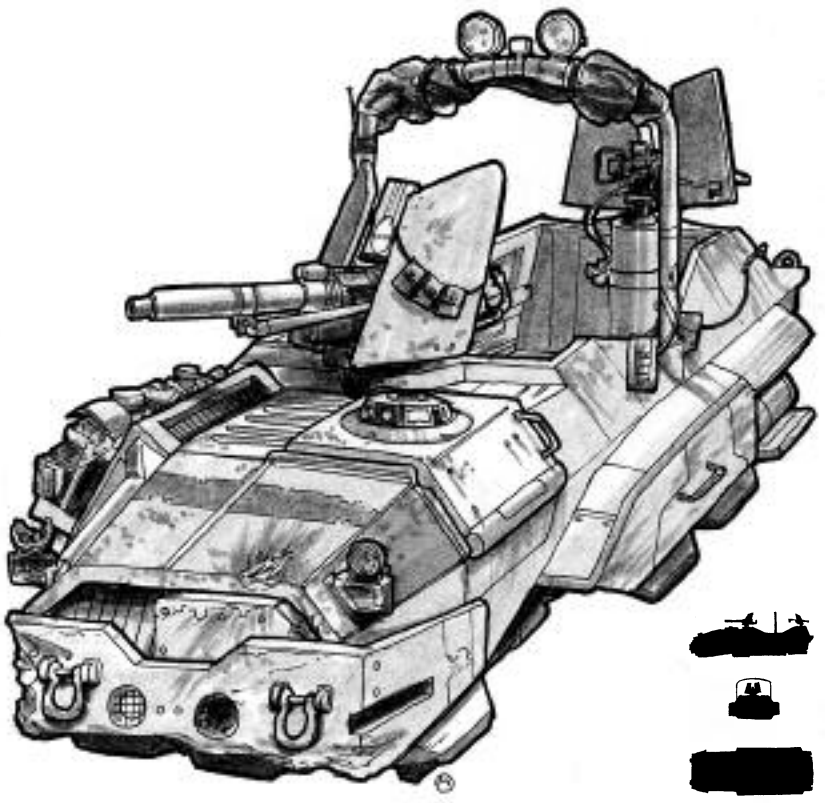
The Tiger III Main Battle Tank is one of the most powerful combat units ever produced by the Alliance. Using the most modern technology, it can kill enemy vehicles at long range with its complement of missiles and a Champion PCS in its heavy turret. The turret on the Tiger III is relatively small and is hit by 10% of incoming fire; aimed shots against the turret have a (+30/-10) modifier. Aimed shots at the body of this tank have a (+45/+05) size modifier. While the Tiger III is extremely powerful, it has been criticized for its armor configuration, which leaves the rear and flank of the vehicle somewhat exposed—if enemy fire manages to bring down the 75HP Flux shield. Each reactive armor plate on the Tiger III's hull costs 300,000cr to replace, while those on the turret cost 70,000cr each to replace.

WEAPONS & EQUIPMENT

Achilles FIG (Turret)
Atmosphere Supply
5 BC-Boomer Missiles (F)
5 BC-Typhoon Missiles (F)
Cerulean Computer (+1,000CC, 5 Weapon Interface Modules)
Champion PCS (Turret)
(2) Defense K-Sat Bays
Digiton Battle System
ECM: 60%
Environmental Containment
Excellcior Impact Laser (Turret)
(2) Freewill-I LAMS (F/B)
H-80 PCS (F)
Mega K-Sat Bay
(2) Nike Hercules 4 SAMS (Top)
Phase Nullification System
Proximate pAI
(2) Quasar FIGs (F)
Radio (long range)
12 Saylon Warhead Missiles (F)

Trident Attack Skimmer

TECH LEVEL 6 SKIMMER



DESCRIPTION

The Trident attack skimmer is typically used by paramilitary forces conducting hit-and-run raids. It has an unusual configuration in which the pilot is totally enclosed (using a virtual reality system for external viewing) and two gunners sit in a partially exposed rear bed. There is a heavy tripod which allows the BC-Ballista to fire in a 180 degree foreward arc (45 degree max elevation). The second gunner typically fires a personal tripod-mounted weapon at enemy personnel. Any shot at this skimmer from the sides, rear, or top has a 40% chance of striking the exposed bed of the vehicle. Side or rear shots striking the bed have a 75% chance of bypassing the armor and hitting the crew or weapon directly. For the purposes of aimed shots, consider the exposed crew to have 25% cover. If the exposed crew takes cover and does not return fire, they gain 75% cover from the armor. Note that there is not enough room for the crew to wear heavy or mechanized armor.

Though popular with mercenary crews for its versatility, and ease of use, the Trident's exposed gunnery area has led to all sorts of field modifications. Often the gun's shields are enlarged, or a frame is erected over the gunnery compartment and covered with a mesh to make it harder to lob grenades inside. It is quick and easy to get out of which can make a difference in combat. Standard procedure is for the gunners to have some sort of PDS.

VEHICLE STATISTICS

Cost: 800,000cr
Crew: 1 (5+eq) + 2 (12+eq)
Size: 4.1m L x 1.8m W x 1.7m H (40)
Size Mod: +30/-10
Weight: 1,015kg
Max Weight: 1,620kg
Cargo: 280 (0.75)
Top Speed: 73 m/s (263kph)
Range: 700km
Piloting Modifier: +10
Autopilot: Level 10
Acceleration: 4 m/s^2
Flux Shield: 2HP

ARMOR

LOCATION	THR	AI
Front Armor	30	50
Front Left Armor	30	50
Rear Left Armor	30	30
Rear Armor	30	40
Rear Right Armor	30	30
Front Right Armor	30	50
Top Armor	30	55
Bottom Armor	30	80

COMPONENTS	THR	BP
Engine (reactor)	30	126
Engine (power system)	24	66
Lift Unit	10	48
Flux Shield Generator	30	36

WEAPONS & EQUIPMENT

Armored Cargo Box: Thr 15, AI 15
BC-Ballista Pulse Cannon (forward facing tripod)
Relecon-2 computer

TECH LEVEL 5 SKIMMER

Valiant

VEHICLE STATISTICS

Cost: 86,000cr
Crew: 4 (28) + 2 patients (14)
Size: 5.7m L x 2.5m W x 2.4m H (120)
Size Mod: +40/+00
Weight: 3,055kg
Max Weight: 5,400kg
Cargo: 2,790 (17)
Top Speed: 120 m/s (432 kph)
Range: 550km
Piloting Modifier: +15
Autopilot: Level 8
Acceleration: 6 m/s^2

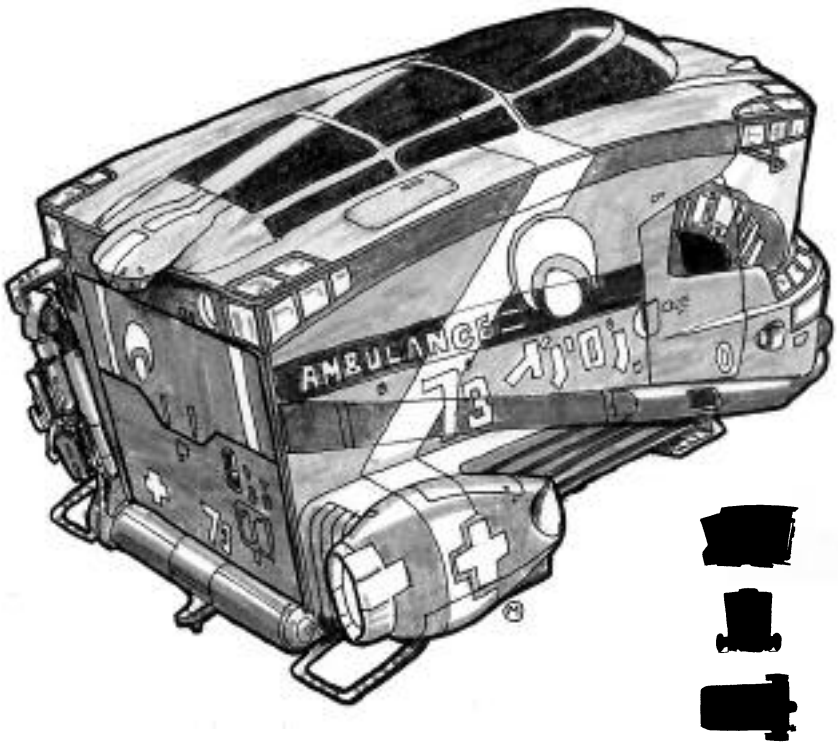
ARMOR

LOCATION	THR	AI
Front Armor	4	70
Front Left Armor	4	70
Rear Left Armor	4	70
Rear Armor	4	75
Rear Right Armor	4	70
Front Right Armor	4	70
Front Top Armor	4	70
Rear Top Armor	4	70
Bottom Armor	4	165
Front Glass	5	20
Front Left Glass	5	12
Front Right Glass	5	12

COMPONENTS	THR	BP
Engine (reactor)	12	300
Engine (power system)	8	140
Lift Unit	7	125

EQUIPMENT

Erenex computer
Patient Bay (size class 8)
Patient Bay (size class 6)



DESCRIPTION

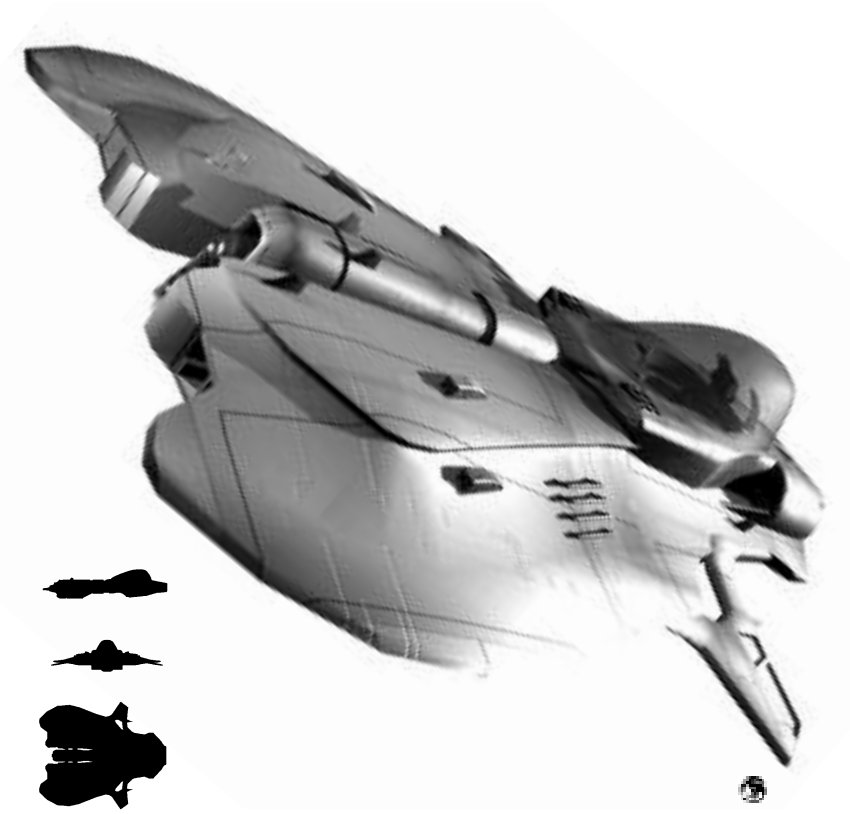
The Valiant skimmer is an ambulance found on most Alliance worlds. It carries a crew of 4 paramedics, can accommodate up to 2 patients in the rear, and has sufficient working space to allow treatment en route to medical facilities. The cargo area is generally half-filled with equipment.

The standard package of medical equipment includes 3 Paramedic Kits, a Surgical Kit, 2 Body Carts, a First Aid Kit, 2 doses of Blood Factor, 2 Blood Transfusions for each race commonly found on the planet, 5 Body Bags, 5 BRIs, 3 Massive BRIs, 2 Slap Bandages, and a Pneumatic Cast. See *Lock-N-Load: Armor, Equipment, & Cybernetics*. The cost of this package (approximately 74,000cr) is not included in the base vehicle price, and the encumbrance has not been deducted from the cargo capacity.

Valiant's have also been stolen so often by Battlelords, that many (85% chance) have been equipped with an anti-theft system that can be accesed by police or the ambulance company. Once it's been reported stolen, the authorities can send a signal to the anti-theft system which immediately slows the vehicle to a stop, turns on a homing beacon, and fills the cabin with a tranquilizing gas (-10 to Chemical SMRs; failure means d4 hours of unconsciousness). It requires a Level 12 Identify Vehicles check to find the device, and then a level 17 Defeat Security check to disable it.

Van'ith

TECH LEVEL 5 SKIMMER



VEHICLE STATISTICS

Cost: 485,000cr
Crew: 1 (7+hvy)
Size: 3.7m L x 1.4m W x 1.6m H (30)
Size Mod: +30/-10
Weight: 900kg
Max Weight: 1,640kg
Cargo: 350 (1)
Top Speed: 65 m/s (234kph)
Range: 550km
Piloting Modifier: +05
Autopilot: Level 8
Acceleration: 2 m/s^2
Flux Shield: 2HP

ARMOR

LOCATION	THR	AI
Front Armor	10	27
Front Left Armor	10	26
Rear Left Armor	10	26
Rear Armor	10	27
Rear Right Armor	10	26
Front Right Armor	10	26
Front Top Armor	10	26
Rear Top Armor	10	26
Bottom Armor	10	60
Front Glass	5	12
Front Left Glass	5	9
Rear Left Glass	5	9
Rear Glass	5	12
Rear Right Glass	5	9
Front Right Glass	5	9

COMPONENTS	THR	BP
Engine (reactor)	12	72
Engine (power system)	8	36
Lift Unit	7	42
Flux Shield Generator	30	35

WEAPONS & EQUIPMENT

Beta X Laser (F)
Erenex computer

DESCRIPTION

The Van'ith is an Eridani skimmer used by the Vax for traveling solo. It features a Flux shield and built-in laser system so that the Eridani is never caught unarmed. The pilot may be up to size class 7, and the seating is designed so that a warrior wearing heavy armor (but not mechanized armor) can operate the vehicle. If the pilot is not wearing heavy armor, the acceleration rises to 3 m/s^2 due to the lighter load.

The Van'ith is typically painted in garish colors, most often in red. Owners also tend to personalize them extensively, many times with artwork depicting their House's history spread across the vehicle's wide body. A Van'ith is usually adorned with an obnoxious name just like Eridani space vessels: *Inferiority Suppressor, Disembowler II, Mudig Master,* and other such nonsense. Images of the driver's sword are often displayed prominently as well (insert any phallic symbol reference here).

Any enterprising Goola Goola worth his beard knows to set up a Van'ith repair shop in any area where there are a lot of Eridani. Eridani tend to drive in as arrogant of a manner as they have in all other activities, so their Van'iths are constantly getting banged up as they drive where they please and run into what offends them.

TECH LEVEL 5 SKIMMER

Wasp

VEHICLE STATISTICS

Cost: 18,300cr
Crew: 1 (4+eq)
Size: 1.1m W x 3.4m L x 1.4m H (20)
Size Mod: +25/-15
Weight: 580kg
Max Weight: 960kg
Cargo: 540 (1)
Top Speed: 120 m/s (432kph)
Range: 550km
Piloting Modifier: +20
Autopilot: Level 8
Acceleration: 14 m/s^2

ARMOR

LOCATION	THR	AI
Front Armor	4	13
Front Left Armor	4	8
Rear Left Armor	4	10
Rear Armor	4	13
Rear Right Armor	4	10
Front Right Armor	4	8
Front Top Armor	4	8
Rear Top Armor	4	8
Bottom Armor	4	22
Front Glass	3	7
Front Left Glass	3	4
Rear Left Glass	3	4
Rear Glass	3	7
Rear Right Glass	3	4
Front Right Glass	3	4

COMPONENTS	THR	BP
Engine (reactor)	12	96
Engine (power system)	8	48
Lift Unit	7	24

EQUIPMENT

Erenex computer

DESCRIPTION

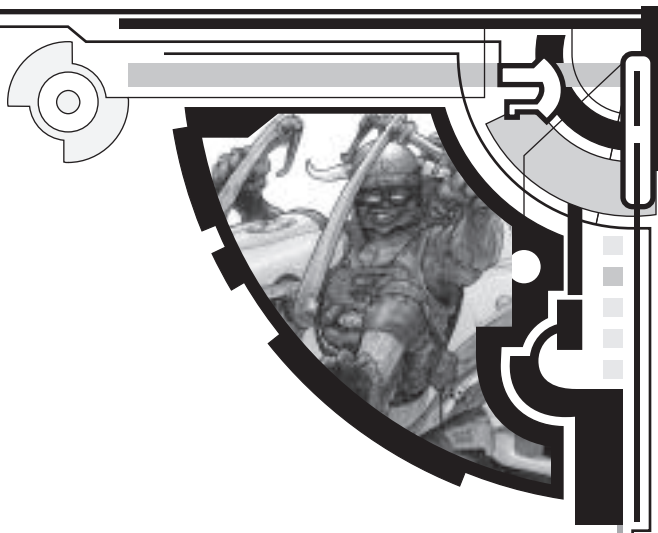
The Wasp skimmer is a step up from a skim-cycle for those who want a more enclosed feel. When coupled with the excessive speeds the vehicle reaches, it is easy to understand why this craft has been banned on many planets. However, it is common on Orion worlds. Due to the unusually vulnerable configuration of the Wasp, any shots which would normally strike the front or rear glass actually strike the armor. Any hits to left or right locations 9-16 bypass all armor and hit the crew compartment. Any hits to left or right locations 5-8 which penetrate the armor affect the engine compartment, instead of the crew compartment. Finally, any damage to top locations 8-13 bypasses all armor and affects the crew compartment instead.

The Wasp is statistically the most dangerous vehicle of its tech level to drive in any environment. It's not because of any design or mechanical flaws, but because it makes it so easy for a driver to use it recklessly. Effortless acceleration and a smooth ride often make it difficult for the driver to realize how fast they are going. Heavily modified Wasps make up the bulk of the Galactic Cycle Racing Association's skimcycle class and are favorites of skimcycle enthusiasts everywhere.

Unfortunately, on many planets, especially on the Core Worlds, the Wasp has been banned because of its misleading safety record. Still, in the open spaces of many frontier worlds, the Wasp is the vehicle of choice. Cheap, easy to repair and modify, and easy to learn to use, the Wasp is everywhere on the frontier.

CHAPTER 5

Ultra Armor • 5



In This Chapter...

Humpty Dumpties (also known as Ultra Armor or HDs) are manned behemoths representing the ultimate in personal combat ability. These machines use a blend of cybernetic and AI technology to interface pilot and machine, leading to incredible reaction times and the ability to engage multiple targets simultaneously. However, they are impractical as mass combat units due to their incredible expense. They are primarily used by command units, elite strike teams, and paramilitary forces to engage and defeat tanks and Arachnids.

The History of Ultra Armor

Eridani built the first walkers over a thousand years ago. The Swordsaints long ago adopted the policy of slavery as a means to strengthen the Eridani nation. Slaves (Unreals) were raised on Vulcahs (slave farms) in the great ice caves that permeate the hostile world of planetary Eridine. For centuries, the Eridani races cultivated Unreals, growing them like cattle, then transporting the slaves off to work camps in the deep mines, or sending them to slaughter for food. Historically, Mudig performed all menial tasks of Eridani society, working in factories, manual labor, etc. The middle class Eridani held administrative positions in charge of the Mudig while the wealthy took up the natural position of warriors. With the advent of space travel in 6524 B.C. and interstellar space travel in 5355 B.C., the Swordsaints briskly set out to expand their empire. Eventually, new races fell conquered and became slaves as the Eridani nation swelled across the Milky Way galaxy. An efficient system evolved: the Eridani warriors conquered inferior races and put them to work as slaves, thereby providing the economy with cheap labor. The middle class managed the resources and strengthened the economic base. More warships were thus built to conquer more foes, and the Eridani prospered.

Over time, the strain on manpower required that fewer warriors watch over greater numbers of slaves. To further complicate things, Eridine's continual changing of orbit caused tremendous weather changes, only exacerbating the problem of controlling the Unreals. Revolts generally took place in bad weather. At the same time, the Eridani went to war with the Phentari. They sought to build powerful battle armor systems to increase the survivability of their warriors because Phentari outnumbered Swordsaints three to one. Scientists and military minds came to a rare agreement on the requirement to build armor to suit all needs. Ultra Armor, in its walker form, was the byproduct of their joint efforts.

Cizerion Snare

The Cizerack first witnessed the might of walkers during the first Arachnid invasion. Eridani stormtroopers used these top secret devices to manage their war effort. An acting member of the Galactic Commonwealth, the Cizerack witnessed these formidable machines in action. The felines quickly realized the advantages they would assume if they could build a version of this weapon. Yet the Eridani worked diligently to keep the secrets of the walker hidden from others, thus maintaining an edge in weapons technology.

An Eridani convoy was ambushed by pirates in early 2109. One lone freighter, the *Emperor Wind*, survived, crippled and unable to make it to the nearest starbase. Her life support was failing and might not last until repairs were finished. Worse yet, a fire burned out of control in her engine room. All the other Eridani

◂ "Ok Flip, now listen. You're the only one left that's mobile enough to do this. Saronus and I will create a diversion down the street, and it'll head towards us. We'll give you the signal and all you have to do is pop up and let fly! Easy! Before he got vaped, Ulfar rigged the launcher to dump all four rounds when the trigger is pulled. Hold it steady 'cause it'll try and climb on ya. We also reprogrammed the safeties so the missiles will arm the moment they leave the tube... Don't worry, you've got your PDS on right? Flip?"

ships had been lost during the raid or had committed self-destruction to prevent looters from obtaining their cargo. The commander of the *Emperor Wind* radioed a distress call over military channels. The War Saw, an Akeeli-class battlecruiser, responded along with the Cizerion destroyer Savannah. Enroute, the *War Saw* was notified that Arachnids were attacking the Human world of Novice. The ship's log recorded the Captain's answer to the entire problem:

> "Emperor Wind. *This is the commander of the* War Saw. *We have accepted a challenge for battle! We sail with swords drawn into combat. Thus, we cannot assist you… You and your crew are warriors. Fate is, and has always been, that the strong and resourceful survive. The unfit shall perish. Should the latter be your fate then your brothers and sisters shall be apprised of your courage. We sail to war. We, the War Saw, sail to Victory! To Victory! Long live Eridani. Long live the Swordsaint nation…"*
>
> *End of Transmission.*

The Cizerack seized the opportunity and radioed that they would, if asked, come to the assistance of the mortally wounded ship. The commander of the *Emperor Wind* reluctantly agreed. The felines took their time, realizing that the longer they delayed, the more Eridani would perish. By the time they reached the crippled ship, only seventeen of her crew remained alive. The *Emperor Wind* had taken several direct hits amidships and was burning out of control. Her aft cargo bay glowed like a torch, engulfed in flames. Yet her forward bay remained intact. The Cizerack commander seized the initiative. She fired two simultaneous laser volleys – one into the bridge section where all of the survivors would probably be, and one at the communications rig. The first blast compromised the ship's hull integrity and sucked her crew into deep space. The second disabled communications as was desired. The Cizerack commander sent boarders to retrieve the contents of the forward bay, and after it was aboard fired a final barrage into the *Emperor Wind*, destroying the entire vessel.

The Cizerack had snared walker technology. Over the next 50 years, with the assistance of Gen-Human scientists, the cats developed a new variant, the crawler.

Suicide Jockeys

The operator of an Ultra Armor is called a suicide jockey because there is no automatic ejection system on board most Humpty Dumpties. If the Humpty "falls," then so does the pilot.

The jockey sits in the abdominal section of the vehicle in either an almost fetal position (walker) or lying flat (crawler) and is neurally interfaced with the armor's artificial intelligence module. His brain activities are actually plugged into and monitored by the onboard computer systems. He sees things through the eyes of a virtual reality control center which gives him a 3-D view of his surroundings. The operator moves the Humpty Dumpty by carrying out theoretical movement as he would if he were acting normally. The neural information is converted to its mechanical counterpart and fed to the armor's computer system where the machine executes the proper movements.

A suicide jockey is effectively plugged into his machine. He must undergo surgery. Jockeys have neural interfaces surgically implanted into their bodies at the junction of all major motor nerve centers. There are seven jacks implanted in the skull, twelve connected to the spine, four to each arm, and six to each leg. Neural information is transmitted across the jacks to a mental processor in the armor's brain where it is transformed into its electronic components. The artificial intelligence module relays that information to servo actuators which move in response to the pilot's actions. The jockey views the outside world through a virtual reality center inside the crew compartment of his Humpty Dumpty. He sees himself as he is, standing on the ground. If he looks one way, the upper torso of the HD turns that way. If he attempts to lift his leg, the armor lifts its leg. All actions work in simultaneous harmony between man and machine. Crawler operation is much the same, with the jockey's four limbs (or four chosen limbs, in the case of Ashanti and Phentari) corresponding to the four legs of the HD.

The Theater

Suicide jockeys ride their steeds into combat, blasting tanks and robots into pieces, watching the whole thing from the "theater." The theater is the crew compartment of the Humpty Dumpty. It is form fitting and filled with a variety of sensory equipment.

The jockey enters the chassis through the escape hatch, strapping himself into a vertical or horizontal console. Once he is strapped in, the pilot's umbilical wires that interface him with the armor's brain are automatically connected by the HD's computer. Sensor bands that line the pilot's sleeve-like "seat" pick up input from various extremities. Those connections are all he needs to pilot the HD, although there are manual controls which can be used in case of emergency (-50 to control checks). The process of connection takes approximately 15 seconds. The emergency console is mounted to the rear face plate of the escape hatch (in front of the jockey). Above him, to the right, is arms controlling the attachments of the neural net. Behind him is the VRS (virtual reality simulator), which processes the sensor input and feeds it into the pilot's brain. There are a variety of adjustments that the jockey can make to his HD with mental commands or slight movements.

The jockey uses a series of mental commands to activate and fire his HD's weapons. The appropriate weapon or tool appears before him in his simulated world. He aims at the target and the HD engages automatic targeting mode and fires. The primary surface for mounting heavy weapons on an HD is called the "anvil." Anvil mounts all have visual sensors. The suicide jockey only sees the world through a huge eye, instead of seeing his entire body in simulation. All anvil mounts are 360 degree engagement systems. Many veteran jockeys will tell you that the hardest thing to learn about operating Ultra Armor is realizing that you can see behind you. It is difficult to get used to simulating your head spinning around and all novice jockeys complain about pinched nerves in their necks. External mounted weapons such as Reflex missiles can also be fired by invoking the eye simulation.

Despite the relatively cramped conditions, Humpty Dumpties have comfortable "theaters" from which to operate. The console is designed as a form-fitting couch, allowing the jockey to sleep in place during extended deployments. Ultra Armors have food synthesizers onboard and facilities for taking care of the jockey's bodily functions built in. The suicide jockey may not wear any armor other than Street Clothes armor. A PDS may be carried, but its field, when activated, interferes with the neural link inflicting a -20 modifier to any activity.

Due to the high-tech direct brain interface and the computer system which prioritizes sensory input to the operator, Ultra Armor pilots gain

an initiative modifier which is listed in the vehicle description. This initiative modifier applies as long as the theater interface is operational, and does not "stack" with other bonuses which the jockey may have, nor with any thought-activated weapon bonuses. If the pilot's own initiative modifier (via Agility, Alertness, and Body Equilibrium) is better than that provided by the Ultra Armor, he retains the better modifier. The HD-provided initiative modifier is lost if the suicide jockey is forced to use the manual controls.

Optional Rule: The initiative bonuses from Body Equilibrium are applied in addition to those granted by an Ultra Armor.

A Man and His Horse

As a Human once said, "It is simply a love between a man and his horse." The same sentiment holds true for man and machine in the 23rd century. The jockeys who ride these great machines into battle share an almost reverent love for their Humpties. If your HD goes down, then so do you. This realization fosters a bond between man and machine. Ultra Armors usually carry para-artificial intelligence (pAI) modules, giving them something like a quasi-brain. Many HDs can speak and are programmed to simulate emotions.

In combat, the Ultra Armor can act independently of the jockey in many ways. At the pilot's command, the Ultra Armor will automatically engage enemies using any weapon system which is not currently being controlled by the jockey. The pAI controlling these systems has its own IQ, Intuition, and Gunnery skill in order to effectively defeat multiple threats. Unlike the pilot, the Ultra Armor's pAI can engage as many targets as it can track on radar or using visual sensors; typically, the jockey will operate the anvil weaponry while the pAI utilizes the remaining systems on "lesser threats." It is critical that allies of an active Ultra Armor have IFF (Identify Friend or Foe) systems turned on, as the pAI is typically ruthless in destroying "unknowns" when in free-fire mode.

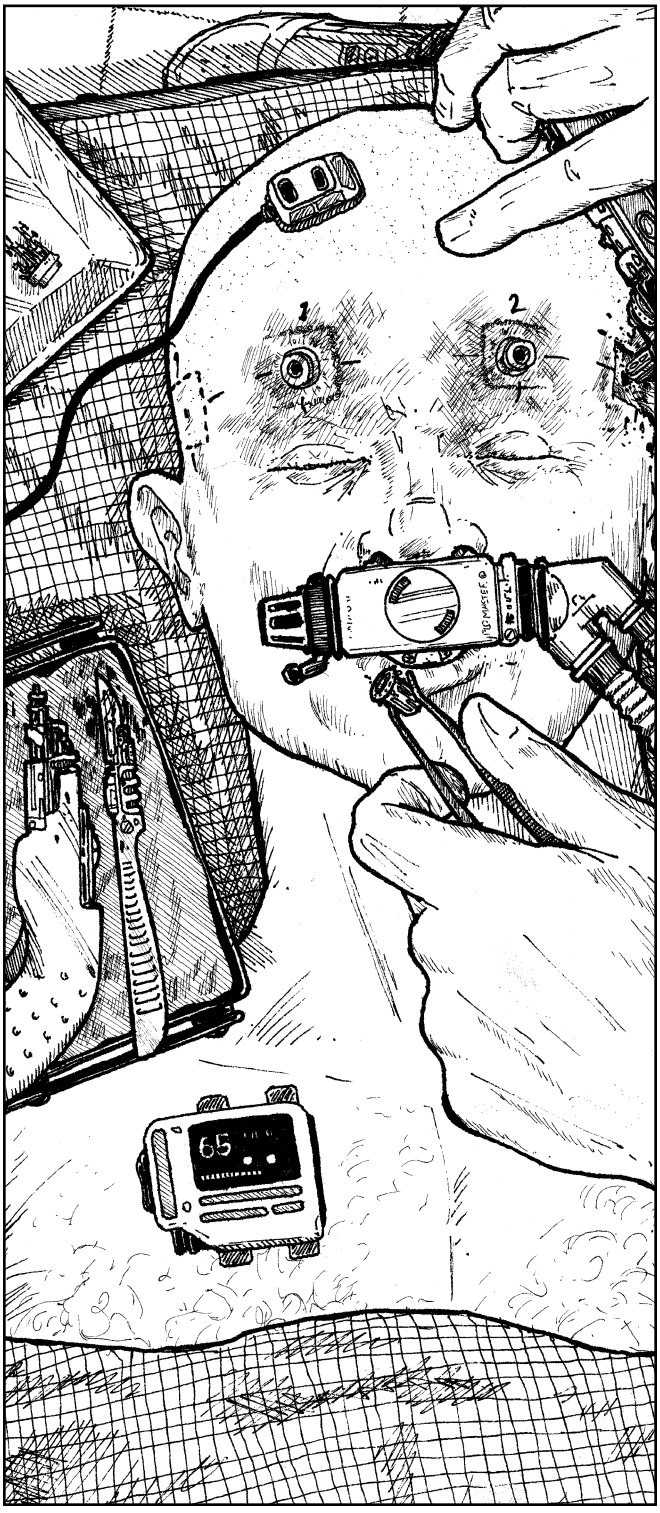
In game terms, the BM should allow the pilot of an Ultra Armor to use his skills for the normal number of actions per round, but the pAI's skills and abilities may be used for taking multiple simultaneous actions, up to the number of Actions listed in the Ultra Armor's statistics. For example, the Alorre has a Brilliance pAI capable of 5 actions per round. This allows it to fire up to 5 different weapons systems in a single round. It does not allow any individual weapon to be fired faster than its ROF.

Furthermore, if the jockey so desires, the pAI can even take over maneuvers, using its built-in Piloting skill. It will make rational decisions based on its vital statistics. pAIs for Ultra Armor essentially never malfunction or go "rogue", unless altered through illegitimate means (level 20+ Bypass Security checks required, and this alteration can only be accomplished from inside the theater).

Walking Billboards

Humpty Dumpties are prohibitively expensive to build. Very few people own their own private Ultra Armors. They just cost too much and aren't practical. Basically, you can buy a small spaceship for the cost of an HD. So why spend all the money on them in the first place? Ultra Armor represents the cutting edge of weapons/cybernetic technology. These lavish weapons systems prove that the integration of artificial intelligence, steel, and flesh can work together in a harmonious fashion. The future of weapons technology races along the path to discover the most potent methods of building such hardware. Ultra Armor has proven its worth on battlefields versus the Arachnid threat.

These machines are sold to the public sector. Why? Well, there are several reasons. First and foremost: companies compete in the private sector for a large portion of their business. Ultra Armor is the most effective means of advertisement. Humpty Dumpties are walking billboards, each painted with the company logo and each numbered. They are designed to lure the public into buying a company's products, more than the value of the unit in the field. Many have murals painted on them.



The Great Debate

Are they better than tanks? What are the benefits as well as liabilities of operating Humpty Dumpties? Their practicality is a subject of much contention and will be discussed at length in below. "HDs" are self-surviving entities designed to engage and defeat modern tanks and Arachnids. These combat units are made of layered Adamite steel, and are 4-10m in length (or height). They mount heavy weapons such as Pulse Automatic Weapons and Crown Stack heavy missile racks. All Humpty Dumpties maintain Flux shields.

There are two basic types of Humpty Dumpties: walkers and crawlers. Walkers are mounted on bipedal chassis. They stand anywhere from 5-10 meters tall and maintain an erect profile. Crawlers are quadrupeds, utilizing a four-legged chassis to facilitate operations.

One of the most powerful arguments in favor of the walker is its pronounced ability to mount multiple heavy weapons. It generally carries two main weapon systems, one on the anvil (top of the vehicle) and one in an arm section. The other arm usually maintains utility systems such as saws and flamethrowers to provide logistical balance. It should be noted that a walker can mount a weapon in both arms without penalty. This, however, minimizes the overall abilities of the Humpty Dumpty. The walker has the highest profile and is the easiest to spot at long range. It has good lateral motion, superior to any tank, but inferior to most crawlers. Liabilities: The walker doesn't handle well in rugged country and is inherently unstable as with all bipeds. It is quite susceptible to tipping over in inhospitable terrain and the driver must make frequent Piloting checks when operating under these conditions. Furthermore, any penetrating weapon hit that knocks out the walker's legs can put this type of Humpty Dumpty out of action. All non-bipedal creatures must undergo extended training to use this piece of equipment.

The crawler is arguably the more versatile of the Ultra Armors. It has a low silhouette, impeding radar and visual detection. The crawler's lateral mobility is outstanding, adding to its versatility. In addition, this type of HD can climb in terrain impassable to both tanks and walkers. Just as damage to the sensitive inertial grav system or treads can knock a tank out of action, the legs of a walker are by far its most vulnerable point. However, crawlers often sustain heavy damage to their legs and still maintain reasonable maneuverability. Only three of the four need function. Finally, many crawlers possess great leaping ability.

There are two major drawbacks to the crawler. The first is the limited amount of heavy weaponry that can be mounted to the chassis. The legs maintain a low profile. Mounting heavy weapons becomes impractical. Therefore, only the back (anvil) of this Ultra Armor mounts heavy weaponry. Lastly, the crawler is the most expensive to build. There is less of a demand for crawlers, pushing up the cost per unit to build them.

The debate rages continually over which type of Ultra Armor is the best. Duels between tanks, walkers, and crawlers have provided no conclusive evidence as to the superiority of one type of vehicle over the other. Much is dependent on the skill of the jockey who must ride his HD into the perils of combat.

Tanks are by far the cheapest, but suffer the greatest losses in this arena of high tech warfare. Walkers, while packing the deadliest punch ton for ton, require the most repairs and are lost far too often to superstructure damage. Crawlers cost the most to build. Still, most of the Alliance's subjects are bipedal, making it difficult for the masses to learn how to "crawl." Moreover, the idea of crawling into combat goes against the macho Gen-Human, Python, and Eridani egos that deeply support weapons proliferation.

It has been proven time after time that all manned vehicles are inherently superior to robots. Robots may be able to execute decisions faster, but their intuition capabilities are severely limited. The improvisational methods of true sentient beings have always undone the greater advantages of artificial intelligence found in robots. Ultra Armor is a blend of the two.

Standard Equipment

All Ultra Armor includes the following standard equipment: a sensor package that duplicates the effects of the Vizex armor option (see *Lock-N-Load: Armor, Equipment, & Cybernetics*) and night vision (negates darkness penalties to sighting checks in the visual spectrum); a fire extinguisher, altimeter, and field radio available in the theater; a Military Emergency Beacon embedded inside the chassis; a minimum radar package equivalent to the Dynatech radar system (see *Lock-N-Load: Armor, Equipment, & Cybernetics*), although many have even more powerful systems (listed in the individual description); and ECM of at least 10% (see the individual vehicle description for details). Environmental Containment and Atmospheric Supply options are also standard on all Ultra Armors.

Physical Combat

Operators of Ultra Armor (especially Eridani) are fond of "mixing it up" at very close range. This involves using their huge vehicles to punch, kick, and step on lesser beings. Some even trample "crunchies" (infantry) or use giant swords to cut enemies in half, mainly for the psychological effect.

A suicide jockey who wishes to engage in "hand-to-hand" combat may use his Hand-to-Hand Combat skill to increase his attack bonus, damage, and number of attacks. However, his effective skill is limited by his Piloting skill (i.e. if he has more levels of Hand-to-Hand Combat than he has Piloting, use the lower number to determine effects). The damage bonus from Hand-to-Hand Combat skill is multiplied by 5 when used with an Ultra Armor's physical attacks.

• **Example:** Rod-ican the Eridani has 18 levels of Hand-to-Hand Combat skill and 9 levels of Walker Piloting skill. When he uses the fist of his Budaish-Enk Ultra Armor to smash an Arachnid flat, he gains bonuses as if his Hand-to-Hand Combat skill were only 9 (since he has only 9 levels of Walker Piloting skill). Therefore, he gains a +36 to hit, +15 damage, and +2 extra attacks, as per *Battlelords of the 23rd Century* (Physical Skills, Hand-to-Hand Combat).

A few Ultra Armor pilots actually use giant versions of Archaic Hand Weapons in combat. Again, the pilot's effective skill is the lesser of his Archaic Hand Weapon skill or Piloting skill. As with Hand-to-Hand attacks, any skill bonus to damage is multiplied by 5 when using a Humpty Dumpty-size weapon.

It is remotely possible to strike an incoming missile (or anti-tank weapon) using the Ultra Armor's fist or hand weapon. The pilot must first beat the missile's initiative, which has a -(missile speed/50) bonus to the roll. Should this check succeed, a single punch, kick, or attack with a hand weapon may be made. The chance to hit will be -60 (for missile size) and further modified by the missile's speed (see Combat

ULTRA ARMOR MANEUVER EXAMPLES

MANEUVER	SPEED (M/S) 0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71+
Acceleration (1/4)	-5	-5	-5	-5	-5	-5	-5	-5	-5
Acceleration (1/2)	-4	-3	-3	-3	-3	-3	-3	-3	-3
Acceleration (Full)	-2	0	0	0	0	0	0	0	0
Avoid Creature-Size Object	-	1	2	3	4	5	6	7	8
Avoid Vehicle-Size Object	-	5	7	9	11	13	15	17	19
Crouch (Walker)	6	-	-	-	-	-	-	-	-
Deceleration (1/4)	-	-3	-3	-3	-3	-3	-3	-3	-3
Deceleration (1/2)	-	-1	0	1	2	3	4	5	6
Deceleration (Full)	-	1	2	3	4	5	6	7	8
Dodge (Missile)	Spec	Spec	Spec	Spec	Spec	Spec	Spec	Spec	Spec
Evasive (-05)	-	5	6	7	8	9	10	11	12
Evasive (-10)	-	12	13	14	15	16	17	18	19
Evasive (-15)	-	21	22	23	24	25	26	27	28
Jump (Short Distance)	5	7	9	11	13	15	17	19	21
Jump (Long Distance)	-	10	12	14	16	18	21	23	25
Stand Up after Fall	3	-	-	-	-	-	-	-	-
Stand Up from Crouch	1	-	-	-	-	-	-	-	-
Turn (Abrupt)	-5	-1	0	1	2	3	4	5	6
Turn (U-Turn)	-4	2	5	8	11	14	17	20	23

Modifiers in *Battlelords of the 23rd Century*). If the attack is successful, the incoming missile is automatically destroyed. Such an attempt may be made only once per round, and only if no other physical attacks have been made.

• **Example:** A Doltharian fires an Impact-5 anti-tank missile at Rod-Ican from 300m away. His LAMS engages the missile, but fails to destroy it. Just before it reaches him, Rod-Ican tries to cleave the missile in twain with his plasma sword. He makes an initiative check (he has a -8 modifier due to 115 Agility, 3 levels of Alertness, and 10 levels of Body Equilibrium) and rolls a (2-8) = -6; the missile has a -8 modifier due to speed (400 m/s) and rolls a (9-8) = 1 initiative. Rod-Ican gets to act first. He needs a (75 (chance to hit with sword) + 80 (20 levels of Archaic Hand Weapon skill) + 14 (Agility bonus) – 60 (missile size) – 120 (400 m/s speed penalty)) = -11 to hit. Looks like this sword vs. missile stuff isn't that great after all! However, Rod-Ican rolls an 01 and chops the missile in half anyhow, giving him the chance to boast about his ultimate prowess.

Piloting Ultra Armor

Ultra Armor pilots face very different maneuverability challenges than pilots of "regular" vehicles. The Ultra Armor is linked directly to the jockey's nervous system, enabling incredible reaction times augmented by the vehicle's pAI. In addition, the fact that the armor walks across the ground allows the vehicle to accelerate or decelerate very rapidly. However, obstacles on the ground such as trees, mud, or trenches can cause a great deal of difficulty. As a basic rule, if a character would not be required to make an Agility check in a specific situation, you will not need to consult the Piloting check table to perform the maneuver.

All walker Ultra Armors accelerate at 10 m/s^2 and decelerate at 15 m/s^2. Crawler vehicles accelerate at 15 m/s^2 and decelerate at 20 m/s^2. However, applying maximum deceleration may cause instability in the event of a failed Piloting check (see the Loss of Control section).

Any Piloting check with a difficulty less than one is automatically successful unless the jockey is unskilled or a penalty has been applied due to the situation. Since all jockeys are surgically altered, an unskilled pilot who lacks the surgical alterations can only control a Humpty Dumpty manually after significant modifications to the computer system (Level 15 Bypass Security and Level 12 Computer Programming will be necessary). Manual operation of an Ultra Armor negates any initiative bonuses and causes a -50 on all Piloting checks (in addition to any penalty for an unskilled operator).

Because of the nature of Ultra Armor, it is never necessary to make a Piloting check to move straight or to execute a slight turn. In addition, stationary HDs can perform a sideways step with no check necessary.

When combining two maneuvers in the same second, the total difficulty is equal to the more difficult of the two maneuvers, plus 1/2 of the difficulty for the second maneuver. The BM may rule that two specific maneuvers may never be combined.

Maneuver Definitions

1/4 Acceleration, 1/2 Acceleration, Full Acceleration: Piloting checks are usually only necessary for these maneuvers when the HD has been severely damaged.

1/4 Deceleration, 1/2 Deceleration, Full Deceleration: Piloting checks are usually only necessary for these maneuvers when the HD has been severely damaged, is operating under unsafe conditions, or is moving at high speed.

Abrupt Turn: Attempting to change direction by 45-90 degrees in a second.

Avoid Creature-Size Object: This maneuver is attempted if the pilot needs to avoid a target (of size class 8 or less) that has moved directly into the HD's path and is less than 1 second away at current speed. The check will be more difficult if the target is actively trying to collide with the Ultra Armor. A stationary target more than 1 second away can automatically be avoided.

Avoid Vehicle-Size Object: This maneuver is attempted if the pilot needs to avoid a vehicle-sized target that has moved directly into the HD's path and is less than 1 second away at current speed. The check will be more difficult if the target is actively trying to collide with the Ultra Armor. A stationary target more than 1 second away can automatically be avoided.

Crouch (Walker): Attempt to position a walker in a crouching or "on one knee" position.

Dodge (Missile): The cybernetic interface of Ultra Armor is so fast that it is possible for the pilot to actually avoid incoming missiles (including anti-tank missiles). This maneuver must be declared just before the missile's attack roll is revealed to the player, but after all LAMS and other counter missile fire has been resolved. The Piloting check has a difficulty equal to 3+ (missile speed/50) + 1 per 10m/s of the Ultra Armor's current speed. For each additional missile in the same round, the level of the check is 4 higher.

• **Example:** Rod-Ican is about to be hit by a Saylon Warhead missile. His LAMS and Flux shield are down—it's all or nothing! He is currently moving at only 5m/s, so the check will be (3+ (800/50)) = Level 19 difficulty. Rod-Ican has only 10 levels of Walker Piloting skill, so his chance to succeed is 50 – 190 (level 19 check) + 100 (skill) + 14 (Agility) = -26%! He needs to roll a 01 to succeed, but rolls an 18… At least he died in combat, like a true warrior.

Jump (Short Distance): An Ultra Armor may attempt to jump over things, despite its massive weight. A short jump is up to 1/3 the HD's current speed in meters (for a jump from very low speeds, an Ultra Armor may always travel half of its height or length in meters, whichever is greater). This is the horizontal distance – the vertical height of the jump will be only 1/10 as high.

Jump (Long Distance): A long distance jump is any jump which is greater than the distance of a short jump, but less than the maximum jumping distance (3/4 of the Ultra Armor's current speed). The height of the jump is 1/10 of the distance traveled.

• **Example:** A Balrog HD is 5m high, so it may travel up to 1/3 of its current speed or 2.5m with a short jump (whichever is greater). As a long jump, it may travel up to 3/4 of its current speed.

Evasive: Utilizing these maneuvers will cause incoming fire to sustain the listed penalty (-05, -10, or -15) for a full round.

Reverse: Maneuvers performed while the Ultra Armor is moving backwards are at a +2 level of difficulty.

Stand Up after Fall: Attempting to get back up after an HD has fallen can be challenging, especially if the unit is damaged. Standing up requires 2 half actions.

Stand Up after Crouch: It is easier to get out of a crouched position than to successfully get into one, but it still requires a Piloting check.

U-turn: Attempting to reverse direction entirely. This requires 2 half actions if the unit is moving more than 15m/s.

Situational Modifiers

All Ultra Armor Piloting check penalties must be decided by the BM. Some suggested modifiers are given here for reference.

SITUATIONAL MODIFIERS

SITUATION	PILOTING CHECK MODIFIER
Damage to Legs	See Critical Hit effects; no penalty if no critical hits
Forested areas	-30 to -80
Hard Terrain (road, dirt, etc)	N/A
Ice Fields	-30 to -80
Low/High Gravity	+50 to -100
Ropes/Restraints around limbs	-10 to -150
Significant Debris/Obstacles (building rubble, corpse mounds, etc)	-30 to -100
Soft Ground (mud, bog, etc)	-10 to -40
Steep Incline	-10 to -100
Stream/River/Lake	+50 to -50
Swamp/Marsh	-10 to -80
Trench / Holes	-20 to -100
Underbrush	-10 to -50

When piloting an Ultra Armor, there are only a few types of control failures that can occur:

Failed to avoid obstacle: When a character fails a Piloting check to avoid an obstacle, the HD collides with that obstacle. A walker HD also falls over if the check was failed by 30 or more (or on a natural 100), while a crawler will only fall over if the check was failed by 50 or more (or on a natural 100).

Failed to take evasive action: When failing an attempt at evasive action, your opponents suffer no penalty to hit. A walker HD also falls over if the check was failed by 30 or more (or on a natural 100), while a crawler will only fall over if the check was failed by 50 or more (or on a natural 100).

Failed to negotiate difficult terrain: When trying to maneuver in difficult terrain, any control failure by a walker leads to your Ultra Armor falling over. In the case of a crawler failing to move through difficult terrain, it stops moving, but only falls over if the check is failed by 20 or more (or on a natural 100).

Failed to decelerate or turn: A failure on a Piloting check while stopping or turning means that you continue in your current direction at your current speed. A walker HD also falls over if the check was failed by 20 or more (or on a natural 100), while a crawler will only fall over if the check was failed by 40 or more (or on a natural 100).

HIT LOCATION (WALKERS)

D100 ROLL	ARMOR LOCATION	INTERNAL LOCATION
01-02	Left Leg	Left Foot
03-07	Left Leg	Left Leg Internals
08-09	Left Leg	Left Knee
10-15	Left Leg	Left Leg Internals (or Left Leg Missile Rack)
16	Left Leg	Left Leg Sensor Array
17-20	Left Leg	Left Hip
21-22	Right Leg	Right Foot
23-27	Right Leg	Right Leg Internals
28-29	Right Leg	Right Knee
30-35	Right Leg	Right Leg Internals (or Right Leg Missile Rack)
36	Right Leg	Right Leg Sensor Array
37-40	Right Leg	Right Hip
41-50	Torso	Torso Internals
51-52	Torso	Torso Sensor Array
53-59	Torso	Reactor
60-64	Torso	Theater
65-67	Torso	Torso Weaponry or Internals
68-70	Torso	Flux Shield Generator
71-74	Left Arm	Left Arm Weaponry (or Left Arm Internals)
75	Left Arm	Left Elbow
76-78	Left Arm	Left Arm Internals (or Left Arm Missile Rack)
79-80	Left Arm	Left Shoulder
81-84	Right Arm	Right Arm Weaponry (or Right Arm Internals)
85	Right Arm	Right Elbow
86-88	Right Arm	Right Arm Internals (or Right Arm Missile Rack)
89-90	Right Arm	Right Shoulder
91-93	Anvil	Anvil Turret Mechanism
94-95	Anvil	Anvil Sensor Array
96-100	Anvil	Anvil Weaponry

Failed to accelerate: A failure to accelerate leaves you at your current speed. A walker HD also falls over if the check was failed by 20 or more (or on a natural 100), while a crawler will only fall over if the check was failed by 40 or more (or on a natural 100).

Any other situations should be decided by the BM.

Loss of Limbs

An Ultra Armor that loses all integrity in a limb has completely lost that section, including all weaponry and equipment carried in that section. If the section is the torso, the Ultra Armor is destroyed. When a leg is lost, a walker will fall over with no chance to remain standing. It can crawl at 1/6 of its normal top speed, but may not use any arm weapons while doing so. Piloting checks are at a -80.

HIT LOCATION (CRAWLERS)

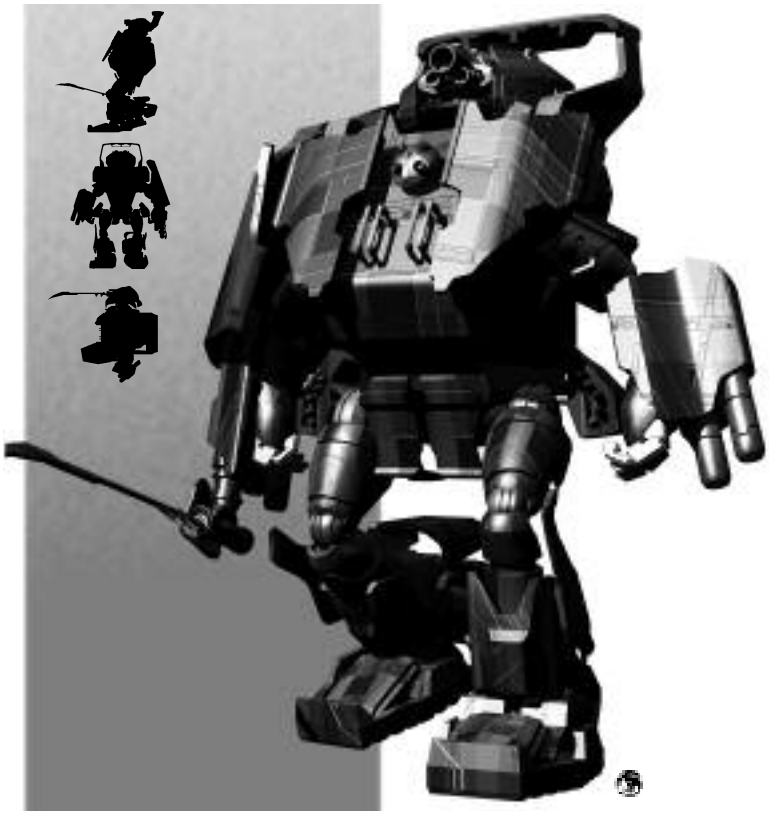
D100 ROLL	ARMOR LOCATION	INTERNAL LOCATION
01-02	Rear Left Leg	Rear Left Foot
03-05	Rear Left Leg	Rear Left Leg Internals
06-07	Rear Left Leg	Rear Left Knee
08-11	Rear Left Leg	Rear Left Leg Internals (or Rear Left Leg Missile Rack)
12	Rear Left Leg	Rear Left Leg Sensor Array
13-15	Rear Left Leg	Rear Left Hip
16-17	Rear Right Leg	Rear Right Foot
18-20	Rear Right Leg	Rear Right Leg Internals
21-22	Rear Right Leg	Rear Right Knee
23-26	Rear Right Leg	Rear Right Leg Internals (or Rear Right Leg Missile Rack)
27	Rear Right Leg	Rear Right Leg Sensor Array
28-30	Rear Right Leg	Rear Right Hip
31-40	Torso	Torso Internals
41-42	Torso	Torso Sensor Array
43-49	Torso	Reactor
50-54	Torso	Theater
55-57	Torso	Torso Weaponry or Internals
58-60	Torso	Flux Shield Generator
61-62	Front Left Leg	Front Left Foot
63-65	Front Left Leg	Front Left Leg Internals
66-67	Front Left Leg	Front Left Knee
68-71	Front Left Leg	Front Left Leg Internals (or Front Left Leg Missile Rack)
72	Front Left Leg	Front Left Leg Sensor Array
73-75	Front Left Leg	Front Left Hip
76-77	Front Right Leg	Front Right Foot
78-80	Front Right Leg	Front Right Leg Internals
81-82	Front Right Leg	Front Right Knee
83-86	Front Right Leg	Front Right Leg Internals (or Front Right Leg Missile Rack)
87	Front Right Leg	Front Right Leg Sensor Array
88-90	Front Right Leg	Front Right Hip
91-93	Anvil	Anvil Turret Mechanism
94-95	Anvil	Anvil Sensor Array
96-100	Anvil	Anvil Weaponry

A walker that loses both legs may drag itself along the ground at 1/10 of top speed (never more than 5 m/s). All Piloting checks are at a -100 modifier. The loss of an arm and a leg or the loss of more than 2 limbs immobilizes a walker.

A crawler that loses one leg operates at a -25% top speed and -60 to Piloting checks. A crawler that loses 2 legs can drag itself at 1/6 of its normal top speed, loses the ability to use its remaining limb weapons while moving, and operates at a -80 to Piloting checks. The loss of 3 limbs immobilizes a crawler.

Alorre

TECH LEVEL 7 WALKER



DESCRIPTION

The Alorre class Ultra Armor is produced exclusively by EridiCorp for use by the Buddon Dete Alorre. It is a derivative of the earlier Legend Ultra Armor, but has been completely refitted with the latest technologies. Alorre boasts a huge version of the Eridani's favored weapon, a 4m long plasma sword capable of slicing mechanized armor in half. It is also available with an oversized energy mace (ATK 55, DAM 50-200 + 125). Any reactive armor sections destroyed cost 750,000cr per plate to replace.

WEAPONRY

(2) BC-Incinerator PCS (arms)
(2) Calsham MG Metal Guns (arms)
(2) Digiton missile racks (legs, fire 3 ea per second): 12 Saylon Warhead missiles
Final Honor PCS (anvil)
Freewill-I LAMS (torso mount)
4m Light Sword

EQUIPMENT

Backup Hydraulics (legs)
Brilliance pAI (Autopilot IM -2, Pilot level 6, Gunnery level 2, Actions 5, IQ 60, Int 30)
ECM/ECCM: 60 (90)/30
ECM Booster
Farsight Combat Array
Mini Phase Nullifier

VEHICLE STATISTICS

Cost: 136Mcr
Crew: 1 (7)
Size: 2.0m L x 2.5m W x 6.5m H (230)
Size Mod: +50/+10
Weight: 12,375kg
Top Speed: 51 m/s (183 kph)
Range: 1,200km
Initiative Modifier: -12
Flux Shield: 30HP

ARMOR

LOCATION	THR	AI	AR
Anvil	9HP	12HP	1150
Left Arm	9HP	12HP	1550
Right Arm	9HP	12HP	1550
Torso	9HP	38HP	3450
Left Leg	9HP	26HP	26HP
Right Leg	9HP	26HP	26HP

REACTIVE ARMOR			
LOCATION	**THR**	**MDC**	**AI**
Torso (each plate)	60	6HP	150
Arms (each plate)	60	6HP	60
Legs (each plate)	60	6HP	80

COMPONENTS	THR	BP
Reactor	25	600
Flux Shield Generator	50	80
Theater Armor	15	72
Brilliance pAI	25	80
Theater Interface System	0	100

PHYSICAL COMBAT

Punch: ATK 40, DAM 12d10 + 125, ROF 1/3
Kick: ATK 15, DAM 25d10 + 125, ROF 1/6
Step On: ATK 10, DAM 1-10HP + 250/sec
Light Sword: ATK 65, DAM 3d6 x 10 + 125

TECH LEVEL 7 CRAWLER

Armadillo Gun Turret

VEHICLE STATISTICS

Cost: 313Mcr
Crew: 1 (8+eq)
Size: 8m L x 4m W x 3m H (425)
Size Mod: +55/+15
Weight: 21,925kg
Top Speed: 22 m/s (79kph)
Range: 1,000km
Initiative Modifier: -10
Flux Shield: 100HP

ARMOR

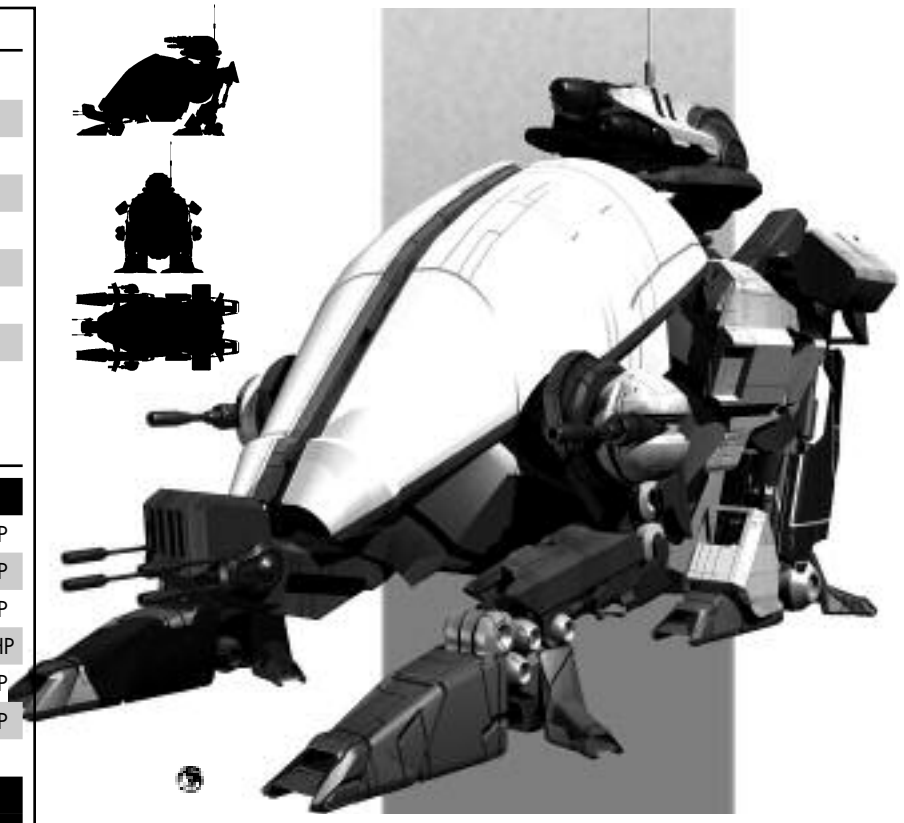
LOCATION	THR	AI	AR
Anvil	15HP	3150	43HP
Front Left Leg	15HP	4850	64HP
Front Right Leg	15HP	4850	64HP
Torso	15HP	95HP	126HP
Rear Left Leg	15HP	4850	64HP
Rear Right Leg	15HP	4850	64HP

REACTIVE ARMOR			
LOCATION	THR	MDC	AI
Torso (each plate)	2HP	12HP	470
Legs (each plate)	2HP	12HP	300

COMPONENTS	THR	BP
Reactor	25	600
Flux Shield Generator	50	160
Theater Armor	15	108
Tactician pAI	40	150
Theater Interface System	0	60

PHYSICAL COMBAT

Front or Rear Kick: ATK 25, DAM 4d10 x 10 + 225, ROF 1/3
Trample/Overrun: ATK 40, DAM 4d10 x 10 + 100
Step On: ATK 15, DAM 2-16HP + 4HP/sec



WEAPONRY

Abomination Omega (front left leg in universal turret)
6 BC-Boomer missiles, 6 BC-Typhoon missiles
Excellcior 3 Impact Laser (anvil)
EWES-I (internal torso, F180 arc)
Freewill-E (external anvil, 360 arc)
Grave Digger PCS (anvil)
Nike Hercules 4 SAM launcher (top)
2 Platform racks (rear legs (rear facing), fire 2 each per second):
Victimizer FIG (front right leg in universal turret)

EQUIPMENT

Displacement Device
ECM/ECCM: 60/35
4 Flechette System mounts (1 each leg)
Sprint Batteries (legs)
Tactician pAI (Autopilot IM –4, Pilot level 10, Gunnery level 5, Actions 6, IQ 75, Int 40)

DESCRIPTION

The Armadillo Gun Turret represents the ultimate in crawler technology. It is designed for extended survivability and high lethality. Its state-of-the-art armor and reactive armor combine for an effective 17HP Threshold, which allows this Humpty Dumpty to all but ignore lower tech threats. The incredibly expensive reactive armor on this vehicle costs 5 million credits per plate to replace, so pick your battles wisely.

Balrog

TECH LEVEL 6 WALKER

VEHICLE STATISTICS

Cost: 67.0Mcr
Crew: 1 (6)
Size: 2.0m L x 2.2m W x 5.0m H (104)
Size Mod: +40/+00
Weight: 5,610kg
Top Speed: 20 m/s (72 kph)
Range: 1,050km
Initiative Modifier: -5
Flux Shield: 15HP

ARMOR

LOCATION	THR	AI	AR
Anvil	3HP	230	120
Left Arm	3HP	230	120
Right Arm	3HP	230	120
Torso	3HP	675	420
Left Leg	3HP	550	250
Right Leg	3HP	550	250

COMPONENTS	THR	BP
Reactor	15	120
Flux Shield Generator	40	40
Theater Armor	12	40
Mentax pAI	25	60
Theater Interface System	0	35

PHYSICAL COMBAT

Punch: ATK 50, DAM 5d10 + 50, ROF 1/3
Kick: ATK 25, DAM 10d10 + 50, ROF 1/6
Step On: ATK 10, DAM 4d10 x 10 + 1HP/sec

DESCRIPTION

One of the most well-known and earliest Ultra Armor designs, the Balrog comes from the factory with twin Wicked Crimson pulse cannons in each arm. The long-range laser and reflex missiles in the anvil help to balance out this formidable machine. However, it is very vulnerable when compared to its extreme price, due to its (relatively) small size. For an additional 2.6Mcr (3.6M as a retro-fit), the Flux shield can be increased to 30HP.

Though not as formidable as it once was, the Balrog's psychological impact on a battlefield is still potent. Merely witnessing the deep red flash and booming report of the quad-Wicked Crimsons is enough to make one give up. Though relegated to primarily an anti-infantry vehicle, the Balrog is still potent.

WEAPONRY

Avron-C1L laser (anvil)
Dissector LAMS (torso)
10 Sabot missiles (internal anvil, twin fire)
(4) Wicked Crimson PAWS (arms)

EQUIPMENT

Battle K-Sat Bay (torso)
Displacement Device (torso)
Dynatech radar system
ECM: 10%
Mentax pAI (Autopilot IM -1, Pilot level 5, Gunnery level 1, Actions 4, IQ 50, Int 20)

TECH LEVEL 6 WALKER

Budaish-Enk

VEHICLE STATISTICS

Cost: 32.5Mcr
Crew: 1 (7)
Size: 1.6m L x 1.8m W x 4.5m H (78)
Size Mod: +35/-05
Weight: 4,000kg
Top Speed: 22 m/s (79 kph)
Range: 1,100km
Initiative Modifier: +0
Flux Shield: 20HP

ARMOR

LOCATION	THR	AI	AR
Anvil	5HP	340	190
Left Arm	5HP	440	270
Right Arm	5HP	440	270
Torso	5HP	11HP	650
Left Leg	5HP	775	460
Right Leg	5HP	775	460

COMPONENTS	THR	BP
Reactor	15	90
Flux Shield Generator	40	40
Theater Armor	12	40
Thinker pAI	25	50

PHYSICAL COMBAT

Punch: ATK 55, DAM 3d10 + 40, ROF 1/3
Kick: ATK 30, DAM 6d10 + 40, ROF 1/6
Step On: ATK 10, DAM 24d10 + 60/sec
Light Sword: ATK 75, DAM 10d6 + 40, ROF 1/3

WEAPONRY

Delta 5 Laser (left arm)
Freewill-I LAMS (torso)
2.5m Light Sword (right arm)
Nike Hercules SAM (right arm)
Wicked Crimson PAWS (anvil)

EQUIPMENT

Dynatech radar system
ECM: 25%
Thinker pAI (Autopilot IM 0, Pilot level 3, Gunnery level 0, Actions 3, IQ 45, Int 15)

DESCRIPTION

The Budaish-Enk is an early Eridani design, originally used to tend slave colonies. The jockey would use his Ultra Armor for intimidation purposes, occasionally cutting a few slaves in half to keep the others in line. In the event of a mass uprising, the anvil-mounted Wicked Crimson quickly exterminated all lesser beings in the area. In recent years, this design has also been used effectively in combat, although it suffers from a lack of firepower against armored targets. Since this system has no initiative bonus, treat any hits that would normally strike the Theater Interface System as hits to the pAI module instead.

Cyclops

TECH LEVEL 6 WALKER

DESCRIPTION

This walker is called the Cyclops because of its prominent sensory assembly, which looks something like an oversized eye. The Cyclops has proven its durability in medium intensity combat situations. It is, however, a little slow. In combat, this Ultra Armor functions primarily in a defensive role. The reactive armor plates on the Cyclops can be replaced for 160,000 credits per plate.

WEAPONRY

Achilles FIG (right arm)
(2) Avengeance Machine Gun Lasers (anvil)
BC-Volumizer Pulse (anvil)
2 Digiton racks (legs, fire 3 each per second): 10 Sabot missiles, 10 Mirv-System missiles, 10 Saylon Warhead missiles
Freewill-I LAMS (torso)
(2) MG-3 Machine Guns (arms)

EQUIPMENT

Backup hydraulics (legs)
Camouflage Unit
Combatant pAI (Autopilot IM -3, Pilot level 8, Gunnery level 4, Actions 5, IQ 60, Int 35)
ECM/ECCM: 25/60
Excavation tool (left arm)
Farsight Combat Array radar system

VEHICLE STATISTICS

Cost: 65.5Mcr
Crew: 1 (7+eq)
Size: 2.1m L x 2.3m W x 6.2m H (200)
Size Mod: +45/+05
Weight: 12,175kg
Top Speed: 20 m/s (72 kph)
Range: 950km
Initiative Modifier: -6
Flux Shield: 25HP

ARMOR

LOCATION	THR	AI	AR
Anvil	3HP	650	250
Left Arm	3HP	850	5HP
Right Arm	3HP	850	5HP
Torso	3HP	20HP	950
Left Leg	3HP	14HP	750
Right Leg	3HP	14HP	750

REACTIVE ARMOR			
LOCATION	**THR**	**MDC**	**AI**
Torso (each plate)	5	3HP	26
Arms (each plate)	5	3HP	10
Legs (each plate)	5	3HP	14

COMPONENTS	THR	BP
Reactor	15	240
Flux Shield Generator	40	40
Theater Armor	12	65
Combatant pAI	30	130
Theater Interface System	0	40

PHYSICAL COMBAT

Punch: ATK 45, DAM 12d10 + 100, ROF 1/3
Kick: ATK 20, DAM 25d10 + 100, ROF 1/6
Step On: ATK 10, DAM 1-10HP + 250/sec

TECH LEVEL 7 WALKER

Foe Hammer

VEHICLE STATISTICS

Cost: 125Mcr
Crew: 1 (8+eq)
Size: 2.4m L x 3.0m W x 7.5mH (350)
Size Mod: +55/+15
Weight: 20,425kg
Top Speed: 20 m/s (72 kph)
Range: 1,000km
Initiative Modifier: -6
Flux Shield: 20HP

ARMOR

LOCATION	THR	AI	AR
Anvil	450	1250	420
Left Arm	450	18HP	1050
Right Arm	450	21HP	1150
Torso	450	4550	19HP
Left Leg	450	30HP	1225
Right Leg	450	30HP	1225

REACTIVE ARMOR			
LOCATION	THR	MDC	AI
Torso (each plate)	8	4HP	91
Arms (each plate)	8	4HP	35
Legs (each plate)	8	4HP	49

COMPONENTS	THR	BP
Reactor	25	500
Flux Shield Generator	50	80
Theater Armor	12	90
Tactician pAI	40	150
Theater Interface System	0	35

PHYSICAL COMBAT:

Punch: ATK 35, DAM 20d10 + 175, ROF 1/3
Kick: ATK 10, DAM 40d10 + 175, ROF 1/6
Step On: ATK 10, DAM 2-16HP + 4HP/sec

WEAPONRY

Champion Pulse Cannon (Right Arm)
1 Digiton rack (Right Arm, fire 3 per second): 10 Sabot missiles, 5 Saylon Warhead missiles
(2) Drexler-V Impact Lasers (Torso, F)
Freewill-I LAMS (Torso)
(2) Launchpad missile racks (anvil: 4 BC-Boomer, 4 Tomahawk-3)
(2) Multi-Rack missile racks (anvil: 8 Sabot, 8 Saylon Warhead, 4 Load-4, 4 Envelopment)
Valley Green PAWS (Left Arm)

EQUIPMENT

Backup hydraulics (legs)
Bug Zapper (all sections)
ECM/ECCM: 60/30
Mega K-Sat Bay
Oversize Saw (L. Arm)
Tactician pAI (Autopilot IM -4, Pilot level 10, Gunnery level 5, Actions 6, IQ 75, Int 40)

DESCRIPTION

The Foe Hammer has an oversized right arm that carries a Champion Pulse Combat System as well as a Digiton missile rack. The Foe Hammer serves primarily as an assault unit. It is an excellent shock value instrument, but avoid prolonged exposure to heavy combat. The reactive armor of the Foe Hammer costs 350,000 credits per plate to replace.

The oversize saw on one arm of the Foe Hammer seems to get most of the attention. It seems ridiculous for something so low-tech to be such a big part of the design, but it makes sense given the Foe Hammer's role of an initial assault vehicle. Cutting through bulkheads and gates or slicing through road surfaces or bridge supports, the saw gives its user a lot of possibilities for controlled destruction.

Half Breed

TECH LEVEL 7 WALKER

VEHICLE STATISTICS

Cost: 12.5Mcr
Crew: 1 (5)
Size: 1.4m L x 1.6m W x 4.0m H (52)
Size Mod: +35/-05
Weight: 2,840kg
Top Speed: 20 m/s (72kph)
Range: 1,400km
Initiative Modifier: -4
Flux Shield: 7HP

ARMOR

LOCATION	THR	AI	AR
Anvil	2HP	135	30
Left Arm	2HP	135	80
Right Arm	2HP	135	80
Torso	2HP	410	95
Left Leg	2HP	370	110
Right Leg	2HP	370	110

COMPONENTS	THR	BP
Reactor	15	60
Flux Shield Generator	40	40
Theater Armor	12	30
Thinker pAI	25	50
Theater Interface System	0	25

PHYSICAL COMBAT

Talons: ATK 50, DAM 4d10 + 30, ROF 1/3
Kick: ATK 25, DAM 6d10 + 25, ROF 1/6
Step On: ATK 10, DAM 12d10 + 30/sec

DESCRIPTION

A relatively new Ultra Armor designed for Human pilots, this undersized walker is very good in close combat against infantry types. The anvil mounts Reflex missiles and a Terminator pulse cannon gun chassis. The Half Breed is affordable and reliable. However, it must avoid direct combat with medium or heavy vehicles, as it lacks the firepower to engage these targets. Due to its relatively small size, it cannot effectively perform step on attacks against other vehicles.

The Half Breed's size does have advantages in built-up areas. Larger HDs tend to be more effective in open country, but in urban confines they can often become trapped in narrow alleys, or be unable to swing their long barreled weapns to bear, making them easy prey for enemies with anti-armor missiles. Though a bit clunky, the Half Breed is effective when used well.

WEAPONRY

BC-Terminator pulse cannon (anvil)
LMDS-E (external, torso)
Range Hound-G impact laser (right arm)
4 Sabot missiles (internal anvil)
4 Saylon Warhead missiles (internal anvil)
Talons (arms)

EQUIPMENT

Backup hydraulics system (legs)
Dynatech radar system
ECM: 25%
4xFlechette Unit (legs)
Power Saw (left arm)
Thinker pAI (Autopilot IM 0, Pilot level 3, Gunnery level 0, Actions 3, IQ 45, Int 15)

TECH LEVEL 6 WALKER

Legend

VEHICLE STATISTICS

Cost: 57.5Mcr
Crew: 1 (8)
Size: 2.0m L x 2.5m W x 6.5m H (230)
Size Mod: +50/+10
Weight: 13,650kg
Top Speed: 25 m/s (90kph)
Range: 950km
Initiative Modifier: -4
Flux Shield: 5HP

ARMOR

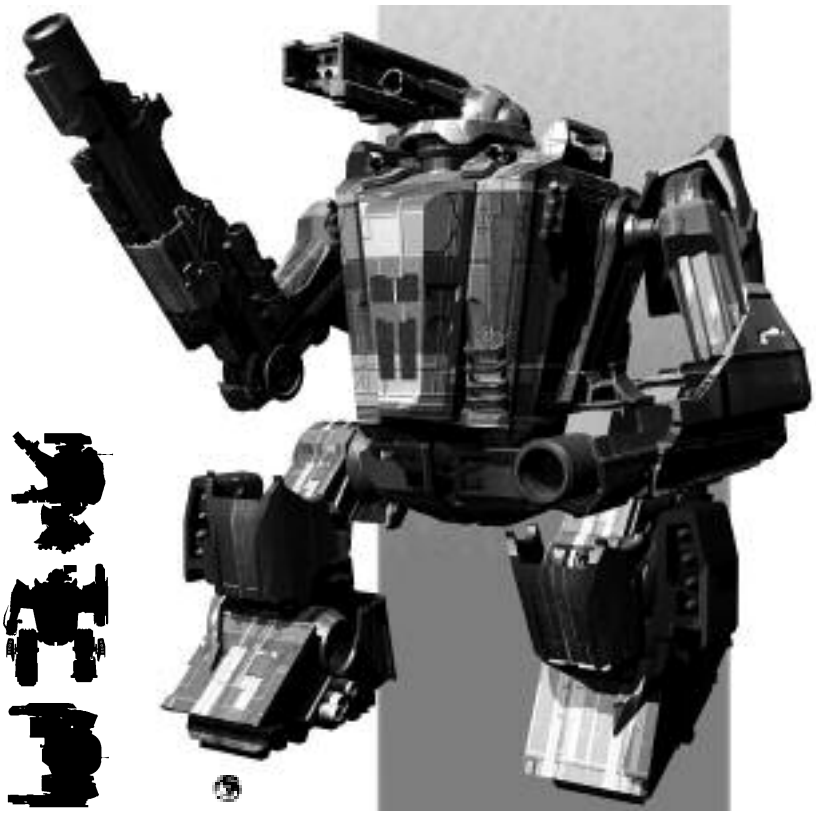
LOCATION	THR	AI	AR
Anvil	425	7HP	550
Left Arm	425	8HP	8HP
Right Arm	425	8HP	8HP
Torso	425	21HP	19HP
Left Leg	425	15HP	13HP
Right Leg	425	15HP	13HP

REACTIVE ARMOR			
LOCATION	THR	MDC	AI
Torso (each plate)	8	4HP	60
Arms (each plate)	8	4HP	23
Legs (each plate)	8	4HP	32

COMPONENTS	THR	BP
Reactor	15	300
Flux Shield Generator	40	40
Theater Armor	12	65
Mentax pAI	25	60
Theater Interface System	0	25

PHYSICAL COMBAT

Talons: ATK 40, DAM 13d10 + 130, ROF 1/3
Kick: ATK 15, DAM 25d10 + 125, ROF 1/6
Step On: ATK 10, DAM 1-10HP + 250/sec



WEAPONRY

(2) BC-E10 Plasma (arms)
Digiton Missile Rack (15 Saylon warheads, 3/sec fire) (anvil)
2 Digiton racks (legs, fire 3 each per second): 10 Sabot missiles, 10 Mirv-System missiles, 10 Saylon Warhead missiles
EWES-E LAMS (torso, external)
S&M Weapon PCS (anvil)
Talons (arms)

EQUIPMENT

Backup hydraulics (legs)
ECM/ECCM: 30/30
2x Flechette Unit (legs)
Mentax pAI (Autopilot IM -1, Pilot level 5, Gunnery level 1, Actions 4, IQ 50, Int 20)

DESCRIPTION

An excellent Ultra Armor that represents the best technology available in Tech Level 6 systems. It has proven itself on the battlefield. Like the Half Breed, it mounts a split anvil configuration with a built-in Digiton missile rack and a Pulse Combat System. Legend is large enough to accommodate Pythons (just barely). Each plate of reactive armor on this vehicle costs 230,000 credits to replace.

Peacemaker

TECH LEVEL 7 WALKER

VEHICLE STATISTICS

Cost: 442Mcr
Crew: 1 (8)
Size: 3.0m L x 3.4m W x 8.5m H (510)
Size Mod: (+60/+20)
Weight: 28,200kg
Top Speed: 13 m/s (47 kph)
Range: 900km
Initiative Modifier: -12
Flux Shield: 100HP

ARMOR

LOCATION	THR	AI	AR
Anvil	12HP	3150	3850
Left Arm	12HP	3350	3850
Right Arm	12HP	3350	3850
Torso	12HP	99HP	115HP
Left Leg	12HP	71HP	79HP
Right Leg	12HP	71HP	79HP

REACTIVE ARMOR			
LOCATION	**THR**	**MDC**	**AI**
Torso (each plate)	1HP	9HP	525
Arms (each plate)	1HP	9HP	2HP
Legs (each plate)	1HP	9HP	3HP

COMPONENTS	THR	BP
Reactor	25	600
Flux Shield Generator	50	200
Theater Armor	15	114
Overmind pAI	50	275
Theater Interface System	0	100

PHYSICAL COMBAT

Punch: ATK 30, ROF 1/3, DAM 28d10 + 250
Kick: ATK 05, ROF 1/6, DAM 55d10 + 250
Step On: ATK -10, DAM 2-20HP + 500/sec

EQUIPMENT

ECM/ECCM: 60/60 (75), ECCM Booster
Overmind pAI (Autopilot IM -7, Pilot level 12, Gunnery level 8, Actions 7, IQ 95, Int 55)
Displacement Device, Cloaking Device
Emergency Escape
(2) Minelayers (1/leg)
(4) Battle K-Sat Bays (2/leg)
Farsight Combat Array

DESCRIPTION

The Peacemaker Ultra Armor is an example of what happens when the ego runs wild. Engineers at Balshrom set out to design the most ridiculous armor and weapons system ever created. The result is nothing short of spectacular…and completely impractical! With its twin PCS systems, twin Impact laser machine guns, Intruder Impact laser cannon, and array of 58 missiles, the Peacemaker can slaughter anything it sees. Just for good measure, the designers threw in a metal gun, some minelayers, and 3 LAMS systems for layered missile defense. This Ultra Armor can lay in wait for the enemy with its cloaking device, capable of avoiding even Arachnid sensors. The pAI can operate the 4 K-Sats independently, allowing this vehicle to provide its own scouting and support function. There are just two problems. First of all, it is a very slow design and needs to be brought to the battlefield by transport. More importantly, it is just too damn expensive to use! If the initial cost of the system is not obscene enough, consider that replacing a single plate of reactive armor on the Peacemaker costs 3.7 million credits.

WEAPONRY

Calsham MG Metal Gun (left arm)
Champion PCS (right arm)
(2) Digiton missile racks (legs, fire 3ea/second): 20 Horizon Reflex missiles, 10 Sabot Reflex missiles
(2) Encasement missile racks (legs, fire 1ea/second): 16 Saylon Warhead Reflex missiles
(8) Flechette Units (4/leg)
Freewill-E LAMS (left arm, external)
Freewill-E LAMS (right arm, external)
Freewill-E LAMS (torso, external)
Intruder Impact Laser Cannon (left arm)
Mortician PCS (anvil)
(2) Platform missile racks (arms, fire 2ea/second): 6 Cobalt Tensor heavy missiles, 3 BC-Boomer heavy missiles, 3 Load-4 heavy missiles
(2) Viceroy Impact Laser MG (left arm)

TECH LEVEL 6 CRAWLER

Rhyno

VEHICLE STATISTICS

Cost: 57.5Mcr
Crew: 1 (7+eq)
Size: 6.0m L x 2.5m W x 2.3m H (180)
Size Mod: +45/+05
Weight: 11,600kg
Top Speed: 22 m/s (79kph)
Range: 950km
Initiative Modifier: -5
Flux Shield: 25HP

ARMOR

LOCATION	THR	AI	AR
Anvil	5HP	8HP	450
Front Left Leg	5HP	13HP	9HP
Front Right Leg	5HP	13HP	9HP
Torso	5HP	3150	1750
Rear Left Leg	5HP	13HP	9HP
Rear Right Leg	5HP	13HP	9HP

REACTIVE ARMOR			
LOCATION	THR	MDC	AI
Torso (each plate)	10	5HP	59
Legs (each plate)	10	5HP	38

COMPONENTS	THR	BP
Reactor	15	240
Flux Shield Generator	40	40
Theater Armor	12	60
Mentax pAI	25	60
Theater Interface System	0	35

PHYSICAL COMBAT

Front or Rear Kick: ATK 35, DAM 20d10 + 75, ROF 1/3
Trample/Overrun: ATK 50, DAM 20d10 + 75
Step On: ATK 15, DAM 1-8HP + 2HP/sec

WEAPONRY

BC-Incinerator PCS (anvil)
2 Digiton racks (front legs, fire 3 each per second): 10 Sabot missiles, 10 Mirv-System missiles, 10 Digiton Warhead missiles
EWES-E (torso, external)
M-800 Pulse Cannon (anvil)

EQUIPMENT

Battle K-Sat Bay (right front leg)
Dynatech radar system
ECM/ECCM: 40/20
4x Flechette Unit (legs)
Grappling Net (left front leg)
Mentax pAI (Autopilot IM -1, Pilot level 5, Gunnery level 1, Actions 4, IQ 50, Int 20)
2 Minelayers (rear legs)
Sprint Batteries (legs)

DESCRIPTION

The Rhyno is designed to charge the enemy and destroy him at ground zero. To this end, the primary weapon is a BC-Incinerator pulse combat system, with a limited range of 150m. In addition, the armor is protected by a 5HP threshold and a 25HP Flux shield to ensure survivability. This system is respectable against light to medium targets, but not a match for modern battle tanks. Any damage to the reactive armor will cost 220,000 credits per armor plate requiring replacement.

The large wedge on the front of the Rhyno makes it particularly useful for destroying buildings or emplacements. When attacking fixed targets in this way (considered a Trample attack) the Rhyno will do 25d10 + 75 points of damage instead of that listed at left.

Note: Some poor slob running away in AKMB is not a fixed target; 20d10 + 75 should be enough.

Scamp

TECH LEVEL 6 CRAWLER

VEHICLE STATISTICS

Cost: 14.0Mcr
Crew: 1 (7)
Size: 4.5m L x 1.6m W x 1.5m H (75)
Size Mod: +35/-05
Weight: 3,870kg
Top Speed: 36 m/s (130 kph)
Range: 1,100km
Initiative Modifier: -5
Flux Shield: 5HP

ARMOR

LOCATION	THR	AI	AR
Anvil	2HP	220	45
Front Left Leg	2HP	380	120
Front Right Leg	2HP	380	120
Torso	2HP	650	135
Rear Left Leg	2HP	380	120
Rear Right Leg	2HP	380	120

COMPONENTS	THR	BP
Reactor	15	120
Flux Shield Generator	30	60
Theater Armor	12	40
Thinker pAI	25	50
Theater Interface System	0	35

PHYSICAL COMBAT

Front or Rear Kick: ATK 45, DAM 8d10 + 35, ROF 1/3
Trample/Overrun: ATK 60, DAM 8d10 + 35
Step On: ATK 15, DAM 3d10 x 10 + 75/sec

DESCRIPTION

The Scamp represents one of the earliest crawler designs. With its sprint batteries engaged, this system is capable of reaching speeds of 180kph. It is maneuverable, but lacks the firepower and integrity for hyper-violent situations. The Scamp holds up well against mechanized battle armor such as Assault and Power Mesh. However, it cannot be used by Python races.

Still in use in second-line Alliance assault forces, the Scamp remains a useful item for mopping up, but the small Flux shield makes it unlikely to survive a prolonged firefight with Arachnid troops.

WEAPONRY

BC-Volumizer pulse cannon (anvil)
Calsham-2X laser (anvil)
Encasement missile rack (rear left leg): 8 Jackrabbit Reflex missiles
Encasement missile rack (rear right leg): 8 Digiton Warhead Reflex missiles
LMDS-E (torso, external)

EQUIPMENT

Dynatech radar system
ECM: 15%
Sprint Batteries (legs)
Thinker pAI (Autopilot IM 0, Pilot level 3, Gunnery level 0, Actions 3, IQ 45, Int 15)

TECH LEVEL 7 CRAWLER

Scamp-II

VEHICLE STATISTICS

Cost: 31.5Mcr
Crew: 1 (7)
Size: 4.5m L x 1.6m W x 1.5m H (75)
Size Mod: +35/-05
Weight: 3,810kg
Top Speed: 58 m/s (209 kph)
Range: 1,400km
Initiative Modifier: -6
Flux Shield: 20HP

ARMOR

LOCATION	THR	AI	AR
Anvil	250	250	75
Front Left Leg	250	475	2HP
Front Right Leg	250	475	2HP
Torso	250	750	230
Rear Left Leg	250	475	2HP
Rear Right Leg	250	475	2HP

COMPONENTS	THR	BP
Reactor	25	200
Flux Shield Generator	40	140
Theater Armor	15	48
Brilliance pAI	25	80
Theater Interface System	0	35

PHYSICAL COMBAT

Front or Rear Kick: ATK 45, DAM 8d10 + 35, ROF 1/3
Trample/Overrun: ATK 60, DAM 8d10 + 35
Step On: ATK 15, DAM 3d10 x 10 + 75/sec

WEAPONRY

Able Dancer V Impact Laser (anvil)
BC-Umbrella (torso, external)
Encasement missile rack (rear left leg): 8 Jackrabbit Reflex missiles
Encasement missile rack (rear right leg): 8 Digiton Warhead Reflex missiles
Platform Rack: Contains 3 BC-Typhoon Heavy missiles and 3 Overload Heavy missiles
Vector 5 Pulse Cannon (anvil)

EQUIPMENT

ECM/ECCM: 50/25
Brilliance pAI (Autopilot IM -2, Pilot level 6, Gunnery level 2, Actions 5, IQ 60, Int 30)
Sprint batteries
Dynatech radar system
4x Flechette Unit

DESCRIPTION

The Scamp-II is a complete overhaul of the early Scamp design, using state-of-the-art technology. This revision significantly upgrades the unit's offensive and defensive capabilities, but at a very high cost.

With big increases in speed, range, and Flux shield strength, the Scamp-II has become a true threat. A variety of weapon types gives it capabilities at a variety of engagement ranges; hammer them with missiles from over the horizon, or run up to them and stomp them to goo. It can do it all.

The Scamp-II still will not fit the largest of the Alliance races within its Theater.

CHAPTER 6

Weapons & Equipment • 6

In This Chapter...

Weapon System Descriptions
Accessories/Ammo Descriptions

Weapons described in *Lock-N-Load: Weapons & Tactics* will not be reproduced here. Note that the costs presented in *Engines of War* may be different from those found in *Lock-N-Load*; this is due either to additional costs for mounting the weapon on a vehicle or to subtraction of costs for features such as built-in Flux shields which do not apply to vehicular-mounted weapons. Therefore, the costs in this book should be used whenever the weapon will be used in a vehicle mount.

Note: Vehicle-mounted weapons are always considered braced. Therefore, the stats for all weapons in this book include the braced shot bonus.

We suckered those rebels in but good. Who says Xplore Inc. mercs are just a bunch of corpses waiting to happen?

It was all Private Grenarus' idea. He may look like a stick with a beard, but there's a crafty mind working behind those innocent-looking Ashanti eyes. We were moving our cargo of robotics parts and weapons from Settlement 502 to the outskirts of Sharita, the largest city on the southernmost continent of Hillenboro when the bastards hit us. They didn't know we'd been told they would, and we were ready. Breaking into the cargo was easy (sorry boss), and we fixed up the three There skimmers we had rented for this trip and headed out to catch some rebels.

Right on cue the Rebels made a try at a tight bend in the road with dense forest on one side and a steep hill on the other. A roadblock of a wrecked car was right in our path as our There skimmer trucks slammed to a halt to avoid the collision. Just before the lead skimmer stopped, its cab was sprayed with fire, riddling the driver. Two Ram Pythons sprinted out of the forest and up to the wrecked cab, as more human and Orion rebels swarmed towards the other two skimmers. The Rams made a barely audible grunt of surprise when they looked in the cab of the lead skimmer just as the mine underneath the dummy driver went off.

An orange and green fireball engulfed the front of the lead skimmer, incinerating one of the Rams completely and flinging the other into a tree, missing most of its lower half. That result was worth losing a vehicle remote control module and Dirty Gronk's hump-doll.

The explosion was Gronk's signal; he yanked hard on the cables holding the freshly cut up sides of the There skimer cargo box, and it fell away to reveal our now assembled and ready former cargo: a fresh Wicked Crimson PAWS. Thelissarious swept it back and forth laying waste to the five rebels on the left side; I caught a glimpse of one staggering back with no arms, only hot, glowing embers a reminder that he was just a moment before wearng armor. As the Phent cranked the cannon around to the left to finish off the remaining rebels, I let fly with our other bit of liberated cargo, a Sabot missile which neatly torched their franticly retreating cargo skimmer. It lasted only about a minute and a half; long enough for me.

I never pegged Ashanti as tricky, but Grenarus shrugged it off saying, "Rule 8754 states that a wise warrior always includes at least one shaft of trickery in his quiver."

‹ "This pulse cannon will do the trick against a Scamp, eh Bluerazor? Bluerazor? Where'd you go?"

VEHICLE RANGE BRACKETS	1	2	3	4	5	6	7	8
Distance (m)	01-50	51-150	151-250	251-500	501-1000	1001-2000	2001-3500	3501+

ARCHAIC POWDER WEAPONS—MACHINE GUNS PG. 110

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
Ultimax	95	55	40	23	-	-	-	-	100	7	100	2-8	1	15	4,500
M-60	90	65	52	37	25	00	-	-	98	6	500	3-12	1	35	5,750
PK	87	63	47	36	24	00	-	-	96	7	500	3-12	1	34	6,000
FN Magnum	90	67	57	43	23	-	-	-	99	8	500	3-12	1	40	6,250
M-240	92	70	60	47	33	15	-	-	98	10	500	3-12	1	45	9,250
LTX-311	89	50	40	28	13	-05	-	-	100	12	500	2-8	2	75	10,000
XM-214	75	42	25	07	-15	-	-	-	100	20	500	2-7	1	32	12,000
MG3	96	69	60	46	33	20	-	-	100	13	500	3-12	1	40	13,000
Browning .50	113	85	80	67	53	35	-	-	99	4	500	4-24	2	105	25,000
Hose	123	95	15	-	-	-	-	-	100	30	500	3-12	2	70	35,000
XM3120	111	85	80	65	50	35	-	-	100	2	500	4-24	2	75	35,000
M2A .50	113	86	81	70	56	37	-	-	98	6	500	4-24	2	125	40,000
ASP 20	108	80	80	70	53	35	-	-	96	4	200	6-36	2	125	48,000
KPV 14.5mm	113	88	85	70	53	35	-	-	100	4	500	5-30	2	145	50,000
NSV	110	85	80	63	43	25	-	-	95	8	500	4-24	2	100	55,000
XM307	115	85	75	60	55	30	-	-	99	2	500	6-36	2	110	60,000

FLUX INTERFERENCE GENERATORS PG. 110

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SIZE	WT	COST
AFR-1	90	35	05	-20	-	-	-	-	100	2	80	8-80	1	10	110,000
Quasar	93	50	45	35	23	05	-	-	100	2	40	8-96	3	65	300,000
Pulsar	96	50	30	15	-08	-	-	-	100	2	40	20-120	1	20	375,000
Victimizer	102	60	35	10	-	-	-	-	100	1/6	20	1-4HP	2	45	1.0M
Achilles	109	70	55	40	20	-	-	-	100	1/3	20	2-8HP	3	70	3.0M
Victimizer-G	97	55	30	05	-	-	-	-	100	1	80	1-4HP	8	180	4.2M
Interfon	105	55	48	30	07	-	-	-	100	1/9	20	5-20HP	10	225	6.0M

LASER ANTI-MISSILE SYSTEMS PG. 110

TYPE	ATK	RANGE	ROF	Q	SIZE	WT	COST
LMDS-E	70	800	1	20	0	15	400,000
LMDS-I	70	800	1	50	1	10	500,000
Dissector	80	1,200	3	60	1	8	600,000
EWES-E	90	2,000	2	40	0	15	1.0M
EWES-I	90	2,000	2	100	1	12	1.1M
Freewill-E	80	1,200	4	100	0	18	1.5M
Freewill-I	80	1,200	4	200	1	12	1.6M
BC-Umbrella	95	1,500	6	150	0	20	2.0M

VEHICLE RANGE BRACKETS	1	2	3	4	5	6	7	8
Distance (m)	01-50	51-150	151-250	251-500	501-1000	1001-2000	2001-3500	3501+

LASERS PG. 111

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
EMG-AP	112	97	72	54	37	-	-	-	97	4	120	2-8	3	40	8,500
RKMV	121	110	95	77	60	-	-	-	100	1	200	3-12	1	6	20,000
Arrow V	140	130	128	111	92	75	-	-	100	1	100	3-12	1	8	25,000
Tagert-8	111	100	85	70	65	-	-	-	97	2	100	2-12	1	8	30,000
XRK-V	115	105	90	75	58	-	-	-	100	1	100	5-20	1	10	40,000
XRK-V2	115	105	90	75	58	-	-	-	99	1	100	5-30	1	20	55,000
XRK-3	115	105	90	75	58	-	-	-	98	1	75	6-36	2	30	80,000
Beta 3V	131	125	105	90	76	65	-	-	100	2	100	2-12	1	10	85,000
RKMG	116	105	90	72	55	-	-	-	99	4	800	3-12	2	25	90,000
Arrow XV	136	126	120	103	85	70	-	-	100	1	40	3-18	1	10	100,000
Arrow VG	135	125	123	107	90	74	-	-	100	4	400	3-12	3	35	110,000
XRK-VG	110	100	90	70	53	-	-	-	99	4	100	5-20	3	40	130,000
Beta X	131	125	105	90	76	65	-	-	99	2	200	4-24	2	28	160,000
Gamma 4E	123	117	97	82	68	57	-	-	100	4	200	3-18	4	40	200,000
Calsham-4E	128	122	120	104	87	32	-	-	100	4	200	4-16	4	48	315,000
Gamma 4V	131	125	105	90	76	65	-	-	100	4	200	3-18	1	10	365,000
Epsilon-1	112	102	87	72	52	-	-	-	99	1/3	50	10-60	3	50	375,000
Calsham-4V	136	130	128	112	95	40	-	-	100	4	200	4-16	1	12	525,000
Banshee-V	110	67	65	49	-	-	-	-	100	5	200	4-24	1	6	650,000
Calsham-2X	136	130	128	112	95	40	-	-	100	2	200	5-30	2	25	750,000
Delta 5	131	125	105	90	76	65	-	-	99	2	200	6-36	2	24	800,000
Epsilon-2	120	115	95	80	65	55	-	-	99	1	100	10-60	4	55	1.0M
Avron-C1L	115	105	90	70	40	-	-	-	99	1/3	75	10-100	4	85	1.0M

LASERS—IMPACT PG. 112

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
BC-Violator+	123	75	55	45	-	-	-	-	100	1	50	4-16	1	5	90,000
Range Hound V	138	110	97	81	57	-	-	-	100	1	50	4-16	1	5	175,000
RKM 5000V	139	107	105	55	20	-	-	-	99	3	75	4-16	1	6	325,000
Drexler-V	123	60	-	-	-	-	-	-	100	6	90	4-16	1	6	550,000
Range Hound G	133	106	104	79	56	-	-	-	99	4	200	4-16	2	24	750,000
Lancer V	140	128	127	111	94	77	62	-	100	1	50	4-24	1	10	800,000
Crusader-E	123	111	105	88	71	54	39	-	100	1	50	6-36	2	20	1.1M
Crusader	128	116	110	93	76	59	44	-	99	1	50	6-36	1	10	1.6M
Excellcior	135	120	109	94	78	59	49	37	100	1	100	6-36	1	12	2.1M
Able Dancer V	136	93	80	70	61	-	-	-	100	3	90	5-30	1	15	3.0M
Excellcior 3	130	116	106	92	77	59	49	37	99	3	300	6-36	2	40	6.4M
BC-Screamer	134	90	25	-	-	-	-	-	100	5	40	10-80	1	15	7.0M
Force-VX	122	87	67	57	36	-	-	-	96	3	90	10-100	1	8	8.5M
Super Force	120	75	60	-	-	-	-	-	96	2	50	10-120	2	20	12.5M

LASERS—IMPACT CANNONS PG. 113

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
Intruder-E	90	90	85	80	60	35	05	-	100	1	75	30-180	16	900	3.7M
MTL-1	95	95	90	80	60	35	10	-10	100	1/12	30	1-4HP	20	1100	4.0M
Intruder	95	95	90	85	65	40	10	-	100	1	75	30-180	8	450	5.5M
ML-1	85	85	80	75	55	30	00	-	100	1/12	30	2-7HP	36	2300	5.5M
MTL-2	100	100	95	85	65	40	15	-05	100	1/12	30	1-4HP	10	550	6.0M
ML-2	85	85	80	75	55	30	00	-	100	1/6	30	2-7HP	36	2300	7.0M
ML-3	90	90	85	80	60	35	05	-	100	1/6	30	2-7HP	18	1150	10.0M
Emitter	90	90	85	80	55	30	00	-	100	1/6	30	2-12HP	25	1650	18.0M
HLX-1	100	100	90	80	60	35	05	-	100	1/3	30	2-20HP	40	3000	25.0M

VEHICLE RANGE BRACKETS	1	2	3	4	5	6	7	8
Distance (m)	01-50	51-150	151-250	251-500	501-1000	1001-2000	2001-3500	3501+

LASERS—MACHINE GUN IMPACT PG. 113

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
Range Hound G-2	120	95	84	69	46	-	-	-	99	8	400	4-16	4	48	1.5M
RKM 50G	123	93	62	43	25	-	-	-	98	12	600	4-16	3	30	1.6M
Octagon	122	112	111	98	83	67	52	-	98	8	400	4-24	6	90	6.6M
Able Rage	121	89	74	58	50	-	-	-	100	12	360	5-30	3	60	12.5M
Viceroy	138	135	134	131	126	115	100	80	96	10	200	4-24	3	55	15.0M
Excellcior-G9	125	111	101	87	72	54	44	32	98	9	900	6-36	6	120	19.2M
Viceroy-2	135	132	131	128	123	110	95	75	96	10	400	6-36	6	110	20.0M

LASERS—MACHINE GUN PG. 114

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
Tagert-10	97	87	72	58	43	-	-	-	96	8	400	2-12	3	35	125,000
RKM 10G	108	100	85	68	10	-	-	-	98	10	500	3-12	3	45	160,000
Beta 3G	115	110	90	76	63	53	-	-	99	8	400	2-12	3	40	325,000
XR-20	120	105	82	68	55	40	-	-	97	20	1,200	2-12	3	48	850,000
BC-Flayer	132	128	127	102	70	45	-	-	98	8	500	3-18	3	40	1.3M
Gamma 4G	115	110	90	76	63	53	-	-	99	16	800	3-18	3	40	1.5M
Banshee-3	105	64	62	47	-	-	-	-	99	15	600	4-24	1	18	2.0M
Calsham-4G	121	116	115	100	84	70	-	-	100	16	800	4-16	3	45	2.2M
Valley Blue	118	110	108	102	90	65	45	-	100	12	500	5-20	4	70	2.9M
Calsham-GX	120	115	114	99	83	30	-	-	100	8	800	5-30	5	100	3.1M
Delta 5G	116	111	92	78	65	55	-	-	98	8	800	6-36	5	90	3.3M
Valley Green	124	115	113	107	95	70	50	-	100	12	500	5-20	2	35	3.8M
Avengance	127	100	65	40	05	-	-	-	100	6	100	6-36	2	35	5.0M
Shalkon Heavy	127	118	117	107	93	75	60	-	97	15	500	6-36	2	32	6.5M
Valley Green Express	134	130	129	119	100	75	45	-	100	20	500	4-24	4	75	7.5M

MISSILES—HEAVY PG. 115

TYPE	ATK	SPEED M/SEC	DAM	ECM/ ECCM	COST
HM-1	95	400	10-60	10/5	30,000
Interdictor	110	500	30-180	20/20	40,000
MIRV-H	110	1,000	4x1-4HP	15/10	55,000
Tomahawk	130	800	2-12HP	30/30	55,000
Tomahawk-3	130	1,000	3-18HP	40/40	65,000
Load-1	130	800	8-48HP	0/0	60,000
Load-4	130	800	10-60HP	25/10	65,000
Cobalt Tensor (SAM)	120	5,000	3-18HP	0/0	65,000
Envelopment	120	800	4-24HP	10/25	70,000
Star Troll	135	2,000	5-30HP	30/20	70,000
Overload	105	600	10-80HP	20/10	75,000
Twin Load	120	1,000	1-6HP/ 5-30HP	10/10	80,000
Stealth-X	115	1,000	5-30HP	55/30	90,000
BC-Boomer	130	1,200	20HP/ 6-36HP	20/20	90,000
BC-Typhoon	130	800	8-48HP	0/0	110,000

SAM RANGE BRACKETS	1	2	3	4	5	6	7	8
Distance (m)	01-250	251-500	501-1000	1001-2500	2501-5000	5001-7500	7501-10000	10001+

MISSILES—SAMS PG. 116

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SIZE	WT	COST
Nike Hercules 4	80	80	80	80	80	80	80	80	100	1/15	4	8-48HP	2	70	0.5M
Patriot 4	90	90	90	90	90	90	90	90	100	1/15	4	4-24HP	3	80	0.6M

PULSE CANNONS PG. 116

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SZ	WT	COST
M-20E	69	14	-	-	-	-	-	-	99	1	25	4-24	3	45	15,000
M-20	75	20	-	-	-	-	-	-	98	1	25	4-24	1	15	22,000
M-70E	70	35	00	-	-	-	-	-	98	1	50	4-24	4	60	40,000
M-70	75	40	05	-	-	-	-	-	97	1	50	4-24	2	30	50,000
BC-E1 Plasma	90	45	35	-	-	-	-	-	100	1	50	4-24	1	10	75,000
Vector 1	92	50	35	20	-05	-	-	-	96	1	50	3-18	1	15	85,000
Precision+	137	110	91	75	47	-	-	-	100	1	40	3-12	1	15	100,000
M-100	70	35	00	-	-	-	-	-	96	1	40	6-36	2	60	110,000
BC-Enforcer	87	45	35	-	-	-	-	-	100	2	50	4-24	1	12	125,000
Vector 4E2	89	47	32	19	02	-	-	-	100	2	50	4-24	4	60	150,000
BC-E2 Plasma	90	45	35	-	-	-	-	-	99	1	40	6-36	2	30	170,000
BC-Offensive	87	40	25	-	-	-	-	-	100	1	40	5-40	1	18	195,000
Vector 4	97	55	40	27	10	-	-	-	100	2	50	4-24	1	15	210,000
Plasma Tube	105	80	45	15	-	-	-	-	99	2	50	6-36	2	65	250,000
Mentar-A3L	73	20	-05	-	-	-	-	-	96	4	50	6-36	1	15	290,000
BC-Heat	118	75	60	42	-	-	-	-	100	1	40	5-30	1	5	310,000
Vector 4H	90	50	37	26	08	-	-	-	99	2	50	6-36	2	35	400,000
BC-Ballista	110	90	50	20	-	-	-	-	100	1	60	8-48	2	60	400,000
BC-Terminator	96	55	35	-	-	-	-	-	100	4	60	6-36	1	20	625,000
BC-Volumizer	110	90	50	20	-	-	-	-	100	1	40	10-60	3	100	700,000
M-50V	102	65	30	-	-	-	-	-	99	2	40	8-48	1	15	1.05M
BC-Heatwave	118	75	60	40	-	-	-	-	100	4	120	5-30	1	16	1.35M
Vector XH	85	50	37	26	08	-	-	-	98	2	100	8-48	4	175	1.4M
M-800	95	60	25	10	-10	-	-	-	100	4	200	5-40	3	90	2.4M
M-80	102	65	30	15	00	-	-	-	100	4	100	5-40	1	15	3.3M
Vector-XV	112	85	70	58	47	35	-	-	99	2	100	7-42	1	10	4.1M
Vector 5	103	57	50	25	-	-	-	-	100	1	70	10-100	1	18	4.6M
BC-Abuser	105	60	-	-	-	-	-	-	100	5	80	50-200	1	20	12.5M

PULSE CANNONS—PULSE AUTOMATIC WEAPON SYSTEMS PG. 118

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SIZE	WT	COST
V1G	88	47	33	19	-05	-	-	-	95	4	200	3-18	2	60	350,000
V1G2	88	47	33	19	-05	-	-	-	94	8	400	3-18	6	120	700,000
V4G	103	52	38	26	10	-	-	-	100	8	200	4-24	3	55	875,000
BC-Heat-G	114	73	59	42	-	-	-	-	100	4	160	5-30	2	25	1.2M
V4G2	103	52	38	26	10	-	-	-	99	16	400	4-24	6	90	1.75M
Valley Green	95	50	35	20	05	-	-	-	100	3	250	5-40	3	40	2.1M
Climax	100	60	45	25	-	-	-	-	99	5	250	6-36	2	50	2.3M
Valley Red	95	50	35	20	05	-	-	-	100	6	500	5-40	5	80	4.4M
Cataclysm	106	65	-	-	-	-	-	-	100	10	1,000	10-60	4	160	9.5M
Wicked Crimson	117	85	55	35	-	-	-	-	100	20	1,000	8-48	4	140	10.0M
Wicked Crimson-2	120	90	60	40	10	-	-	-	100	20	1,000	8-48	7	220	15.0M
BC-Apocalypse	117	77	70	57	35	-	-	-	100	4	250	20-120	6	180	16.0M

VEHICLE RANGE BRACKETS	1	2	3	4	5	6	7	8
Distance (m)	01-50	51-150	151-250	251-500	501-1000	1001-2000	2001-3500	3501+

PULSE CANNONS—PULSE COMBAT SYSTEMS PG. 118

TYPE	1	2	3	4	5	6	7	8	MN	ROF	Q	DAM	SIZE	WT	COST
M-1000E	70	25	-10	-	-	-	-	-	98	1/3	35	10-80	10	300	175,000
M-1000	75	30	-05	-	-	-	-	-	97	1/3	35	10-80	5	150	225,000
M-1500	70	25	-10	-35	-	-	-	-	98	1	100	10-80	16	320	425,000
BC-Scorpion	85	70	30	00	-	-	-	-	100	1/6	60	20-120	12	475	600,000
BC-E5 Plasma	85	40	30	-	-	-	-	-	99	1	40	10-80	8	360	650,000
BC-E10 Plasma	90	45	35	-	-	-	-	-	98	1	40	10-80	4	180	800,000
HB-40 Pulse	95	70	35	05	-	-	-	-	98	1/3	50	20-120	6	240	900,000
M-2000 Pummeler	80	35	00	-	-	-	-	-	97	1/6	30	50-200	15	475	1.25M
HB-60 Pulse	90	65	30	00	-30	-	-	-	98	1/3	50	30-180	10	400	1.6M
M-3000 Overlord	80	35	00	-20	-	-	-	-	97	1/9	25	60-360	30	900	2.7M
M-4000 Imperium	75	30	-05	-	-	-	-	-	97	1/15	30	1-6HP	40	1,200	3.2M
HB-120 Pulse	90	65	30	00	-25	-	-	-	98	1/6	50	60-360	20	800	4.0M
HB-250 Pulse	85	60	25	-10	-	-	-	-	98	1/12	50	2-8HP	32	1,100	4.5M
HB-350 Pulse	85	60	25	-10	-	-	-	-	97	1/12	40	3-12HP	40	1,375	5.0M
BC-Incinerator	118	60	-	-	-	-	-	-	100	1/6	50	4-16HP	6	300	7.5M
S&M Weapon	109	70	65	45	-	-	-	-	100	1/3	50	2-8HP	6	250	7.5M
Venomous-2	115	70	50	15	-10	-	-	-	100	1/6	100	3-12HP	20	1,000	8.5M
H-160	105	95	75	55	25	-	-	-	100	1/3	100	2-7HP	20	1,100	9.5M
Venomous	110	65	40	05	-	-	-	-	100	1/3	100	3-12HP	12	600	11.5M
H-80	110	100	80	60	30	-	-	-	100	1	100	1-4HP	10	450	12.5M
Corpse Render	102	55	45	30	-	-	-	-	100	1/9	50	5-20HP	20	1,300	12.5M
Final Honor	117	95	85	60	36	-	-	-	100	1/3	100	2-8HP	8	350	15.0M
Toast Master 1200	110	60	50	35	05	-	-	-	100	1/12	50	4-24HP	10	600	17.0M
Contender	127	105	100	80	61	50	-	-	100	1/9	50	6-36HP	30	1,500	24.0M
Toast Master 2400	105	55	45	30	-	-	-	-	100	1/12	50	8-48HP	20	1,250	25.0M
Champion	132	110	105	85	66	55	-	-	100	1/6	50	6-36HP	15	750	30.0M
I Like It Crispy	105	55	45	30	-	-	-	-	99	1/30	40	10-100HP	80	5,000	35.0M
Grave Digger	130	95	75	60	43	25	-	-	100	1/3	50	8-48HP	16	800	45.0M
Mortician	125	110	95	80	63	45	-	-	100	1/3	100	10-60HP	20	1,000	60.0M
Mass Burial	120	105	90	75	58	40	-	-	100	1/9	100	20-120HP	40	2,000	66.0M

Despite their pleas, none of Malock's Misfits can convince their Mutzachan team member to leave his Pyra-Drive sled. Not that it would matter, since none of them have been able to figure out how it works.

ACCESSORIES PG. 120

ITEM	SIZE	WEIGHT	COST
Airbags	0	10	200
Altimeter	0	0	200
Atmosphere Supply	1	40	1,500
Cargo Box (armored)	1	15	300
Crash Gel	1%	500 + 100/spc	10 +10/spc
Ejector Seat	1	spec	7,500
Ejector Seat (HD)	1	250	25,000
Emergency Beacon	0	0	50
Environmental Containment	0	0.5/spc	100/spc
Fire Suppression System	0	25	1,000
Fire Suppression System (oversize)	1	120	10,000
Light Amplification Glass	0	0	spec
Multi-race Climate Control	1	50	1,000
NoSteal Sensor	0	0	250
Radio (standard)	0	1	70
Radio (field)	1	10	500
Radio (base)	2	50	1,200
Radio (long range)	3	70	4,000
Radio (interplanetary)	10	450	40,000
Search Light	1	25	10,000
Security Screen (Flex Glass)	0	10	1,500
Security Screen (Police)	1	30	2,000
Standard Winch	3	100	2,000
Xtreme NoSteal	0	5	15,000

COMPUTERS—VEHICLE PG. 120

TYPE	CC/UL	TL	MC	IT	ON	WT	COST
Alsanon	120/220	6	3	V	90	1	1,750
Aspire	250/600	6	6	V	90	5	3,750
Cerulean	500/1,500	7	9	V,D	95	5	7,000
Duras	100/150	4	2	V	60	8	1,250
Erenex	90/190	5	2	V	75	1	1,350
Extreme-1	150/250	7	2	V,D	95	1	2,150
Extreme-2	250/400	7	4	V,D	95	2	4,200
FirsTek	20/-	4	1	V	60	1	75
Gamma 40	400/1,000	6	15	K,V,D	90	5	13,500
Laranet	200/400	6	5	V	90	4	2,900
Navilex	33/-	4	1	V	60	1	400
Orbus	300/450	7	6	V,D	95	3	5,100
Relecon	150/250	5	3	V	75	4	2,000
Relecon-2	150/250	6	4	V	90	2	2,250
Reliance	80/130	4	2	V	60	5	950
SC-2	75/325	5	6	V	75	2	1,000
Sentinel	300/900	6	10	K,V,D	90	5	5,900
SFV-1	200/700	5	8	K,V	75	5	2,650
SkimComp	60/110	5	1	V	75	0	800
VC-1	20/-	5	1	V	75	0	225
VC-3	250/1,000	5	12	K,V	75	8	2,500
VCX-2	500/1,250	5	8	K,V	75	9	9,500
Veliton	1,000/5,000	7	20	K,V,D	99	2	22,000
XC-1	50/100	6	2	V,D	90	0	700

COMPUTERS—EQUIPMENT PG. 122

ITEM	COST
City Grid Controller Module	750
Hyper-Net Range Extender Module	5,000
Hyper-Net Uplink Module (TL 5, vehicle)	1,500
Hyper-Net Uplink Module (TL 6, vehicle)	4,800
hCar Construct	100
Visual Analysis Module	2,000
Weapon Interface Module	2,500

COMPUTERS—pAI CONSTRUCTS PG. 124

ITEM	IM	GUN.	A	IQ	INT	CC USED	COST
Automaton	+4	0 (x1)	2	30	10	245	25,000
Sub-Mind	+2	0 (x1)	2	35	10	290	50,000
Contemplator	+1	0 (x2)	3	45	15	400	90,000
Analytic	+0	1 (x2)	4	50	20	510	145,000
Rapidon	-1	2 (x2)	4	55	25	620	220,000
Adversary	-2	4 (x2)	5	60	30	760	375,000
Proximate	-3	5 (x3)	6	70	40	1,000	600,000
Organo	-4	7 (x3)	6	80	45	1,150	1.1M
Cosmion	-6	10 (x4)	7	90	50	1,475	3.0M

Note: See the *Battlelords* rulebook and *Lock-N-Load: Armor, Equipment, & Cybernetics* for rules and explanations regarding computers.

IM: Initiative Modifier of this pAI (for most purposes, the pAI should be treated as a character).

GUN.: Skill of the pAI in firing the vehicle's weapon systems (Gunnery). An entry of (xN) indicates that the pAI has skill in that many different weapon types. A pAI with a Gunnery entry of 2(x2) might have level 2 Beam Gunnery and level 2 Plasma Gunnery skills.

A: The number of simultaneous full actions which can be executed by the pAI in a single round. A character can normally take 1 full action per round, while a pAI can perform the listed number of tasks simultaneously.

IQ: The intelligence rating of the pAI, based upon the IQ table for characters.

INT: The intuition rating of the pAI, based upon the Intuition table for characters.

CC USED: The amount of computing capacity (CC) needed to run the pAI construct.

FLUX SHIELDS PG. 125

SHIELD	RATING	SIZE	WEIGHT	THR/BP	MAX	COST
MicroEcon-20	20	0	5	10/10	50	40,000
Economy-40	40	1	20	20/30	150	55,000
Micro-40	40	0	5	20/15	70	60,000
Micro-50B	50	0	5	30/15	120	70,000
Standard-50	50	1	15	40/35	400	70,000
Economy-75	75	1	30	20/30	125	90,000
Standard-75	75	1	30	30/35	200	95,000
Micro-75	75	0	6	30/18	150	95,000
Economy-100	1HP	2	80	20/60	360	125,000
Standard-100	1HP	1	25	30/35	300	150,000
Micro-100B	1HP	0	7	30/21	250	155,000
Advanced-100	1HP	1	18	50/40	350	160,000
Economy-200	2HP	2	100	20/60	180	265,000
Standard-200	2HP	1	25	30/35	275	300,000
Micro-200	2HP	0	12	30/36	200	310,000
Standard-300	3HP	1	30	30/35	275	460,000
Economy-500	5HP	2	120	20/60	110	755,000
Standard-500	5HP	1	30	30/35	250	770,000
Micro-500	5HP	0	20	30/60	90	800,000
Standard-500+	5HP	2	60	30/70	500	805,000
Advanced-500	5HP	1	24	50/40	300	805,000
AdvMicro-500	5HP	0	17	40/85	200	825,000
Standard-700	7HP	1	35	30/35	200	1.1M
Standard-1000	10HP	1	35	30/35	200	1.58M
Standard-1000+	10HP	2	70	30/70	400	1.66M
Standard-1500	15HP	1	40	30/35	180	2.45M
Standard-2000	20HP	1	45	30/35	150	3.3M
Advanced-2000	20HP	1	36	50/40	225	3.45M
Advanced-2000+	20HP	2	72	50/80	450	3.55M
Standard-3000+	30HP	2	120	30/70	180	5.15M
Advanced-3000	30HP	1	42	50/40	200	5.2M
Advanced-3000+	30HP	2	84	50/80	400	5.35M
Standard-5000	50HP	2	180	30/70	80	8.25M
Advanced-5000	50HP	1	57	50/40	150	8.7M
Advanced-7500+	75HP	2	140	50/80	260	13.7M

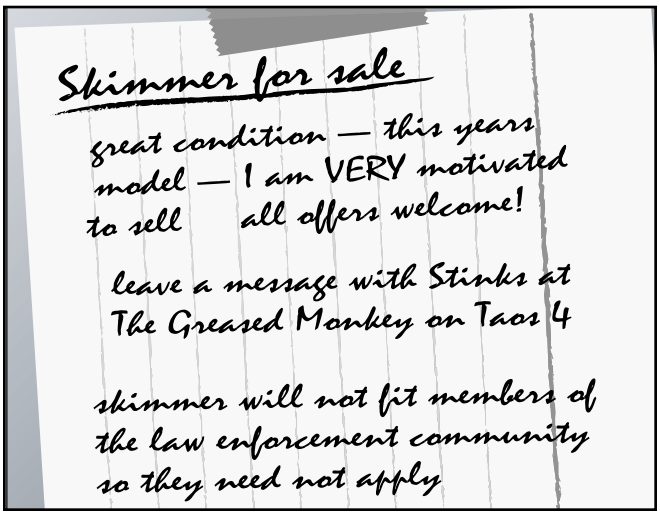
RATING: The strength of the Flux shield.

SIZE: The size of the Flux shield generator, in vehicle spaces. A size of 0 means that the unit is small enough to squeeze into just about any vehicle.

WEIGHT: The weight of the Flux shield generator, in kg.

THR/BP: The threshold and BP of the Flux shield generator.

MAX: The maximum vehicle size which this Flux shield unit can protect.



MILITARY EQUIPMENT PG. 125

ITEM	SIZE	WEIGHT	COST
Anti-Magnetic Generator	1	35	0.25M
Bug Zapper	1	30	50,000
Camouflage Unit (Vehicle)	2%	15/spc	75,000/spc
Cloaking Device	10%	60/spc	1.0M/spc
Displacement Device	2	75	5.0M
ECM Booster	1	25	1.0M
ECCM Booster	1	25	1.5M
Emergency Beacon (Military)	0	0	500
Flechette Unit	0	10	5,000
Holographic Generator	7	175	45M
Hostile Identification Computer	0	3	60,000
IFF-Beacon	0	1	2,500
IR Discriminator	0	1	15,000
Kinetic Energy Shield	0.25%	20/spc	0.2M/spc
K-Sat Bay (Defense)	1	20	50,000
K-Sat Bay (Battle)	2	50	70,000
K-Sat Bay (Mega)	5	200	100,000
Mini Phase Nullifier	2	50	750,000
Mobile Claymore	0	1	500
Phase Nullification System	5	150	3.0M
Point Defense Grenade	0	3	150
Power Jammer	1	30	100,000
Radar Detector	0	1	3,000
Scramble-X	2	70	0.5M
SDLU	0	2	40,000
Smoke Generator	1	30	15,000
UV Scrambler	0	2	15,000

MILITARY MODIFICATIONS PG. 127

ITEM	SIZE	WEIGHT	COST
ECM	0	0	spec
ECCM	0	0	spec
Radar Absorbent Coating	0	1/spc	1,000/spc

ULTRA ARMOR MODIFICATIONS PG. 127

ITEM	SIZE	WEIGHT	COST
Backup Hydraulics	5%/leg	75/spc	75,000/spc
Camouflage Unit (Ultra Armor)	8	100	0.5M
Demolition Claw	2	100	75,000
Emergency Escape	1	50	2.5M
Excavation Tool	3	150	30,000
Grappling Net	2	60	50,000
Minelayer (Ultra Armor)	2	80	50,000
Oversize Saw	6	275	100,000
Power Saw	2	80	25,000
Remove Hand	-1	-30	0
Sprint Batteries	Spec	30/spc	25,000/spc
Talons	1/arm	40	50,000

TIRES PG. 128

ITEM	SIZE	WEIGHT (kg)	THR	BP	MOD	COST
Basic-S	6-20	6	0	2	-05	50
Basic-M	21-50	7	0	3	-05	60
Basic-L	51-70	8	0	4	-05	75
Basic-XL	71-100	9	0	5	-05	95
Radial-S	6-20	7	0	2	0	65
Radial-M	21-50	8	0	3	0	75
Radial-L	51-70	9	0	4	0	90
Radial-XL	71-100	10	0	5	0	110
HD-S	6-20	8.5	1	3	0	80
HD-M	21-50	10	1	5	0	95
HD-L	51-70	11	1	6	0	115
HD-XL	71-100	12.5	1	8	0	140
Solid-S	6-20	12	0	4	-05	100
Solid-M	21-50	14	0	6	-05	120
Solid-L	51-70	17	0	8	-05	150
Solid-XL	71-100	20	0	10	-05	190
Syntex-S	6-20	6	3	6	0	200
Syntex-M	21-50	7	3	9	0	250
Syntex-L	51-70	8	3	12	0	300
Syntex-XL	71-100	9	3	15	0	350
PolyFill-S	6-20	8	3	18	0	500
PolyFill-M	21-50	10	3	27	0	700
PolyFill-L	51-70	12	3	36	0	900
PolyFill-XL	71-100	14	3	45	0	1100
HiPoly-S	6-20	8	6	18	0	750
HiPoly-M	21-50	10	6	27	0	1125
HiPoly-L	51-70	12	6	36	0	1500
HiPoly-XL	71-100	14	6	45	0	1875

SIZE: The size of vehicle on which the tire may be used, in vehicle spaces.

WEIGHT: The weight of a single tire of this type.

THR: The threshold of the tire.

BP: The amount of damage needed to destroy the tire.

MODIFIER: The effect on piloting if all tires are of this type; this effect has already been built into the vehicle template.

COST: The cost of a single tire of this type.

Archaic Powder Weapons—Machine Guns

The table gives vehicular stats for the most commonly mounted machine guns. The attack numbers at each range bracket are based upon vehicular range brackets. Detailed descriptions for each machine gun can be found in *Lock-N-Load: Weapons and Tactics*.

Flux Intereference Gen. pg. 102

TYPE	ER	TL	AV	COST
Achilles	600	6	VR	3.0M
AFR-1	275	5-6	C	110,000
Interfon	550	6	VR	6.0M
Pulsar	600	5-6	R	375,000
Quasar	1,500	5-6	VR	300,000
Victimizer	300	6	R	1.0M
Victimizer-G	300	6	VR	4.2M

Flux Interference Generators

Flux Interference Generators are described in *Lock-N-Load: Weapons & Tactics*. They reduce Flux shields on a point-for-point basis, but cannot damage other targets.

Achilles: An oversized FIG which would be impractical as a personal weapon (Encumbrance of 200), it can eliminate even strong Flux shields in a few shots.

AFR-1: A vehicle-mounted version of the personal weapon. See *Lock-N-Load: Weapons & Tactics*.

Interfon: This massive weapon is designed for "first strike" effectiveness. Most Flux shields wilt under its onslaught. The Interfon is rarely found as a field mount, due to its Encumbrance of 650 and setup time of 5 minutes.

Pulsar: This system can be vehicle-mounted, instead of its standard tripod and backpack configuration. See *Lock-N-Load: Weapons & Tactics*.

Quasar: This vehicle-mounted weapon is described in *Lock-N-Load: Weapons & Tactics*.

Victimizer: The Victimizer is a heavy, slow-firing FIG which allows the target to be "victimized" after a single hit, or so the marketing department at Balshrom would have you believe. As a field mount, the Victimizer has an Encumbrance of 120 and a setup time of 1 minute.

Victimizer-G: In response to criticism for the slow rate of fire of the basic Victimizer FIG, Balshrom has released the Victimizer-G, the first "gatling" Flux Interference Generator. It can dish out a lot of anti-Flux pain, but has the same limited range as its predecessor. When dismounted from a vehicle, this system has an Encumbrance of 500 and a setup time of 3 minutes.

Laser Anti-Missile System pg. 102

TYPE	ER	TL	AV	COST
BC-Umbrella	1,500	7	VR	2.0M
Dissector	1,200	5-7	R	600,000
EWES-E	2,000	5-7	R	1.0M
EWES-I	2,000	5-7	R	1.1M
Freewill-E	1,200	6-7	VR	1.5M
Freewill-I	1,200	6-7	VR	1.6M
LMDS-E	800	5-6	UC	400,000
LMDS-I	800	5-6	UC	500,000

Laser Anti-Missile Systems (LAMS)

Laser Anti-missile Systems (LAMS) on vehicles operate in a very similar fashion to their body armor-mounted counterparts (see *Lock-N-Load: Armor, Equipment, & Cybernetics*). Generally, the vehicular version has more shots per charge. In addition, LAMS on a vehicle may be mounted externally (where the entire unit is exposed to weapons fire) or internally (where only a weapon port is visible from the outside of the vehicle).

All LAMS systems have a Threshold of 10. The power output of these systems is no higher than those described in Lock-N-Load: Armor, Equipment, and Cybernetics; therefore, the chances to destroy an incoming missile on a successful hit are the same (100% for arm rockets, 75% for Reflex missiles or TL3-4 Anti-Tank missiles, and 50% for Heavy missiles or TL5-7 Anti-Tank missiles).

BC-Umbrella: The Balshrom Umbrella system is identical to its personal armor counterpart, but features a larger power pack. External mount only.

Dissector: See *Lock-N-Load: Armor, Equipment, & Cybernetics*. Internal Mount only.

EWES-E: An externally mounted LAMS which is identical in all respects to the EWES (see *Lock-N-Load: Armor, Equipment, & Cybernetics*).

EWES-I: The internally mounted version of the EWES.

Freewill-E: Externally mounted, the Freewill-E can fire 4 times per second. See *Lock-N-Load: Armor, Equipment, & Cybernetics*.

Freewill-I: Take the Freewill system, and mount it inside the vehicle's armor. You now have the Freewill-I.

LMDS-E: Protection on the cheap. This system is externally mounted and performs as the LMDS system from *Lock-N-Load: Armor, Equipment, & Cybernetics*.

LMDS-I: Internally mounted LMDS, providing better protection to the system against hostile fire.

LASERS PG. 103

TYPE	ER	TL	AV	COST
Arrow V	1,250	4-5	UC	25,000
Arrow VG	1,250	4-6	UC	110,000
Arrow XV	1,250	5-6	R	100,000
Avron-C1L	900	6	VR	1.0M
Banshee-V	500	6	VR	650,000
Beta 3V	1,230	5	UC	85,000
Beta X	1,230	5	R	160,000
Calsham-2X	1,500	5	VR	750,000
Calsham-4E	1,500	5	R	315,000
Calsham-4V	1,500	5-6	UC	525,000
Delta 5	1,230	5-6	VR	800,000
EMG-AP	900	3-4	R	8,500
Epsilon-1	850	5	VR	375,000
Epsilon-2	1,100	5	VR	1.0M
Gamma 4E	1,230	5	R	200,000
Gamma 4V	1,230	5-6	UC	365,000
RKMG	850	4-5	UC	90,000
RKMV	850	4-5	C	20,000
Tagert-8	800	4	R	30,000
XRK-3	850	4-5	VR	80,000
XRK-V	850	4-5	R	40,000
XRK-V2	850	4-5	VR	55,000
XRK-VG	850	4-5	VR	130,000

LASERS

Vehicular lasers are just like man-portable lasers, but larger, resulting in a higher damage yield, higher rate of fire, or larger energy pack. Vehicle-mounted lasers suffer the usual half damage penalty against armor with a threshold of 7 or higher.

Arrow V: The vehicular adaptation of the infamous Arrow LOSN laser carbine.

Arrow VG: Utilizes quadruple firing chambers to produce a weapon with the accuracy of the Arrow V but a much higher firing rate.

Arrow XV: A vehicular version of the Arrow-X laser (see *Lock-N-Load: Weapons & Tactics*).

Avron-C1L: The Avron-C1L represents one of the largest non-Impact lasers available. Despite its massive output, it is still ineffective against armored targets. As such, it is seen only infrequently on the battlefield. A portable version is available (Encumbrance 250) with a setup time of 3 minutes.

Banshee-V: Balshrom has adapted the Banshee to vehicular use. This weapon lacks the long range of most lasers, while retaining the ineffectiveness of lasers against heavy armor.

Beta 3V: The well-known Beta 3 laser rifle has been adapted for vehicle mounts, without the variable damage settings however.

Beta X: An advanced design which doubles the power output of the Beta 3V while retaining its targeting solution. Fairly lethal for the cost, when used against personnel. No portable power units are made for this system, preventing its use as a personal weapon.

Calsham-2X: Utilizes power boost technology to yield excellent damage results. Available as a field mount with an Encumbrance of 70 and setup time of 30 seconds.

Calsham-4E: Derived from the Calsham-4 laser rifle, this system cuts cost by eliminating expensive miniaturization technology. As such, it is quite bulky and somewhat less accurate, but provides excellent punch for the money.

Calsham-4V: A vehicular version of the Calsham-4 laser. See *Lock-N-Load: Weapons & Tactics*.

Delta 5: The last release in the "Greek letter" series of lasers from Balshrom Science Corporation, available only in a vehicular mount. Damage yield is exceptional.

EMG-AP: One of the earliest vehicular lasers, there is little to recommend this weapon except its cost. It is comparable in technology to the M18-L.

Epsilon-1: Just to irritate the Balshrom Science Corporation, Marrson Optics began releasing the Epsilon series of lasers in 2272. The Epsilon-1 features extreme damage output at the cost of a relatively slow rate of fire.

Epsilon-2: Released in 2274, the Epsilon-2 provides heavy firepower with a reasonable rate of fire. This weapon is available as a field mount (Encumbrance 150 and setup time of 2 minutes).

Gamma 4E: Based on the excellent Gamma 4 laser rifle, this system lacks the variable damage yield of its predecessor. Miniaturization features have been cut, producing a larger but lest costly weapon system.

Gamma 4V: A smaller, but equally deadly, adaptation of the Gamma 4. See *Lock-N-Load: Weapons & Tactics*.

RKMG: A weapon featuring quadruple output emitters, based upon the RKM laser carbine. Its extended power pack allows this weapon to be used effectively in long engagements.

RKMV: A simple adaptation of the RKM laser, this system does not have a built-in grenade launcher. See *Lock-N-Load: Weapons & Tactics*.

Tagert-8: It seems everyone wants to get in on the vehicular laser market. The Tagert-8 is a quick redesign of the Tagert-6 Shock Gun for use on vehicles.

XRK-3: From the makers of the RKM carbine comes the XRK series of weapons. The XRK-3 represents the best in damage boosting technologies, unleashing a lethal beam for minimal cost.

XRK-V: The XRK-V is the first weapon in the XRK series, boosting the base RKM output significantly. No personal version of this weapon has been created to date.

XRK-V2: The XRK-V2 is a further improvement in damage yield upon its predecessor, the XRK-V.

XRK-VG: The XRK-VG is an attempt to produce an affordable rapid fire laser by coupling 4 XRK-V firing mechanisms into a single weapon. A field mount (Encumbrance 125, setup time 2 minutes) is available.

LASERS—IMPACT PG. 103

TYPE	ER	TL	AV	COST
Able Dancer V	1,000	7	VR	3.0M
BC-Screamer	250	7	VR	7.0M
BC-Violator+	350	7	UC	90,000
Crusader	2,600	7	VR	1.6M
Crusader-E	2,600	7	R	1.1M
Drexler-V	150	7	VR	550,000
Excellcior	3,450	7	VR	2.1M
Excellcior 3	3,450	7	VR	6.4M
Force-VX	550	7	U	8.5M
Lancer V	2,700	7	R	800,000
Range Hound G	700	7	R	750,000
Range Hound V	700	7	UC	175,000
RKM 5000V	550	7	R	325,000
Super Force	250	7	U	12.5M

LASERS—IMPACT

Impact Lasers are described in *Lock-N-Load: Weapons & Tactics*. Vehicular versions of these weapons never mount built-in Flux shields or other special features found in the personal weapons. This results in a reduced price for vehicle mounts as compared to the versions found in *Lock-N-Load: Weapons & Tactics*.

Able Dancer V: A vehicular version of the Able Dancer impact laser (see *Lock-N-Load: Weapons & Tactics*).

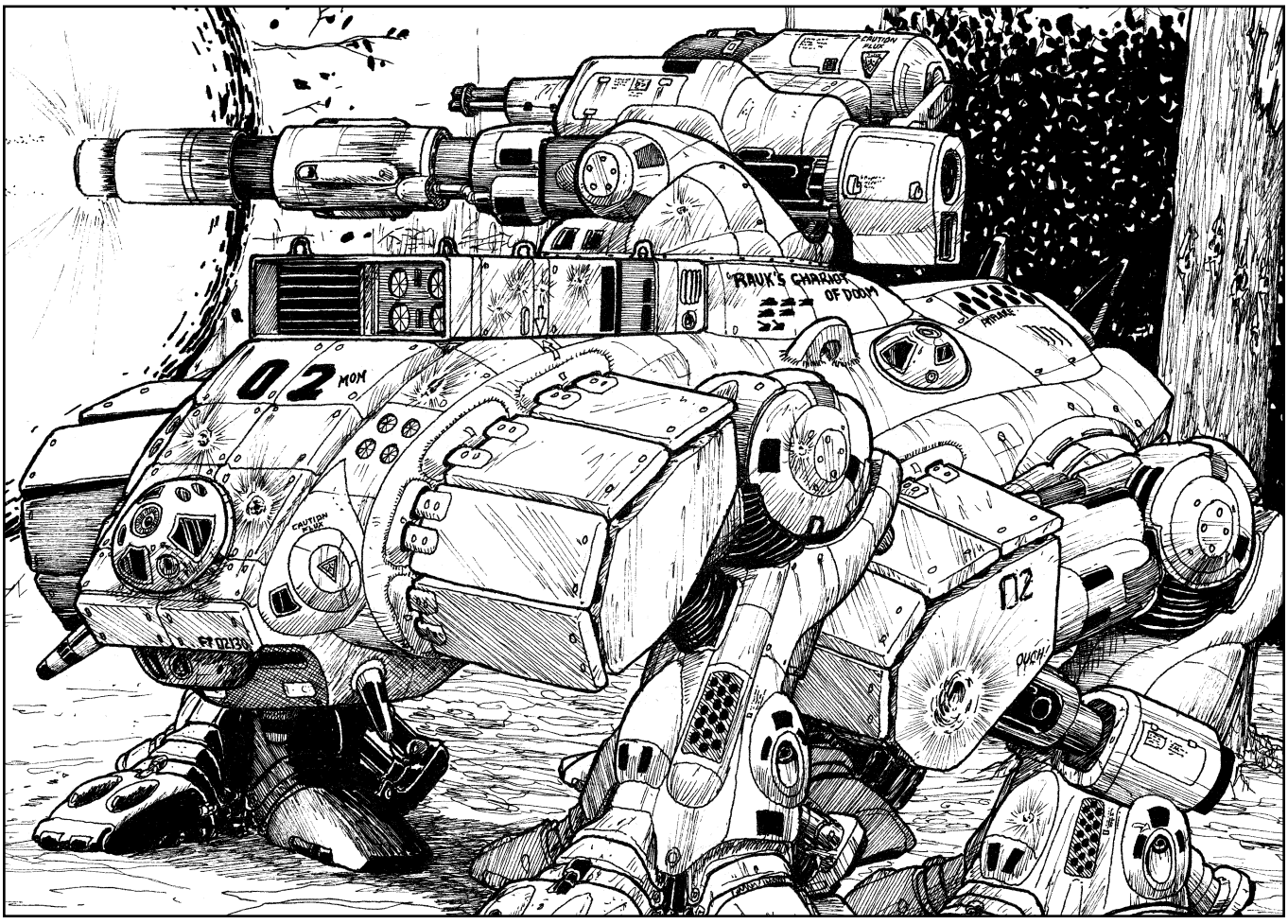
BC-Screamer: See *Lock-N-Load: Weapons & Tactics* for details.

BC-Violator+: This vehicle-mounted weapon eliminates the system shock problems found in the personal weapon. See *Lock-N-Load: Weapons & Tactics*.

Crusader: See *Lock-N-Load: Weapons & Tactics* for details.

Crusader-E: The price of a weapon can be reduced substantially if miniaturization features are eliminated. Marrson Optics took advantage of this fact to produce the Crusader-E.

Drexler-V: For close-in killing only, based upon the Drexler Auto Cannon. See *Lock-N-Load: Weapons & Tactics*.



Excellcior: See *Lock-N-Load: Weapons & Tactics* for details.

Excellcior 3: When cost is no object, the Excellcior 3 is an excellent option. Triple recycle chambers allow this weapon to achieve a high sustained rate of fire.

Force-VX: Why should the power of the Force be limited to personal weapons? A vehicular version is now available.

Lancer V: A straight conversion of Balshrom's impact laser weapon. See *Lock-N-Load: Weapons & Tactics*.

Range Hound G: The Range Hound is very light weight, so several have been incorporated into a single system to provide a better rate of fire.

Range Hound V: See the Range Hound in *Lock-N-Load: Weapons & Tactics*.

RKM 5000V: Brings the excellent RKM 5000 to the vehicular arena. See *Lock-N-Load: Weapons & Tactics*.

Super Force: This weapon actually started as a vehicle system before being adapted as a personal weapon. It lacks the range needed for most vehicle combat, but possesses excellent killing power. See *Lock-N-Load: Weapons & Tactics*.

LASERS—IMPACT CANNON PG. 103

TYPE	ER	TL	AV	COST
Emitter	2,750	7	U	18.0M
HLX-1	3,300	7	U	25.0M
Intruder	2,750	7	VR	5.5M
Intruder-E	2,750	7	R	3.7M
ML-1	3,000	7	VR	5.5M
ML-2	3,000	7	VR	7.0M
ML-3	3,000	7	VR	10.0M
MTL-1	4,000	7	R	4.0M
MTL-2	4,000	7	VR	6.0M

LASERS—IMPACT CANNONS

Impact Laser Cannons combine the tech level 6-7 Impact technology with massive emitters, making them suitable for destroying large targets at extreme range. These weapons are extremely heavy and tedious to set up, just like Laser Cannons of lower tech levels. In fact, the smallest Impact Laser Cannon currently available (the Intruder) has an encumbrance of 1,000 and would require 2 hours to assemble on a battlefield. Therefore, these weapons are best left for fixed emplacements or tank mounts. The Threshold of these weapons is 30. These weapons recharge from the vehicle's power plant at the rate of 1 shot per 2 minutes, assuming no other weapons are currently being recharged.

Note: Any person hit by an Impact Laser Cannon which inflicts damage in Heavy Points receives penetrating damage (and integrity reduction) spread across all sections of his armor. Of course, this is of little help since absorption polymers are useless against laser damage!

Emitter: Emits death in the form of a 2-12HP Impact laser beam. Useful against most vehicles and overkill against personnel. Integrity Reduction against personal armor is 60.

HLX-1: Big and deadly. 2-20HP of Impact laser damage is enough to get anyone's attention. Inflicts an unreasonable 1HP of integrity reduction against personal armor, but most personnel are vaporized with a single shot in any case.

Intruder: Intended for use against light vehicles or heavily armored infantry, this weapon can knock out targets at extreme range. Integrity reduction to personal armor is 30.

Intruder-E: Similar to the Intruder, but with less miniaturization to reduce costs. Still deadly on the battlefield and reduces integrity by 30 against personal armor.

ML-1: Part of a series of progressively more advanced (and effective) Impact Laser Cannons intended for use against medium armor. The ML-1 inflicts 40 points of integrity reduction against personal armor.

ML-2: Same damage and integrity reduction as the ML-1, but with a higher rate of fire.

ML-3: Even better than the ML-2, since the size of the system has been cut in half without compromising performance.

MTL-1: Bulky and slow, this system has the advantage of a 4km range. It is useful against light vehicles and reduces integrity of personal armor by 35.

MTL-2: Lighter and more accurate than the MTL-1, but with the same overall performance otherwise.

LASERS—MACHINE GUN IMPACT PG. 104

TYPE	ER	TL	AV	COST
Able Rage	1,000	7	VR	12.5M
Excellcior-G9	3,450	7	VR	19.2M
Octagon	2,700	7	R	6.6M
Range Hound G-2	700	7	VR	1.5M
RKM 50G	550	7	R	1.6M
Viceroy	5,000	7	VR	15.0M
Viceroy-2	5,000	7	U	20.0M

LASERS—MACHINE GUN IMPACT

Vehicular versions of these weapons never mount built-in Flux shields or other special features found in the personal weapons. Some of these weapons can be found in the Machine Gun Lasers section of *Lock-N-Load: Weapons & Tactics*.

Able Rage: See *Lock-N-Load: Weapons & Tactics* for details.

Excellcior-G9: Marrson has also introduced a high-end product, the Excellcior-G9. For those with the money to burn, this weapon exceeds the specs of the Viceroy impact laser cannon in almost all areas (except range). It may not be practical to use this weapon in a non-vehicle mount, as it has an encumbrance of 250 and a setup time of 9 minutes.

Octagon: See *Lock-N-Load: Weapons & Tactics* for details.

Range Hound G-2: Marrson Optics has produced this weapon to compete in the low end Impact Laser Machine Gun market against the recently introduced RKM 50G. It features superior range, but a lower rate of fire for a similar price. Encumbrance as a stand-alone unit is 100 and setup time is 3 minutes.

RKM 50G: See *Lock-N-Load: Weapons & Tactics* for details.

Viceroy: See *Lock-N-Load: Weapons & Tactics* for details.

Viceroy-2: Even though Balshrom has just introduced the Viceroy impact laser machine gun, it is ready to go to market with an even larger weapon: the Viceroy-2. It features 50% more killing power than the Viceroy for only 25% more money! Unfortunately, there are some problems with the system that account for its low malfunction number. Cautious buyers may want to wait for the Viceroy-2 Service Pack 1. Encumbrance is 250 and setup time is 8 minutes when used in a non-vehicular setting.

LASERS—MACHINE GUN PG. 104

TYPE	ER	TL	AV	COST
Avengance	600	6	VR	5.0M
Banshee-3	500	6	VR	2.0M
BC-Flayer	1,200	5-6	R	1.3M
Beta 3G	1,230	5	R	325,000
Calsham-4G	1,500	5	R	2.2M
Calsham-GX	1,500	5-6	VR	3.1M
Delta 5G	1,230	5-6	VR	3.3M
Gamma 4G	1,230	5-6	R	1.5M
RKM 10G	850	4-6	UC	160,000
Shalkon Heavy	2,600	6	VR	6.5M
Tagert-10	800	4-5	UC	125,000
Valley Blue	2,350	5-6	R	2.9M
Valley Green	2,350	5-6	UC	3.8M
Valley Green Express	2,500	6-7	R	7.5M
XR-20	1,300	4-6	UC	850,000

LASERS—MACHINE GUN

Machine gun lasers are frequently mounted on vehicles for anti-personnel use on the battlefield. They are relatively light, although somewhat bulky, and devastatingly effective at range. A squadron of skimmers mounting machine gun lasers can decimate an opposing force in seconds. Vehicular versions of these weapons never mount built-in Flux shields or other special features found in the personal weapons.

Avengeance: See *Lock-N-Load: Weapons & Tactics* for details.

Banshee-3: The Banshee-3 is a very strange weapon. It has a limited range and questionable accuracy, but can dish out damage. It is very light, only 40 encumbrance when used as a portable unit, and it sets up in a mere 15 seconds.

Beta 3G: Someone once got the idea to tape multiple Beta 3 carbines together and fire them from a tripod mount. This caught the attention of Balshrom weapon designer, who produced a proper machine gun laser based on the Beta 3 technology. It has a moderate rate of fire and questionable damage, but good range for the money. As a portable weapon, this unit has an encumbrance of 75. Setup time is minimal, as low as 30 seconds.

BC-Flayer: See *Lock-N-Load: Weapons & Tactics* for details.

Calsham-4G: Once Balshrom started the trend, all laser rifle designers wanted to get in on the profitable machine gun laser market. The Calsham-4G boasts a high rate of fire, decent damage, and excellent range ... along with a substantial price tag. Used as a tripod unit, encumbrance is 100 and setup time is 45 seconds.

Calsham-GX: A true machine gun laser designed from the ground up. This weapon uses Calsham-4 technology, but with substantial modifications to the power source. The result is a high-damage machine gun laser with reasonable range. As a standalone unit, setup time is 6 minutes and encumbrance is 225.

Delta 5G: Balshrom merged its laser rifle and machine gun laser teams for a brainstorming session, and this was the result. Some of the glitches have not yet been worked out, resulting in a questionable malfunction number for a battlefield weapon. The Delta 5G has an encumbrance of 200 and a setup time of 6 minutes when used in a field mount.

Gamma 4G: Once Balshrom gets started, it's hard to stop them. This unit offers a significantly higher rate of fire than the BC-Flayer at a slight increase in price. However, its accuracy is questionable. This weapon has an encumbrance of 80 when used as a tripod weapon. Setup time is 30 seconds.

RKM 10G: See *Lock-N-Load: Weapons & Tactics* for details.

Shalkon Heavy: See *Lock-N-Load: Weapons & Tactics* for details.

Tagert-10: See *Lock-N-Load: Weapons & Tactics* for details.

Valley Blue: A lower-cost version of the popular Valley Green laser machine gun, the Valley Blue comes with an optional combat shield (Thr 15, AI 40), which covers about 60% of the operator's body from the front while in use. Encumbrance 150 when used as a standalone weapon (Setup time: 10 minutes, or 8 minutes without the shield).

Valley Green: See *Lock-N-Load: Weapons & Tactics* for details.

Valley Green Express: See *Lock-N-Load: Weapons & Tactics* for details.

XR-20: See *Lock-N-Load: Weapons & Tactics* for details.

MISSILES—HEAVY PG. 104

TYPE	ER	TL	AV	COST
BC-Boomer	60km	7	VR	90,000
BC-Typhoon	50km	7	VR	110,000
Cobalt Tensor (SAM)	30km	6-7	VR	65,000
Envelopment	30km	6-7	VR	70,000
HM-1	2km	4-5	UC	30,000
Interdictor	5km	5-6	UC	40,000
Load-1	50km	6	R	60,000
Load-4	50km	6-7	VR	65,000
MIRV-H	8km	5-6	R	55,000
Overload	5km	6-7	VR	75,000
Star Troll	50km	6-7	VR	70,000
Stealth-X	75km	6-7	VR	90,000
Tomahawk	100km	6	R	55,000
Tomahawk-3	100km	6-7	R	65,000
Twin Load	40km	6-7	VR	80,000

MISSILES—HEAVY

Heavy missiles are anywhere from 1.0 to 2.0 meters in length. Heavy missiles apply all the technology of reflex missiles such as fire and forget systems and kicker charges. These missiles also utilize electronic warfare to enhance the probability of successfully reaching the target. Weight: 5kg per missile (14 encumbrance when carried).

Heavy missiles have a minimum range of 25m, and unless otherwise noted reduce integrity by 1HP when striking body armor. They have an electrical/EMP SMR of 75/60, and a Threshold of 15.

BC-Boomer: This weapon has been developed as a means of defeating heavily shielded targets. The Boomer carries a single-shot Flux Interference Generator in addition to a standard warhead. Upon arriving at its destination, the missile first releases the Flux Interference charge, inflicting 20HP of damage on any Flux shield (but leaving any other targets unaffected), after which the warhead detonates, dealing 6-36HP of damage. ECM/ECCM: rated at 20/20. 130% accurate out to 60km. Missile Speed: 1,200m/s.

BC-Typhoon: This wicked missile was designed by a Shuestron engineer working for Balshrom. Presented with the problem of defeating LAMS-defended targets, the engineer proposed a simple, yet elegant solution: each Typhoon missile carries a Laser Shield in the nose cone. This adds substantially to the unit cost, but each laser striking this missile has a 90% chance of being deflected harmlessly. The missile otherwise has the same stats as the Load-1.

Cobalt Tensor (SAM): Reaches Mach 7 before the end of the launcher! This is the only heavy missile currently on the market designed to knock out trans-atmospheric vessels. Cobalt Tensor is a Balshrom Science Corporation product. It has a maximum engagement ceiling of 30km and does 3-18HP of damage. It carries one chaff pod and has an accuracy of 120%. Missile Speed: 5,000 m/s.

Envelopment: Designed to allow successful engagement of targets equipped with Laser Anti-Missile systems, the core of this missile is coated in ablative liner. As a result, it requires 3 hits from a LAMS to destroy this missile. The Envelopment missile carries a 4-24HP warhead and is rated at 120% accuracy out to 30km. Its electronic warfare system is rated at 10/25. Missile Speed: 800 m/s.

HM-1: One of the earliest heavy missile designs, it is only useful due to its low cost. Integrity reduction against body armor is only 50. Missile Speed: 400 m/s.

Interdictor: Quite accurate and carries a decent electronic warfare package, but does not inflict heavy damage. Integrity reduction against body armor is 75. Range is limited to 5km. Missile Speed: 500 m/s.

Load-1: Carries an 8-48HP warhead with a 130% accuracy out to 50km. No electronic warfare raises some doubts about the overall worth of this unit. Missile Speed: 800 m/s.

Load-4: This Load variant does 10-60HP to the target and carries an electronic warfare system rated at 25/10. Missile Speed: 800 m/s.

MIRV-H: A multiple warhead missile, designed for relatively close range engagement of large targets such as Arachnid ground crawlers. The missile releases 4 submunitions, each capable of inflicting 1-4HP of damage. The system is 110% accurate out to 8km. This missile carries a minimal electronic warfare package rated at 15/10. Missile Speed: 1,000m/s.

Overload: This weapon is basically a huge warhead on a relatively small rocket. 105% accurate out to only 5km. However, the huge detonation is capable of doing 20-80HP of damage to the target. Additionally, any targets within 10m of the blast site sustain 30-180 points of concussion damage and 4 fragments inflicting 10-40 damage each. Carries onboard electronic warfare with ECM/ECCM 20/10. Missile Speed: 600 m/s.

Star Troll: This oddly named missile is known for its incredible engagement speed. The Able corporation equipped this bird with 4 booster rockets in addition to its central thruster. As a result, it quickly reaches hypersonic speeds upon launch. 135% accurate out to 50km, with ECM/ECCM ratings of 30/20. A successful hit causes 5-30HP of damage (threshold is reduced by 2HP). Missile Speed: 2,000 m/s.

Stealth-X: This missile relies on an extremely potent electronic warfare suite in an attempt to evade enemy countermeasures. The highly classified electronic warfare system has ECM/ECCM ratings of 55/30. The missile flies only 5m above the ground when outside of 5km of the target in order to minimize the chance of detection. The targeting system is 115% accurate out to 75km. Missile Speed: 1,000 m/s.

Tomahawk: An excellent system that should be used in conjunction with the Digiton Battle System. Damage: 2-12HP. Its accuracy is rated at 130% out to 100km. The unit has an ECM/ECCM computer rated at 30% each. Missile Speed: 800m/s.

Tomahawk-3: An improvement over the Tomahawk, with higher damage yield and a more powerful electronic warfare computer. Damage Yield: 3-18HP. ECM/ECCM: Rated at 40%. Missile Speed: 1,000 m/s.

Twin Load: Reactive armor poses a challenge for all missile designers. The Twin Load missile has a tandem charge designed to defeat reactive armor. The initial charge inflicts 1-6HP of damage on the target; the main warhead does 5-30HP. The electronic warfare package is rated at 10/10. 120% accurate out to 40km. Missile Speed: 1,000 m/s.

MISSILES—SAMS PG. 105

TYPE	ER	TL	AV	COST
Nike Hercules 4	12,000	5-7	R	500,000
Patriot 4	15,000	6	VR	600,000

MISSILES—SAMS

Vehicles mounting Surface to Air Missile systems require more than 1 shot loaded and ready to fire. Therefore, twin-tube launchers with an auto-loading mechanism are employed for most anti-aircraft uses.

Nike Hercules 4: Based on the portable Nike Hercules system, this radar guided missile travels at 5,000 m/s and has an engagement ceiling of 9,000m altitude. Each additional missile costs 70,000cr and weighs 7 kg.

Patriot 4: This vehicular version of the Patriot MDG missile system is the most advanced SAM available. While inflicting less damage than the Nike Hercules, this system has a longer range, a higher engagement ceiling (11,000m) and carries an onboard ECM/ECCM of 10/05. Most importantly, the missile has a 07% chance to penetrate a Flux shield outright. Missile Speed: 4,000 m/s. Additional missiles cost 100,000cr each.

PULSE CANNONS PG. 105

TYPE	ER	TL	AV	COST
BC-Abuser	120	7	VR	12.5M
BC-Ballista	450	6	UC	400,000
BC-E1 Plasma	200	5-6	VR	75,000
BC-E2 Plasma	180	5-6	R	170,000
BC-Enforcer	180	5-6	UC	125,000
BC-Heat	350	6-7	VR	310,000
BC-Heatwave	350	6-7	R	1.35M
BC-Offensive	160	5-6	U	195,000
BC-Terminator	185	6-7	U	625,000
BC-Volumizer	450	6	VR	700,000
M-100	200	4-5	R	110,000
M-20	130	4-5	C	22,000
M-20E	130	4-5	UC	15,000
M-50V	200	6-7	UC	1.05M
M-70	220	4-5	UC	50,000
M-70E	220	4-5	R	40,000
M-80	550	6-7	VR	3.3M
M-800	550	6-7	VR	2.4M
Mentar-A3L	240	5	VR	290,000
Plasma Tube	400	5	R	250,000
Precision+	1,000	5-6	VC	100,000
Vector 1	700	4	VC	85,000
Vector 4	800	5-7	VC	210,000
Vector 4E2	800	5-7	UC	115,000
Vector 4H	600	5-7	C	400,000
Vector 5	400	6-7	R	4.6M
Vector XH	600	5-7	UC	1.4M
Vector-XV	1,100	7	R	4.1M

PULSE WEAPONS

PULSE CANNONS

Vehicular pulse cannons are simply mounted versions of their handheld counterparts, often paired with a larger plasma source.

Optional Rule: All pulse cannons which are capable of inflicting 80 points of damage or more reduce integrity by 12 per hit when striking body armor, rather than 8.

BC-Abuser: See *Lock-N-Load: Weapons & Tactics* for details.

BC-Ballista: A purpose-built vehicular plasma cannon, the BC-Ballista has all-around excellent performance. No field mounts or personal weapon variants exist at this time.

BC-E1 Plasma: An affordable plasma cannon which borrows technology from the BC-Enforcer. Despite its small size, the power pack is not configured for backpack use, so it is not a practical weapon to carry around.

BC-E2 Plasma: Balshrom has upped the damage yield on this unit considerably to produce a mid-range vehicular plasma cannon. The BC-E2 Plasma Cannon allows pilots to engage targets in body armor with confidence.

BC-Enforcer: See *Lock-N-Load: Weapons & Tactics* for details. The vehicular version does not have variable damage output settings, but the full damage (4d6) uses only 1 charge.

BC-Heat: The BC-Heat comes with a snap-in/snap-out interface so that crewmembers can dismount it and use it exactly as described in *Lock-N-Load: Weapons & Tactics*. Mounting or dismounting the weapon takes 6 seconds.

BC-Heatwave: See *Lock-N-Load: Weapons & Tactics* for details.

BC-Offensive: See *Lock-N-Load: Weapons & Tactics* for details.

BC-Terminator: See *Lock-N-Load: Weapons & Tactics* for details. The vehicular version does not have variable damage output settings, but the full damage (6d6) uses only 1 charge.

BC-Volumizer: A big weapon from Balshrom which produces a big ball of plasma when fired. The BC-Volumizer is only available in a vehicle-mounted configuration, due to its large size.

M-100: The M-100 represents the limits of Tech Level 4 Pulse Cannon technology in a (relatively) compact form. It yields respectable damage, but has a poor malfunction number. Watch out!

M-20: See *Lock-N-Load: Weapons & Tactics* for details.

M-20E: The M-20E eliminates the "expensive" miniaturization features of the M-20 to produce a bulky pulse cannon that is one of the cheapest and least potent vehicle weapons available.

M-50V: A vehicular adaptation of the highly sought after M-50 Defiant pulse cannon (see *Lock-N-Load: Weapons & Tactics* for details).

M-70: Not to be confused with the M-50 or M-80, the M-70 is an evolution of the M-20 pulse cannon to a true vehicular weapon. It features an extended range and larger "ammunition" capacity, making it more practical on the modern battlefield.

M-70E: Yet another weapon variant which cuts cost by increasing the size and bulk of the weapon.

M-80: See *Lock-N-Load: Weapons & Tactics* for details.

M-800: Replace some of the ultra high-tech components of the M-80, and you have the M-800, a bulkier and less accurate weapon which is nonetheless highly effective in combat. One advantage of the added size: a larger shot capacity.

Mentar-A3L: See *Lock-N-Load: Weapons & Tactics* for details.

Plasma Tube: It's a tube. With plasma. Mounted on a vehicle. What more is there to know? Well, OK, there is a Tech Level 5 weapon connected to the tube, generating that lethal plasma, but that's just being picky.

Precision+: This adaptation of the Plasma Precision (see *Lock-N-Load: Weapons & Tactics* for details) is not very practical as a vehicle weapon, but some companies will try to sell anything. It does have a long range, at least.

Vector 1: See *Lock-N-Load: Weapons & Tactics* for details.

Vector 4: See *Lock-N-Load: Weapons & Tactics* for details.

Vector 4E2: The Vector 4 has been so successful that several variants exist. The Vector4E2 is a cheaper version which uses large components to replace expensive nanotechnology, while retaining the overall effectiveness of the weapon.

Vector 4H: The Vector 4H utilizes power yield-boosting technology which cuts the system range slightly, but produces a much deadlier effect than the base Vector 4.

Vector 5: See *Lock-N-Load: Weapons & Tactics* for details.

Vector XH: This system suffers from an intentionally confusing name. The Vector XH is not based upon the deadly Vector-X technology (as corporate marketing would like you to believe), but is instead an expanded version of the Vector 4H. This system produces lethal results out to medium range, but is fairly costly.

Vector-XV: A vehicular variant of the Tech Level 7 Vector-X pulse cannon. See *Lock-N-Load: Weapons & Tactics* for details.

PULSE CANNONS—PAWS PG. 105

TYPE	ER	TL	AV	COST
BC-Apocalypse	600	6-7	VR	16.0M
BC-Heat-G	350	6-7	VR	1.2M
Cataclysm	150	6-7	R	9.5M
Climax	400	5-6	R	2.3M
V1G	700	4	C	350,000
V1G2	700	4	UC	700,000
V4G	800	5-7	UC	875,000
V4G2	800	5-7	R	1.75M
Valley Green	850	5-6	UC	2.1M
Valley Red	850	5-6	R	4.4M
Wicked Crimson	300	6-7	R	10.0M
Wicked Crimson-2	750	6-7	U	15.0M

PULSE CANNONS—PULSE AUTOMATIC WEAPONS

In addition to the PAWS systems found in *Lock-N-Load: Weapons and Tactics*, many vehicles mount automatic pulse weaponry due to its lethal effectiveness on the battlefield. Vehicle-based PAWS never come with special features such as a Flux shield, accounting for some price differences from their portable counterparts. In addition, no setup time is necessary for vehicle mounted weapons (they are set up upon installation).

Optional Rule: All pulse cannons which are capable of inflicting 80 points of damage or more reduce integrity by 12 per hit when striking body armor, rather than 8.

BC-Apocalypse: See *Lock-N-Load: Weapons & Tactics* for details.

BC-Heat-G: Another economy class PAWS built from a pulse rifle design. Encumbrance of only 65 in a tripod mount, and it sets up in just 45 seconds.

Cataclysm: See *Lock-N-Load: Weapons & Tactics* for details.

Climax: See *Lock-N-Load: Weapons & Tactics* for details.

V1G: A cheap way to deliver plasma rapidly at a distance. It doesn't do very much damage, but it can be set up in only 1 minute. The weapon has an encumbrance of 150 when used on a tripod mount.

V1G2: Twice the performance, twice the price. Also twice as heavy as the V1G and it takes 2 minutes to set up.

V4G: Bundles multiple Vector 4 units together to produce an economical PAWS system. Encumbrance 110 when used on a tripod, with a 1 minute setup time.

V4G2: Twin V4G systems melded into one weapon frame. The weapon has an encumbrance of 225 with a setup time of 90 seconds.

Valley Green: See *Lock-N-Load: Weapons & Tactics* for details.

Valley Red: See *Lock-N-Load: Weapons & Tactics* for details.

Wicked Crimson: See *Lock-N-Load: Weapons & Tactics* for details.

Wicked Crimson-2: See *Lock-N-Load: Weapons & Tactics* for details.

PULSE CANNONS—PCS PG. 106

TYPE	ER	TL	AV	COST
BC-E10 Plasma	240	5-6	R	800,000
BC-E5 Plasma	240	5-6	UC	650,000
BC-Incinerator	150	6-7	R	7.5M
BC-Scorpion	450	6	R	600,000
Champion	1,400	7	U	30.0M
Contender	1,250	6-7	U	24.0M
Corpse Render	500	6-7	VR	12.5M
Final Honor	1,000	7	U	15.0M
Grave Digger	1,250	7	U	45.0M
H-160	650	6-7	VR	9.5M
H-80	700	7	VR	12.5M
HB-120 Pulse	550	5-6	VR	4.0M
HB-250 Pulse	300	5-6	R	4.5M
HB-350 Pulse	300	5-6	VR	5.0M
HB-40 Pulse	400	5	VR	900,000
HB-60 Pulse	540	5-6	R	1.6M
I Like It Crispy	500	6-7	U	35.0M
M-1000	200	4	UC	225,000
M-1000E	200	4	R	175,000
M-1500	275	4-5	R	425,000
M-2000 Pummeler	220	4-5	R	1.25M
M-3000 Overlord	275	4-5	VR	2.7M
M-4000 Imperium	200	4-5	VR	3.2M
Mass Burial	1,500	7	U	66.0M
Mortician	1,500	7+	U	60.0M
S&M Weapon	500	6-7	VR	7.5M
Toast Master 1200	600	6-7	VR	17.0M
Toast Master 2400	500	6-7	VR	25.0M
Venomous	400	6-7	VR	11.5M
Venomous-2	600	6-7	VR	8.5M

PULSE CANNONS—PULSE COMBAT SYSTEMS

The heaviest pulse cannons, unsuitable for personnel use, are known as Pulse Combat Systems (PCS). Even if personnel in MBA armor could carry these weapons, absorbing the recoil would likely be fatal. These are the main weapons of modern tanks and Ultra Armor, used to kill opposing vehicles (or Arachnids) in seconds. However, all but the biggest or most advanced Pulse Combat Systems suffer from a notable lack of range. These weapons have a threshold of 50.

BC-E10 Plasma: Another in the line of Balshrom's Tech Level 5 vehicular pulse cannon series. The E10 doesn't stand for anything. This system reduces armor integrity by 12 points per hit when striking body

armor. A tripod mount is available (Encumbrance of 450 and setup time of 6 minutes).

BC-E5 Plasma: The BC-E5 Plasma is marketed as a low-end Tech Level 5 Pulse Combat System. It is fairly large and reduces integrity by 12 points when used against body armor.

BC-Incinerator: Unleashes a devastating blast of plasma, but suffers from a serious lack of range. The BC-Incinerator can make quick work of even heavily-armored vehicles, however. In addition, if employed against infantry, it inflicts 50 points of integrity reduction to body armor.

BC-Scorpion: Although this system is large and has a limited damage yield and rate of fire, it is affordable. It also possesses a fairly long range for a Pulse Combat System, due to its Tech Level 6 magnetic bottle technology. Integrity Reduction: 12.

Champion: One of the first Pulse Combat Systems on the market to use the advanced magnetic bottle technologies recently discovered by Eridani researchers. The Champion can engage the might of modern armor with a high probability of kill and survival. A 1m tall feathered plume can be attached to this weapon for parade use. Integrity Reduction: 50.

Contender: The Contender PCS is based on the Champion system, but does not include top-secret miniaturization technology which is the sole property of EridiCorp. Therefore, it is larger and slightly less capable than the Champion system. Integrity of body armor is reduced by 50 points per hit (assuming there is anything recognizable left at all).

Corpse Render: The weapon's name describes its effects upon target vehicles' crew. The unsuspecting victims are generally rendered into small bits and DNA identification is required prior to notification of their next of kin. A hit upon body armor will reduce armor integrity by 50 points.

Final Honor: Produced exclusively by EridiCorp, the Final Honor Pulse Combat System is designed to take out mechanized infantry in a single shot. Integrity reduction is 30 points.

Grave Digger: Not only does it waste the enemy, it leaves a crater big enough to bury them in. Integrity Reduction: 50.

H-160: A large weapon system with reasonable range and lethality. Integrity reduction is 30 points when used against personnel.

H-80: The fastest firing PCS in the Heavy Point class, the H-80 is reasonably sized and has a fairly long range. Integrity reduction is 20 points per hit against personnel.

HB-120 Pulse: Some weapon designers forgo catchy names for their products and simply refer to them by code numbers. The HB-120 Pulse is a Tech Level 5 system with excellent range and damage yield for the money. It inflicts 16 points of integrity damage per hit against body armor.

HB-250 Pulse: Another in the HB line of Pulse Combat Systems. Integrity Reduction: 30.

HB-350 Pulse: Yet another PCS which lacks a marketing campaign. Integrity Reduction: 30.

HB-40 Pulse: If they hadn't produced so many systems, Able Corporation would have been able to think of names for these weapons. But they decided to pursue many different price points with their HB line. Integrity Reduction: 12.

HB-60 Pulse: The only other Pulse Combat System which Able has on the market. Integrity Reduction: 12.

I Like It Crispy (ILIC): Someone at Balshrom might have had a little too much Solar Tequila before rolling out this product. This weapon actually doesn't "crisp" its target—it usually vaporizes it completely. This thing is huge and has a terrible rate of fire … but that's fine as long as you hit what you aimed at, since it won't be firing back at you. Hint: don't engage multiple enemies at once with this system as your primary weapon. Integrity Reduction: 75 (as if it mattered).

M-1000: An early Pulse Combat System which allows Tech Level 4 vehicles to engage lightly armored vehicles and other moderate threats. Integrity Reduction: 12.

M-1000E: Even cheaper than the M-1000, the M-1000E could only be loved by the bean counters at headquarters. Integrity Reduction: 12.

M-1500: Upgrade the M-1000 with a few quality parts and the result is an M-1500. Integrity Reduction: 15.

M-2000 Pummeler: Even Tech Level 4 Pulse Combat Systems can deal considerable damage, if they are made large enough. The Pummeler is one example. It inflicts 16 points of armor integrity damage upon penetration of body armor.

M-3000 Overlord: Weighing in at nearly a metric ton, the Overlord can do significant damage at short range. Integrity Reduction: 16.

M-4000 Imperium: The Imperium is slow and heavy, but is a serious threat to low technology Armored Fighting Vehicles (AFVs). Integrity Reduction: 20.

Mass Burial: A more descriptive name for the effects of this weapon would be "Mass Cremation," but the designers decided that wasn't as catchy. Nothing else can boast the sheer killing power of this system, which can easily eliminate opposing armor at ranges over 1km. The integrity reduction of this weapon has been measured at 80 points, but only through computer simulation since the actual test subjects were rendered into glowing particles.

Mortician: Guaranteed to deliver your enemy to his death in style. Great for you Wax 'Em and Fax 'Em types. Integrity Reduction: 50.

S&M Weapon: The damage yield and range of this weapon are nothing to write home about, but it gets the job done. Integrity Reduction: 30.

Toast Master 1200: Can knock out modern tanks at ranges of up to 600m. The slow rate of fire is a drawback for a weapon that costs 17 million credits. Integrity Reduction: 50.

Toast Master 2400: Significantly improves the damage yield over the earlier Toast Master 1200 weapon. Integrity Reduction: 50.

Venomous: A well-rounded system with good damage yield, range, and rate of fire. Integrity Reduction: 40.

Venomous-2: One of the rare cases where the "new model" costs less than the original, the Venomous-2 trades rate of fire and miniaturization for an extended range. Integrity Reduction: 40.

ACCESSORIES PG. 107

ITEM	TL	AV	COST
Airbag	3-5	C	200
Altimeter	3-7	VC	200
Atmosphere Supply	3-5	UC	1,500
Cargo Box (armored)	4-5	C	300
Crash Gel	5-6	UC	10 + 10/spc
Ejector Seat	3-6	UC	7,500
Ejector Seat (HD)	4-6	R	25,000
Emergency Beacon	4-7	P	50
Environmental Containment	3-7	UC	100/spc
Fire Suppression System	3-5	UC	1,000
Fire Suppression System (oversize)	3-4	R	10,000
Light Amplification Glass	4-6	R	spec
Multi-race Climate Control	4-6	C	1,000
NoSteal Sensor	3-5	C	250
Radio (standard)	2-4	P	70
Radio (field)	3-4	UC	500
Radio (base)	3-5	UC	1,200
Radio (long range)	3-5	R	4,000
Radio (interplanetary)	4-6	VR	40,000
Search Light	3-4	C	10,000
Security Screen (Flex Glass)	4-5	UC	1,500
Security Screen (Police)	4-6	R	2,000
Standard Winch	2-4	C	2,000
Xtreme NoSteal	5-6	R	15,000

ACCESSORIES

Vehicle accessories are items which have general purpose use on vehicles and are relatively easy to retrofit after construction of the vehicle. In general, the Battle Master should not charge more than 10% for labor to install one of these systems.

Note: For descriptions of radio systems, see Battlelords of the 23rd Century (Communications Equipment). The standard vehicle radio has the same stats as the hand radio.

Airbags: Airbags reduce the effects of crashes upon the occupants. If a character is protected by a seat belt and airbag, he will suffer 1/5 damage from the effects of rapid acceleration/deceleration (see the section on Collision Effects). A character protected only by an airbag (not a seat restraint) suffers 2/3 of normal damage. The weight and cost given are per airbag; a standard configuration is one airbag per front seat passenger and one airbag per side (to protect against T-bone collisions). Airbags deploy in any frontal or side collision over 5 m/s.

Altimeter: A small digital display of the vehicle's current altitude (and rate of ascent/descent, if applicable). Destroyed if the piloting controls are destroyed.

Atmosphere Supply: Provides air (or methane atmosphere) for the occupants. 120 hours of air is provided for one person; divide this by the number of crew to get the duration available. Multiple supplies may be purchased for a single vehicle to provide backup or a longer duration. The supply mechanism has 15 BP.
Note: This system is far less useful without environmental containment, or if the vehicle's hull has been breached. In an emergency, masks can be connected directly to the supply (each mask costs 25cr), but this will not protect against very high or low-pressure atmospheres, corrosive atmospheres, etc.

Cargo Box (armored): The armored cargo box has a threshold of 12 and can withstand 15 BP of damage before being compromised. It has an internal volume of 3/4 of a vehicle space ($0.15m^3$). Any items stored are also subtracted from the total encumbrance which can be carried by the vehicle (it doesn't have a-grav inside, after all).

Crash Gel: This substance is instantly dispersed through the crew cabin in the event of a collision at speeds greater than 10 m/s. It reduces all forces encountered by the vehicle's occupants, reducing damage by an additional 2/3 if the crewmember is using a seat belt (to 1/6 of normal damage) or 3/4 if the person is otherwise unprotected. However, it fills the cabin, rendering most actions impossible unless a Strength check at -50 can be made to extract yourself from the gel. After 3 minutes, it evaporates into a harmless gas. Crash Gel does not interfere with breathing (it is air-porous and does not fill the mouth or nose upon deployment).

Note: If crash gel has been deployed, any still-functioning onboard computer will attempt to steer the vehicle to a smooth, immediate stop.

Ejector Seat: An ejector seat weighs 20kg for size 1-4 seats, 40kg for size 5-7 seats, or 80kg for size 8 seats. The seat cannot eject characters in heavy armor or MBA. When activated, the seat ejects the character

(through a retracting hatch in the top armor). Ejection requires 2 seconds to complete (one to retract the hatch, and one to eject and close the hatch). The character is launched 5m above the craft. No special landing mechanism is provided with the basic ejector seat, so falling damage ensues. An ejector seat has 10 BP.

Ejector Seat (Heavy Duty): Identical to the standard ejector seat but it works for characters in Mechanized Battle Armor. A crash balloon deploys negating the violent impact that would normally result from the weight of the seat and the armored occupant. The Heavy Duty Ejector Seat has 25 BP.

Emergency Beacon: If vehicle is disabled, this beacon broadcasts a distress signal (100km range, 100% strength) for 24 hours. It survives almost any vehicle damage short of the destruction of the engine as well as the Bottom Armor.

Environmental Containment: Protects against outside atmospheric conditions, biological and chemical hazards, and radioactive fallout. A vehicle with this option can choose to "button up" and use internal air supplies only, or open the vents to expose the vehicle to the outside atmosphere. Note that this option does not protect against environmental radiation, only against the danger of contamination by radioactive particles. The containment system includes a filtration unit; this allows the outside atmosphere to be cleaned if it is simply contaminated air, as opposed to a toxic atmosphere or vacuum. A vehicle may operate in filtration mode for up to 300 hours before the filters must be changed (250cr).

Fire Suppression System: An onboard fire extinguishing system that can be used by vehicles up to size 300. 40% chance to extinguish a vehicle fire, per second. The system remains active for 10 seconds.

Fire Suppression System (oversize): An onboard fire extinguishing system that can be used by vehicles up to size 2,000. 75% chance to extinguish a vehicle fire, per second. The system remains active for 20 seconds.

Light Amplification Glass: Glass areas of the vehicle are impregnated with NightVis 5, a light amplification compound eliminating night time vision penalties. The cost is 20 times the size of the vehicle (given in parenthesis on the vehicle template). This modification cannot be applied to vehicles with viewing systems (most of which have this capability built in).

Multi-race Climate Control: Allows the vehicle to provide comfortable conditions across a wide range of racial needs, from Phentari (cool) to Ram Python (hot).

NoSteal Sensor: Standard on TL4+ civilian vehicles. Allows tracking if stolen (100km range, 110% transmission strength). The tracking device's activation code is unique and encrypted to prevent unauthorized use. Battery lasts 3 days if vehicle not operating.

Search Light: Twice as powerful as the search light armor option (see *Lock-N-Load: Armor, Equipment, & Cybernetics*). The search light can be shot out by weapons fire (-100 to target it during the day, -60 at night).

Security Screen (Flex Glass): This transparent screen is used on taxis or limousines to provide a barrier between the driver and passenger compartments. It has a threshold of 7 and integrity of 15.

Security Screen (Police): Combining Flex glass and Flex steel, this security barrier provides an enclosure sufficient to contain most criminals. It has a threshold of 10 and integrity of 35.

Standard Winch: This winch has a 20 meter cable and a pulling capacity of 3,000kg. The winch itself has threshold 3 and takes 25 BP to destroy.

Xtreme NoSteal: Similar to the NoSteal sensor, but can track a vehicle anywhere on a planet, or within same solar system at 50% effective transmission strength. Battery lasts 3 days if vehicle not operating.

COMPUTERS—VEHICLE PG. 107

TYPE	TL	AV	COST
Alsanon	6	UC	1,750
Aspire	6-7	R	3,750
Cerulean	7	VR	7,000
Duras	4	R	1,250
Erenex	5	C	1,350
Extreme-1	7	R	2,150
Extreme-2	7	UC	4,200
FirsTek	4	VC	75
Gamma 40	6-7	VR	13,500
Laranet	6-7	UC	2,900
Navilex	4	C	400
Orbus	7	R	5,100
Relecon	5-6	UC	2,000
Relecon-2	6	C	2,250
Reliance	4	C	950
SC-2	5	C	1,000
Sentinel	6-7	R	5,900
SFV-1	5-6	UC	2,650
SkimComp	5	VC	800
VC-1	5	VC	225
VC-3	5-6	C	2,500
VCX-2	5-6	R	9,250
Veliton	7+	R	22,000
XC-1	6	C	700

COMPUTERS

All standard vehicular computers are assumed to take 0 space, but have a small weight (in kg). If dismounted from the vehicle in some way, they will have ENC equal to twice their weight (1 for 0 weight computers). All computers are assumed to have 1 BP/kg of weight, and there is a 75% chance they are rendered non-functional from any damage, even if BP remain.

A vehicle with a built in Piloting construct can self-pilot, but needs a predetermined course or external input to select which way to go.

This is generally done by pre-plotting a course with the aid of the Land Navigation construct or by allowing the city grid controller to issue navigational commands to the vehicle. In the event of combat or significant obstacles, the autopilot will generally disengage. The only way to have a vehicle pilot itself in a "dynamic" situation (one in which decisions are required as to where to go) is to install a pAI construct.

Note: In all descriptions that follow, when the Piloting construct is included, it is either a Skimmer or Automobile Piloting construct. The type of construct corresponds to the type of vehicle in which the computer is installed. Similarly, Repair Vehicle constructs are of the appropriate type for the vehicle. Ultra Armor Piloting constructs are not available in standard computers, but only as part of the Ultra Armor's specialized pAI computer.

Alsanon: Comes with built-in level 4 Land Navigation and level 8 Piloting constructs.

Aspire: Comes with built-in level 4 Land Navigation and level 15 Piloting constructs.

Cerulean: Comes with built-in level 2 Repair Vehicle, level 10 Land Navigation, and level 18 Piloting constructs.

Duras: Comes with built-in level 1 Land Navigation and level 8 Piloting constructs.

Erenex: The standard computer for most tech level 5 vehicles. Comes with built-in level 2 Land Navigation and level 8 Piloting constructs.

Extreme-1: Comes with built-in level 2 Repair Vehicle and level 10 Land Navigation constructs.

Extreme-2: Comes with built-in level 2 Repair Vehicle, level 10 Land Navigation, and level 12 Piloting constructs.

FirsTek: Has no built-in constructs. This primitive device represents one of the earliest onboard computer models, and is mainly useful for playing music.

Gamma 40: Comes with built-in level 4 Land Navigation and level 15 Piloting constructs. Includes a TL6 Hyper-Net Uplink and a Multi-Port Reader. Unlike most other computers, the Gamma 40 has an onboard pAI with level 10 Computer Operations ability, an initiative modifier of +5, and an effective IQ of 30 and Intuition of 8. This enables it to operate autonomously after receiving a command, although in a very limited fashion. The pAI utilizes 300 CC when in operation. The built-in pAI unit in this computer can be replaced with a different model.

Laranet: Comes with built-in level 4 Land Navigation and level 12 Piloting constructs.

Navilex: Comes with built-in level 1 Land Navigation and level 2 Piloting constructs.

Orbus: Comes with built-in level 2 Repair Vehicle, level 10 Land Navigation, and level 15 Piloting constructs.

Relecon: Comes with built-in level 2 Land Navigation and level 10 Piloting constructs.

Relecon-2: Found throughout the Core Worlds on tech level 6 vehicles. Comes with built-in level 4 Land Navigation and level 10 Piloting constructs.

Reliance: It's what a manufacturer throws in when they just need a computer in a vehicle. Comes with built-in level 2 Land Navigation and level 5 Piloting constructs.

SC-2: Comes with built-in level 1 Land Navigation and level 5 Piloting constructs.

Sentinel: Comes with built-in level 4 Land Navigation and level 12 Piloting constructs.

SFV-1: Comes with built-in level 5 Land Navigation and level 10 Piloting constructs.

SkimComp: Available only for skimmer use. Comes with built-in level 1 Land Navigation and level 5 Piloting constructs.

VC-1: Almost the bottom of the barrel. Comes with built-in level 1 Land Navigation construct.

VC-3: Comes with built-in level 2 Land Navigation and level 8 Piloting constructs.

VCX-2: Comes with built-in level 2 Land Navigation and level 10 Piloting constructs. Comes with 2 Weapon Interface Modules pre-installed.

Veliton: See *Lock-N-Load: Armor, Equipment, & Cybernetics*. This computer can be dismounted from the vehicle and used normally with its built-in battery.

XC-1: Comes with built-in level 4 Land Navigation construct.

COMPUTERS—EQUIPMENT PG. 107

ITEM	TL	AV	COST
City Grid Controller Module	4-6	C	750
Hyper-Net Range Extender Module	5-6	UC	5,000
Hyper-Net Uplink Module (TL 5, vehicle)	5	C	1,500
Hyper-Net Uplink Module (TL 6, vehicle)	6	C	4,800
hCar Construct	4-7	VC	100
Visual Analysis Module	5-7	UC	2,000
Weapon Interface Module	4-7	R	2,500

COMPUTERS—EQUIPMENT

City Grid Controller Module: This unit is built into all TL 5+ vehicle computers. It can be purchased for TL 4 computers and utilizes 1 module capacity. This system allows a skimmer to utilize city traffic grid control units. This has two benefits: letting you get on the "elevated highways" present in tech level 6 cities, and giving the onboard autopilot an effective level 18 Piloting skill for the purpose of avoiding crashes with other vehicles that are also utilizing a city grid controller.

Hyper-Net Range Extender Module: Utilizes an extended transmitter array to add 5km range to any Hyper-Net Uplink module. The range extender takes up 1 module and also connects to an external array that is relatively large compared to most computers (adds 10kg to weight of vehicle).

Hyper-Net Uplink Module (TL 5, vehicle): This unit performs the same as described in *Lock-N-Load: Armor, Equipment, & Cybernetics*, but has a range of 60m. The Hyper-Net Uplink modules intended for PCDs or body computers do not work with vehicle computers.

Hyper-Net Uplink Module (TL 6, vehicle): Same as above, but with a 300m range.

hCar Construct: This construct allows a vehicle to find directions, order food, and play entertainment on those long hours of autopilot. Standard in TL4+ civilian vehicles. Uses 10CC when running. The cost given is for separate purchase, which is probably only necessary if someone wipes your computer's storage. No special module necessary.

Visual Analysis Module: This module allows an onboard computer to interface with a vehicle's external viewing system and analyze the data to provide "vision" to the computer. This allows for several functions, including recording of live video from any external sensor, imagery analysis (useful by Detect Concealment, Identify Vessels, Identify Vehicles, and Identify Robots constructs), and weapon targeting utilizing visual sensors (if the system has a Weapon Interface Module). The use of this module can also greatly assist with input to other constructs, at the BM's discretion (Geology, Forensics, Survival, etc.). This module can also function as a Visual Connection module to other devices (see the description of the Visual Connection module in *Lock-N-Load: Armor, Equipment, & Cybernetics*).

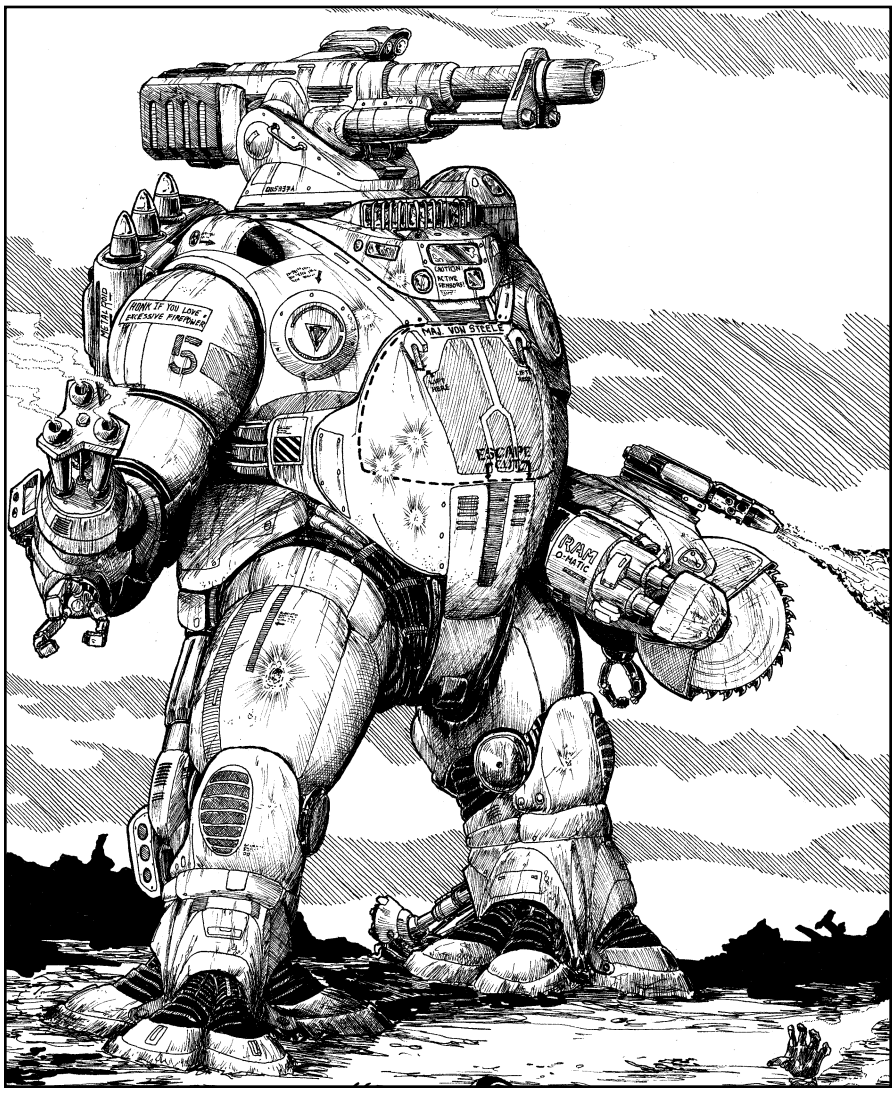
Note: A PCD or Body Computer can use a Visual Connection module to interface to a vehicle's viewing system, but it requires a level 5 Operations check, and only one side of the vehicle can be input to the computer at one time.

Note: All vehicles that you want to pilot remotely should have one of these modules, as you will be flying blind otherwise (see the Remote Joystick description in *Lock-N-Load: Armor, Equipment, & Cybernetics*). In addition, this module is useless on any vehicle that does not have a viewing system (i.e. it has plain old windows).

Weapon Interface Module: The weapon interface module allows an onboard vehicle computer to control one weapon mounted on the vehicle. The weapon must be one that is in a "normal" vehicle mount (internal and mechanized); it cannot be a tripod or ring mount external to the vehicle. If there is any doubt, the weapon can be automated if the pilot can control the weapon from his control panel. The computer can follow simple orders only, unless it has a pAI construct capable of independent decision-making. Simple orders are generally limited to firing at targets which are being tracked via an onboard radar system or other sensor input which the computer can access. If the weapon system is anything other than a missile, the computer fires at -20 unless it has a Gunnery construct running.

Note: Any radar system onboard the vehicle should be considered to interface to the computer.

Note: The computer may control more than one weapon with a single module if they are physically linked; also, one rack of missiles counts as a single weapon for interface purposes.



COMPUTERS—pAI CONSTRUCTS PG. 107

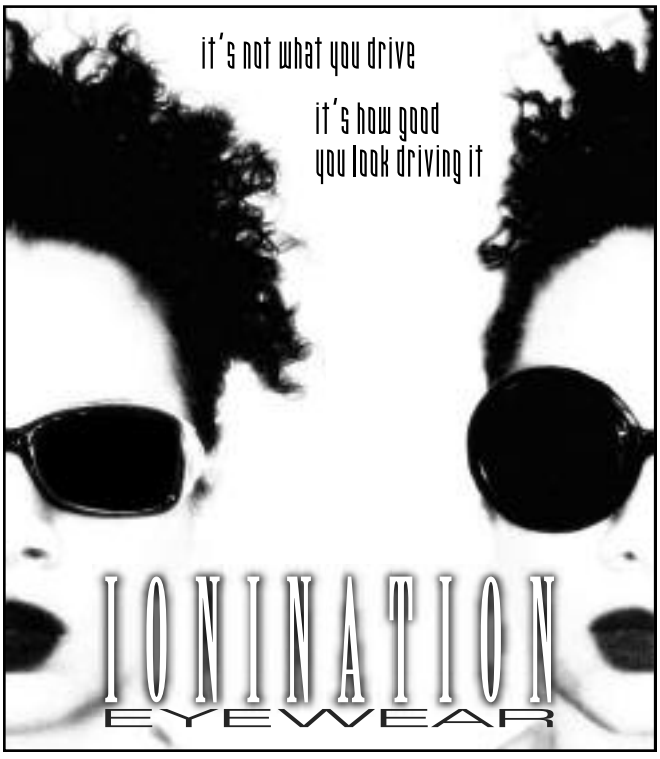
ITEM	TL	AV	COST
Adversary	6-7	VR	375,000
Analytic	6	R	145,000
Automaton	4-6	R	25,000
Contemplator	5-6	VR	90,000
Cosmion	7+	U	3.0M
Organo	7	VR	1.1M
Proximate	6-7	VR	600,000
Rapidon	6	R	220,000
Sub-Mind	5-6	R	50,000

COMPUTERS—pAI CONSTRUCTS

Some vehicles employ pAI (para-artificial intelligence) constructs to operate weaponry and generally act as an extension of the crew. These pAIs are capable of independent decisions (within the parameters of their orders and programmed laws). A pAI can multitask, allowing it to perform feats that a character could not normally do, such as controlling 4 weapons and piloting a skimmer simultaneously. The number of simultaneous actions which the pAI can execute is limited by its Actions rating.

Transport of artificial intelligence systems (even less-sophisticated systems such as pAI, as opposed to true artificial intelligence systems) to lower tech level environments is strictly forbidden. The standard punishment for smuggling this type of technology is a minimum of 20 years hard labor, with life imprisonment fairly common for egregious violations.

Note: The pAI issues commands to the onboard computer, which executes the instructions based on its ability; therefore, a pAI utilizes the skills loaded on the vehicle computer as constructs and can only control as many weapons as the computer has Weapon Interface Modules.



Note: A Gunnery skill of 0 indicates that the system can fire weapons at no penalty, but does not gain any bonus for skill either.

Note: The pAI constructs listed here are usable on standard vehicles (skimmers and wheeled vehicles) only. Ultra Armors use specialized, hard-wired pAI constructs which differ from those available for use on standard computers.

• **Example:** A skimmer is mounting a fully upgraded Gamma 40 computer (CC 1,000), housing a Rapidon pAI (replacing the standard pAI in this computer). The computer is housing 3 Weapon Interface Modules linked to the main plasma cannon, anti-personnel laser, and auxiliary missile rack. The Rapidon pAI can take 4 actions in a combat round (3 seconds); this allows it to pilot the skimmer (level 15 ability) and fire any or all of the three weapons (with Plasma Gunnery level 2 and Beam Gunnery level 2) in the same round. In addition, the pAI can communicate with the crew or broadcast messages via the radio, since these activities don't normally require a character to take a full action. Isn't high technology wonderful?

Adversary: The gold standard for most Alliance military vehicles. The Adversary pAI can execute on the Gamma 40 platform and is more reliable than your average Python Lizard in most circumstances.

Analytic: A fair pAI which is reliable in low-intensity situations. Very useful if you have lost some crewmembers and need help to get back to base.

Automaton: This pAI has a serious limitation; it cannot make navigational decisions fast enough to pilot a vehicle in combat. Apply a -40 to all Piloting checks due to slow reaction times. In addition, it is dumber than most Ram Pythons, leading to bad judgment in target selection. You get what you pay for.

Contemplator: It takes its time to decide what to do. That's the last thing you want in combat! But it is much cheaper than more advanced pAI systems, and it is capable of operating two different weapon types.

Cosmion: A BioCyberdyne product which outshines all others in its class. Only very specialized military systems can outperform a Cosmion pAI.

Organo: Vericle Systems' top entry in the vehicular pAI market, the Organo requires at least a Cerulean computer just to execute. However, it can really hold its own in combat, and it is far less expensive than the Cosmion (that isn't saying much).

Proximate: The Proximate is a high-end pAI which has been eclipsed by the most recent TL 7 models. However, it has found considerable use in the private vehicles of prominent (i.e. wealthy) bounty hunters.
It is always good to have a backup you can trust, especially when you are a Phentari who prefers to work alone.

Rapidon: The Rapidon lost out on major defense contracts to the more advanced Adversary pAI. However, this pAI can be purchased via the Black Market more readily than higher tech models.

Sub-Mind: The Sub-Mind is considered barely functional by most military experts; it operates at a relatively slow speed and makes poor decisions. However, it can pilot a skimmer without additional penalties (assuming a suitable construct is available in the onboard computer).

FLUX SHIELDS PG. 108

ITEM	TL	AV	COST
Advanced-100	7	VR	160,000
Advanced-500	7	VR	805,000
Advanced-2000	7	U	3.45M
Advanced-2000+	7	U	3.55M
Advanced-3000	7	U	5.2M
Advanced-5000	7+	U	8.7M
Advanced-7500+	7+	U	13.7M
AdvMicro-500	7	U	825,000
Economy-40	4	VR	55,000
Economy-75	4	VR	90,000
Economy-100	4	VR	125,000
Economy-200	4	VR	265,000
Economy-500	4	U	755,000
Micro-40	5-6	R	60,000
Micro-50B	6-7	VR	70,000
Micro-75	6-7	VR	95,000
Micro-100B	6-7	R	155,000
Micro-200	6-7	VR	310,000
Micro-500	6-7	VR	800,000
MicroEcon-20	4-5	R	40,000
Standard-50	5-6	R	70,000
Standard-75	5-6	R	95,000
Standard-100	5-6	UC	150,000
Standard-200	5-6	R	300,000
Standard-300	5-6	R	460,000
Standard-500	5-6	R	770,000
Standard-500+	6-7	VR	805,000
Standard-700	5-6	VR	1.1M
Standard-1000	5-6	VR	1.58M
Standard-1000+	5-6	U	1.66M
Standard-1500	5-6	VR	2.45M
Standard-2000	5-6	U	3.3M
Standard-3000+	5-6	U	5.15M
Standard-5000	5-6	U	8.25M

Flux Shields

Vehicular Flux shields may be added to vehicles that do not normally have shields; however, this will typically reduce the top speed of the vehicle by 2 m/s due to the energy used by the shield. Passengers in a vehicle may have their PDS active (as stated in *Lock-N-Load: Armor, Equipment, & Cybernetics*) but may not use any other type of Flux shield or field-generating device while the vehicle's shield remains active.

Military Equipment

Anti-Magnetic Generator: Repels magnetic mines and mag rounds. While an Anti-Magnetic Generator is active, any mag rounds fired at the vehicle are effective only 15% of the time; magnetically-triggered mines operate only 30% of the time while an Anti-Magnetic Generator is active.

MILITARY EQUIPMENT PG. 109

ITEM	TL	AV	COST
Anti-Magnetic Generator	4-5	R	0.25M
Bug Zapper	4-5	R	50,000
Camouflage Unit (Vehicle)	4-6	R	75,000/spc
Cloaking Device	6-7	VR	10M/spc
Displacement Device	5-7	VR	5.0M
ECCM Booster	5-7	R	1.5M
ECM Booster	5-7	R	1.0M
Emergency Beacon (Military)	4-7	UC	500
Flechette Unit	5-6	R	5,000
Holographic Generator	6-7	U	45M
Hostile Id. Computer	5-7	VR	60,000
IFF-Beacon	4-6	C	2,500
IR Discriminator	4-6	R	15,000
Kinetic Energy Shield	4-6	UC	0.2M/spc
K-Sat Bay (Battle)	6-7	R	70,000
K-Sat Bay (Defense)	6-7	R	50,000
K-Sat Bay (Mega)	6-7	VR	100,000
Mini Phase Nullifier	7	R	750,000
Mobile Claymore	4	UC	500
Phase Nullification System	7	VR	3.0M
Point Defense Grenade	3-4	UC	150
Power Jammer	5-6	R	100,000
Radar Detector	4-6	UC	3,000
Scramble-X	4-6	R	0.5M
SDLU	5-6	VR	40,000
Smoke Generator	4-5	UC	15,000
UV Scrambler	4-6	R	15,000

However, this system cannot be used while a vehicular Flux shield is active. The generator can sustain 20 BP of damage before being destroyed.

Bug Zapper: This device electrifies the outer surface of a Humpty Dumpty or other military vehicle. It can be used for 10 seconds per recharge. Anything in contact with the electrified section takes 6-36 points of electrical damage; any armor or equipment affected must make an electrical SMR. This unit cannot be used on sections with reactive armor or mounting an external missile rack. Each section of the armor is separately electrified. It requires 10 minutes to recharge this device, which has 10 BP.

Camouflage Unit: Changes color to match the vehicle's surroundings, like the armor option of the same name. The unit takes up 2% of the vehicle's total space (round up) and has 10 BP of integrity per space occupied.

Cloaking Device: This system allows the vehicle to cloak when not moving or firing. Any time the vehicle does not move or fire for 6 seconds, the cloaking device engages. As long as the vehicle remains stationary and does not engage in weapons fire, all Sighting checks to spot the vehicle are at a -200 penalty. In addition, Infrared detection or targeting is at -80, radar lock-on chance is at -100, and Ultraviolet detection is at -60. However, as soon as the vehicle moves or fires weaponry, the cloak is no

longer effective. The cloaking device may also be used as a standard camouflage unit, even when moving or engaged in combat. Note that while cloaked, the vehicle's crew can still perform other actions such as controlling K-Sats or performing passive radar scans. The cloaking device itself has a threshold of 25 and 20 points of integrity per space occupied.

Displacement Device: Operates in the same manner as a personal displacement device (see the Displacement Device description in *Lock-N-Load: Armor, Equipment, & Cybernetics*). The range is limited to 40m from the vehicle's initial position. The vehicle can recharge this device at a rate of 1 use per hour. This system may be used on vehicles as large as size 800.

ECCM Booster: When activated, this device multiplies your ECCM by 1.25. It is sensitive to EMP attacks, having an SMR of only 60.

ECM Booster: When activated, this device multiplies your ECM by 1.5. However, it also decreases your ECCM by 10 points (to a minimum of 0).

Emergency Beacon (Military): Standard on TL4+ military vehicles. Broadcasts a distress signal (1,000km range, 120% strength) for 24 hours, but must be manually activated. This unit can be activated by a pAI if one is present in the vehicle.

Flechette Unit: These anti-personnel devices are typically mounted on the legs of Ultra armor to deter enemy infantry from getting too close. They can be triggered by the jockey via mental command, or by the onboard pAI when necessary. Any personnel within 5m are hit by 2-12 fragments, each inflicting 6-36 points of damage. Personnel within 20m are hit by 1-4 fragments, while personnel out to 50m have a 30% chance of being hit by 1 fragment. Each leg may mount up to 3 of these devices. The device has a 180 degree arc of effect. 1 may be mounted per section per 100 vehicle spaces. This is an external option (Thr 5, 1 BP) which requires vehicle threshold of at least 40 to use.

Holographic Generator: See *Lock-N-Load: Armor, Equipment, & Cybernetics* (Personal Equipment). Thr 3HP, 120 BP.

Hostile Identification Computer: See *Lock-N-Load: Armor, Equipment, & Cybernetics*. The vehicular version is cheaper due to a lack of miniaturization.

IFF-Beacon: See *Lock-N-Load: Armor, Equipment, & Cybernetics*. The vehicular version is cheaper due to a lack of miniaturization.

IR Discriminator: See *Lock-N-Load: Armor, Equipment, & Cybernetics*.

Kinetic Energy Shield: This generator produces a force shield that surrounds the entire vehicle. The electromagnetic field reduces the effects of kinetic-based attacks by 10 points per attack. The field gives off a bright purple light which can be detected at great distances and eliminates the usefulness of any night vision devices. This field may not be used in conjunction with a Flux shield or other field generation device.

K-Sat Bay (Battle): This bay allows a Killer Satellite of Battle Sphere size to be housed within the vehicle. It can be launched in 1 second by automatic command. The listed weight includes the weight of the Killer Satellite. K-sats inside the bay are protected by the threshold of that section of the vehicle.

K-Sat Bay (Defense): This bay allows a Killer Satellite of Defense Sphere size to be housed within the vehicle. It can be launched in 1 second by automatic command. The listed weight includes the weight of the Killer Satellite. K-sats inside the bay are protected by the threshold of that section of the vehicle.

K-Sat Bay (Mega): This bay allows a Killer Satellite of Mega Sphere size to be housed within the vehicle. It can be launched in 1 second by automatic command. The listed weight includes the weight of the Killer Satellite. K-sats inside the bay are protected by the threshold of that section of the vehicle.

Mini Phase Nullifier: Functions exactly as the Phase Nullification Unit armor option (see the description in *Lock-N-Load: Armor, Equipment, & Cybernetics*).

Mobile Claymore: An anti-personnel device mounted to the outside of a vehicle. Treat as Claymore 3 when detonated (see the Claymore 3 description in *Lock-N-Load: Weapons & Tactics* for detailed effects). This unit must be mounted on a surface with threshold 20 or higher.

Phase Nullification System: Functions exactly as the Phase Nullification Unit armor option (see *Lock-N-Load: Armor, Equipment, & Cybernetics*), but it has an effective range of 500m instead of 100m.

Point Defense Grenade: Uses a thick steel plate backing an explosive packed with fragments. Treat the detonation as an M-95 grenade (see Grenades in Battlelords of the 23rd Century or *Lock-N-Load: Weapons & Tactics*). The point defense grenade must be mounted on a location of Threshold 8 or higher with no glass exposed nearby.

Power Jammer: Provides +40% ECM out to 100m radius that stacks with other ECM units; however, it affects friendly radar as well as enemy radar within that range. This includes trying to fire missiles out of the 100m radius; the firing vehicle sustains a -40 ECM penalty even if it is the one using the Power Jammer unit.

Radar Detector: See the description of the Radar Detector armor option in *Lock-N-Load: Armor, Equipment, & Cybernetics*.

Scramble-X: When a Scramble-X is activated, all radar locks against targets within a 300m radius (including the mounting vehicle) suffer a -100 ECM penalty. This unit produces a huge return on enemy radars due to its jamming effect. Opponents will tend to concentrate artillery fire on you as a result, so watch out! The Scramble-X unit itself has 30 BP if struck by weapons fire.

SDLU: See the SDLU description in *Lock-N-Load: Armor, Equipment, & Cybernetics*. It costs 10,000cr to rearm an SDLU, as some of its components burn out after a single use.

Smoke Generator: Can be mounted anywhere on the vehicle. When activated, the generator dispenses thick smoke which spreads 4m per

second, out to 12m from the vehicle. This system is totally ineffective at speeds greater than 12 m/s. A generator can operate continuously for up to 1 minute; it must cool down for 5 minutes before being used again. The smoke dissipates after 2 minutes.

UV Scrambler: See the UV Scrambler description in *Lock-N-Load: Armor, Equipment, & Cybernetics*.

MILITARY MODIFICATIONS PG. 109

ITEM	TL	AV	COST
ECCM	3-7	UC	spec
ECM	3-7	C	spec
Radar Absorbent Coating	4-5	R	1,000/spc

MODIFICATIONS

ECCM: Each point up to 30 costs 15,000cr/point. Each additional point up to 50 costs 35,000cr/point. Each additional point up to 60 costs 250,000 cr/point. 60 is the maximum ECCM value that can be built into a vehicle.

ECM: Each point up to 30 costs 10,000cr/point. Each additional point up to 50 costs 25,000cr/point. Each additional point up to 60 costs 200,000 cr/point. 60 is the maximum ECM value that can be built into a vehicle.

Radar Absorbent Coating: Reduces chance for radar lock-on by 40%, if no external objects have been attached to the vehicle.

ULTRA ARMOR OPTIONS PG. 109

ITEM	TL	AV	COST
Backup Hydraulics	5-7	VR	75,000/spc
Camouflage Unit (Ultra Armor)	6-7	R	0.5M
Demolition Claw	4-7	UC	75,000
Emergency Escape	6-7	R	2.5M
Excavation Tool	4-7	UC	30,000
Grappling Net	6-7	R	50,000
Minelayer (Ultra Armor)	6-7	R	50,000
Oversize Saw	4-6	R	100,000
Power Saw	4-6	UC	25,000
Sprint Batteries	6-7	UC	25,000/spc
Talons	4-7	C	50,000

ULTRA ARMOR OPTIONS

Backup Hydraulics: An Ultra Armor with Backup Hydraulics is unaffected by critical hits to the knee or hip that indicate the leg has frozen in place. However, if such a critical occurs a second time to the same location, it is affected normally (the backup hydraulics have then been compromised).

Camouflage Unit: Performs as a standard camo unit. The main unit must be mounted in the torso section (4 spaces), and 1 space is used per limb. This version can be used on Ultra Armor only, and has 40 BP if hit by weapons fire.

Demolition Claw: Made up of a hydraulic grasping claw (grappling Strength 200) and an embedded plasma torch (with enough fuel for 1 hour of operation). Can inflict 8d4 damage per second to a grasped target, and can cut through materials with a high Threshold given enough time (BM's discretion, but an average scenario would be 10 seconds per HP of Threshold to make a 6-inch cut). The demolition claw has an integrity of 75 BP.

Emergency Escape: If the torso is destroyed, the crew cabin is compromised, or the HD is otherwise critically destroyed (reactor critical, etc), this option has an 85% chance of displacing the operator 20m away in a random direction.

Excavation Tool: Combines a powered shovel with a device used to bore through solid rock, allowing the HD to create defensive fortifications rapidly. When tunneling, the device is as effective as an EV-1 Mole (see *Lock-N-Load: Armor, Equipment, & Cybernetics*). When used as an earth mover, the HD can move 1 cubic meter of dirt per 30 seconds. However, due to limited reach, holes cannot be deeper than half of the Ultra Armor's height, unless the excavation is large enough for the vehicle to walk down into the crater. It is rare for anyone to use a 50 million credit war machine for strip mining, however! The rugged excavation tool has 100 points of integrity.

Grappling Net: The grappling net is made of Flexsteel cords and is attached to the Ultra Armor by a high tensile strength metal cable. The net may be fired to a distance of 50m and entangle any creature weighing less than 1 ton. There is a 90% chance to hit a size class 4 target. The net requires a Strength check at –60 to escape, unless the target can sever the Flexsteel cords by other means. The retracting winch reels in the net at 5m/s and has an effective pulling Strength of 150. It requires 30 seconds to reset the net after a miss. The Ultra Armor operator can release the cord at any time. The mechanism for firing the grappling net has 20 BP.

Minelayer: Allows the HD to lay mines via one of its legs. The unit must be mounted in the leg and holds up to 100 encumbrance of mines. Multiple units may be mounted. Laying a mine takes 2 seconds during which the Ultra Armor must be stationary. The minelayer has Thr 10 and 20BP; if damaged, there is a 10% chance of detonating 1-3 mines contained in the unit.

Oversize Saw: 2m wide and 5cm thick, this circular saw blade is excellent for slicing through trees (a 1m thick tree can be cut down in a single round), and makes quick work of obstacles such as barbed wire. In fact, this non-magnetic blade will even cut through force wire in less than 1 second. A round is usually long enough to cut an opening through a steel fence. When used as a weapon, this saw inflicts 6-36 points of damage, but the target's Threshold value is doubled. Note that while the oversize saw is in operation, no other weapons may be fired from that limb of the Ultra Armor. The oversize saw has Threshold 10 and 15 BP, and may be targeted while in use (-70/-30 targeting modifier).

Power Saw: A much smaller circular saw blade, useful for cutting through obstacles such as barbed wire and fences. The 50cm blade of the power

saw can slice through wood at the rate of 10cm per second. It is generally able to sever steel cable in 1 to 3 seconds, depending on strength and thickness. When used as a weapon, this saw inflicts 3-12 points of damage, but the target's Threshold value is doubled. The power saw has Threshold 5 and can only sustain 6 points of damage before being disabled. Due to its small size, targeting a power saw is at a (-90/-50) penalty (the first number refers to vehicle weapons, the second to personal weapons).

Sprint Batteries: Sprint Batteries store additional power which may be released for ultra-rapid movement. This option is available for crawler HD units only. The batteries allow a top speed increase of 50kph (14 m/s) for a 1-minute burst. After this burst, the batteries require 15 minutes of immobility before they are recharged. These units are mounted in each leg of the crawler. The batteries take up 1 space in each leg per 50 spaces of total HD size; (a 75 space crawler must use 2 spaces per leg (240kg) to gain the benefits). If struck by weapons fire, the Sprint Batteries are immediately disabled; the unit is destroyed if it sustains more than 15 points of damage.

Talons: Talons mounted on Ultra Armor are far larger than any standard talons. They are made of hardened Flex Steel and when used to attack targets, gain the full benefit of the Ultra Armor's strength and mass. Therefore, they inflict more damage per hit than a punch (add d10+5 per hit to the base punch damage).

Tires

All tires come in sizes from Small through Extra Large. The size of vehicle determines which size of tire is needed, as shown on the table.

Basic: These tires are fragile and provide poor handling (-05 to Piloting checks). However, they are cheap.

TIRES PG. 109

ITEM	TL	AV	COST
Basic-S	2	P	50
Basic-M	2	P	60
Basic-L	2	P	75
Basic-XL	2	P	95
Radial-S	2-3	VC	65
Radial-M	2-3	VC	75
Radial-L	2-3	VC	90
Radial-XL	2-3	VC	110
HD-S	3	UC	80
HD-M	3	UC	95
HD-L	3	UC	115
HD-XL	3	UC	140
Solid-S	2-3	UC	100
Solid-M	2-3	UC	120
Solid-L	2-3	UC	150
Solid-XL	2-3	UC	190
Syntex-S	4-5	UC	200
Syntex-M	4-5	UC	250
Syntex-L	4-5	UC	300
Syntex-XL	4-5	UC	350
PolyFill-S	5	R	500
PolyFill-M	5	R	700
PolyFill-L	5	R	900
PolyFill-XL	5	R	1100
HiPoly-S	6	VR	750
HiPoly-M	6	VR	1125
HiPoly-L	6	VR	1500
HiPoly-XL	6	VR	1875

HD: Providing a bit of damage resistance, HD tires are intended for off-road use. They handle well under any conditions.

HiPoly: High technology meets old-fashioned wheeled vehicles. These Tech Level 6 tires can sustain a great deal of damage due to the use of the latest absorption polymer and Flex Steel technology. However, they are expensive and illegal on worlds below Tech Level 6.

PolyFill: These tires are acceptable on worlds of Tech Level 5 or higher; they utilize absorption polymers and synthetic biomaterials to provide a high level of damage resistance.

Radial: The standard tire on Tech Level 2-3 worlds, these tires do not penalize maneuverability but cannot sustain much damage before falling apart.

Solid: Filled with rubber instead of air, these tires handle poorly but can take more damage before being destroyed than other low technology tires.

Syntex: The Syntex line of tires is found on most Tech Level 4 vehicles. The tire utilizes advanced materials to replace rubber and can resist a significant amount of damage.

WHEELED VEHICLES AVAILABILITY

NAME	TL	AV	COST
Bristol	3-4	C	7,450
Buzzard	3-4	UC	61,200
Ellsworth	3-4	VC	12,000
Metropolitan	3-4	C	25,300
Peregrine	4	R	31,500
Ripper	4	UC	60,000
Small ATV	5-6	UC	61,400
Ursa	3	C	152,000
Vanguard	4-5	UC	7,250

SKIMMERS AVAILABILITY

NAME	TL	AV	COST
Argent	5-6	C	33,500
ARSAP	5	C	86,500
Companion	5-6	VC	34,200
Convergence	5-6	UC	5,500
Cybin	6	UC	34,500
Eliminex	6	U	74.5M
Exeter	5-6	UC	55,200
Gauntlet	6	R	4.7M
Go	5-6	VC	10,700
Guardian	5-6	UC	98,500
Hunter	5	UC	90,000
Kiev	5	VR	23.0M
Levus	6-7	R	56,800
Panther	6	VR	20.0M
PS1	4-5	UC	19,300
Quartet	6	R	870,000
Ripple	6	VR	9.6M
Sentry	5	UC	62,000
SkimDump	5-6	UC	144,000
Street Sweeper	5	R	7.1M
There	5	UC	120,000
Tiger III	7	U	104M
Trident	6	UC	800,000
Valiant	5	UC	86,000
Van'ith	5	R	485,000
Wasp	5-6	C	18,300

CRAWLERS AVAILABILITY

NAME	TL	AV	COST
Armadillo	7+	U	313M
Rhyno	6	VR	57.5M
Scamp	6	R	14.0M
Scamp-II	7	VR	31.5M

WALKERS AVAILABILITY

NAME	TL	AV	COST
Alorre	7	U	136M
Balrog	6	R	67.0M
Budaish-Enk	6	R	32.5M
Cyclops	6	VR	66.0M
Foe Hammer	7	U	125M
Half Breed	7	VR	12.5M
Legend	6	R	57.5M
Peacemaker	7+	U	442M

Speed Conversion Table

A table for faster conversion between kilometers per hour and meters per second is included below. Miles per hour (mph) have also been included for the convenience of players who may have difficulty visualizing speeds in metric units. Keep in mind that all data in the game is presented in metric units.

- To convert m/s to kph, multiply by 3.6.
- To convert kph to m/s, multiply by 0.277.
- To convert m/s to mph, multiply by 2.237.
- To convert kph to mph, multiply by 0.621.

SPEED CONVERSION

KPH	M/S	MPH
5	1.4	3.1
10	2.8	6.2
25	6.9	15.5
50	13.9	31
100	27.7	62
125	34.7	77.7
150	41.7	93.2
200	55.6	124.3
250	69.4	155.3
300	83.3	186.4

Index

Important Rules & Formulas

Formulas

1 vehicle space = 0.2 m3

Maximum Encumbrance (Cargo): (Volume x 2,000) or (2 x (Max Weight – Current Weight))

Converting weight into encumbrance: Enc. = (weight x 2) + (size x 10)

Simplified Collision Resolution: Collision damage = (Collision speed (in m/s) / 5) x (Vehicle Weight (in kg) / 1,000) x d8

Vehicle Additional Weight Capacity: Vehicle Weight - Max Weight

Max Weight < Added weapons and equipment + Vehicle +Crew + Cargo

Skimmer Max Deceleration: Max Acceleration + 1

Total Vehicle Weight: Vehicle Weight + Crew Weight + Cargo Weight

Abbreviations

EQ: crew may use regular body armor and carry non-body-mount weaponry

HVY: heavy armor

MBA: mechanized battle armor

(F): forward-firing weapon

(B): rear-firing weapon

(360): weapon which can fire in any direction

MDC rating: Maximum Damage Capacity. This represents the amount of damage negated when an attack penetrates the reactive armor's threshold

Modifiers

Snap Shot: -40 to hit (even at Range Bracket 1 for Vehicle Weapons)

Aiming Times: (to avpoid Snap Shot Penalty)
- Range Bracket 1: half action
- Range Bracket 2: full action
- Range Bracket 3: 4 half actions
- Range Bracket 4-5: 5 half action
- Range Bracket 6-8: 3 full actions

Pilot Aiming Weapon: -30 to Piloting Checks

Pilot Snap Shot Firing Weapon: -20 Piloting Check, -40 to hit

Size Class Difference intended for Vehicle Occupants:
- 2 SC below: -40 Piloting
- 2 SC below: -20 to hit (Gunnery)
- 1 SC larger: -20 to all skill, Man Dex, and Agility checks
- 2 SC larger: -40 to all skill, Man Dex, and Agility checks
- 3+ SC larger: cannot fit unless extra seat is available (then -40 to all skill, Man Dex, and Agility checks

Piloting in Armor: -40 to Piloting checks

Vehicle Occupants in Armor (in vehicles not meant for armor):
- Body Armor: -40 to all skill, Man Dex, and Agility checks
- Heavy Armor: Must be 1 SC smaller than intended size (then -40 to all skill, Man Dex, and Agility checks)
- MBA: Must be 2 SC smaler than intended size (-40 to all skill, Man Dex, and Agility checks)

Body-mounted weapon: -80 Piloting; -40 to hit

Weapons fire by pilot: -40 Snap Shot penalty; -20 penalty to Piloting. A pilot may not fire a manually targeted weapon which does not face forward.

Aimed weapons fire by pilot: -30 to Piloting. After aim established, -10 penalty to Piloting checks.

Rules

Occupants of a vehicle may use PDS technology while the vehicle's Flux shield is in use.

The threshold of "glass" areas is halved against laser fire.

A vehicle may not operate multiple Flux shields at the same time, nor may vehicle occupants utilize Flux shields or other field generating armor options while the vehicle's Flux shield is in operation (unless otherwise noted).

If any Piloting checks are missed while anyone in the vehicle is aiming a weapon, the weapon's aim is ruined and must be re-established.

Weak Point Detection: Level 15 Identify Vehicles check

Walker Ultra Armors decelerate at 15 m/s^2; Crawlers decelerate at 20 m/s^2.

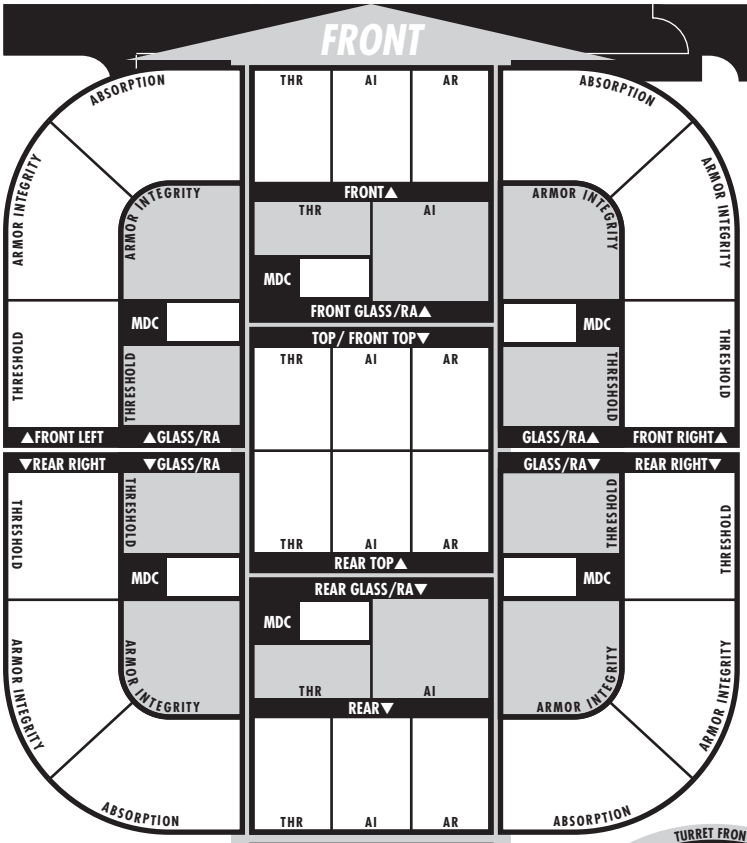
Racial Modifications

Ashanti: vehicles are driven with four limbs (-30 penalty for 2-limbed pilots).

Cizerack: bipedal creatures suffer a -40 to Piloting checks when using a Cizerack craft (-20 for Phentari or Ashanti).

Phentari: vehicles are steered with four controls; therefore, most races suffer a -30 to all Piloting checks when attempting use them (Cizerack suffer only -10 and Ashanti suffer no penalty).

VEHICLE RECORD SHEET



Statistics

Vehicle Model	
Vehicle Manufacturer	Year
Owner/Pilot	Piloting Level+Modifiers

CREW		SIZE (m)			
Individuals	Size Class	L	W	H	Rating

SIZE MODIFIER		WEIGHT (kg)			
Personnel	Vehicle	Base	Crew	Total	Max

CARGO		TOP SPEED (1m/s = 3.6kph)	
Encumbrance	Spaces	m/s	kph

RANGE (km)	PILOTING	
	Modifier	Autopilot Level

ACCELERATION	MAX. DECEL.	STATUS	
		Current Speed	Damage Modifiers

TURRET REACTIVE ARMOR

	THR	MDC	AR
TOP			
FRONT			
REAR			
RIGHT			
LEFT			

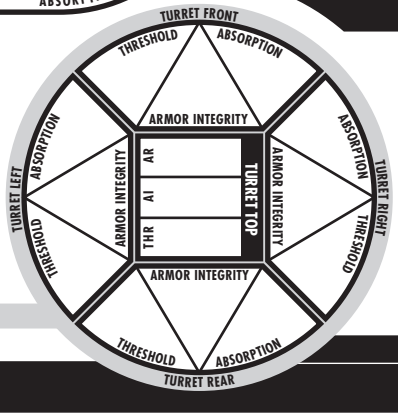
BOTTOM/ FRONT BOTTOM▼

THR	AI	AR

REAR BOTTOM▲

FLUX SHIELD

ECM/ECCM /



COMPONENT	THR	BP

Vehicle Weapons

VEHICLE RANGE BRACKETS

	WEAPON NAME	1 0-50m	2 51-150m	3 151-250m	4 251-500m	5 501-1000m	6 1001-2000m	7 2001-3500m	8 3501m+	BONUS	MN	SS	ROF	Q	DAMAGE	AI DAM.	THR RED.
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
	DISCHARGE RANGE BRACKETS:	0-05m	06-15m	16-25m	26-50m	51-150m	151-300m	301-750m	750m+	BONUS	MN	SS	ROF	Q	DAMAGE	AI DAM.	THR RED.

	MISSILE NAME	MISSILE SPEED (M/S)	0-50m	51-150m	151-250m	251-500m	501-1000m	1001-2000m	2001-3500m	3501m+	BONUS	MN	SS	ECM/ECCM	Q	DAMAGE	AI DAM.	THR RED.
10																		
11																		
12																		
13																		

VEHICLE RECORD SHEET

Owner/Pilot	Piloting Level+Modifiers

Note here where weapons listed on the other side are mounted on this vehicle.

	WEAPON LOCATION
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	

Crew & Passengers

CREW/PASSENGER NAME	LOCATION

Cargo/Equipment

Cargo Capacity

LOCATION (CHECK 1)

EQUIPMENT NAME	ENC	SS	CARGO AREA	ROOF/TURRET TOP		
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
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			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
			☐	☐	☐	☐
TOTAL ENCUMBRANCE CARRIED:						

Vehicle Damage & Modifiers

SECTION/COMPONENT	DAMAGE	EFFECTS/PENALTIES

Vehicle Modifications & Notes

Vehicle Computer

COMPUTER NAME	CC	TL	MC	IT	ON

ACCESSORY/MODULE LEVEL	CONSTRUCT/MODULE LEVEL
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

pAI	IM	GUN	IQ	INT	CC USED

ULTRA ARMOR RECORD SHEET

TORSO REACTIVE ARMOR

	THR	MDC	AR
FRONT			
BACK			

R. ARM REACTIVE ARMOR

	THR	MDC	AR
FRONT			
BACK			

L. ARM REACTIVE ARMOR

	THR	MDC	AR
FRONT			
BACK			

R. LEG REACTIVE ARMOR

	THR	MDC	AR
FRONT			
BACK			

L. LEG REACTIVE ARMOR

	THR	MDC	AR
FRONT			
BACK			

ANVIL
ABSORPTION
ARMOR INTEGRITY
THRESHOLD

RIGHT ARM
ABSORPTION
ARMOR INTEGRITY
THRESHOLD

LEFT ARM
ABSORPTION
ARMOR INTEGRITY
THRESHOLD

TORSO
ABSORPTION
ARMOR INTEGRITY
THRESHOLD

RIGHT LEG
THRESHOLD
ARMOR INTEGRITY
ABSORPTION

LEFT LEG
THRESHOLD
ARMOR INTEGRITY
ABSORPTION

FLUX SHIELD

ECM/ECCM /

COMPONENTS

	THR	BP
REACTOR		
FLUX SHIELD		
THEATER ARMOR		
pAI		
THEATER INTERFACE SYS.		
OTHER		

Statistics

Vehicle Model	
Vehicle Type	Year
Owner/Pilot	Piloting Level+Modifiers

CREW — Size Class

SIZE (m) — L | W | H | Rating

SIZE MODIFIER — Personnel | Vehicle

WEIGHT (kg)

TOP SPEED (1m/s = 3.6kph) — m/s | kph

RANGE (km)

ACCELERATION

MAX. DECEL.

PILOTING — Autopilot Level | Initiative Modifier

Physical Combat

HAND ATTACK MATRIX — SEGMENT1 | SEGMENT2 | SEGMENT3

ATTACK NAME	ATTACK	ATK BONUS	ROF	DAMAGE

Ultra Armor Weapons

VEHICLE RANGE BRACKETS

QTY: If multiple instances of the same type of weapon are present, enter the number of weapons here

	WEAPON NAME	QTY	1 0-50m	2 51-150m	3 151-250m	4 251-500m	5 501-1000m	6 1001-2000m	7 2001-3500m	8 3501m+	BONUS	MN	SS	ROF	Q	DAMAGE	AI DAM.	THR RED.
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
	DISCHARGE RANGE BRACKETS:		0-05m	06-15m	16-25m	26-50m	51-150m	151-300m	301-750m	750m+	BONUS	MN	SS	ROF	Q	DAMAGE	AI DAM.	THR RED.

	MISSILE NAME	MISSILE SPEED (M/S)	0-50m	51-150m	151-250m	251-500m	501-1000m	1001-2000m	2001-3500m	3501m+	BONUS	MN	SS	ECM/ECCM	Q	DAMAGE	AI DAM.	THR RED.
11																		
12																		
13																		
14																		
13																		
14																		

ULTRA ARMOR RECORD SHEET

Note here where weapons listed on the other side are mounted on this vehicle.

Owner/Pilot	Piloting Level+Modifiers

	WEAPON LOCATION		
1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7			
8			

Ultra Armor Computer

COMPUTER NAME	CC	TL	MC	IT	ON

ACCESSORY/MODULE LEVEL	CONSTRUCT/MODULE LEVEL

pAI	IM	GUN	IQ	INT	CC USED

Vehicle Damage & Modifiers

SECTION/COMPONENT	DAMAGE	EFFECTS/PENALTIES

Ultra Armor Modifications & Notes

ULTRA ARMOR MANEUVER EXAMPLES

	SPEED (M/S)								
MANEUVER	0	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71+
Acceleration (1/4)	-5	-5	-5	-5	-5	-5	-5	-5	-5
Acceleration (1/2)	-4	-3	-3	-3	-3	-3	-3	-3	-3
Acceleration (Full)	-2	0	0	0	0	0	0	0	0
Avoid Creature-Size Object	-	1	2	3	4	5	6	7	8
Avoid Vehicle-Size Object	-	5	7	9	11	13	15	17	19
Crouch (Walker)	6	-	-	-	-	-	-	-	-
Deceleration (1/4)	-	-3	-3	-3	-3	-3	-3	-3	-3
Deceleration (1/2)	-	-1	0	1	2	3	4	5	6
Deceleration (Full)	-	1	2	3	4	5	6	7	8
Dodge (Missile)	Spec	Spec	Spec	Spec	Spec	Spec	Spec	Spec	Spec
Evasive (-05)	-	5	6	7	8	9	10	11	12
Evasive (-10)	-	12	13	14	15	16	17	18	19
Evasive (-15)	-	21	22	23	24	25	26	27	28
Jump (Short Distance)	5	7	9	11	13	15	17	19	21
Jump (Long Distance)	-	10	12	14	16	18	21	23	25
Stand Up after Fall	3	-	-	-	-	-	-	-	-
Stand Up from Crouch	1	-	-	-	-	-	-	-	-
Turn (Abrupt)	-5	-1	0	1	2	3	4	5	6
Turn (U-Turn)	-4	2	5	8	11	14	17	20	23

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