多次元機甲戦士道

メクトン PLUS プラス

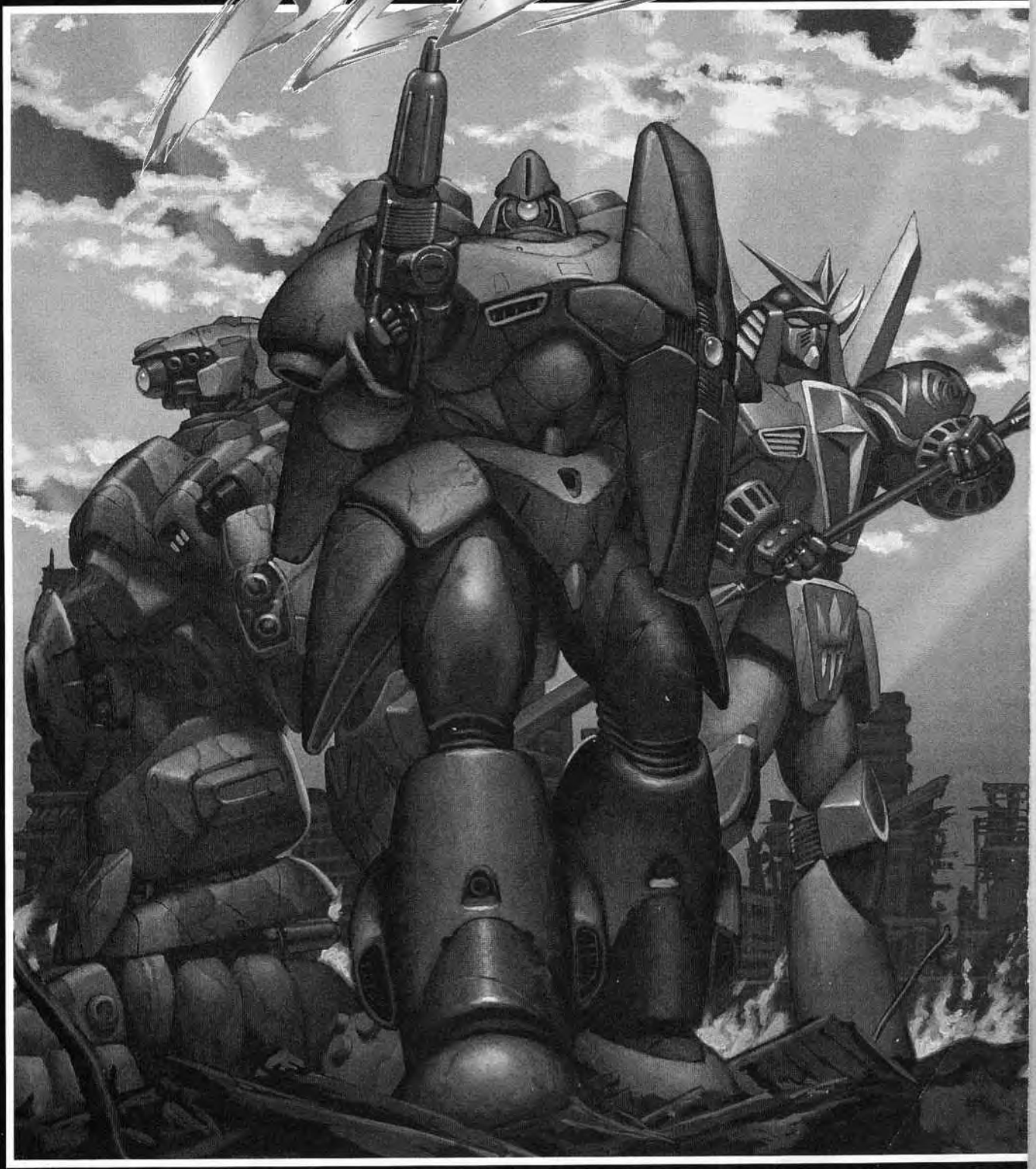


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ADVANCED TECHNICAL MANUAL

多次元機甲戦士道

メクトン プラス



ADVANCED TECHNICAL MANUAL

Credits △ クレディツ

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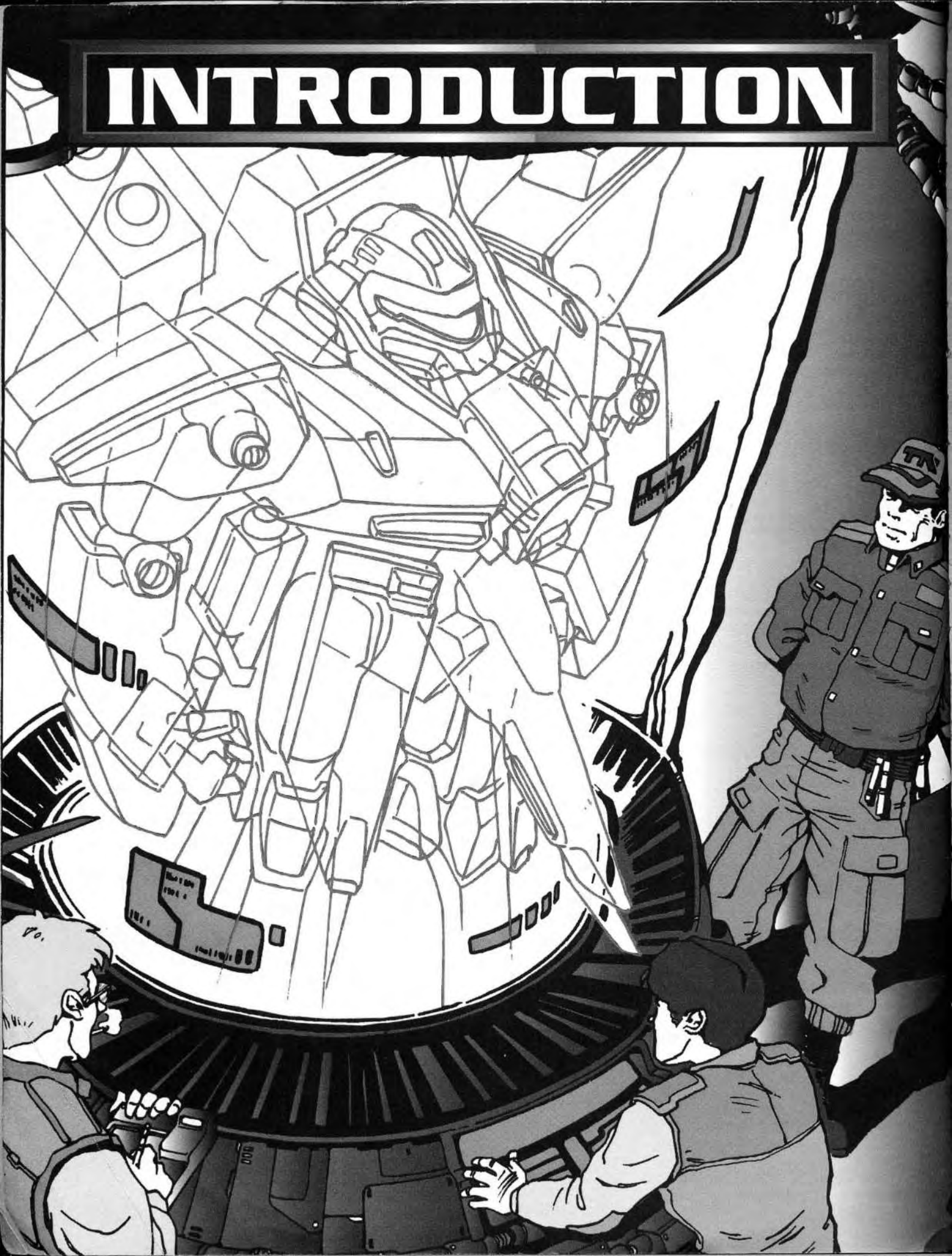
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INTRODUCTION



MEKTON ZETA PLUS

Welcome to *Mekton Zeta Plus*, the preferred source for informed mecha mashers. Within these pages you will find many improvements and refinements of the basic *Mekton Zeta* game; these changes and additions complete the advanced version of the game. From the most comprehensive (and usable) mechanical-design system ever published to new combat rules, this book has it all. *Mekton Zeta Plus* is the ultimate tool for the advanced *Mekton Zeta* player.

The heart of *Mekton Zeta Plus* is the Mekton Technical System, with which players and referees can build literally any mechanism they can imagine; this section includes a sample construction procedure, which takes the reader through the MTS design process step-by-step. MTS is capped off with scaling rules, which expand MTS to handle any size design, from a pocket-sized switchblade to a planet-busting battlecruiser.

With the same vigor found in MTS, *Mekton Zeta Plus* takes the game's rules to new levels of playability. In the advanced rules section, the immeasurable powers of the mind explode into *Mekton Z*—the psionics system not only applies to characters, but interfaces with MTS (see the ESPer lens) for an incredible new dimension in mecha combat: Psyber-Psychic Mecha Conflict! Other new rules include expanded terrain explanations, new combat maneuvers and tips on how to speed play. The Advanced Rules Section ends with a discussion of how to mix *Mekton Zeta* with RTG's other Interlock System games, particularly *Cyberpunk*.

Tech Levels △ テック・レベル

Being that *Mekton Zeta* is designed as a potentially generic anime mecha RPG, capable of simulating all the myriad universes of Japanese mecha-animation, we need a way for players (and referees) to keep track of the technologies available for their mecha and equipment. Thus, in *Mekton Zeta*, we introduced the concept of Tech Levels.

Tech Level is measured on a scale from 1 to 10, with one being the technological equivalent of the Stone Age, and 10 being a super-science society where even death has fallen before the scientific might of humanity (or whomever).

Below is a list of the ten Tech Levels, as well as a rough guide for placing them in a campaign setting. Most equipment in *Mekton Zeta* has a Tech Level listing, and some other systems do as well (notably light-speed drives and medical technologies). In MTS, the various systems have not been given corresponding Tech Levels, for the simple reason that, in anime, there is seldom any governing logic to what mecha can or cannot do. Various anime features have placed giant robots in medieval settings, in feudal Japan, and in the 20th century (not to mention the near to far-flung future). The types of technology available to mecha have also been scattered throughout time; psi-tech in the early 21st-century, a late 22nd century without beam weaponry, an alternate World War II with 15-meter mecha... It's all dependent upon the style of the series.

T. L.	AGE	WEAPONS	PROPULSION	MEDICAL
1	Stone	Clubs	Walking	Dream on!
2	Iron	Swords	Riding Beasts	Bloodletting
3	Bronze	Bows	Trained Animals	Basic Pharmacy
4	Industrial	Guns	Early Vehicles	Basic Surgery
5	Nuclear	Missiles	Jet Vehicles	Advanced Surgery
6	Information	Railguns	Walking Vehicles	Meat Cloning
7	Superconductors	Beam Weapons	Civilian Flyers	Full Cloning
8	Biotech	EMWs	Anti-Gravity	Regeneration
9	Nanotech	Planet-Busters	FTL	Resurrection
10	Magic	Magic	Teleportation	Immortality

"The Mekton ... What power it has! The enemy's will is crushed when he sees his home and family trampled underfoot by a hundred ton metal man."

—Arkon Verian, from The Merits of Mekton Combat.

"Of all the weapons of the Empire, the greatest were the Metal Knights. The MeKs had served the Bendari Emperors for generations—wreaking vengeance and striking terror in the Empire's enemies. These mechanical giants were shaped like men ... Shaped like men so that the alien blasphemers would know that it was Man who defeated them."

—Lady Attican, addressing the Vanguard Host assembly in Muria.

Kenty stared at the blueprints for a long time. Finally she said, "Let me get this straight ... six arms?"

Jesse looked at her smugly. "I got a great deal on a half-dozen beamswords," he grinned.

Kenty picked up a wrench and hit him.

Roleplaying Tech △ テック・ロールプレー

Beyond the Combat Game

MTS was created to be an effective and comprehensive way to design any one of a hundred types of mecha from almost as many anime and science fiction sources. As a system for creating units with which to play massed mecha battles, it will give enterprising roleplayers and wargamers hours of fun, building and fighting with their favorite war machines.

SO YOU SAY YOU WANNA ROLEPLAY THE MECHA-DESIGN PROCESS ....

If you are simply planning to use Mekton Zeta as a mechanized combat game, you will probably want to skip this section. But if you use Mekton Zeta as the basis for roleplaying adventures (which we hope you will), you'll definitely want to read this.

Designing Mecha

Theoretically, anyone should be able to design a Mekton—after all, you just flip through the Mecha Construction System in *Mekton Z*, put together the best possible balance of components, weapons and armor for your particular needs. No problem, right?

Here, however, is where game realism catches up to the unwary Mekton Zeta player. Suppose you wanted to build a modern-day jet interceptor: say, an F-16? Obviously, it wouldn't be as easy as sitting down with a rulebook, would it? No, you'd need to know about aeronautics, engineering, weapons technology, materials science, electronics—dozens of specialized fields which all go into the creation of a highly advanced piece of machinery. Likewise, your Mekton Zeta character has also had to learn a lot of new skills in order to know exactly how to construct his complex vehicle. This huge body of knowledge is integrated into the skill of **Mecha Design.**

Whenever a roleplaying character intends to design a mecha unit, he must sit down with a CAD program and actually go through the process of blueprinting the thing. Here's how it's done:

1) Go ahead and design your intended unit, using the rules for construction on pages 52-65 of *Mekton Z* or use MTS in this book. Once you've done all the designing, it's time for your character to go to work.

2) For **every 25 (or less) Construction Points** of the proposed mecha's cost, your Mekton Zeta character will spend **1 day** in the process of actually designing the unit. At the end of this period, he must roll his:

INT+Mecha Design Skill+1D10

versus a Difficulty Number found on the Complexity Table (below). A successful roll means he staggers away from his Computer Aided Design terminal with a completed set of blueprints. A failed roll means he must spend one additional day of design work, then roll again at the end of that day. This process continues until he makes a successful *Mecha Design* roll and lurches off into the night to find someone to work from his revised blueprints.

Complexity Table

The Difficulty of designing a Mekton is based on the square root of the mecha's total cost (before scaling). For those of you without a scientific calculator, see below:

Total cost of Proposed Design	Difficulty Number
1-100	Diff 10 (Easy)
101-225	Diff 15 (Average)
226-400	Diff 20 (Difficult)
401-625	Diff 25 (Very Difficult)
626-900	Diff 30 (Near Impossible)
901-1225	Diff 35
1226-1600	Diff 40
1601-2025	Diff 45
2026-2500	Diff 50
2501+	Diff 55

Pooling

Sometimes you won't have enough skill to finish a design at all. However, **two or more mecha designers can combine their talents, rolling 1D10 for the total.** Use the highest INT and add everyone's Mecha Design skills.

For example: *With an INT of 9 and a Mecha Design of +4, Jesse can't possibly design the Rapier Commando (1000 CPs) by himself. However, Rocket Russel (INT 8, Mecha Design +6) and Professor Kodai (INT 10, Mecha Design +8) agree to work on the Rapier Commando project; the skill roll becomes INT 10 (Kodai) + Mecha Design [+8 (Kodai) +4 (Jesse) +6 (Rocket)] = 28+1D10. This team has a much better chance of success than Jesse did all by his lonesome.*

The design process offers Mekton Zeta players and referees infinite possibilities for role-playing fun. Characters can become design specialists, hiring themselves out to the highest bidder. They could have plans stolen, or steal plans themselves. Budding entrepreneurs can go into business with their own mecha factories, engaging in industrial espionage or other corporate skullduggery. Remember: Mekton Zeta is a roleplaying game. So why not use these opportunities to add more depth and substance to your adventures?

Constructing Mecha

Your Mekton Zeta character has just rushed into the hangar bay, blueprints clutched in his sweaty little mitts. But who's going to build the thing for him? This is where the skill of **Mecha Tech** comes into play.

Mecha Tech is the knowledge of how to bring together the complex amalgamations of electronics, fusion power, hydraulics and weapon technology that goes into an ultra-modern war machine. As any fighter jock can tell you, it's the crew chief down in the shop who makes sure the jet gets airborne. A Mekton Zeta technician is more than just a mechanic—he or she is a gifted artist who takes a mere blueprint and makes it work. Here's how:

Every mecha will have some or all of these systems: **Hydraulics, Armor, Powerplant, Sensors, Weapons** and **Movement Systems.** For each system present, the Techie constructing the vehicle will roll once on the appropriate Tech Construction Table (below) for that system, adding his or her **Tech Stat +Mecha Tech skill +1D10;** the difficulties are the same as those from the Complexity Table, and the Pooling rule applies as well. Depending on the outcome, each system of the newly constructed mecha may or may not have little "hidden flaws"—flaws which will only show up during use (usually at some embarrassing or potentially deadly time). For this reason, it's always advisable to shake down your new unit before taking it into combat (creating an entirely new career class, the **Heroic & Suicidal Test Pilot**).

TECH CONSTRUCTION TABLE

Fail	Weapons	Sensors	Powerplant
15	All beams lose power; Range, damage lose 2.	Sensors cut out after 1D6 turns of use.	Overheat: Mecha shuts down after 1D10 turns.
10	All rapid-fire weapons jam after 1D6 turns.	Flawed array: Ranged weapons at 1/2 range.	Bad power transmission; lose 1 from MV.
6	All beam weapons overheat & shut off for 1D6 turns.	Targeting misalignment; ranged weapons at -3 to hit.	Readouts show false "Critical Overheat" alarm after 1D6 turns operation.
3	All missiles/rockets jam after 1D6 turns of use.	Bad shielding; you get random TV and radio signals for 1D10 turns.	Engine underpowered; Land MA drops by 1D6/2 after 1D6 turns.
1	Faulty guidance; -4 for missiles & rockets WA.	Sensors cut out for 1 turn after 1D6 turns.	Overheating drops XS# by 1 until fixed.
0	No problem.	No problem.	No problem.

Fail	Armor	Movement System	Hydraulics
15	Cheap armor from contractor; value is 1/2 normal SP!	Movement System cuts out after 1D10 turns of use!	Too much pressure; mecha will be unable to move after 1D10 turns use.
10	Armor placed wrong; -1SP from two random locations.	System sluggish; move up to only 1/2 normal MA.	Cracked pump; lose use of 2 random locations after 1D6 turns.
6	Armor fitted wrong; random location -1SP.	Throttle jammed; move at 1/2 MA or not at all.	Leak; lose use of 1 random location after 1D6 turns use.
3	Refractive coating flawed; -2 SP vs beam weapons.	Directional system stuck; turning radius increased by 1 hex.	Hydraulic fluid is burning; cockpit fills with smoke, -2 to all rolls.
1	Inconsistent density; -2 SP vs missiles and -projectile weapons.	Movement System misalignment; lose -1 from MA.	Low pressure in fluid; all hand-to-hand and melee attacks lose 2 Kills.
0	No problem.	No problem.	No problem.

NEW CHARACTER PROFESSION:

HEROIC AND SUICIDAL TEST PILOT (D)

Adrenaline Junkie, Guinea Pig, etc.

Mecha Pilot: +1	Awareness: +1
Jury Rig:+1	Survival: +1
Mecha Tech: +1	First Aid: +1
Aircraft/Shuttle Pilot: +1	

"Some pilots think there's a symbiotic relationship between Man and Mekton—that the machine becomes an extension of yourself, integrated into the whole of mind-body-spirit. This, ladies and gentlemen, is a crock. Don't get caught up in this delusion! A Mekton is a means to an end; you use it to attack the enemy and to protect yourself. You are the weapon—the Mekton is a tool. Nothing more, nothing less."

—Major Altair Attaris, from his speech to the graduating cadets of the EMA.



The Tech Construction Tables are designed to enhance the roleplaying aspects of your Mekton Zeta adventures, rather than to be used in a combat game situation. For this to work, it's important that the players actually *act* as though their characters don't know that their vehicles have flaws. One way to do this is to have the Techie player make the rolls while the Referee reads the tables. The Referee then makes a copy of the Mekton sheet and annotates it with the required changes. As each little problem comes up, he then tells the player piloting the mecha to make these changes on his original sheet.

How Long Will It Take?

In general, it will take **4 days** of construction time for every 50 or less Construction Points used in your mecha. This is because, in most cases, you will be building a one-of-a-kind unit. Any subsequent units of the same type will take half as long—**2 days** per 50 CPs. If you are able to set up an assembly line, such as in a factory, any subsequent models of this prototype will take **1 day** for every 50 Construction Points.

Referees may want to extend or contract this time frame as the needs of their game demand. This construction formula also does not take into account breaks for lunch, needing new parts or tools, aliens invading the city, rival Mekton warriors assaulting your headquarters, or any of the hundreds of other distractions possible in a good roleplaying adventure.

What's This Going to Cost?

In attempting to integrate Anime, realism *and* playability, Mekton Zeta faces a sticky problem: attempting to rationalize fighting machines more complex than jet aircraft being owned by people other than national governments. After all, at a price tag of some 40 million dollars, not all that many people can actually afford to buy an F-117 Stealth Fighter. Ideally, Mekton Zeta would provide a price structure for mecha that would, on one hand, be somewhat realistic, yet on the other hand be affordable to the average anime hero.

Down that road lies madness. Given the wide range of campaign settings possible in a Mekton Zeta game, there can be no absolute conversion between Construction Points and actual monetary values. The best way to handle this problem is to fake it—most campaigns assume military-owned mecha, every-man-for-himself scrounging, or some kind of tribal/ritual/royal system of merit over actual, money-based, mecha-trade. However, there is certainly the potential in both anime and Mekton Zeta for worlds in which mecha are sold, not earned.

In such a campaign, we have priced most mecha in the range of a modern home—somewhere between $75,000 and $200,000. Yes, yes, we *know* it's thoroughly unrealistic. It's also, however, a fun way to play. It means that eventually, somehow, a really determined player could scrape up enough money to buy himself a robot. Prices would be low enough that it is even possible to find wrecked battlefield units or used civilian models. Affordable prices also bring up the prospect of bank-financed mecha loans, complete with possibilities for mecha-repomen and skip tracers, or even—underworld-financed loan sharking! All of these variations offer a wealth of roleplaying experiences in what otherwise might degenerate into an endless round of robot-bashing.

The most important part of any Mekton is the torso, the main body which integrates a basic skeletal arrangement, much like a car chassis, onto which all other components are bolted. Torsos could be found in junkyards, deserted battlefields and old, abandoned work sites. Judicious use of *Mecha Tech* skill can usually modify an old Torso into something workable—if not, you may be forced to actually buy one at new prices. The actual new cost is determined by the formula:

(Construction Points x $1,000)
-minus-
(Buyer's Persuasion, Streetwise or Streetdeal skill roll x $50)

Prices for servo components, armor, weapons, sensors, cockpits, etc. can be determined by multiplying their CPs x $1,000. Serious sticklers can adjust this number to get "realistic" mecha prices—say, CPs x $100,000 or so ...

Parts Unknown™

To make the Techie's role even more interesting, and to offer a new realm of adventuring, we have created the Parts Unknown™ catalog (named after a famous *Mekton Z*-world spare parts chain). These are small, reasonably affordable parts that have absolutely *nothing* to do with the combat game aspect of a mecha unit—they have no Kill values and no official Construction Point costs. However, they have the ability to create new Plot Complications for Mekton Zeta

players, and thus, many new adventures hinging on the replacement, jury-rigging, or even downright theft of an important widget. To use the Parts Unknown™ catalog, roll 1D10 four times, comparing each roll with the appropriate column of the table. One of the nice things about the Parts Unknown™ catalog is that each roll also generates the price of the part: write down each value in the order rolled and place your decimal point in the second place from the right.

For example: *You roll a 9, a 2, a 4 and a 4. You need a Micro Sequence-Sensor, which costs 92.44¥.*

Parts Unknown™ Catalog

Roll 4 Times	1st Roll	2nd Roll	3rd Roll	4th Roll
1	hydraulic	holographic	processor	(0.01)
2	parallel	sequence	sender	(0.02)
3	heat-sensitive	pressurized	receiver	(0.03)
4	dielectric	aerosol	sensor	(0.04)
5	auto	bimetal	shaft	(0.05)
6	fiberoptic	servo	display	(0.06)
7	integrated	wire	water	(0.07)
8	digital	fluid	feeder	(0.08)
9	micro	lubricant	linkage	(0.09)
10	(nothing)	(nothing)	separator	(0.00)

Big Science △ ををきい・がく

Long Term Research and Breakthroughs

Big Science—it's the stuff of sci-fi and the lifeblood of anime-style mecha technology. Through the work of brilliant scientists, a version of a starship-sized device may be developed that would fit into a small fighter or corvette. Technological advancements occur often in some game worlds, less in others. One of the important things that the Referee must decide is how the technology in the game will progress or regress. In a low-tech world, where mecha are the last line of defense against a new dark age, improvement or innovation may be disallowed entirely. Technological advancements may be rigorously monitored and governed by complex treaties. Research may be against religious laws; some ideas may be considered unsportsmanlike, or even heretical.

There are, for game purposes, three levels of research tasks: Improvement, Innovation, and Invention. Each level has Difficulty Numbers associated with it. Some Referees may choose to change the Difficulty Numbers to suit their personal feelings, or even disallow them entirely. Those decisions are up to them—these are simply guidelines.

Improvement (20RP)

Improvements are the easiest advancements in technology. They are enhancements that do not change weight, range, efficiency, or effect by more than ten percent. When attempting to improve multiple characteristics of a weapon or other system, one extra task is always required to combine the advancements. For example, Kenty (an aspiring mecha engineer) may want to increase the range and damage (and decrease the size of) a beam weapon commonly used on her world. There are four improvements here—one for each improvement (range, damage, size) and one improvement task for combining the improvements. It is also important to note that though the size was decreased the mass (weight) remained constant. Each characteristic should be handled separately.

Innovation (60RP)

Innovation involves a sweeping change in the technological field. Innovation may improve any characteristic of a piece of equipment up to thirty-three percent. This level of technological advancement may be combined with an Improvement at the cost of an additional Innovation. Example, Kenty now wants to reduce the size of a weapon by 33% and the weight by 10%, so she now has three tests: one Improvement, one Innovation, and one Innovation to combine the two.

Overtechnology

Research and Development is an integral part of any war. Just ask the Germans. From the minds of frantic scientists, working diligently in hidden bunkers, come the innovations and breakthroughs that will give your pilots the edge they need over the enemy. One of the first missions of any squadron should be to capture an enemy Mekton, to turn over to the brainiacs for study. If you delay this too long, like the Germans you'll be rushing out prototype after prototype, sending untrained pilots up in a vain attempt to push back the advancing enemy.



Invention (100RP)

An Invention is something entirely new. It usually works completely differently, or does something completely different than before the technology was used. The particle beam is an example of an Invention—it was based on laser research, and even was very comparable to lasers in terms of performance and function, but the process to deliver the energy and the effects of delivery were significantly different from the laser. Invention usually involves a new process, but can also encompass radical and new ways of accomplishing the same goal (i.e., damage, locomotion, communication). An Invention would involve at least a thirty-three (or more) percent increase in performance.

Combination Research

As mentioned under Improvement, this always involves an extra task. In most cases the Referee should assign it a task equal in difficulty to the hardest improvement attempted. In some cases the Referee may choose to use lower-Difficulty tasks. That is his decision alone. As a general rule only one Invention per string of combined research should be allowed. Again, if the Referee feels this is too restrictive, he may change the Difficulties or amounts.

The Research Process

The research process is fairly involved. It is not usually something that will occur "on the run." For one thing, a laboratory or research facility of some kind is always required. Research is more than sticking chewing gum on a diode and saying, "Eureka!" Research involves the slow and tedious testing of ideas and retesting to duplicate effects. Research should be categorized in three difficulties: Average, Difficult, and Very Difficult.

- **AVERAGE (DIFF = 15):** This usually involves a simple problem. It is an existing technology simply put to a new use. The engineer has worked in the field and has developed at least three Improvements, or an Innovation.

- **DIFFICULT (DIFF = 20):** This research is usually a new idea in the field that has limited effect. The engineer has only worked on one, or no, Improvement or Innovation.

- **VERY DIFFICULT (DIFF = 25):** Such research involves a field the engineer has never worked in, and/or incorporates alien (or "lost") technology.

The engineer or technician leading the research is the arbiter of the researchers' progress. Yes, though occasionally a young assistant makes a breakthrough or somehow affects research, it is the project director who kills one avenue of exploration and opens another.

Each interval (determined by the Referee—usually a day, week or month), the lead engineer makes a **TECH +Mecha Tech (or other related skill) +1D10** roll vs the Difficulty appropriate for the type of research being conducted. If that roll is successful, the amount by which the roll succeeded is added to a grand total. When enough of these "Research Points" have been accumulated, the research pays off.

The number of Research Points required are set by the Referee, but a good range is 20 points for an Improvement, 60 points for an Innovation, and 100 points for an Invention. Of course, the Referee can make the targets higher or lower at his whim.

For example: *Doc Fujita (with the help of his staff) is attempting a Difficult Innovation. He must successfully roll his TECH +Mecha Tech +1D10 vs 20 enough times to rack up 60 Research Points in order to realize his creation.*

Breakthroughs

Occasionally, things go better than planned. Should a researcher roll a Critical Success on a Research Roll, add twice the number of Research Points to the total. Should a researcher roll Critical Successes on three consecutive Difficulty rolls, the research automatically succeeds.

Getting Stumped

Should a researcher roll a Critical Failure, subtract twice the amount of Research Points the roll was failed by. Should a researcher roll three Fumbles in a row, there has been a terrible accident or blunder that makes the improvement twice as difficult.

Production

Production is a whole different ball game, as they say. Just because the engineer makes an Innovation on a single mecha design does not mean that the innovation can be reproduced a hundred times over. If the engineer wants to make the improvement a production item, then the research process must be successfully duplicated at least two times (and without a major disaster!). The improvement can then be mass-produced.

FINAL NOTES: It's easy to say that an improvement is a 10% improvement, but in Mekton Z eta things don't always work out that easy. If you are attempting to improve the damage on

a 4-Kill weapon then improving it by 10% would yield a 4.4-Kill weapon. Any improvement must be in whole numbers. Therefore, that 4-Kill weapon can have no less than a 25% efficiency increase (to get 5 Kills out of it).

Whether or not research is even proper for the game is purely up to the Referee. Any of these ideas can and should be modified by any factors the Referee sees fit. After all, it's your game, gearheads!

MTS △ エム・テイ・エス

The Mekton Technical System

The Mekton Technical System makes Mekton Zeta's potential as infinite as your imagination. Players and Referees now have the opportunity to create a limitless variety of weapons and make use of over a dozen new systems, both offensive and defensive. With MTS, your mecha can use anything—from custom-designed armaments to the (expensive) ability to teleport! It may seem overwhelming at first, but don't worry. Not everyone will use all of MTS, but everyone will use some part of it.

What will MTS do? Glad you asked.

Quite simply, MTS provides endless variety for the construction of mecha, from massive firepower platforms to small scout units. MTS gives players and Referees the ability to custom-build every aspect of their designs, from sensors to servos to weapons. With MTS, the Mekton Zeta player can construct literally any mecha he wishes, limited only by his imagination.

New Systems

Certain terms and concepts crop up repeatedly throughout MTS. While most of these are only slight modifications of ideas in *Mekton Z*, it is absolutely necessary that these changes be explained.

Warning: Read carefully and thoroughly before continuing on to build mecha of your own! Think of these new ideas and rules as updated or more intricate versions of the familiar methods outlined in *Mekton Z's* Mecha Construction section. These new concepts are used in conjunction with all other systems and will influence overall construction of the mecha.

Spaces

Although the formula was not stressed in *Mekton Z*, it was and still is true that systems which require Spaces take up as much Space as their cost (working on a parallel but opposite principle to servos). This being the case, a Beam Weapon which costs 6 CPs also takes up 6 Spaces. Some systems take no Spaces, and still others take up only a fraction of their cost; such systems are clearly marked in their description in the mechanical catalogue. There are no placement restrictions for weapons and other systems—any weapon or system may be mounted in any location provided that the necessary Spaces are available.

As was explained in *Mekton Z*, the number of spaces a servomodule has is equal to its cost (Pods are an exception to this rule, having 2 spaces per Construction Point); a servo costing ten CP's would have ten Spaces in which to mount weapons and other systems. As in Mekton Z, structural integrity may be sacrificed for additional space: one sacrificed Kill gives two additional CP spaces. There is no limit to how many Kills may be sacrificed for Spaces.

For example: *The Rapier has Mediumweight arm servos (7 Spaces). However, the heavy assault version (the Gun Rapier) has a 9 CP Projectile Weapon mounted in its right arm. In order to make the weapon fit, 2 extra Spaces of room are needed. Therefore, one Kill is sacrificed from the right arm servo.*

Hands (and other gripping devices, such as claws or "handy" melee weapons) may carry as many Spaces worth of equipment as the servo in which they are mounted. If Kills were sacrificed from the arm for additional Spaces, there is no increase in the capacity of the hand. It continues to hold as many Spaces as the original cost of the servo.

Kills

Most systems in MTS have a Kill value listed, which represents their structural integrity—that is, their ability to take damage. 1 Kill is equal to 25 "Hits," which are Human-scale points of damage. 1 Kill is also equal to 1/2 ton. The relationship between structural integrity and weight eliminates the need for a separate weight value for all systems. Instead, only a mecha's overall weight is important, and can be changed from the basic value of 1 Ton for 2 Kills. This makes calculating weight very simple; just add together all the Kills your mecha has in its design (servos, armor SP, weapon Kills [not Damage], shield SP, etc) and divide by 2. That's the mecha's weight.

GETTING SPECIFIC

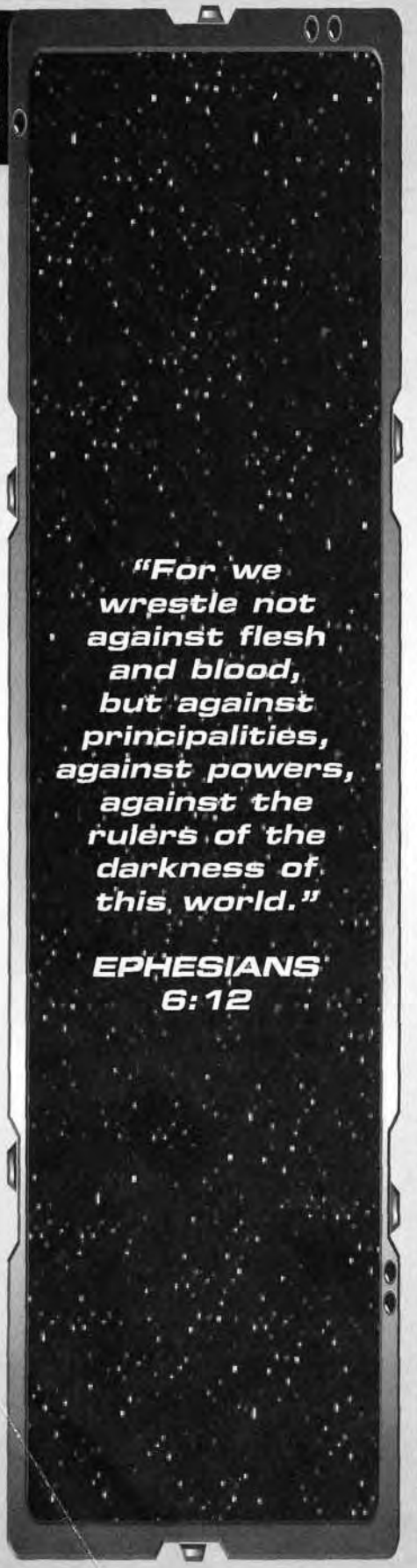
When you're engaged in Mekton-to-Mekton combat, the amounts of damage being thrown around are pretty huge; you're also working with a heap of armor, so things are usually reduced to hit or miss. However, when your Mek's crashed and burned and you're scurrying between the leg servos of enemy units ... well, that's a different matter. At times like this, you need to know exactly how much damage is going exactly where.

Weapons which do Kills of damage have a blast radius of 1 meter per Kill of damage, with damage dropping off by 1 Kill per meter. The last meter of the blast radius takes 2D10 damage. In other words, a 7-Kill missile has a blast radius of 7 meters: 6K at 1m, 5K at 2m, 4K at 3m, 3K at 4m, 2K at 5m, 1K at 6m and 2D10 at 7m.

REMEMBER!

2 Kills = 1 Ton

Mecha's Totalled Kills ÷ 2 = Mecha's Totalled Weight



System Definitions

There are three types of systems in MTS:

• **ADDITIVE:** Items or machinery that are directly added to the cost of your mecha. Servos, armor and most other systems from *Mekton Z* are Additive.

• **WEAPON:** Really a subset of additive systems—they are Additive systems with specific Multipliers which apply only to them.

• **MULTIPLIER:** Systems which have no fixed cost. They influence the overall performance of the mecha as a whole, so their cost is based on the totaled cost of your mecha's Additive systems. The transformation systems from *Mekton Z* is an example of a Multiplier system.

Additive vs Multipliers

Most of the systems in MTS have a definite cost associated with them, and usually a Space requirement as well. These are Additive systems, such as such as servos, armor, and weapons from *Mekton Z.* The costs of these systems are added up and their sum is the total Base Cost for the mecha design. However, Multiplier systems do not have a specific cost— they affect the cost of the unit as a whole. For example, a x0.2 Multiplier system costs 0.2 times the unit's Base Cost (that is, it adds 20% to the sum of all Additive systems).

For example: *The Rapier has several Additive systems: servos, armor, sensors, a few weapons and some other subassemblies which, when added up, total 150 CPs. This is the Rapier's Base Cost. The Rapier also has three Multiplier systems: an Energy Absorption system (x0.1 Cost Multiplier), Stealth (x0.2 Cost Multiplier) and a basic Cloaking system with Fire Control and Combat Cloaking abilities (x 0.8 Cost Multiplier). The Rapier's Base Cost was 150 points, so to determine the cost of the Multiplier systems, apply the sum of all the Multiplier systems (0.1+0.2+0.8=1.1) to the Base Cost. The resulting amount is then added to the Base Cost. In this case, 150 x1.1 = 165, and 150 +165 =315 CPs total cost for the Rapier.*

A faster way of determining total cost is: 1) total up all Cost Multipliers, 2) add 1.0, and 3) multiply the Base Cost by this new number. In the above example, 1.1 +1.0 = 2.1, and 150 x2.1 = 315.

IMPORTANT: It is assumed, unless otherwise stated in MTS, that Multiplier Systems **do not increase the weight of the mecha.**

A NOTE ON ROUNDING: The ideal rounding for system costs is to the tenth; a weapon that costs 23.46 should round to 23.5. It seems that rounding to the whole number does not accurately represent the cost of a mecha or system, and keeping any further places after the tenths place becomes too cumbersome.

Weapon and System Design

The *Mekton Z* rule book contains a list of various weapons (each with its own advantages and disadvantages) and their costs. Although the standard weapon designs listed in *Mekton Z* are not invalidated by MTS (care has been taken to insure that all weapon costs remain unchanged), it is now possible to custom-build your own weapons. Many other systems (i.e., non-weapons) that appear in MTS are also capable of some level of customization. These systems are constructed in the same manner as weapons.

Weapons

There are five separate categories of weapons; each category has its own advantages, disadvantages and special options (available only to a specific category). The five categories are:

• **BEAM WEAPONS:** The assorted plasma and laser weapons from *Mekton Z,* as well as any other form of particle or energy projector. Characterized by long range and high accuracy, these weapons often have a large or endless supply of shots and a correspondingly high cost.

• **ENERGY MELEE WEAPONS:** Both the beam swords and nova swords from *Mekton Z*'s weapons list, as well as any other close-combat energy weapons. Such weapons have no range and are somewhat expensive, but they are arguably the most powerful weapons in the game. Most EMWs are some form of fusion or plasma reaction contained in a magnetic field.

• **MELEE WEAPONS:** Similar to EMWs, but are more physical in nature. Swords, claws, teeth, baseball bats, and mallets are all members of this category. These weapons are also rangeless, but are cheap and very versatile. They're also heavy.

• **MISSILES:** Technically speaking, this category covers rockets, grenades, torpedoes, mines and bombs as well. These self-propelled, destructive projectiles are the most versatile type of weapon: guided or unguided, conventional or nuclear, shaped charge or wide area of effect—it's your choice. These weapons are very cheap, but they get used up fast.

• **PROJECTILE WEAPONS:** This category includes the guns, cannons and machine-guns from *Mekton Z,* as well as any other form of conventional, caseless, rocket-assist-

ed, railgun, or massdriver artillery. Weapons of this sort are generally characterized by lower cost and much greater versatility than beam weapons, but also shorter range and lower accuracy.

More detailed descriptions of these various weapon types can be found under their individual entries. Printed with these descriptions are charts listing the major weapon statistics (Weapon Accuracy, Range, Damage, etc.) and a few additional charts for modifications (Wide Angle Beam Weapons, Incendiary Projectiles, Nuclear Missiles, etc.). For each weapon category, there is one base chart. This chart lists damage and Kills, and is the only chart which gives cost in whole numbers. All other charts in the weapon category's description list modifiers to the base cost as decimal-value numbers. These numbers are preceded by an "x" symbol.

The damage determines the basic cost of the weapon, whereas the other factors modify this basic cost. To determine the cost of a weapon you have designed, simply multiply the listed costs together. For example, a range that has a cost modifier of "x0.6" will reduce the cost of the weapon as a whole (by 40% in this case); therefore it is considered disadvantageous when compared to the norm (e.g. range 8 hexes for beam weapons). Similarly, a high Weapon Accuracy (WA) for a projectile weapon might have a cost associated with it (say "x2.5"); this would increase the cost of the weapon and thus make it more potent than an average-WA projectile weapon with the same damage potential. All weapons must have a damage and a WA; in addition, all beam, projectile, and missile weapons must also have a range.

Any weapon's range is a function of its damage; after all, big guns shoot farther. To determine a weapon's base range, find the square root of the weapon's damage and multiply by 4 (if it's a beam weapon); 3.5 (if it's a missile) or 3 (if it's a projectile weapon): the result is the weapon's range.

For Example: *A 1-Kill beam weapon would have a range of 4 hexes (1=1x1, 1x4=4), a 4-Kill beam weapon would have a range of 8 hexes (4=2x2, 2x4=8), a 9-Kill beam weapon would have a range of 12 hexes (9=3x3, 3x4=12), and a 16-Kill beam weapon would have a range of 16 hexes (16=4x4, 4x4=16).*

This base range can be modified by modifying the weapon's cost.

• **WEAPON CREATION EXAMPLE**: Rocket Russel—hotshot mecha-designer and weaponsmith—decides that a backup weapon is needed for the EDF's frontline Mektons. Noting that most already have beam sabers (EMWs), Rocket decides that a limited-use, high-yield energy cannon might be desirable (sort of a mecha-equivalent to a modern LAW rocket). Since Mr. Russel already has a design concept in mind (that's always Step 1), he continues to Step 2: He must set the numerical values for the weapon's statistics. He chooses the following:

• **DAMAGE**: 10 Kills (good enough to penetrate all but the heaviest armor). Base Cost: 15 CP's

• **WA**: -1 (cheap targeting systems). Cost Modifier: x0.8

• **RANGE**: 13 (normal for this beam weapon—why not?) Cost: x1.0

• **SHOTS**: 1 (keeps with the design conception, and keeps the cost down) Cost: x0.5

• **TOTAL COST**: 15 x 0.8 x 1.0 x 0.5 = 6.0 CP.

This procedure is not used exclusively to design weapons; some other systems have a similar design and construction procedure. In these cases, simply follow the method above, using the cost listed as a whole number (the one not preceded by the "x") as the Base Cost, and the others as cost modifiers.

Weapons Linkage

In *Mekton Z*, multiple weapons within a single limb or servo may be Linked for a cost of one CP. Linkage allows two or more weapons to be fired in one action (as one attack roll), with each hit striking seperate randomly rolled locations; you may also Link systems other than weapons for simultaneous use. In this section, MTS offers several new versions of Weapons Linkage (see below). However, there are some important rules which govern all Linkages: Linked items must be of the same category (such as beam weapon, EMW, etc), and in the case of more than two items being Linked, every item Linked—after the first—must pay the listed Linkage cost. All Links take up no Space and have no weight.

• **CROSS-LINK (COST=2)**: This Linkage works exactly like the standard Link in *Mekton Z*—all weapons are fired in one action as one attack roll—except that Cross-Linked weapons will *all hit the same location.* This is a double-(triple-, quadruple-, etc) or-nothing subassembly; you either hit with all weapons/systems or miss with all of them.

• **INTERSERVO LINK (COST=3)**: This option Cross-Links items that are not in the same servo—even if one or more are located in command armor or binder locations. The higher cost is due to increased complexity and physically longer connection requirements. If the systems are not Cross-Linked, the cost is only 2 CPs.

• **MELEE WEAPON LINK (COST=4)**: Cross-Links two or more melee weapons and/or





EMWs (as long as they are not automated). The intricacies of synchronizing close-combat attacks make this system twice as expensive as normal Weapons Linkage. If the systems are not Cross-Linked, the cost is only 3 CPs.

• **INTERMECHA LINK (COST=4):** Yes, it's even possible to Cross-Link items between multiple mecha. The advantage of this is that only one pilot need roll, and only one pilot need expend an action to fire the Cross-Linked weapons. For an Intermecha Link, the cost must be paid by each item not in the "controlling" mecha (that is, the unit that fires the weapon)—should there also be weapons Linked within the controlling mecha, these must pay the regular price to be Linked to each other (as described above). The controlling unit must be designated when the mecha are designed. If the Intermecha items are not Cross-Linked, the cost is only 3 CPs.

Weapon Linkage Example: *The Strike Rapier has six identical, Cross-Linked, 3K beam weapons—three in each arm servo. The beamguns cost 6.6 points each; each arm, having three guns, thus pays 19.8 CP and Spaces. For each arm, two of the beamguns must be Cross-Linked to the third, controlling, beamgun; that's another 4 CP per arm. Total cost for each arm's beamgun array thus costs 23.8 CPs—the Strike Rapier can now fire either its right or left arm's array as one action, with all three shots hitting the same location. To Cross-Link the two batteries together, an additional 3 CPs are paid, Cross-Linking each arm's controlling guns to each other. Now both arrays can be fired as one array; a successful attack will result in all six 3K shots hitting the target in one location! The total cost is 23.8 for the right arm's array, 23.8 for the left arm's array, and 3 for the Interservo Link, for a grand total of 50.6 CPs. Were the Strike Rapier to not Link any of these weapons, it would have paid 39.6 CPs and only be able to make one 3K attack per action!*

Another application of Weapons Linkage technology is Splitting. Splitting carries the same cost as Linkage, but its uses are somewhat different.

• **WEAPON OR SYSTEM SPLITTING:** By using this option, the Spaces taken up by a weapon or system may be split between multiple servo locations, or even *multiple mecha!* This is a good method to use if your mecha has a lot of space in its various servos, and houses a system which is larger than the Spaces in any one of its servos. When using Splitting, first decide which servo locations will house the system; each of these locations must pay to be Linked to each other (the cost is as per Interservo and/or Intermecha Cross-Links, as described above). The "controlling" location (or the controlling mecha, if Splitting Intermecha) must be stated when the system is designed—the Split system can only be used by the Controlling location (that is, a beam weapon which has been Split between the head and torso servos could only be fired by one of those servos). In the case of Intermecha Splitting, each mecha must be within two hexes of at least one other unit. Note: Hand-held weapons need not be Split between multiple hands—it is assumed that two- (three-? four-?) handed weapons are inherently "Split," and they pay no CPs for this. Flight systems are also exempt from Splitting requirements, since they are designed to be spread across multiple locations.

The whole concept of Linking and Splitting may seem a bit complex at first. The simple rule is: Each item *after the first* must pay the Linking (or Splitting) cost to be Linked to the controlling item. Items housed in multiple locations need not Link to *each other,* only to the controlling item. Remember: The controlling item is a controller for bookkeeping purposes only. If it is destroyed, it does not take the other components with it—but they can no longer operate as a Linked system.

Damaging & Destroying Systems

The rules for damaging and destroying systems in MTS are virtually the same as the rules for damage in *Mekton Z.* However, there are some special cases and modifications:

• **WEAPONS AND ARMOR:** These follow the same rules as listed in *Mekton Z.*

• **ADDITIVE SYSTEMS:** If there is a Kill value listed in the system's description, the system may be targeted and hit in the same way sensors can be hit in *Mekton Z,* either randomly or through aimed shots.

• **MULTIPLIER SYSTEMS:** Same as above—if there is a Kill value listed, the system can be hit and damaged normally.

• **SYSTEMS WITH SPACES BUT NO LISTED KILL VALUE:** These systems are only knocked out of action when the servo that contains part or all of the system is destroyed. For this reason, it is critical to keep track of where all the Spaces for systems are contained in your mecha.

For example: *If a Mekton has a beam weapon that is split between its arms (that is, both arms have Spaces dedicated to the weapon), when the right arm servo is destroyed, the weapon is put out of action.* Flight systems and maneuver verniers are exceptions to this rule—see below.

• **MANEUVER VERNIERS:** When your mecha loses a servo that contains maneuver verniers, those Spaces (that is, the number of Spaces worth of verniers that were in that

servo) are subtracted from the total Spaces of the maneuver vernier system. The new MV bonus for the verniers is then calculated by using the number of Spaces worth of Verniers remaining on the mecha, and checking the new value on the chart.

For example: *The Rapier has +4 maneuver verniers (20 Spaces), with 7 of those Spaces in each leg servo. If the Rapier loses one of its legs, it loses 7 Spaces worth of verniers. Checking the maneuver vernier chart, we see that 13 Spaces is less than 15 (which are required for a +3 MV bonus), so the Rapier's verniers now only grant +2 MV.*

• **FLIGHT SYSTEMS:** These are damaged as per the rules in *Mekton Z*, page 104.

• **SYSTEMS WHICH TAKE NO CP SPACES:** These systems will function no matter how much damage the mecha takes; they are assumed to be an integral part of the unit as a whole, and will only cease functioning when the mecha is totally destroyed.

Efficiency

When using MTS, you will find that not only weapons, but Mektons in general, will have a tendency to grow much larger (in terms of cost, Space and weight). In *Mekton Z* it generally holds true that Mektons with high-Kill structure, strong armor and/or powerful weapons tend to be the largest. This is because the technology of miniaturization is not an aspect of the basic game—the conventions of two Kills equaling one ton and one Space per one CP are convenient standards. Should a more efficient Mekton be necessary for your campaign or scenario, it is possible to alter these conventions—although doing so can get pretty expensive.

• **SPACE EFFICIENCY (COST=0.5 PER SPACE):** The most common form of Efficiency, this allows you to fit large systems (in terms of Spaces) into smaller amounts of Space. To pull this off, you simply pay an extra 0.5 CP for every required Space you remove from a weapon or system.

For example: *The Rapier carries a 9 CP beam cannon, but its arm servo is only Medium Striker level (5 Spaces), so it cannot lift its own gun! In roleplaying terms, the mecha-technicians decide to introduce some new power relays and a new containment field for the beam cannon's power source. The overall effect: the gun is smaller. In MTS terms, 4 Spaces of size must be removed from the beam weapon; at 0.5 CP per Space removed, we must add 2 CP to the cost of the beam weapon to remove the 4 Spaces. After Space Efficiency, the Rapier's beam cannon now only takes up 5 Spaces, but costs 11 CP to buy.*

• **WEIGHT EFFICIENCY (COST=2 PER TON):** With this type of Efficiency, the weight of any given mecha can be decreased. It is quite possible for a unit weighing 120 tons to have its weight reduced to a mere 30 tons—thereby making it smaller and much more maneuverable, yet no less tough or destructive! This form of Efficiency is less common than Space Efficiency because of its high cost: two CPs per ton removed. This cost is added to the mecha's final cost after EVERYTHING else has been done, including calculating Multipliers. Actually, scaling is the final step—it is described in the Scaling chapter (see page 106).

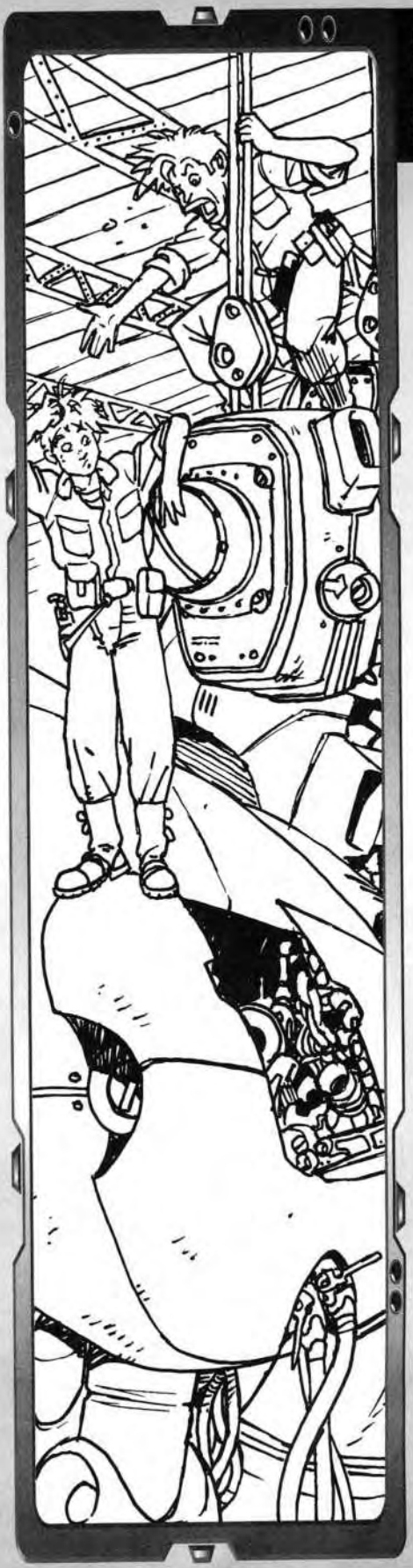
For example: *The Rapier Mark-6's design theory calls for a small, fast unit which can penetrate defense lines, strike deep within enemy territory and then get out quick. However, its tough armor and versatile weapons suite puts its weight at 57 tons. In roleplaying terms, the mechatechs decide to build the Rapier from laminates and composites rather than conventional alloys—the mecha is thus made much lighter, and weighs in at 38 tons. In MTS terms, 21 tons are going to be removed from the Mekton's weight, so 42 CPs must be spent. Those 42 points are added to the Rapier Mk-6's final cost (after Multipliers, before scaling).*

• **WEIGHT INEFFICIENCY (COST= -x0.2):** While conceptually the opposite of Weight Efficiency, Weight Inefficiency *does not* add 2 CPs per 1 ton added. Instead, for a 20% cost rebate, the weight of your mecha doubles. This -x0.2 cost multiplier should be figured in with all others to help determine the final price of your mecha; if your mecha costs 150 CPs, and you give it Weight Inefficiency, it will wind up costing 120 CPs. However, if your mecha has other cost multipliers (such as the x1.1 Multiplier for the Rapier mentioned earlier), the total Multiplier would subtract x0.2 (the Weight Inefficient Rapier would have a new Multiplier of x0.9).

Building Your Mecha

Having read this far, you are familiar with the underlying concepts behind MTS—there are many details yet to be discussed, but they are covered in the individual system entries. Certain systems (such as remotes and combiners) are fairly complex, but there is nothing in MTS that can't be understood with the help of a basic calculator (the use of which is highly recommended). Building mecha in MTS takes a little longer than in *Mekton Z*, but the more you use MTS the easier it becomes.

Following is a "recipe" for building mecha in MTS. This recipe will go over all the stages of construction, step by step. It is advised that you follow this recipe when designing your first few mecha. After that, it's up to you and your imagination. Now go stomp some suit!



Design Flowchart △ メカ・デザインのチャート

1 **HAVE A CONCEPT IN MIND:** What is this mecha designed for? Is it a sleek attack unit, designed for in-and-out battles? Perhaps a lumbering juggernaut which can take everything the enemy throws at it, and respond with overwhelming force? These are important questions for the balance of your unit—at first you'll be tempted to pile everything onto a single suit, but this would be disastrous. True, it'll be powerful, but it'll also cost a fortune! Check out the series of *Mekton Mecha Manuals* for some conceptual inspiration.

2 **CONSTRUCT A FRAME:** Now that you know what you want your mecha to do, it's time to assemble its frame—the "skeleton" of servos and armor into which everything else will be built.

2A. CHOOSE A BODY FORM: Is your mecha humanoid or beastform? How may limbs does it have? Does it even have limbs? It could be a fighter or tank.

2B. BUY SERVOS: Once past 2A, pull out a mecha sheet and start buying the proper servos. Keep your concept in mind—it isn't likely that a quick, transformable scout-mecha will have Megaheavy servos. If you're going to need a lot of Space, buy a pod or two.

2C. WHEELS AND TREADS: If your mecha is going to use either (or both) of these motive systems, buy them now (based on your torso's Level) and assign their Spaces to whatever servos are appropriate—yes, pods are legitimate choices!

2D. BUY ARMOR: Same rules apply as 2B; don't overload on armor. Buy what you think would be appropriate for the mecha—no more, no less. If your mecha uses Energy-Absorbing Armor, don't forget to deal with that here.

3 **CHOOSE YOUR WEAPONS:** Now comes the fun part. How is your mecha armed? Hundreds of small mini-missiles, or a single, huge howitzer? Use the weapons in *Mekton Z* for a reference (they were all built in MTS), then start building your own. Weaponry in MTS offers some of the greatest variation—make use of it, gearhead!

3A. BUILD WEAPONS: Go to town.

3B. DO THEY FIT? Probably not. Spend some extra CPs for Space Efficiency and mount the weapons where you want them—or trim the cost of the weapon down—either process serves. Perhaps you would like to Split the weapon between multiple locations? At the end of the process, all weapons should be in place.

3C. AMMO: Don't forget to buy ammo for projectile weapons. You'll be sorry if you do.

4 **CONSIDER SHIELDS:** A good, cheap form of protection. Does your mecha use a shield? If so, what kind and in what way? Does it have more than one?

4A. CHOOSE SHIELD TYPE: Standard, Active or Reactive? Do you have more than one type?

4B. DOES IT FIT? Do you want binder space in the shield?

4C. USE BINDER SPACE: If any of your shields are binders, place systems in Binder Space.

5 **BUY CREW AND SENSORS:** Before you forget, purchase these vital subassemblies. Decide where the crew is located and pick the sensor level you need (check the max range of your weapons—it'll help).

6 **BUY OTHER ADDITIVE SYSTEMS:** Now buy all other subassemblies—electronic warfare systems, statistical enhancement, energy pools, reconnaissance systems, reflectors, remote control systems and weapon mounts are all bought now.

6A. ALLOCATE SPACES: Place systems in the mecha's servos (or in binders).

6B. EFFICIENCY, ANYONE? Don't forget to use this (or Splitting) when necessary.

7 **FIGURE BASE WEIGHT:** The sum of all Kills (of structure, not Kills of damage the unit can dish out) of all systems bought in steps 2-6, divided by 2, is your mecha's base weight.

7A. FUEL: If your mecha is going to be using some kind of flight system and you are using the optional fuel rules (see page 59), decide what percentage of your mecha's base weight will be added for fuel storage. Allocate Spaces—if there's no room, buy external fuel tanks. No need for this step if you're using antigrav!

8 **WEIGHT EFFICIENCY:** Use this to reduce the weight of your mecha as a whole. Don't add in the cost yet—you'll have to wait until Step 12. The new weight, after Efficiency, is your mecha's final weight.

9 **FLIGHT AND OTHER PROPULSION SYSTEMS:** If your mecha uses any kind of movement system (outside of legs, wheels and treads), buy it now that you know your final weight. Decide which kind of system you're using: thruster, antigrav, hydrojet, etc.

9A. CALCULATE COST & SPACE: Decide on the MA you want, cross-reference with your mecha's final weight, and deal with cost and Space.

9B. EFFICIENCY AGAIN: Since Splitting doesn't apply here, use Space Efficiency with abandon—you'll need it!

10 **FIGURE BASE COST:** Add up the costs of all systems bought in steps 2-6. The sum of the all costs is your mecha's Base Cost.

11 **CHOOSE MULTIPLIER SYSTEMS:** Figure out all the Multiplier systems you want your mecha to have. The order in which you buy them is not really important, but it is wise to think of the in the following order for purposes of expediency. Remember that some of these systems take up Space, so don't write Efficiency off yet!

11A. BUY POWERPLANT: This will affect your Ground MA and the all-important MV. Also consider hot vs cold: Do you want survivability—or a spiffy Maneuver Pool?

11B. BUY COCKPIT CONTROLS: Decide upon the controls, enclosure, etc.

11C. MANEUVER VERNIERS: If your MV needs a boost, buy verniers and allocate Spaces.

11D. ENVIRONMENT PROTECTION: What kind of terrain will your mecha be facing? Buy Environment Protection as necessary—a space unit won't have Desert Protection.

11E. TRANSFORMABLES & COMBINERS: Is your mecha capable of performing such feats? If so, does it have all the components it needs to become a mechabug, a giant camera, or combine into Mega-Mekton GX?

11F. OTHER MULTIPLIER SYSTEMS: Cloaking, ESPer lenses, internal automation, hydraulics, shadow imagers, stealth, techno-organics, thought control, turbocharger, etc.

12 **CALCULATE YOUR MECHA'S MULTIPLIED COST:** Add up all of the Cost Multiplier numbers. The sum is the Total Cost Multiplier for your mecha. Add one (yes, the number 1) to the Total Cost Multiplier, and then multiply the resulting number by the Base Cost of your mecha (from Step 10). The result is the Multiplied Cost of your mecha. Now is the time to add in the cost of the Weight Efficiency you bought in step 8.

13 **OVERVIEW MECHA:** Look at the mecha as a whole. Do you wish to make changes? Add systems? Maybe you need to add +3 COOL Statistical Enhancement? Go back to the proper steps and make any changes you wish, but remember to recalculate cost and weight.

14 **FIGURE STATS:** Now calculate the important stats of the base mecha and record them on the mecha sheet. This includes Maneuver Value (MV), Maneuver Pool (MP), Land MA, Flight MA, special action bonuses, etc.

15 **BUY COMMAND ARMOR:** Decide if you want your mecha to have a second layer of armor and added weapon systems.

15A. BUY COMMAND ARMOR SYSTEMS: Equip the Command Armor with whatever you wish. Anything goes—Additive, weapon, Multiplier and movement systems are all fair game.

15B. DETERMINE STATS: Calculate the Command Armor's cost as per Steps 10-12, and the weight according to steps 7-8. Remember that these Stats are based on the Command Armor and the equipment it contains.

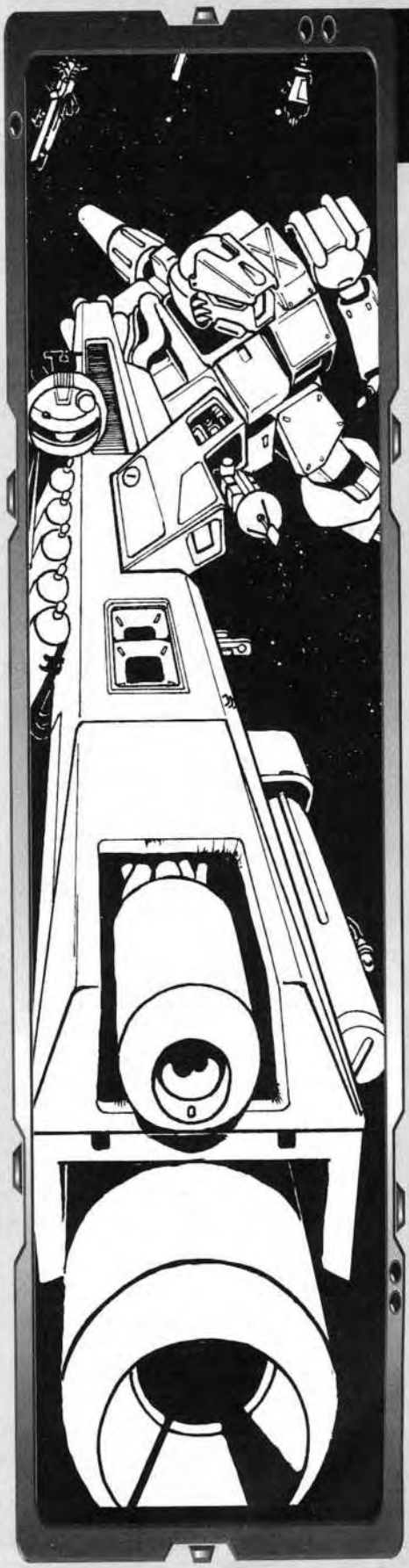
15C. CALCULATE MECHA'S NEW STATS: Add the cost of the Command Armor to the cost of the mecha (from Step 12), and add the weight to that of the mecha (from Step 8). Be sure to check for changes in Land and Flight MA. MV changes according to special rules (see the Command Armor section).

16 **SCALE AS APPROPRIATE:** Check the Scaling chapter for effects if your mecha is not supposed to be a 1:1 scale design.

17 **DO YOU WANT REMOTES?** If you want to control any remotes, you should have bought a remote control system back in step 6. If you didn't, go back and do so, then go to step 13. Once you're ready, decide how many you want and build your remotes. They are designed just like any mecha. Repeat Steps 1 through 16 for your remotes.

17A. CALCULATE YOUR MECHA'S NEW COST: Add the costs of the remotes to the cost of your mecha (remotes rarely add to the mecha's weight). This is it—the actual cost of your mecha!

18 **IT'S A WRAP!** Name your mecha, come up with a serial number or title (if you wish), record the pilot's important Stats, and hit the battlefield running!




THE FRAME

THE FRAME

The primary components of any Mekton's Frame are its Servomodules (or just servos). Servomodules are the skeletal components of your mecha. They are composed of a rigid armature which integrates joints with a full range of motion, hydraulic pistons which actually move the servo, and several hardpoints for adding weapons and other systems. Depending upon the character of your campaign, servos might use "myomers" (electrically enacted, artificial muscles), magnetic-force actuators, mice running on little treadmills, or whatever.

Every servo has a Kill value, a number of Spaces, and a cost in CPs. Usually all three of these are the same number. Pods are an exception in that they have no Kills, but they have twice as many Spaces as they cost. Arm and leg servos also get a Damage Bonus rating for melee combat purposes, and arms also get a Throwing range rating (measured in hexes). Servos may sacrifice Kills for extra Spaces; **1 sacrificed Kill gains 2 Spaces.** This trade has no CP cost.

Mecha may also buy reinforced servos, if so desired. Extra Kills of structure costs **2 CPs and takes up 2 Spaces per added Kill**—these added Kills make the servo tougher, but do not add to melee damage and do indeed add weight.

For simplicity's sake, the important information from the charts in *Mekton Z* have been reproduced below.

Servos △ サーボ

Torso Servo

All mecha have a torso, if nothing else. This is the component to which all other servos are attached—the normal limit is 12 servomodules, and no servo may be more than one classification level above the Torso. The Torso also houses your mecha's Powerplant. Just because this component is called a Torso doesn't mean it must be shaped like one; this could be the hull of a jet fighter, tank or starship.

TORSO SERVO

CLASS	COST, SPACE, KILLS
Superlight	2
Lightweight	4
Striker	6
Medium Striker	8
Heavy Striker	10
Mediumweight	12
Light Heavy	14
Medium Heavy	16
Armored Heavy	18
Super Heavy	20
Mega Heavy	22

Head Servo

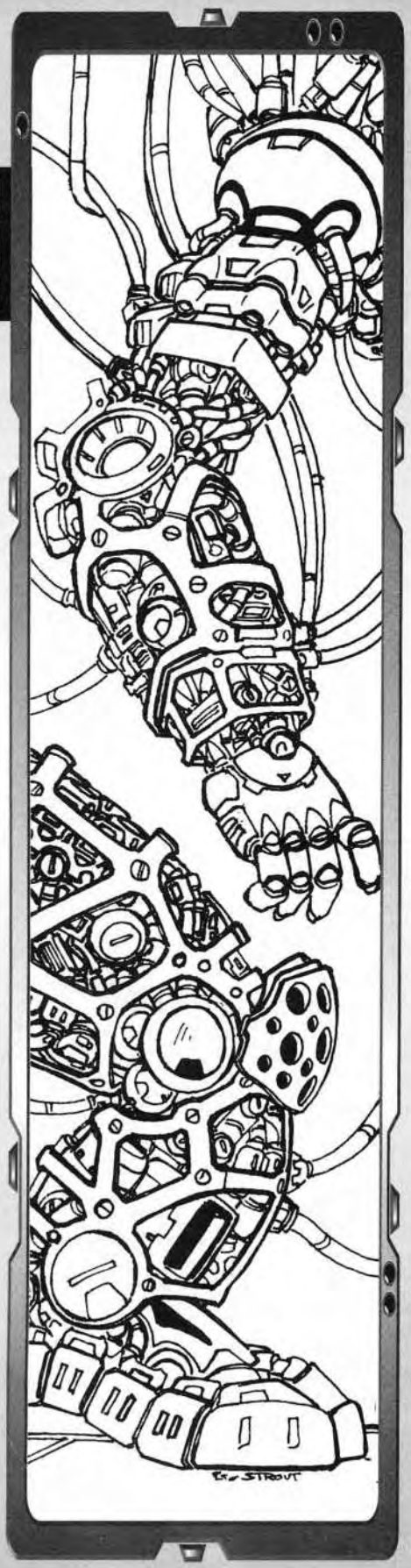
While not an absolutely necessary servo, a Head is the best place for Humanoid- and Beast-form mecha to mount sensors. Sensors systems not placed in a Head servo suffer a penalty of -2 to Awareness rolls (this is true only for Humanoids and Mechabeasts). There are many reasons for this—a Head serves as a kind of sensor turret, granting a larger field of vision; sensors placed in limbs flail around a lot and servo-mounted sensors usually have limbs flailing around in front of them. Heads also make excellent turrets for Tanks and other mecha.

HEAD SERVO

CLASS	COST, SPACE, KILLS
Superlight	1
Lightweight	2
Striker	3
Medium Striker	4
Heavy Striker	5
Mediumweight	6
Light Heavy	7
Medium Heavy	8
Armored Heavy	9
Super Heavy	10
Mega Heavy	11

For the hundredth time that month, Kenty wearily crawled out onto the catwalk of the hangar bay. Above her loomed the massive chest of the Rapier Mark-II. Already its armor plating was being stripped by heavy cranes and robotic waldos; the proposed Mark-III's configuration called for a pair of wings and a new head.* Damn Jesse and his constant upgrades, *she thought as she consulted her electronic checklist—the wing servos could be ordered from the factory, but the old head would have to be demounted, reshaped and retrofitted with a secondary frame. Working her way over to the collar's access hatches, she punched the entry codes, pulled her tech-scanner out of her greasy coveralls, and began to work ...

So much for her weekend. Again.



Arm Servo

Arms are NOT assumed to come with Hands. This is because there are far too many mecha in anime which have arms, but not hands. Hands (as well as claws, talons, pincers and other manipulators or weapons) must be bought as melee weapons; a standard Hand is WA +0, takes 1 Space, has 1 Kill and costs 2 CP. Hands are considered "Quick" and "Handy" (see page 30).

ARM SERVO

CLASS	COST, SPACE, KILLS	DAMAGE+	THROW
Superlight	2	+0	1
Lightweight	3	+0	2
Striker	4	+0	2
Medium Striker	5	+1	3
Heavy Striker	6	+1	3
Mediumweight	7	+1	4
Light Heavy	8	+2	4
Medium Heavy	9	+2	5
Armored Heavy	10	+2	5
Super Heavy	11	+3	6
Mega Heavy	12	+3	6

Leg Servo

Legs are assumed to come with Feet at no extra cost, Kills or weight. This is because a Leg without a foot is just an Arm. However, claws, talons and other fancy protrusions from the feet must be bought as melee weapons (see page 30). Remember that any mecha's Leg servos may not be smaller than 1 classification level lower than it's Torso's classification level; in the case of mecha with more than 2 legs, the total number of Kills in all your legs must add up to no less than 2 Kills less than the total number of Kills in your Torso servo.

LEG SERVO

CLASS	CP, SPACE, K	DMG+
Superlight	2	+0
Lightweight	3	+0
Striker	4	+1
Medium Striker	5	+1
Heavy Striker	6	+2
Mediumweight	7	+2
Light Heavy	8	+3
Medium Heavy	9	+3
Armored Heavy	10	+4
Super Heavy	11	+4
Mega Heavy	12	+5

Wing and Tail Servos

These servomodules could be taken literally when fitted to Beastmecha, or they could be used as in the construction of aircraft-style mecha. Wings could also represent large thruster blocks (a pair of wings no smaller than 2 levels lower than your Torso servo always add +2 to flight MA), while tails can serve as tentacles (they are capable of performing Entangling attacks).

WINGS & TAILS

CLASS	COST, SPACE, KILLS
Superlight	1
Lightweight	2
Striker	3
Medium Striker	4
Heavy Striker	5
Mediumweight	6
Light Heavy	7
Medium Heavy	8
Armored Heavy	9
Super Heavy	10
Mega Heavy	11

Pod Servo

Pods are hollow servos. They are held together by the armor placed upon them, and are destroyed when the system or systems inside them are destroyed. They make great backpacks. Pods are also unique in that they are not subject to the normal class restriction like other servos; any class of Pod may be attached to a Torso servo, but for every 2 Class Levels the Pod has over the Torso, the mecha suffers a -1 MV penalty.

POD SERVO

CLASS	COST	SPACE
Superlight	1	2
Lightweight	2	4
Striker	3	6
Medium Striker	4	8
Heavy Striker	5	10
Mediumweight	6	12
Light Heavy	7	14
Medium Heavy	8	16
Armored Heavy	9	18
Super Heavy	10	20
Mega Heavy	11	22

Wheels and Treads △ ホイールとトレッド

Even as sleek Mektons and mechafighters streak across the sky, the battlefields of Mekton Zeta are populated by numerous mechanized landmasters. Mechatanks rumble over the battlefield, caterpillar treads crushing obstacles like popcorn. The tires of Mechabikes screech on the highways as death-defying maneuvers are performed. Powered-Armor suits skate over rubbled city streets, engaging in high-firepower rollerderbies. This is where Wheels and Treads come in.

Each system has its advantages and disadvantages: Wheels allow your mecha to move faster on the ground, while Treads make your mecha more effective at negotiating rough terrain. On the gameboard, Wheels add +2 to land MA, while Treads add nothing to MA but allow the mecha to traverse ANY terrain type (except water and swamps) without suffering any MA penalty. In order to get both bonuses, you must buy a full set of both Wheels and Treads.

CLASS: This is the Classification Level of the Wheel/Tread system, just like servos and armor use. Your Wheels or Treads may be 1 Level less than the Level of your Torso servo (but no less—there is no upper limit) in order to gain movement benefits.

COST: The cost in Construction Points of the Wheels or Treads you are buying. Wheels and Treads take no Spaces from your mecha, but they must be allocated to servo or Binder locations for the purposes of hit determination. Wheel/Tread systems may divide their Kills among various locations in any combination they desire; a Mediumweight Wheel system could be one 6-Kill wheel, two 3-Kill Wheels, three 2-Kill Wheels, two 2-Kill Wheels and two 1-Kill Wheels, or six 1-Kill wheels. These may be placed wherever the designer wishes, but they should follow some kind of symmetrical layout and must all be able to touch the ground in order to grant any bonuses (so if you have Wheels on your Arms, no firing a hand-held weapon

WHEELS AND TREADS

CLASS	WHEEL COST & KILLS	TREAD COST & KILLS
Superlight	1	2
Lightweight	2	4
Striker	3	6
Medium Striker	4	8
Heavy Striker	5	10
Mediumweight	6	12
Light Heavy	7	14
Medium Heavy	8	16
Armored Heavy	9	18
Super Heavy	10	20
Mega Heavy	12	22

Turn and Burn

Dodging frantically, Shiro checked the rearview displays in his stolen Warthog's cockpit. The MP Powered Armors were keeping up with him, chewing up the road and buildings with their gatling guns. The recoil was slowing them down, but not enough. Soon they would close, and Shiro's career as a terrorist would end quickly, at the end of a rope.

He slewed round a corner, running the red light, the wheels in the Warthog's feet leaving black trails on the asphalt. He screamed underneath an overpass, chips of concrete bouncing off his suit's armor. He suddenly realized his chance, and took it. Gritting his teeth, he kicked in the turbochargers and threw the control sticks hard right. The extra torque the turbos generated spun him around faster than his pursuers could react. Shiro unloaded his rocket pods, and the MPs were buried beneath tons of concrete as the overpass collapsed on them.

Armored Vengeance

The invaders had come pouring over the border at dawn, butchering anyone who got in their way. Men, women, children—all fell beneath the growling chainguns. Bruno swore he would stop this. He and his elite Red Vanguard would end this desecration of the motherland. Or rest in her embrace forever.

The tail door of the transport aircraft dropped open, and the Guard stepped out. No parachutes betrayed them. They did not need them. They impacted right in front of an enemy column, their heavy Golgotha mecha sinking up to their knees in the soft earth. As they tore free, straightening up to their full twelve meters in height, the enemy suits opened up. The chainguns, sounding like an army of kamikaze hornets, sprayed a solid wall of lead at the Red Vanguard. The puny rounds bounced off armor plate thick as a safe door as Bruno's armored fist completely crushed one of the enemy...

while driving). Wheels/Treads may even be split up within a single location: In the previous system, each Leg could mount two 1-Kill Wheels, and the Torso could mount two 1-Kill Wheels. Wheels and Treads may be bought in addition to Legs, or may be bought instead of Legs—if all the Wheels/Treads are in the Legs, the mecha may "skate" with them (essentially boosting their running ability). Transformable mecha often have their Wheels/Treads distributed across their servos, and can thus only get the bonuses when Transformed.

KILLS: Used, as usual, to determine damage capacity and weight. Wheels and Treads are not servos, and thus may not be armored, but they do get armor protection from the servo they are mounted on. There are two stages of damage for Wheels and Treads: When half of the number of individual Wheels or Treads are destroyed, the system is disabled and all the bonuses are lost. When all Wheels/Treads are destroyed, the whole system is destroyed. This demonstrates the usefulness of splitting your Wheels/Treads into multiple locations.

Armor △ アーマー

Armor is a protective honeycomb of alloys and plastics (although if you're planning to build one of the more bizarre vehicles from anime, armor may be made up of almost anything you want). The armor is laid out in overlapping plates to cover the various parts, like a suit of armor protects the knight within. Each level of armor has a cost and a Stopping Power (how many points of damage the armor will stop before the servo below is affected). You do not have to armor all servos, but armor must be bought separately for each servo. You may not cover a servo with armor more than 2 levels above the class of the servo itself.

As it has become possible to design larger and more destructive weapons through MTS, it also has become necessary that better and greater varieties of armor be available. Armor is now divided into five types, which vary in protective capacity and in cost. Though mecha may not put any more Kills worth of armor on a given servo than would have been allowed in *Mekton Z,* enhanced protection is available in the other forms.

In *Mekton Z,* the staged penetration system says that when a Mekton's armor is hit by a blast of one Kill or greater, the armor itself loses one Kill's worth of Stopping Power (regardless of the actual size of the blast). However, MTS offers newer and better armor types, which do not lose pieces as easily as *Mekton Z* armor. Each of the new armor types has a **Damage Coefficient** (or DC), which represents the minimum number of Kills that will cause an impacted armor area to lose the usual one Kill's worth of protection. If the incoming attack is smaller than the Damage Coefficient, the armor is not damaged in any way.

The only armor type that does not have any actual Damage Coefficient is Ablative-type armor. Cheaper than *Mekton Z's* armor, the Ablative variety does not reduce using the staged penetration system at all; rather, it simply blows off like a servo or other component (take 3 Kills, lose 3 Kills of armor).

ARMOR

CLASS	SP	COST
Superlight	1	1
Lightweight	2	2
Striker	3	3
Medium Striker	4	4
Heavy Striker	5	5
Mediumweight	6	6
Light Heavy	7	7
Medium Heavy	8	8
Armored Heavy	9	9
Super Heavy	10	10
Mega Heavy	11	11

ARMOR TYPE

TYPE	DC	COST
Ablative (Ø)	0	x0.5
Standard (s)	1	x1.0
Alpha (a)	2	x1.25
Beta (b)	4	x1.5
Gamma (g)	8	x2.0

Though armor may cost more (or less) than the armor of *Mekton Z,* the maximum amount of armor allowed on any given servo remains unchanged. Standard and Active shields may also be of the refined armor types, and their cost is calculated by multiplying the cost of the shield by the cost of the armor type. These new, refined armor types do not add weight to your mecha.

Energy-Absorbing Armor

Also known as RAM (Radiation Absorbing Material), Energy-Absorbing Armor absorbs incoming energy pulses and stores a portion of the power in massive batteries for later use. Whenever a mecha fitted with Energy-Absorbing Armor is attacked by an energy weapon (beam weapon, energy melee weapon, or nuclear blast), a fraction of the damage equal to the system's "Absorption Coefficient" is removed from the total number of incoming Kills before normal damage resolution. This number of Kills is then stored in any available energy pools (see Energy Pools, page 40) as energy points to be later discharged as attacks or defenses. For these purposes all fractions are rounded down. Note: All mecha with Energy-Absorbing Armor MUST have an energy pool to store the absorbed energy in. Without one this system is useless. See page 40 for Energy Pools.

R.A.M. ARMOR

ABSORBTION	COST	PENALTY
1/5th	x1.5	1/1SP
1/4th	x1.8	4/5SP
1/3rd	x2.2	3/4SP
1/2	x2.5	2/3SP

ABSORPTION (AbC, or Absorbtion Coefficient): This is the fraction of the incoming damage that is removed and stored in the suit's energy pools on a one-to-one basis (one Kill to one point). This quantity is also removed from the Kills of the incoming attack before applying the damage to the armor/servo that has been hit. The mecha designer may decide which locations he wishes to protect when his mecha is designed; only these locations are protected when hit, and only these must pay the cost for the RAM.

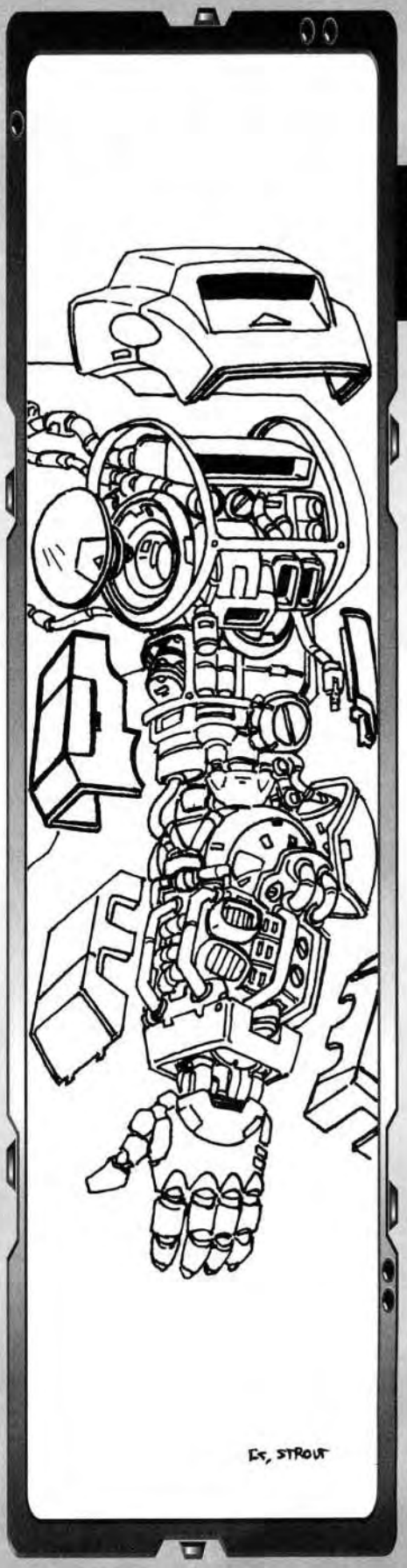
COST: RAM multiplies the cost of mecha's armor. In the case of refined armor types which are also energy absorbing, the multipliers are multiplied together. The same goes for Shields.

For example: *The Rapier Mark-III will have Medium-Heavy Beta armor with an Absorption Coefficient of 1/2 on its wings. The cost will be 8 for Medium-Heavy armor, x1.5 for the Beta DC of 4, x2.5 for an AC of 1/2. Each wing will have 5K of armor (2/3 of the original 8) with a DC of 4 and an AC of 1/2; each wing will have to pay 30 CPs for its armor.*

ARMOR PENALTY: Not only does RAM cost a lot, it must also be worked into the carefully-engineered materials of your armor. For this reason, an energy-absorbing location's armor rating is reduced by the amount listed in the Armor Penalty column; the amount of protection is reduced to this fraction of its original value. The absorption process takes place when a servo is hit but before damage resolution occurs. If a Command Armor location is hit that is not protected, absorption does not occur, except on the damage that blows through to the (presumably) protected servo underneath.

HIS DEATH APPROACHED

Kalvin knew it. His entire squadron had engaged this bogie, this mysterious black Mekton that had appeared from beyond the Rim. They had immediately fired upon the intruder with their fusion cannon, and had hit the thing with enough energy to create a small sun, but to no avail. The intruder seemed to absorb their energy beams, and then danced among them, its right-angle turns and sudden stops indicating some sort of inertialess propulsion system. With casual flicks of its wrists, it cut Kalvin's squadrons to pieces with some sort of energy scythe. Now Kalvin was the last one. As his squadron commander's suit blossomed into a fireball, the horned head of the intruder turned on him. In a desperate measure, he overloaded his chest cannon, unleashing a hideous amount of high-energy plasma that engulfed the intruder, and actually seemed to stagger it. But it did absolutely no damage. Kalvin tried to run, but the feedback had fried most of the electronics in his suit. The intruder raised its arm, palm outward. Energy crackled on the wings that arced from the intruder's back. Kalvin triggered his suit's vulcan cannon in a futile gesture, staring in shock as the intruder's armor began to disintegrate under the impact of the projectile weapon. Then, a terrible beam lanced out of the intruder's palm—it seemed to seeth with all the energy it had absorbed from the fusion weapons, and Kalvin's world filled with white, burning light.



WEAPONS

Beam Weapons △ ビームのへいき

Beam weapons are rifles, cannons, guns and any other ranged weapons firing concentrated energy, such as laser light, accelerated particles (like protons), or plasma-based "rays." *Mekton Z* lists several examples, but MTS allows for much greater diversity when dealing with these weapons. They have the advantages of long range and high accuracy, although they are not as powerful as some other weapons and tend to be rather costly.

DAMAGE: Net damage in Kills from any single shot of the weapon. Damage also represents the capacity of the weapon itself to sustain incoming damage; a weapon that does five Kills of damage can also take five Kills of damage before being destroyed.

ACCURACY: Represents how easy (or difficult) it is to hit a given target with the weapon. Increased or decreased accuracy may come in the form of a laser targeter, an auto-aim system, or a just plain bigger beam.

RANGE: The Beam Weapon's Combat Range in 50-meter Mekton hexes. This may be increased or decreased as the designer wishes by paying the cost listed under "Range."

SHOTS: Beam Weapons, because they do not use ammunition in the sense of the modern firearm, are usually designed to draw power from their mecha's powerplant. However, some weapons are too large (and thus too draining on the mecha's power supply) for this to be possible—others require an additional one-use component (such as the nuclear core for an x-ray laser) that might limit the number of possible firings available before replacement or recharge. In any event, when such a Beam Weapon runs out of shots, the weapon must be recharged back "in the pits" (that is, in the hangar). The "0" rating for shots means that firing the weapon drains the mecha's Powerplant for as many turns as the weapon's damage rating—during this time, the mecha has no power available for anything except life support!

CLIP-FED: To save space and reduce cost, many Beam Weapons (usually hand-held ones) use some form of battery which stores their energy supply, rather than drawing off their powerplant. In other words, they use replaceable Clips. The number of charges in the Clip is bought using the Shots table; in the case of infinite Shots, the number of shots in the Clip is 15. Clips are not assumed to come with the gun, so stock up: each Clip for your weapon costs 1 CP and is assumed to be

Beam Effects

This section generally treats Beam Weapons as devices which cause damage, yet science fiction is full of all sorts of specialized energy projectors: stunners, tractor beams, sex-change rays, etc. Should you want to create such a device, you have two options:

1) Build the device most appropriate for the effect, then just call it a Beam Weapon (i.e., an Entangling Melee Weapon as a Tractor Beam).

2) Design a Beam Weapon, and then apply the "Special Effect Weapon" Stupid Mekton Trick (see page 94).

BEAM WEAPONS

Damage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cost	1.5	3	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30
Range	4	6	7	8	9	10	11	11	12	13	13	14	14	15	15	16	16	17	17	18

Range	25%	50%	75%	100%	125%	150%	175%	200%	250%	300%
Cost	x0.62	x0.75	x0.88	x1.0	x1.12	x1.25	x1.38	x1.5	x1.75	x2.0

Accuracy	-2	-1	0	+1	+2	+3
Cost	x0.6	x0.8	x0.9	x1.0	x1.5	x2.0

Warm-Up Time	0	1	2	3
Cost	x1.0	x0.9	x0.7	x0.6

Shots	0	1	2	3	5	10	∞
Cost	x0.33	x0.5	x0.6	x0.7	x0.8	x0.9	x1.0

Wide Angle	Hex	60°	180°	300°	360°
Cost	x2.0	x3.0	x5.0	x7.0	x9.0

Burst Value	2	3	4	5	6	7	8	∞
Cost	x1.5	x2.0	x2.5	x3.0	x3.5	x4.0	x4.5	x5.0

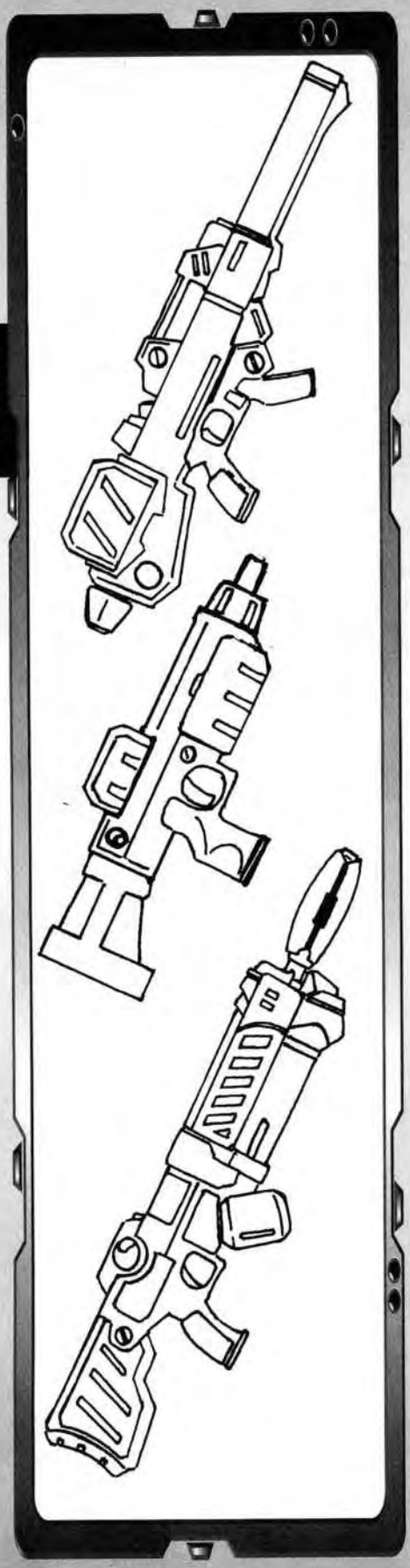
Clip-Fed . . .x0.9
Clip Cost . . .1 CP each

Anti-Missile x1.0
Variable x1.8

Anti-Personnel x1.0
Variable x1.8

Anti-Missile & Personnel: . . .x1.8
All-Purpose: x2.6

Fragile: . .x1.0 **Long Range:** . . . .x1.33 **Hydro:** . . . . .x0.2 **Mega-Beam:** . . . .x10.0 **Disruptor:** x2.0



stored somewhere on your mecha (beware—unless they are stored in spaces or in a Binder, they can still be hit and destroyed). It takes one full action to change Clips on a Beam Weapon. **No weapon may have both "0" Shots and be Clip-Fed.** It takes one action to change clips.

WARM UP TIME: Weapons with a warm-up time contain a single capacitor-like element that takes a number of full turns' worth of charging before it can be fired. Once the weapon has been fired, the same number of full turns must go by before the weapon may be fired again (e.g., action on subsequent turn, second, or third following turn). Because the weapon will automatically begin the recharge sequence, it is not necessary for your hot-shot Mechajock to hole up in some corner of the battlefield holding down a recharge button on his control panel. Warm-up weapons need not be fired immediately after being charged. The capacitors are assumed to be able to hold their charge indefinitely until needed in combat. **No weapon may have both Limited Shots and Warm-Up Time.**

WIDE ANGLE: In general, a spray of beams, each with destructive yield of the original beam. These weapons are particularly favored by large units for their ability to attack great numbers of smaller mecha. When a Wide Angle Beam Weapon is fired, a single To-Hit roll is made and is compared to the Defense roll of each and every target within the weapon's arc. Friendly or otherwise, if it's in range, it's in danger! Attacks are then resolved normally. Wide-Angle Weapons are no more difficult to avoid than normal beams—if a saturation effect is desired, buy a higher Weapon Accuracy. Wide-Angle beam spreads are assumed to be thin enough that a single mecha within the firing arc will only be hit once; if a thicker beam spread is desired (multiple hits per target) we might suggest Wide-Angle Autofire! Note: the "Hex" rating means that the Beam Weapon has a 7-hex area of effect (the target hex and the six hexes around it) along its entire length; like any Wide Angle attack, any mecha within the path of the beam must make a Defense Roll to avoid being hit.

BURST VALUE: Any form of weapon likely to strike a single target more than once per firing has a Burst Value, and is known as an Autofire weapon. No matter what you choose as the nature of your weapon, the game effect is always the same: Once a successful To-Hit roll is made, an additional hit is scored for each point by which your attack score beats the target's Defense roll (up to a maximum of the Burst Value of the weapon). Each hit strikes a separately determined location, doing the full damage value of the weapon. Weapons with an Infinite Burst Value fire a continuous beam, and have no upper limit on the number of times they can hit a target. Limited Shots or Warm-Up Time for Burst-fire weapons are assumed to be for an entire burst. Note: For calculating damage results from Crits and Mega-Crits with Autofire weapons, see Missiles on page 32 of this book.

ANTI-MISSILE: Rather than being designed for offensive purposes, these Beam Weapons are a collection of smaller, rapid-firing beams; their purpose is to destroy incoming Missile Weapons. Systems of this nature need not be purchased as Burst-firing (it would have no effect on their performance since they are assumed to already be of a fast-firing nature). When a Missile (or Salvo of Missiles) is fired at a unit equipped with an Anti-Missile Beam Weapon, the defender automatically gets to fire defensively **as well as** getting the normal Dodge roll. If this is done, the defender first makes a Dodge roll—if this defense roll fails, the defender makes a Mecha Gunnery skill attack roll. This roll is then compared to the attacker's original Mecha Missile skill attack roll. If the defender wins, a number of incoming Missiles equal to the Anti-Missile Weapon's Kill value are automatically shot down. In addition to this, for each point by which the attacker's Missile roll is exceeded by the Gunnery roll made by the defender, another incoming Missile is destroyed. Systems purchased as "Only" may **only** be used for defensive purposes; systems with the "Variable" option, however, may be used interchangeably as offensive weapons in the normal manner. Note: Range is not relevant to Anti-Missile systems, so the range multiple is always x1.0. Refer to the example in the sidebar on the next page for more.

ANTI-PERSONNEL: Weapons of this type may be used to attack Human-size targets (such as people and equipment) without suffering that pesky mecha-vs-man -6 modifier. Attacks of this type are resolved as if the target were simply another mecha. Weapons of this type purchased as "Only" may **only** be used against human-sized targets; systems purchased as "Variable" may be used freely against man and mecha alike. This is not a 2-Scale counter-modifier, it's a personnel-specific design parameter.

ANTI-PERSONNEL AND ANTI-MISSILE WEAPONS: A Beam Weapon which can be used for Anti-Personnel and Anti-Missile purposes, but doesn't effect mecha-scale targets at all, can be purchased for a x1.8 cost multiple.

ALL-PURPOSE: A Beam Weapon which can be used for normal mecha combat as well as for Anti-Personnel and Anti-Missile purposes can be purchased for a x2.6 cost multiple.

MEGA-BEAM: These are weapons of extreme destruction—a Mega-Beam is so wide, so high-energy and lasts so long (almost a full second rather then a microfraction thereof) that the target is fully engulfed. Only one target may be attacked with a Mega-Beam Weapon at a time (unless it has a Burst Value or Wide-Angle function). When a unit is hit with a Mega-Beam Weapon, it takes the full damage of the weapon to every location. Note that if the target has Command Armor, only the Command Armor is directly hit. Hand-held weapons take full damage as well, but other weapons and components are assumed to be more or less protected by the servos in which they are housed (provided the servos survive). Standard and Active Shields also take full damage and can only protect one location from the blast; only Reactive Shields (force fields) provide any true protection. In general, Mega-Beam Weapons have a Warm-Up Time, but it is not impossible to manufacture a Mega-Beam with some other disadvantage. Their prohibitive cost usually demands numerous disadvantages and System Splitting.

LONG RANGE: All weapons have a Maximum Range equal to their range ("Combat Range") squared (i.e., Range x Range), and any target outside the Combat Range but within Maximum Range is at -4 to be hit. However, a weapon may be modified with improved targeting arrays and stabilizers which optimize it for long-range combat. Such Long-Range weapons only suffer -2 to hit targets outside their Combat Range, but are also at -2 to hit targets inside their Combat Range. These weapons are usually relegated to artillery, "stopgap," and other support mecha.

FRAGILE: Beam Weapons with this option are not as structurally sound as they might be, so they are destroyed after taking a single Kill of damage. However, becuase the Beam Weapon only has one Kill, it is very light; therefore, this option doesn't affect cost (since its advantages and disadvantages balance each other out).

DISRUPTOR: These weapons are designed to penetrate energy-based defenses. Disruptor beams fire concentrated energies which allow them to push through Reactive Shields and Beam Shields; Disruptor beams treat the SP of any Beam Shield or Reactive Shield as having only 1/2 its normal SP.

HYDRO: While not exactly a Beam Weapon, a water cannon is pretty closely related (gamewise). Very useful for firefighter mecha, Hydrolaunchers can spray water (or any other liquid) across a wide area. Hydrolaunchers must always have an Infinite Burst Value and Limited Shots, and their damage rating represents the chance (10% per Kill) the water has of putting out a fire in the target hex. Each turn after the spray has failed to extinguish a fire, its chance is reduced by 10%. This chance is based on the assumption that the fires are huge, hex-filling fires as can be set by mecha flamethrowers and powerplant explosions; smaller fires (those too small to be of danger to mecha-sized units) can be put out automatically by Hydrolaunchers, and can also be dealt with by a standard Damage Control Package option (see *Mekton Z*, page 60). The damage rating for Hydrolaunchers can also be used to represent a Trip attack (see *Mekton Z*, page 99) with a defense Difficulty of 10+ Kills. Mecha (or people, or whatever) sprayed by a Hydrolauncher must overcome this number or be pushed off their feet (or wheels, or whatever).

For example: *the Rescue Rapier sprays an Alpha-Gorgon with a 5-Kill Hydro-launcher—the difficulty to resist this attack will be 15 (10+5K).*

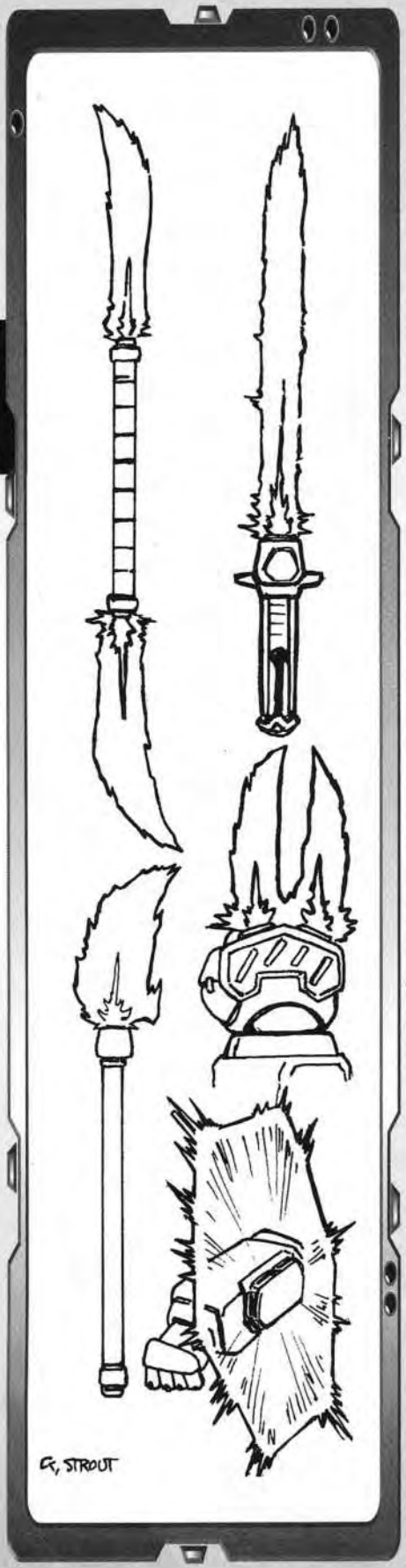
Example Beam Weapon Designs

The primary weapon on the Rapier Delta is a hand held plasma rifle that does 6 Kills, has a weapon accuracy of +2, has unlimited shots, and a range of 7. The cost of the Rapier Delta's beam rifle is: 9x1.5x1.0x0.88=11.88. When rounded the cost is 11.9.

The Sturm Rapier, a mobile artillery platform, uses a 10 Kill beam that has a WA of 0, a range of 10, and a sixty-degree wide angle spread. Unfortunately, the weapon can only fire after a three turn warm-up period. The cost for the gun on the Sturm Rapier is: 15 x0.9 x0.88 x3.0 x0.6 =21.384. When rounded the cost is 21.4.

Anti-Missile Example

A Gorgon launches 20 Missiles at the Rapier Zed, rolling a 20. The Rapier Zed dodges, rolling a 15—10 Missiles incoming. The Rapier Zed fires its 5-Kill Anti-Missile system, rolling a 23 (3 more than the original attack roll of 20): The 5-Kill system brings down five Missiles, +3 for the three-point margin of success the Rapier Zed has over the Gorgon. In the end, only two Missiles will hit the Rapier Zed.



Energy Melee Weapons △ エネルジけん

Energy Melee Weapons are formidable, mecha-sized versions of typical melee weapons, but they use stressed magnetic fields to shape "blades" from searing energy. As well as being cost-efficient, these weapons are accurate and provide massive destructive power. EMWs cut through armor just like the proverbial "hot knife through butter," treating all armor as being at -4SP (that is, SP7 would protect as if it was only SP3; don't confuse this with the Armor-Piercing option for Melee Weapons), except for Reactive Shields and Beam Shields. Minimum SP is zero. Most EMWs are actually a breed of high-powered flamethrower, projecting a narrow stream of superheated plasma which is held in check by a sculpted magnetic bottle. They come in all varieties, from Energy Swords to Axes to Spears, etcetera.

DAMAGE: This is the amount of damage the weapon can dish out, measured in Kills. Don't forget that all EMWs treat **all armor as being at -4SP** (that is, SP7 would protect as if it was only SP3; minimum SP is 0), except for Reactive Shields and Beam Shields. Energy Melee Weapons are capable of sustaining damage equal to one quarter of their yield; an 8-Kill EMW would be able to take only 2 Kills of damage before being destroyed.

ACCURACY: This represents how easy it is to hit a target with the weapon; it modifies the pilot's Attack Roll. Accuracy is related to many aspects of the weapon's design, the most important factor being the length of the weapon—some EMWs have been known to project a blade several times longer than the height of the mecha wielding them!

ATTACK FACTOR: Like Wide Angle or Burstfire for Beam Weapons, Attack Factor is an option that need not be purchased. Weapons with an Attack Factor are called "automated" or "point defense" systems—they will automatically attack any enemy units coming within one hex of the mecha. Automated EMWs can take the form of small energy beams or an offensive-oriented energy screen about the mecha. An automated EMW may attack a number of separate targets up to its Attack Factor during the course of a single turn, but such a system will not (during the course of single turn) attack a single target more than once—at least, not without expending Actions for the additional attacks as normal. Although automated EMW's are never hand held, they are *often* (not always) mounted away from the Torso of the mecha on Wings, Pods, or Tails. Because these systems are expensive, they are often split between several locations.

TURNS IN USE: This is the maximum number of full turns (not Actions) that the weapon can remain in use. This function is essentially the same as Limited Shots for Beam Weapons—it's a good way to reduce the cost of otherwise extremely expensive weapons. Once the weapon is out of power, it must be either replaced or re-energized (either way, a mechabay pit-stop will be required). EMWs with limited Turns In Use can be (but are not automatically) Rechargeable; see below.

RECHARGEABLE: If your EMW has a limited number of Turns In Use, you may designate a location on your mecha to use as a recharging port with a direct power feed to the Powerplant. After an EMW is drained, it may be recharged here. For each turn it spends recharging (i.e., stored in/on that location), it regains the ability to be used for one turn in combat. Remember that it will take one action to "sheath" hand-held EMWs.

THROWN: Any EMWs of this type may be thrown at an opponent at a distance, doing normal damage as if the attack were a normal Melee Attack. Throwing distance is equal to the throwing distance given in the servos section (that is, one half the servo's Kills). Once a weapon of this type has been thrown, it must be retrieved before it may be thrown again.

QUICK: This special enhancement allows the Energy Melee Weapon to attack twice in a single Action—two separate Attack Rolls must be made and hit location is also determined separately. This capability is a function of the EMW's shape; such designs as double blades, spinning-type attack styles and semi-automated/motorized devices characterize Quick EMWs.

HYPER: Through serious modification of normal power-transmission systems, Hyper-

ENERGY MELEE WEAPONS

Damage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Accuracy	-2	-1	0	+1	+2	+3
Cost	x0.6	x0.8	x0.9	x1.0	x1.5	x2.0

Attack Factor	1	2	3	4	5
Cost	x1.5	x2.0	x2.5	x3.0	x3.5

Turns in Use	1	2	3	4	5	7	10	∞
Cost	x0.3	x0.4	x0.5	x0.6	x0.7	x0.8	x0.9	x1.0

Rechargeable:	x1.1
Thrown:	x1.2
Quick:	x2.0
Hyper:	x7.5
Beam Shield:	x1.5
Variable:	x2.0

EMWs have physically wider "blades," resulting in more severe penetration. When any mecha attacks with a Hyper-EMW, it inflicts damage one additional time for each point by which the Attack Roll succeeded; each hit **does full damage to the same location**. So, if the Rapier Zero rolls a 20 to slash its Hyper-EMW at the Gorgon's Torso (whose Dodge is a 15), then the Gorgon would take the Hyper-EMW's full damage to its Torso five times! This multiple damage is not added together; rather, it is applied in individual hits, with each being a full-damage hit on the same location—armor and reactive shields will fully apply to each and every hit.

BEAM SHIELD: This is an advanced system, standing between "classic" EMWs and full-blown force fields (see Reactive Shields, page 44). A Beam Shield is a pseudo-EMW whose stressed magnetic field has been shaped into a wide, shield-shaped screen. A Beam Shield's Stopping Power is equal to the EMW's damage rating, and its Defense Accuracy is equal to its Accuracy minus three; default accuracy is thus -2. Beam Shields are used just like normal Shields (see *Mekton Z*, page 92) for parrying purposes, but they do not use the Staged Penetration system. If a Beam Shield successfully parries an incoming attack which is lower than its SP, the attack is nullified—Beam Shields do not ablate. Should the parried attack do more damage than the Beam Shield's SP, the leftover damage will continue through to the mecha, and the Beam Shield will shut down until the mecha's next turn comes around. Should the parried attack do twice the damage of the Beam Shield's SP, the Beam Shield will be shorted out until a tech crew can replace a lot of fuses and conductors. A Beam Shield can be destroyed if its projector is hit (such as by a weapon or Shield Mount location hit): Penetrating the armor of the servo in which it is mounted and doing enough Kills to destroy the EMW will do the trick.

Beam Shields can also act as normal EMWs, but at reduced effectiveness. Should another mecha come in contact with a Beam Shield, 1/2 the Beam Shield's normal EMW damage will be delivered to the mecha. However, Beam Shields make poor weapons, both because of the half-damage effect and the fact that they use their DA for attacks as well (that is, they act at -3 Accuracy). For this reason, Beam Shield EMWs may be designed to be Variable—they can act as a weapon or as a Shield at the pilot's choice, taking no Actions to switch between functions. When used as a weapon, a Beam Shield EMW will do full damage and act at full Accuracy.

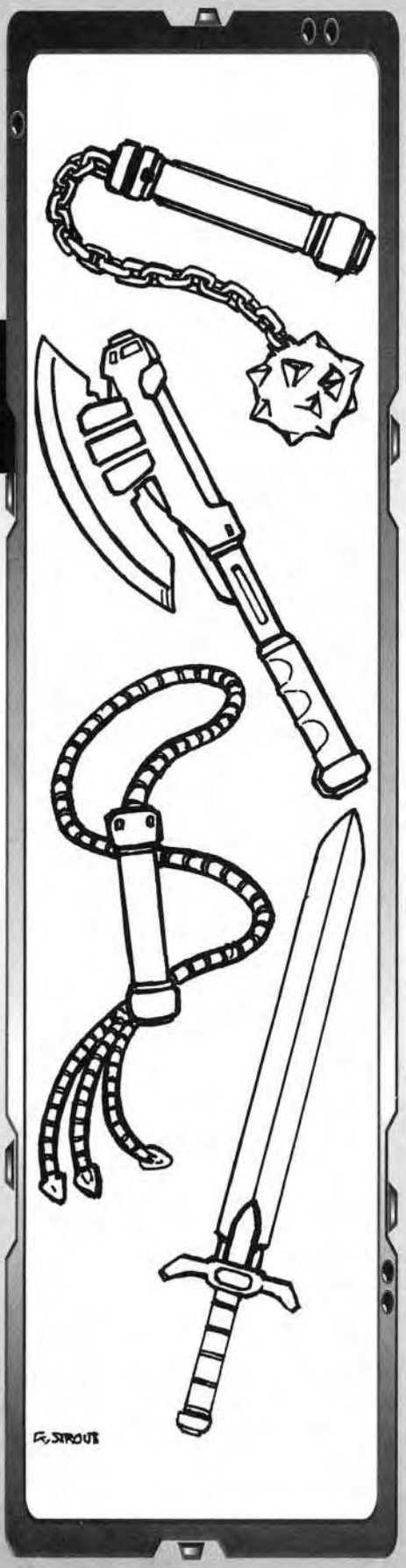
Unlike other Shields (see Shields, page 44), Beam Shields take full Space from the servo they are mounted in (that is, they take as much Space as they cost). Beam Shields can be Thrown, although the utility of such a design philosophy is questionable. Applying such advantages as Quick or Hyper to Beam Shields is possible, but are somewhat wasted unless the Beam Shield is Variable (otherwise, you'll get a Quick Hyper-EMW which does 1/2 damage and has poor Accuracy).

Beam Shields which have an Attack Factor (that is to say, automated Beam Shields) act exactly like Active Shields (see page 44). However, unlike Active Shields (which get only one automatic parry per turn), Automated Beam Shields may automatically parry as many attacks as their Attack Factor per turn. Just like Active Shields, any attacks above and beyond the Automated Beam Shield's Attack Factor will require Parry Rolls by the mecha's pilot (so don't skimp on the DA).

Example EMW Designs

The Rapier Zero is armed with two quick EMWs; each one does 13K and has +2 Accuracy, but each one can only be used for 3 turns—they are rechargeable, however. The cost for each EMW will be 13 CPs x1.5 x0.5 x1.1 x2.0 = 21.45, which rounds to 21.5 CPs. Ouch.

The Silouhette Rapier 99's Beam Shield is mounted in the left arm: it has a Stopping Power of 9 (9K damage) and a Defense Accuracy of -1 (Accuracy of +2), and can be switched to serve as an energy saw (i.e., it's variable). 9 x1.5 x2.0 = 27 CPs. Efficiency time!



Melee Weapons △ けん

While some mecha designers are drawn to the sheer destructive capacity of Energy Melee Weapons, others prefer the cost efficiency, versatility, and sheer class of the EMW's more tangible cousins. Melee Weapons include swords, clubs, whips, legs from the mecha of old enemies, or any other type of close-range weapon. Melee weapons are not always hand-held—they are often mounted directly onto arms or other servos, taking full Space in the normal manner. Such weapons include teeth, claws, spikes on the knees or shoulders, and any other such rough-n-tumble armaments.

DAMAGE: Generally related to the size and weight of the weapon, Damage can be enhanced by the Damage Bonuses provided by large servos and enhanced Hydraulics. Melee Weapons are capable of taking as many Kills as they are able to inflict.

ACCURACY: Related as much to weight as to length, Accuracy provides the primary distinction between a whip, a sword, and a mecha-sized sledge hammer.

THROWN: Any Melee Weapon of this type may be thrown at an opponent at a distance, doing normal damage as if the attack were a normal Melee Attack. Throwing distance is equal to the throwing distance given in the servos section (that is, one half the servo's Kills). Once thrown, it must be retrieved before it may be thrown again.

RETURNING: As Thrown (above),except that once thrown, the Melee Weapon need not be retrieved; it will return to the thrower.

HANDY: Capable of manipulating objects, Handy Melee Weapons may not be hand held, but may themselves act as hands for all purposes (*Mekton Z's* Pincers and Hands are Handy Melee Weapons).

CLUMSY: Melee Weapons, when mounted on the Legs of a mecha design, may be so large as to slow the mecha's running MA. Melee Weapons with this disadvantage subtract 1 from MA for every 3 Kills of damage they do. Clumsy Melee Weapons may only be mounted in Leg Servos.

ENTANGLE: Acting like whips or nets, Entangling Melee Weapons can immobilize a mecha when used to make a grappling attack (see *Mekton Z,* page 99). Entangling Melee Weapons are equally capable of causing damage or making grappling attacks, but only one or the other can be performed in a single Action. When designing Entangling Melee Weapons, the mecha designer may choose to trade damage (in Kills) for range (in hexes) on a one-to-one basis, thereby creating winches, electro-grapples, etc.

QUICK: This special enhancement allows the Melee Weapon to attack twice in a single Action—two separate Attack Rolls must be made and hit location is also determined separately. This capability is a function of the Weapon's shape; such designs as double blades, spinning-type attack styles and semi-automated/motorized devices characterize Quick Melee Weapons. Claws and Hands from *Mekton Z* have this ability; other Quick weapons might include Nunchucks and Quarterstaves.

ARMOR-PIERCING: Such a weapon might be a drill, saw, monoblade, vibrational device, or simply a very sharp weapon. When a mecha is attacked with an Armor-Piercing Melee Weapon, its armor (not including Reactive and Beam Shields) is treated as having only 1/2 its Stopping Power. So, if an Armor-Piercing Weapon were used against SP6 armor, the armor would protect as if it only had 3SP; staged penetration and Damage Coefficients work as normal.

DISRUPTOR: Some Melee Weapons are designed to penetrate energy-based defenses. Disruptor blades focus conducted energies which allow them to slice through Reactive Shields and Beam Shields; Disruptor blades treat the SP of any Beam Shield or Reactive Shield as having only 1/2 its normal SP.

SHOCK: Rather than causing normal damage, Shocking Melee Weapons deliver an electrical shock to the target—although a billion volts may be nothing to a 50-ton Mekton, it can prove to be a little excessive for the pilot! Instead of damaging the target mecha, this electrical surge will cause tremendous pain to the target mecha's pilot, causing incapacitation, unconsciousness, or possibly death. When a mecha is struck by a Shock Weapon, the pilot must roll **1D10 +BOD, subtracting the Kill value of the Shock Weapon:** If the result is ten or less, the severe pain is enough to cause the pilot to

MELEE WEAPONS

Damage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cost	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10

Accuracy	-2	-1	0	+1	+2
Cost	x0.6	x0.8	x1.0	x1.5	x2.0

Thrown: x1.2
Returning: x1.5

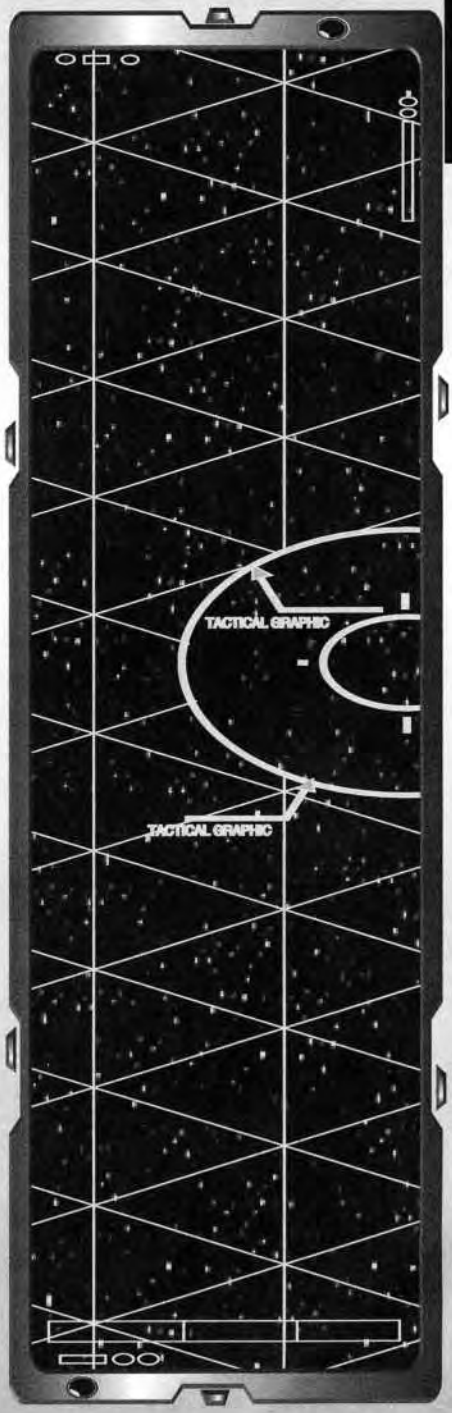
Handy: x1.5 **Clumsy:** x0.5 **Entangle:** x1.25 **Disruptor:** x2.0

Quick: x2.0 **Armor-Piercing:** x2.0 **Shock (only):** x2.0 **Shock (added):** x3.0

lose control of his mecha for one turn (that is, he loses one turn). For each three points of failure, the Pilot loses another turn (lose 2 actions on a roll of 7, three actions at 4, etc.). Should the roll be below zero, the shock has been simply too great and an additional roll must be made. If this unmodified D10 roll is less than the pilot's Stun/Shock Number, then the pilot is rendered unconscious. If it is greater—he's dead. Ablative and Standard armor (and Standard and Active Shields) have no effect against the number subtracted from the pilot's resistance roll. Alpha-type armor counts as one third its SP value against this number and Beta-type armor counts at half. Only Gamma-type armor, Beam Shields and Reactive Shields count at their full value. Weapons which are bought as Shock Only only do shocking damage (as described above), while Weapons which are bought as Shock Added do the shocking damage in addition to doing normal damage.

Example Melee Weapon Design

The Gorgon-VI has two scythe-like blades that extend from the unit's forearms. The blades do 6 Kills of damage, have an Accuracy of +0 and are both Armor-Piercing and Quick. The cost for each Melee Weapon is 3 x0.7 x2.0 x2.0 =8.4 CPs per blade, so our blades will cost 16.8 CPs total.



Missiles Δ ミサイル

This category is rather broad because the weapon category "Missiles" actually covers any type of self-destructing charge. Rockets, propelled grenades, torpedoes, mines, bombs, and homing and guided missiles are all, in MTS terms, Missiles. Missiles are purchased one at a time. Individually, Missiles are rather inexpensive, but that's okay—combat burns Missiles very quickly. Because of their low cost (and thus low Space requirements), a great number of Missiles can be placed into a single servo. Grouped Missiles of the same type in the same servo are referred to as Packs (or sometimes Pods, Racks, Launchers, Dischargers, Tubes, Clusters, etc.).

All missiles in a single Pack are assumed automatically to be Linked, and all Missiles in a Pack may be fired in a single Action. Multiple Packs of Missiles may be Linked together as if each Pack were an individual weapon. Note that the actual launching device for the Missiles is not taken into account in any manner; the Missiles may be on pylons, in a multi-shot tube, tucked in a bay or anything else. The launching device is considered to be of negligible cost and weight, so reloading a Missile bay requires that the Missiles be, in essence, bought all over again.

Another advantage of Missiles is that they may be fired in "salvos." Salvo fire is particularly efficient for large quantities of small Missiles—when a unit fires a group of Missiles in a single Action, it is resolved with one Attack roll. If the attack is successful, each point by which the Attack Roll beat the Defense Roll results in one Missile hitting the target. The advantage of Salvo fire is that the number of hits per point of success is multiplied by 1/10 the number of missiles fired. As an example, let's say that the Strike Rapier fires a Salvo of Missiles at the Command Gorgon, beating the Command Gorgon's roll by 4. If the Strike Rapier fired up to 10 Missiles, then it would hit with 4 Missiles; if it fired up to 20 Missiles, it would hit with 8 Missiles; if it fired up to 30 Missiles, it would hit with 12 Missiles; 40 Missiles would grant 16 hits; etc. Salvos are calculated per target: If 60 Missiles were fired at 3 Targets, each target would be facing a

Missile Hit Determination Example

The Sturm Gorgon fires 12 missiles at the Rapier-X, beating the Rapier-X's defense roll by 11. This means that all twelve missiles will hit (because the hit was by more than 10, 100% of the missiles would hit). The hit location roll grants a 3 (Torso), so the hits will start there and go down the chart. The first two missiles will ignore armor (since they beat the defender by 11 and then 10), so the Rapier-X's Torso (3) and Pod (4) will take armor-ignoring missile hits. The next five Missile hits, striking locations 5-9, could be applied to any of the three hit tables (Random, Special or Cinematic) at the Sturm-Gorgon player's preference, becuase they beat the defender by 5 or more. The last five Missiles will hit locations 10, 1, 2, 3, and 4 on the Mecha Random Hit Chart.

Salvo of 20 Missiles. While Missiles do not have to be fired in Salvos, it is much faster when large numbers of Missiles are involved.

The way you calculate Crits and Mega-Crits for salvo-fired Missiles is as follows: **1)** Compare Attack and Defense Rolls; the amount by which your Attack Roll beats the target's Defense Roll determines how many Missiles hit. **3)** Subtract 9 from the amount by which your Attack Roll beats the target's Defense Roll; this determines how many hits are Mega-Critical Hits. **2)** Subtract 4 from the amount by which your Attack Roll beats the target's Defense Roll; this number, minus the number of Mega-Crits, determines how many hits are Critical Hits.

DAMAGE: This measures the payload capacity of the Missile's warhead. To determine the number of Kills a Missile Pack (or a single Missile) can take before being destroyed, add the Kills of all Missiles in the Pack together, then divide by 15. For example, a Pack of twenty 5-Kill Missiles would be able to take 7 Kills of damage (20 x5 =100, 100/15 =6.67, rounded to 7); a single 12-Kill Missile would be able to take 1 Kill (12 x1 =12, 12/15 =0.8, rounded to 1). The minimum Kill value for any Missile or Pack is 1 Kill, and for the purposes of Anti-Missile attacks, a Missile in flight can take only one Kill of damage before being destroyed.

RANGE: This is the effective cruising distance for the Missile (the Maximum Range is, as always, Range x Range). Missiles may actually have a range of zero—these are Mines and/or Bombs. Such weapons are not fired; Mines are simply left behind and explode automatically when a mecha-sized target enters their hex (Mines must have a +0 Accuracy, but hit automatically anyway). Bombs work differently: They may have any Accuracy the mecha designer wishes, and fall at an MA of 8 hexes per turn, unless the "bomber" mecha Dive-Bombs. Dive-Bombing requires that the "bomber" mecha flies down towards the target in its first Action and then drops its Bomb(s)—this adds the bomber's MA for that Action to the base 8 of the Bomb (bombing a moving target, like a Mekton, is resolved as normal, but to bomb a building or other terrain feature, refer to the Indirect Fire Table on page 97 of *Mekton Z*).

ACCURACY: Accuracy represents the quality of the Missile's guidance system, be it laser, wire, radar or TV. Tracking systems which have homing, seeking and/or other self-guiding capabilities are not included in Accuracy; such Missiles must buy the "Smart" ability.

BLAST RADIUS: Though normal Missile warheads are shaped charges, area-effect explosive payloads are also available. When a Blast Missile goes off, all mecha and other scenery items can expect some damaging shrapnel. If the Blast Missile directly strikes a single mecha (or other target), that target will take full damage as normal; any Targets caught within the Blast Radius cannot dodge (only Parry if they have a DA-0 Shield). Damage from a Missile's Blast Radius is resolved as on the Area Effect Damage Table (see *Mekton Z*, page 97). Should a Blast Missile (or Missiles) miss its tar-

MISSILES

Damage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cost	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
Range	4	5	6	7	8	9	9	10	11	11	12	12	13	13	14	14	14	15	15	16

Accuracy	-2	-1	0	+1	+2	+3
Cost	x0.6	x0.8	x1.0	x1.3	x1.6	x2.0

Range	0%	25%	50%	75%	100%	125%	150%	175%	200%	500%	1000%	3000%	5000%
Cost	x0.5	x0.62	x0.75	x0.88	x1.0	x1.12	x1.25	x1.38	x1.5	x3.0	x5.5	x15.5	25.5

Smart	1	2	3	4
Cost	x2.5	x3.0	x3.5	x4.0

Skill	6+	9+	12+	15+	18+	20+
Cost	x1	x1.3	x1.6	x1.9	x2.2	x2.5

Blast Radius	1	2	3	4	5	6	7	8	9	10	20
Cost	x3	x4	x5	x6	x7	x7.5	x8	x8.5	x9	x10	x20

Long Range: x1.33
Foam: x1.33

Hypervelocity: x1.25
Flare: x0.5

Fuse: x1.1
Smoke: x0.5

Nuclear: x1000.0
Scatter: x0.5

Countermissile x1.0
Variable x1.8

Smoke/Scatter: x1.0

get, it is important to see where the Missile(s) detonate: Stray shots deviate a number of hexes from the target area in a random direction equal to the amount the Attack Roll was missed by (see the Deviation Diagram, *Mekton Z* page 97). In the case of Salvo-fired Blast Missiles, each Missile must go somewhere; for each successive Missile after the first to have hit, one higher roll would have been necessary. Thus, should some Missiles hit, the remainder will string away from the target hex (one missed by one, the second by two, etc., all the way up to the number of Missiles fired). Should all the Missiles have missed, there would be a similar effect (but beginning a number of hexes away from the target mecha equal to the amount the original Attack Roll was missed by). These strings continue until a) all of the Missiles fired are accounted for, or b) the string trails off beyond the Maximum Range of the Missiles. In the latter case, all remaining Missiles are assumed to have run out of fuel before detonating and are thus lost.

SMART: While MTS normally assumes that Missiles are relatively "dumb," it is possible to design "intelligent" Missiles with self-guidance capabilities. Active heat-seekers, anti-radiation "wild weasels," pseudo-AI weapons and terrain-following cruise missiles all use "fire and forget" terminal guidance to actively seek and chase their targets. These, in MTS parlance, are Smart Missiles.

When launching Smart Missiles, the pilot of the attacking mecha must first make an MR+ Mecha Missiles skill +Accuracy +1D10 Attack Roll; if this roll is a success, the target mecha is hit as normal. If the Attack Roll is fumbled (i.e., a 1 is rolled), the SMs fail to "lock on" and are gone. However, if the Attack Roll fails but is not fumbled, the SMs have "locked on" to the target and will follow and attempt to hit it for a number of full combat rounds equal to the level of Smartness at which they were bought. After the initial Attack Roll, the attack value of a Smart Missile (or Salvo of SMs) is 1D10 +Accuracy plus their Skill (see below); Smart Missiles always act last in a combat round. Should the SMs consecutively fail to hit for a number of combat rounds equal to their Smartness, they are assumed to have run out of fuel without detonating and are thus lost. Smart Missiles do not have an MA rating, nor do they require a counter on a hexmap—they are assumed to be able to keep up with their target and are also assumed to be close by, but they attack only at the end of each combat round. It is the duty of the player who launched the SMs to keep track of them!

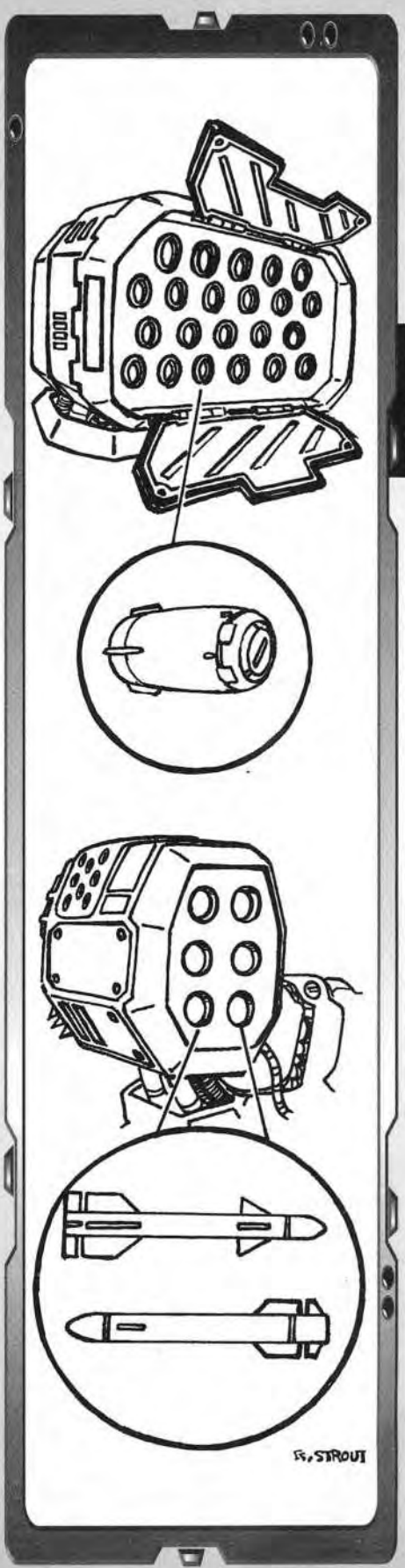
There are three ways to deal with Smart Missiles (other than getting hit): *Dodge, Evade,* or *Counteract. Dodging* SMs is simplest (no Actions are expended) but does not get rid of the threat. At the end of a combat round, when the Salvo of SMs attacks, the target mecha can make a Dodge Roll; if successful, the target mecha is safe until the end of the next round, when the SMs will be back. *Evading* SMs is more effective, but also more complex. At any time during its turn, the target Mecha may take an Action to attempt an Evasion by rolling **MR+ Mecha Pilot skill +1D10** and comparing this to the SM's Skill +Accuracy +1D10; should the target mecha win, a number of SMs equal to the number by which the Evasion succeeded will "lose their lock" and are considered gone (remaining SMs will still attack at the end of the round, however). *Counteracting* SMs requires that the target mecha use (and consequently, have) some kind of anti-Missile system—Anti-Missile ECM, Anti-Missile Weapons or a Burst-firing weapon will all work. Any Counteraction attempt requires the target mecha to expend an Action.

• ANTI-MISSILE ECM: The pilot rolls **INT +Electronic Warfare skill +Value +1D10** and compares this to the SMs Skill +Accuracy +1D10; should the targeted mecha win, a number of SMs equal to the ECM suite's Value *plus* the number by which the EW skill roll succeeded will "lose their lock" and are considered gone (remaining SMs will still attack at the end of the round, however).

• ANTI-MISSILE WEAPONS: The pilot takes an Action to use an Anti-Missile Beam Weapon, Phalanx Projectile Weapon, or Countermissiles. Results are as for these particular weapons; see their own entries in the appropriate sections.

• BURST-FIRE WEAPONS: The target mecha may try to shoot down incoming Smart Missiles with any Burst-Firing Beam or Projectile Weapon at a -5 skill penalty. The pilot rolls **MR +Mecha Gunnery skill +Accuracy +1D10 *minus* 5** and compares this to the SM's Skill +Accuracy +1D10; should the targeted mecha win, a number of SMs equal to the number by which the Gunnery skill roll succeeded will be destroyed (remaining SMs will still attack at the end of the round, however).

The maximum distance a Smart Missile may travel in a combat round is its Maximum Range (Range x Range); this is only useful for designing "cruise missiles," which are actually better simulated by building a



Countermissile Example

The Super Gorgon launches thirty Missiles at the Rapier Mark-7, rolling a 20. The Rapier Mk7 dodges, rolling a 16—twelve Missiles incoming. The Rapier Mk7 has a Pack of five 6-Kill Countermissiles; it fires all five, rolling a 22 (2 more than the original attack roll of 20): each Countermissile brings down two Missiles, so in the end, only two Missiles will hit the Rapier Mk-7.

kamikaze Remote (see page 54 for Remotes). Bombs may also be Smart, but they work by rolling their own Skill +Accuracy +1D10 to hit their target rather than the "bomber-mecha's" pilot rolling his MR +Mecha Missile skill +Accuracy +1D10.

SKILL: This represents the quality of the target-identification, guidance and maneuvering systems of a Smart Missile. All Smart Missiles must have a Skill rating. At the end of a combat round, when SMs attack, they use their **Skill +Accuracy +1D10** like a mecha pilot would use **MR +Mecha Missile skill +Accuracy +1D10,** comparing the result to the target mecha's roll. Hits from Salvo fire are resolved as normal and hit location is always rolled randomly.

LONG RANGE: All Missiles have a Maximum Range equal to their range ("Combat Range") squared (i.e., Range x Range), and any target outside the Combat Range but within Maximum Range is at -4 to be hit. However, a Missile may be modified with terminal-guidance arrays and target-ID routines which optimize it for long-range engagement. Such Long-Range Missiles only suffer -2 to hit targets outside their Combat Range, but are also at -2 to hit targets inside their Combat Range. These Missiles are usually relegated to anti-ship, nuclear, and other assault-type weapons.

HYPERVELOCITY: If you are using the optional Missile Travel Time rule (*Mekton Z* page 93), your missiles normally travel at an MA of 40; that's 2km per turn, or 5040kph (which is Mach 4.2). However, if you purchase the Hypervelocity advantage for your Missiles, they are considered to be fast enough to reach any target within their Maximum Range in 1 turn, and they are not going to be outrun by any unit launching them or being targeted by them. Their exact flight speed is left up to the Referee; it might be Mach 20, it might by 0.5 C, or the missiles might even be delivered by teleportation!

FUSE: Missiles with this capability can be preset to explode after a set amount of time, or be detonated by remote. They may have any range, including 0. When a Fuse Missile hits its target, it does not automatically explode; instead, it waits for the preset amount of time and then detonates. This is how "limpet mines" are designed, and they are also a useful way to capture mecha—should a "tagged" mecha attempt to remove a Fuse Missile before it explodes, it must roll MR+1D10 vs the MR +Accuracy +1D10 for the mecha pilot controlling the Fuse Missiles.

NUCLEAR: In the world of physics (that is, explosives design), detonation can be caused by more than simple chemical blasts. With the coming of modern sciences, molecular reactions have given way to the splitting of the atom—thus was born nuclear technology. Like a tree, this discovery bore many fruits of destruction. For the full effects of Nuclear weapons, see the Nuclear Explosion rules on page 117-118 of this book, but keep in mind the following rules: 1) Nuclear weapons must have a Blast Radius, and 2) Spaces are calculated differently for nukes. **To determine the Space a Nuclear weapon takes up, do not include the x1000 multiplier—apply this number only to cost, not to Space.**

FOAM: Rather than being used for offense, this type of Missile carries a fire-retardant foam or other substance in its warhead. The number of Kills of damage purchased for the Missile represents the chance (10% per Kill) the weapon has of putting out a fire in the target hex. Each turn after a Missile has failed to extinguish a fire, its chance is reduced by 5%. This chance is based on the assumption that the fires are huge, hex-filling fires as can be set by mecha flamethrowers and powerplant explosions; smaller fires (those too small to be of danger to mecha-sized units) can be put out automatically by Foam Missiles, and can also be dealt with by a standard Damage Control Package option (see *Mekton Z,* page 60).

COUNTERMISSILES: The warheads of these Missiles carry numerous decoy submunitions; their purpose is to destroy incoming Missiles. When a Missile or barrage of Missiles is fired at a unit armed with Countermissiles, the defender automatically gets to fire defensively as well as getting his normal Dodge roll. If this is done, the defender first makes a Dodge roll—if this defense roll fails, the defender makes an MR +Mecha Missiles skill +Accuracy +1D10 attack roll. This roll is then compared to the attacker's original Mecha Missile skill attack roll. If the defender wins, a number of incoming Missiles equal to the amount by which he beat the attacker's roll are shot down **per Countermissile fired**, up to the kill value of the Countermissiles. Note: Range is not relevant to Countermissiles, so the range multiple is always x1.0. See the sidebar for an example of using Countermissiles.

Countermissiles cannot be used for attack—they are a purely defensive weapon system. If the mecha designer so wishes,

Countermissiles may simulate Chaff, Star Shells and other such exotic anti-Missile countermeasures.

FLARE: These Missiles are loaded with a high-intensity illumination charge rather than an explosive warhead. They can be used to illuminate an area which is shrouded in darkness, or they can be used to blind observers. When used for illumination, a Flare Missile adds its Kill value to visual *Awareness* skill rolls, offsetting any penalties for darkness (with a maximum bonus of +2). When used to blind opponents, a Flare Missile subtracts its Kill value from visual *Awareness* rolls; mecha with ASP and/or Spotting Radar are immune to being blinded by Flares. The effects of Flare Missiles drop off by 2 per hex from ground zero; a 6-Kill Flare Missile would subtract 6 from *Awareness* rolls made by those in the target hex, -4 in the 6 hexes around the target hex, and -2 in the next ring of hexes. By firing multiple flares, one can achieve the full effect over many hexes. Flares with a blast radius will impart full bonuses/penalties within their radius, with the effect falling off by 2 per hex as normal. Mecha who launch Flare Missiles may take one action before firing to "protect" themselves: how this is done could be anything from a special polarizing filter to covering their sensors with a hand.

SCATTER: These defensive Missiles deploy an obscuring cloud which provides cover from Beam Weapons. Scatter Missiles must have a Blast Radius—although they do no damage, they can be launched into a hex to create an area through which Beam Weapons either cannot be fired or can only be fired with limited efficiency. A Scatter Missile's cloud is centered on the target hex and has a radius equal to the Blast Radius value purchased. Any Beam Weapons fired through this area will lose a number of Kills of damage equal to the Kill value of the Scatter Missile. Should the Kill value of the cloud be greater than that of the incoming Beam attack, the Beam is assumed to have been completely stopped. Scatter clouds last as many rounds as their Kills/2 (minimum of 1 round); at the end of this time they disperse and provide no more protection. Scatter Missiles do not limit line of sight.

SMOKE: Smoke missiles provide line of sight cover against all mecha not equipped with ASP or Magnetic Resonance Lenses (see Recon Systems, page 51). Mecha which are not so equipped must make a 15+ Awareness roll (minus the Kill value of the Smoke cloud) to see targets inside the Smoke—a 20+ Awareness roll (also subtracting the Kill value of the Smoke Missile) is required to see targets beyond (through) the Smoke cloud. Like Scatter Missiles, Smoke Missiles do no damage, must have a Blast Radius, and last as many rounds as their Kills/2 (minimum of 1 round).

SMOKE/SCATTER MISSILES: A Missile which creates a cloud of both vision-obscuring Smoke and Beam-refracting Scatter material can be purchased for a x1.0 cost multiple.

Example Missile Design

The Heavy Rapier has a saturation-fire rocket launcher mounted over its right shoulder. It holds 20 rockets, which do 5 Kills of damage, have an Accuracy of -1 and a Range of 6. The cost for this rocket launcher is 20 x0.5 x0.8 x0.88 =7 CP.

Projectile Weapons △ ほう

Projectile Weapons (colloquially referred to as "Guns") cover any type of launching device which propels damage-causing objects at a target. Everything from a pocket slingshot to massive naval batteries fall under this category. Of course, human-sized pistols and rifles and the autocannon of mecha combat legendry are solid examples of Projectile Weapons, but they are not the only types possible; any form of high velocity projectile that is not self-propelled (that is, not a Missile) qualifies. Railguns (coilguns, gauss cannon, mass-drivers and other magnetic accelerators), compressed-air weapons, crossbows, electrothermal artillery and many others all make their way into this category. Compared to Beam Weapons, Projectile Weapons are cheap—but Ammunition must be purchased separately.

Firing Line!

Ahead of Alain, the Lord Capitain of their brigade swept his heat claymore in the new signal they had learned – the signal to form a firing line. The Thrael Knights of Albion knelt, unlimbering the new "rifles" the Technomancers had provided them to turn back the advance of the Armies of Corruption. It was difficult to maneuver the eighteen-meter rifles into position, but they had trained long to be able to do it quickly. As a unit, the men opened the breaches, and loaded the meter-long rounds. They reminded Alain more of crossbow bolts than musket balls, but why they were called "rounds" was a worry for another time.

The Lord-Capitain raised his sword, and breeches were closed and rifles raised to a firing position. Across the moor, over a line of hills, the vanguard of the Army of Corruption became visible through the morning haze. A line of armored black giants, covered in vicious spikes and gilded skulls, wielding wicked obsidian blades.

The Lord-Capitain swept his sword down...

PROJECTILE WEAPONS

Damage	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Cost	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Range	3	4	5	6	7	7	8	8	9	9	10	10	11	11	12	12	12	13	13	13

Accuracy	-2	-1	0	+1	+2
Cost	x0.6	x0.8	x1.0	x1.5	x2.0

Multi-Feed	1	2	3	4
Cost	x1.0	x1.2	x1.4	x1.6

Range	0%	25%	50%	75%	100%	125%	150%	175%	200%	250%	300%
Cost	x0.5	x0.62	x0.75	x0.88	x1.0	x1.12	x1.25	x1.38	x1.5	x1.75	x2.0

Burst Value	2	3	4	5	6	7	8
Cost	x1.5	x2.0	x2.5	x3.0	x3.5	x4.0	x4.5

Long Range: x1.33 **Phalanx:** x0.5 **Anti-Personnel:** x1.0 **Antipersonnel/Phalanx:** x1.6
Hypervelocity: x1.25 Variable: x1.4 Variable: x1.8 **All-Purpose:** x2.6

PHALANX EXAMPLE

The Gun-Gorgon launches 20 Missiles at the Rapier-D, rolling a 20. The Rapier-D dodges, rolling a 14—twelve Missiles incoming. The Rapier-D fires its Phalanx (Burst Value=5), rolling a 25 (5 more than the original attack roll of 20): The BV-5 Phalanx brings down five Missiles, +5 for the three-point margin of success the Rapier-D has over the Super-Gorgon. In the end, only two Missiles will hit the Rapier-D.

DAMAGE: As with all weapons, damage represents the ability of the Gun to destroy enemy mecha, buildings, houses, house pets and other scenery. Damage also indicates the number of Kills the weapon can sustain from enemy fire before being destroyed. Consequently, it also is a measure of the weapon's weight.

ACCURACY: Projectile Weapons are generally less accurate than Beam Weapons, because the Accuracy of a Gun's projectile is determined by all relevant aspects of the weapon's design (barrel length and quality, muzzle velocity, targeting, windspeed, etc.).

RANGE: The Projectile Weapon's Combat Range in 50-meter Mekton hexes. This may be increased or decreased as the designer wishes by paying the cost listed under "Range."

BURST VALUE: Any form of Gun likely to strike a single target more than once per firing has a Burst Value and is known as an Autofire weapon. Machineguns, autocannon, gatling and vulcan assault weapons all have a Burst Value. No matter what you choose as the nature of your weapon, the game effect is always the same: Once a successful To-Hit roll is made, an additional hit is scored for each point by which your attack score beats the target's Defense roll (up to a maximum of the Burst Value of the weapon). Each hit strikes a separately determined location, doing the full damage value of the weapon. When buying Ammunition for a Burst-Firing Gun, remember that one Shot purchases one full burst. Note: for calculating damage results from Crits and Mega-Crits with Autofire weapons, see Missiles on page 32 of this book.

LONG RANGE: All Guns have a Maximum Range equal to their range ("Combat Range") squared (i.e., Range x Range), and any target outside the Combat Range but within Maximum Range is at -4 to be hit. However, a Gun may be modified with improved targeting arrays and stabilizers which optimize it for long-range shooting. Such Long-Range Projectile Weapons only suffer -2 to hit targets outside their Combat Range, but are also at -2 to hit targets inside their Combat Range. These Projectile Weapons are usually relegated to artillery, "stopgap," and other support mecha.

HYPERVELOCITY: If you are using the optional projectile Travel Time rule (*Mekton Z* page 93), your gun's projectiles normally travel at an MA of 30; that's 1.5km per turn, or 2700kph (which is Mach 2.2). However, if you purchase the Hypervelocity advantage for your Projectile Weapon, its bullets are considered to be fast enough to reach any target within their Maximum Range in 1 turn, and they cannot be outrun by any unit shooting them or shot at by them. The projectiles' exact velocity is left up to the referee; it might be Mach 20, it might by 0.5 C, or the bullets might even be delivered by teleportation!

MULTI-FEED: All Projectile Weapons fire Ammunition (otherwise they're just big hunks of metal), and that Ammunition is stored in Clips (see Ammunition, below). It takes an Action to switch Clips, but with the

Multi-Feed option, a Gun may feed from more than one Clip at a time—such weapons may switch Ammo types without expending an Action to do so. Any mix of Clips may be loaded into such a weapon.

PHALANX: This is a specially designed type of Burst-Firing Gun whose purpose is to destroy incoming Missiles. Unlike Anti-Missile Beam Weapons, Phalanx weapons must be bought with a Burst Value. When a Missile (or Salvo of Missiles) is fired at a unit equipped with a Phalanx weapon, the defender automatically gets to fire defensively as well as getting the normal Dodge roll. If this is done, the defender first makes a Dodge roll—if this defense roll fails, the defender makes an **MR +Mecha Gunnery skill +Accuracy +1D10 attack roll.** This roll is then compared to the attacker's original Mecha Missile skill attack roll. If the defender wins, a number of incoming Missiles equal to the Phalanx weapon's Burst Value are automatically shot down. In addition to this, for each point by which the attacker's Missile roll is exceeded by the Gunnery roll made by the defender, another incoming Missile is destroyed. Systems purchased as "Only" may only be used for defensive purposes; systems with the "Variable" option may be used interchangeably as offensive weapons in the normal manner. Note: Range is not relevant to Anti-Missile systems, so the range multiple is always x1.0. See the sidebar for an example of using Phalanx-type weapons.

ANTI-PERSONNEL: Weapons of this type may be used to attack Human-sized targets (such as people and smaller vehicles) without suffering that pesky mecha-vs-man -6 modifier. Attacks of this type are resolved as if the target were simply another mecha. They need not be Burst-Firing (although they can be). Anti-Personnel Weapons purchased as "Only" may only be used against human-sized targets; systems purchased as "Variable" may be used freely against man and mecha alike.

ANTI-PERSONNEL/PHALANX: A Beam Weapon which can be used for Anti-Personnel and Anti-Missile purposes, but doesn't effect mecha-scale targets at all can be purchased for a x1.6 cost multiple. Such weapons (because they have Phalanx capability) must have a Burst value.

ALL-PURPOSE: A Projectile Weapon which can be used for normal mecha combat as well as for Anti-Personnel and Anti-Missile purposes can be purchased for a x2.6 cost multiple. Such weapons (because they have Phalanx capability) must have a Burst value.

Example Projectile Weapon Design

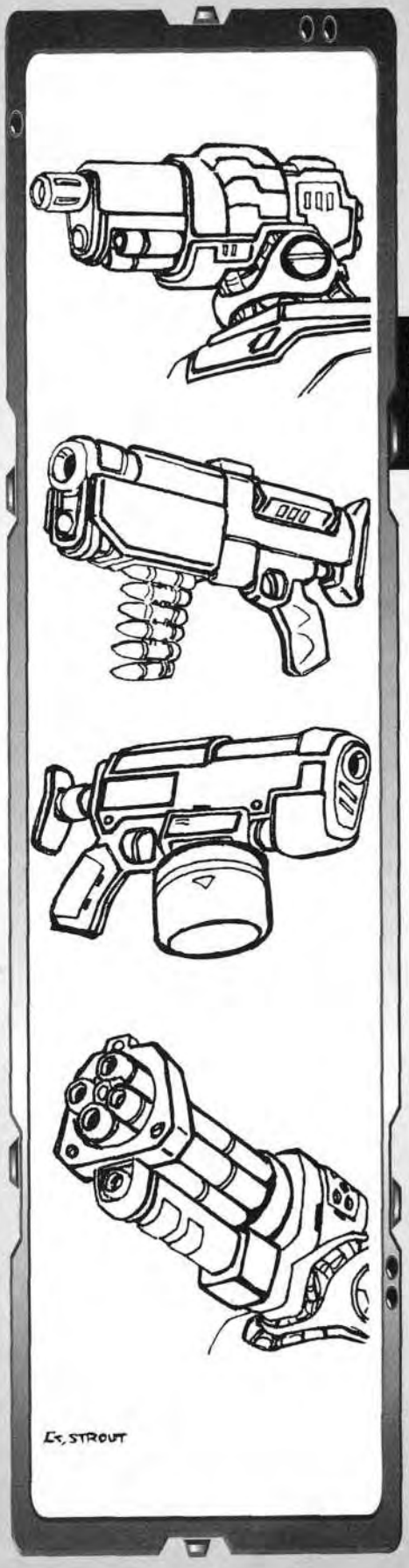
The Gorgon-6 uses a wicked handheld gatling railcannon to mow down its opponents. This 7-Kill Hypervelocity weapon has a Burst Value of 4 and can be used against mecha and missiles. The cost for this weapon is 7 x2.5 x1.25 x1.4 =30.6 CP.

AMMUNITION

While Guns are effective, versatile weapons capable of massive devastation, they are completely impotent without Ammunition—and Ammo ain't cheap. There are, however, advantages to ammo-consuming armaments: For one, such weapons are smaller than Beam Weapons and thus may be placed in a smaller servo or hand. Additionally, because a variety of Ammunition can be manufactured, Projectile Weapons provide a cheap method to achieve versatility without purchasing multiple weapon systems.

Ammunition is purchased per Shot. A Shot is not necessarily a single projectile, but rather enough ammunition for a single firing of the weapon; this being the case, one entire burst for a Burst-Firing Gun would be bought as one Shot. The cost of Ammunition, per Shot, is equal to one percent of the cost of the weapon itself. However, this price will only buy "Standard" ammunition. The special effects of Standard Ammunition can vary from campaign to campaign, depending upon the conditions of the universe and the whims of the Referee, but in *Mekton Z*, "Standard" rounds are assumed to be of a High Explosive nature. Additional effects cost more, but they're worth it. Any number of special advantages may be purchased for Ammunition—the cost is equal to the product of the costs of the various Ammunition types chosen. Thus, given a 10 CP Gun, HE rounds would cost 0.1 CP each; Armor-Piercing Scattershot rounds would cost 0.1 x4.0 x5.0 = 2.0 CPs per shot.

All ammunition is held in Clips—a Clip might be a drum, a box magazine, a belt, or whatever, but in MTS terms it's all the same. The Clips themselves, being no more than a collection of Ammo, are treated as having no cost, Space or weight—these stats all





come from the Shots of Ammunition themselves. There is no maximum to the number of Shots a Clip can store, and Ammunition types may be combined in a single Clip if the designer so desires (but this can get confusing for both the player and Referee). Changing Clips takes an Action, but Multi-Feed Guns do not have this problem (see Multi-Feed, above). Ammunition always takes up Space, unless it is a reload for a hand-held weapon: A hand-held Gun's total Space would be equal to its own Space plus the Space taken by its Ammunition, and a servo-mounted Multi-Feed Cannon with two Clips of Ammunition would have a total Space requirement of the Gun and its Two Clips of Ammunition, but spare Ammunition for a hand-held Gun would take no Space, being assumed to be mounted on the mecha's exterior somewhere.

Ammunition Cost:
Weapon's Cost x(0.01 per Shot) x [Ammo Cost Multiplier(s)]

Ammunition Space:
Weapon's Cost x(0.01 per Shot)

Ammunition Kills:
Weapon's Cost x(0.01 per Shot)

Ammunition List

Type	Cost	Effect
Paintball	x0.5	Practice Rounds
Foam	x0.5	Firefighting
High-Ex	x1.0	Standard Ammo
Tracer	x3.0	+1 to WA
Kinetic	x3.0	More Knockback
Tangler	x3.0	Grappling Attack
A-P	x4.0	1/2 SP vs Armor
Disruptor	x4.0	1/2 SP vs Energy
Incendiary	x4.0	Flamethrower
Shock Only	x4.0	Stun Effect
" Added	x6.0	Stun& Damage
Scatter Shot	x5.0	Shotgun Effect
Blast	x6.0	1-hex Radius
Blast II	x8.0	2-hex Radius
Blast III	x10.0	3-hex Radius
Blast IV	x12.0	4-hex Radius
Blast V	x14.0	5-hex Radius
Nuclear	x1000.0	Atomic Ammo

HIGH EXPLOSIVE (x1.0): This is the Standard shell—nothing special, but it's cheap!

FOAM (x0.5): This type of Ammunition fires a flame-retardant foam or other substance. The number of Kills of damage the Gun can deliver represents the chance (10% per Kill) the Ammo has of putting out a fire in the target hex. Each turn after a Projectile has failed to extinguish a fire, its chance is reduced by 5%. This chance is based on the assumption that the fires are huge, hex-filling fires as can be set by mecha flamethrowers and Powerplant explosions; smaller fires (those too small to be of danger to mecha-sized units) can be put out automatically by Foam Ammo, and can also be dealt with by a standard Damage Control Package option (see *Mekton Z*, page 60).

PAINTBALL (x0.5): Mechajocks may be hotshots, ladykillers and all that—but even they have to practice sometimes! Paintball cartridges are frangible "baggies" of fluorescent dye which can be easily hosed off with cold water, but a "tagged" Mekton really stands out on the training course. When using Paintball Ammo, the Kill value of the weapon represents a bonus to visual Awareness rolls to spot the "tagged" unit. For example, a Mekton hit by a 3-Kill Paintball would be at +3 to be noticed by other units.

TRACER (x3.0): These rounds represent any form of self-propelled, self-targeting, or high velocity projectiles. Such high-Accuracy rounds give an additional +1 to Weapon Accuracy when fired.

TANGLER (x3.0): These projectiles are capable of immobilizing a target on a successful hit. Such rounds may contain a sticky, quick-hardening substance or might involve a rocket-propelled net—advanced versions might even use a micro-forcefield limpet charge. Tangler Ammo is assumed to do no damage, but instead acts as a Grappling attack (see *Mekton Z*, page 99) with an escape Difficulty of 3x Kills. Mecha grappled by Tangler Ammo are not connected in any way to the mecha which shot them; they are simply ensnared and cannot move or act effectively until they escape.

For example: *the Armored Rapier is snagged by a Tangler from the Gorgon's 5-Kill Gattler—the difficulty to escape from this Grappling attack will be 15 (5K x3).*

KINETIC ENERGY (x3.0): This type of ammunition delivers a high-impact blow to the target rather than a focused, penetrating attack. Such effects are usually achieved by use of cratering plastique projectiles and other explosive squash-heads, but in a high Tech Level universe such a round may use some kind of momentum transfer system of gravitic warp shell. Whatever the explanation, Kinetic Energy Ammo does normal damage but acts as double damage for the purposes of deter-

mining knockback (see the knockback table on page 100 or 111 of *Mekton Z*).

ARMOR-PIERCING (x4.0): These special rounds are designed to give additional penetration against those mecha that are simply too heavily protected for normal fire. These gauss, jacketed, shaped-charge or heavy metal core rounds prove effective even on those occasions where normal firepower is just too feeble. When a mecha is hit with an AP round, all armor levels and Shield SPs are only counted as half (rounding down) their real value. Only Beam Shields and Reactive Shields are immune to the effects of Armor-Piercing Ammo.

DISRUPTOR (x4.0): These exceptionally high-tech projectiles are designed to penetrate energy-based defenses. Disruptor rounds generate special fields which allow them to slip through Reactive Shields and Beam Shields, acting like Armor-Piercing Ammo (1/2SP, as above) against them. Disruptor rounds are not AP vs Armor; if you want them to be, you must buy the Armor-Piercing effect as well.

INCENDIARY (x4.0): Flames, napalm, white phosphorus, thermite—what fun! Incendiary weapons which hit a mecha or other target continue to burn, doing additional damage for several successive rounds. Incendiary Ammo, because of its effects, can be used to simulate acid rounds as well. After the first round of damage, the target mecha will continue to take damage to the same location as many times as the location was hit. Every successive round's damage is equal to half the damage done the turn before—it is easiest for all players when these weapons are purchased with 8, 4, 2, or 1 Kill yields. A 1/2 Kill rounds to one, and the following 1/4 Kill rounds to zero; thus a 4-Kill hit would do 4, 2, 1, and 1 Kills respectively on the four following turns. In situations where the damage is not one of these numbers (Scattershot etc.) after the first turn, the damage should be rounded down to the nearest whole number.

For example: *If an 8-Kill Incendiary were to hit your Shield (which has seen better days and can stop only 3 Kills right now), five Kills would go through to your right Arm servo. The next turn the 3K that went to your Shield is halved to 1.5K and thus rounds down to one. Similarly, the 5K that hit your right Arm would be halved to 2.5K and then be rounded down to 2K. Thus on at the moment of impact the Shield would take 3 Kills and the Arm 5K, but then the shield would take 1K and 1K for the next two turns thereafter, and your Arm would take 2K, 1K, and 1K at the beginning of the next three rounds.*

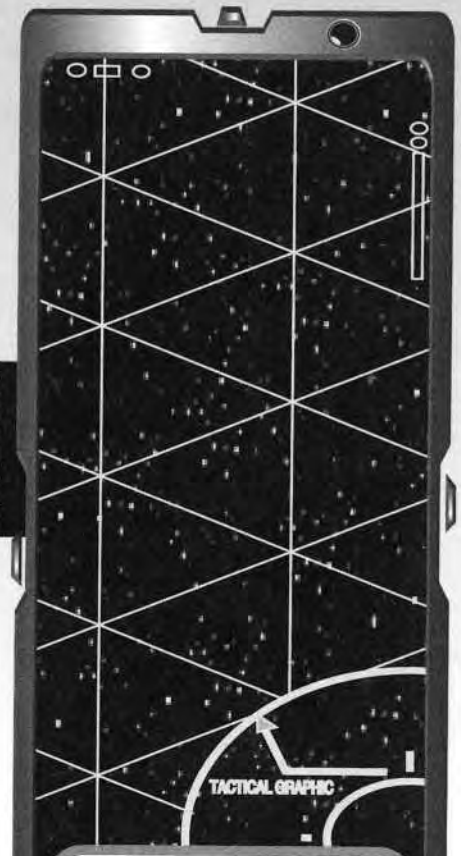
SHOCK (x4.0 or x6.0): Energy-dumping capacitor bullets, mecha-tasers and high-voltage lightning guns use this type of Ammunition. Instead of causing normal damage, Shock Ammo delivers electricity to the target—although a billion volts may be nothing to a 50-ton Mekton, it can prove to be a little excessive for the pilot! Rather than doing normal damage, this electrical surge will cause tremendous pain to the target mecha's pilot, causing incapacitation, unconsciousness, or possibly death. When a mecha is struck by a Shock round, the pilot must roll 1D10 +BOD, subtracting the Kill value of the Gun firing the Shock Ammo. If the result is ten or less, the severe pain is enough to cause the pilot to lose control of his mecha for one turn (that is, he loses one turn). For each three points of failure, the Pilot loses another turn (lose two actions on a roll of 7, three actions at 4, etc.). Should the roll be below zero, the shock has been simply too great and an additional roll must be made. If this unmodified D10 roll is less than the pilot's Stun/Shock Number, then the pilot is rendered unconscious. If it is greater—he's dead. Ablative and Standard armor (and Standard and Active Shields) have no effect against the number subtracted from the pilot's resistance roll. Alpha-type armor counts as one third its SP value against this number and Beta-type armor counts at half. Only Gamma-type armor, Beam Shields and Reactive Shields count at their full value. Ammo bought as Shock Only only does shocking damage (as described above), while Ammo bought as Shock Added does the shocking damage **in addition** to doing normal damage.

SCATTERSHOT (x5.0): Any shotgun-like or other dispersive-pattern attack (flame thrower, etc.) falls into the Scattershot category. Though not guaranteed to be as effective as a single slug, Scattershot attacks have the advantage of **hitting every location on the target at once.** Damage for these weapons is done as follows: For each point the attacker rolls above the required To-Hit roll, the target takes one Kill of damage, up to a maximum of the Kill value of the weapon (remember that it's halved). In the case of Burst-Fire attacks, the roll is compared to the number required to hit with each particular shot.

For example: *the Gorgon-Z makes a 4-Kill, Burst Value 4 Scattershot attack on the Strike Rapier, beating it by 5—one shot hits by 5, another by 4, another by 3, and the last by 2: The damage done would be 4, 4, 3, and 2 Kills (in that order) to every location on the Strike Rapier (note that the shot hitting by 5 did only 4 Kills because 4 Kills was the damage of the weapon).*

Kurt was still disgusted. The boys in R&D had dreamed up some new idea, and now Strike Team Gamma had to test it out. Shotguns. They had been issued king-size shotguns for this mission. Kurt had a feeling that they were all going to die, raiding a South American fuel dump with popguns.

Kurt's headset radio crackled. "This is it, boys. Fire 'em up and wind 'em out." Strike Team Gamma readied their weapons, and kicked on the afterburners on their thermonuclear hover jets. As they blew out of the covering jungle and into the arroyo, the South Americans came to meet them. "Banana Stompers," Kurt had called them derisively. That was back at the base. Now, he pumped the shotgun, and swerved in close to one of them. Effective range is just too damn close for comfort, Kurt thought. He got the Banana Stomper in his sights, and fired. The shotgun bucked in his Mekton's hands, and Kurt yelled in surprise as the Chobham shot tore through the inferior armor of his target. The Banana Stomper dropped like a poleaxed bull, frame collapsing and hydraulic fluid fountaining out of the jagged holes the shotgun blast had ripped. Kurt grinned. Maybe these popguns weren't so useless after all.



Energy Pools, Portfolios and Limited-Use Weapons

Weapons in Portfolios which have "Limited Shots" or "Turns In Use" will affect all functions in the Portfolio. Thus, if a Portfolio-2 Energy Pool had an infinite-shot beam gun and a 1-shot beam cannon, the beam gun could be fired indefinitely, but once the beam cannon was fired the entire Energy Pool would be depleted. In the case of Energy Pools with multpile functions which have limited uses, determine proportional values for the limited uses.

For example: *The Multi-Rapier's "Beam Typhoon" is a Portfolio-3 Energy Pool. It's three functions are: 1) an ∞-shot beam gun, 2) a 7-Turn beam sword and a 2-shot beam cannon. 7÷2=3.5, so each shot of the beam cannon equals 4 uses of the beam sword.*

BLAST RADIUS (x6.0+): Unlike the charge in a standard HE round, Blast Radius rounds carry payloads designed to explode in all directions rather than simply straight forward into the target's suit. Almost the Projectile equivalent of Wide-Angle Beam Weapons, Blast Radius attacks not only do damage to the target mecha, but also hit every other mecha, scenery element and other possible target within one (or more) hexes of the target. As with a Blast Missile, if a Blast Radius projectile directly strikes a single mecha (or other target), that target will take damage as normal; any Targets caught within the Blast Radius cannot dodge (only Parry if they have a DA-0 Shield). Damage within the shell's Blast Radius is resolved as on the Area Effect Damage Table (see *Mekton Z*, page 97), unless the damage is being delivered by Scattershot Blast Radius Ammunition (1/2 damage, but ouch)! What happens if you miss? If you miss, the round deviates in a random direction (see the Deviation Diagram, *Mekton Z* page 97) by a number of hexes equal to the amount by which the Attack Roll was missed. Should a Burst of Blast Radius shells miss then each shell deviates by a number of hexes equal to the difference between the actual die roll and the number required to hit with each particular shell (similar to missing with a salvo of Blast Missiles). In these cases, direction is rolled only once for all of the shells. Notice also that is it possible to hit with only some of the rounds, and miss with the remainder in the burst. Watch out for your friends—Blast shells don't discriminate! The Roman numeral following a Blast shell denotes its Blast Radius: "Blast Radius III" Ammunition would hit all targets within three hexes of the target hex, etc.

NUCLEAR (x1000.0): Although of generally lower yield than Nuclear Missiles (1/10 base damage), Nuclear shells for cannons and other artillery are still devastating. Remember that Nuclear Ammo must also have the Blast Radius ability at some level! Such Ammo is usually loaded into Long Range cannons, since it's very easy for the shooter to get caught in his own blast radius otherwise. For the full effects of Nuclear weapons, see the Nuclear Explosion rules on page 117-118 of this book, but keep in mind that Nuclear Ammo must also be Blast Radius Ammo.

Energy Pools △ エネルギー・プール

Raw energy at your disposal—seething, crackling, waiting for your direction, waiting to do your bidding; to maim, destroy, kill ... ahem. An Energy Pool provides a versatile method in which to give your mecha access to a variety of different weapons and defensive systems without the enormous cost or Space requirements or buying each system individually. When an Energy Pool is purchased, the designer creates a "Portfolio" of Beam Weapons, Energy Melee Weapons, and Reactive Shields (force fields). The pilot may switch between the various functions in the Portfolio instantaneously—no actions are expended.

Energy Pools take up Spaces in the normal way, and their cost is determined by both the size of the systems that they can

Energy Pools

Cost/Space	Power Available	Maximum Power	Kills
10	(Battery)	50	5
10	5	25	4
20	10	40	7
30	15	45	8
40	20	50	10
50	25	55	11
60	30	60	13

Portfolio Size	1	2	3	4	5	7	10	∞
Cost	x0.6	x0.75	x1.0	x1.2	x1.3	x1.4	x1.5	x2.0

Morphable: x1.25

emulate, and the number of weapons and Shields allowed for by their Portfolios. Energy Pools can be targeted as, and may be Linked like, normal weapons. Linked Energy Pools may fire weapons simultaneously but may not combine their available power.

Systems in Portfolios are designed exactly as normal, although weapons which have "Limited Shots" or "Turns In Use" are a special case—see the sidebar on page 40. Weapons in Portfolios need not worry about Space requirements. A pilot may switch the function of the Energy Pool between any of the functions of the Portfolio. Though the systems in a Portfolio can not be changed during combat, it is often possible to modify them with sufficient amounts of reprogramming, hardware modification and time. In the case of unlimited Portfolios it is still a good idea to have the most commonly used systems already designed—this will speed play and make these "Infinity Pools" much more usable.

COST/SPACE: This is the cost of the Energy Pool in CPs and the space requirement for the system. Because the space necessary for this system can be immense, Energy Pools are often Split between multiple locations. Energy Pools may also be hand held—one might want a Beam rifle with two or three modes (one for Burstfire, one for Wide-Angle, etc.)—this would be well-accommodated by a Portfolio-2 or Portfolio-3 Energy Pool. An Energy Pool is essentially a weapon, and in game play it is treated as such. If it mounted in the Torso, it is treated exactly like a weapon mounted in the Torso (for targeting and damage purposes). If it's hand-held, it has all of the advantages and disadvantages of a hand-held weapon. The total cost of an Energy Pool is calculated by multiplying together the base cost for the system and the multiplier for the Portfolio size.

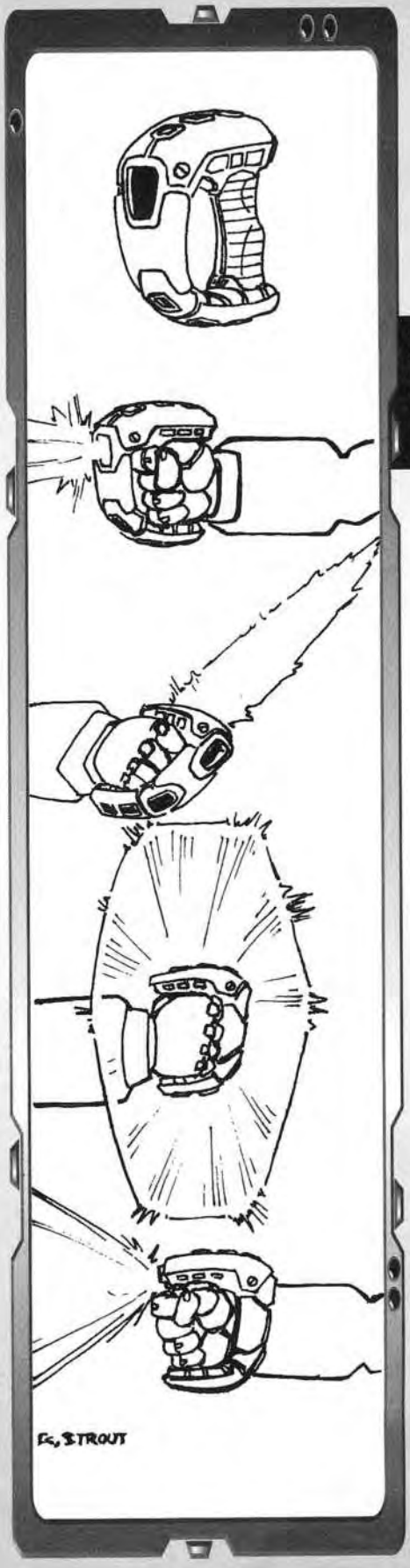
POWER AVAILABLE: This is the number of "energy points" (CPs) that any single weapon or Shield in the Energy Pool's Portfolio may cost. Batteries have no Available Power (see Maximum Power, below). Keep in mind that Power Available cannot be used up; it is always in the Energy Pool, and all it does is denote the level of power that the Pool is capable of simulating in its functions.

MAXIMUM POWER: An Energy Pool may store energy points collected by an Energy Absorber; the total energy of an Energy Pool is equal to the available energy plus any absorbed (stored) energy. Energy pools can emulate systems with costs greater than their Available Power by using stored energy to make up the difference; however, once the stored energy is used, it is gone. If an Energy Pool or Battery's current energy should be forced to exceed the listed Maximum Energy, the Energy Pool or Battery explodes—this will automatically destroy any servos, Hands, Binders, or Command Armor locations in which the Energy Pool, Battery, or portions thereof are mounted. By using one Action, a pilot may divert stored energy from one Energy Pool to another, or he may "purge" 5 points of it in order to avoid an explosive overload. When extra power absorbed from an outside source is used (all the player need do is specify that he is using it), it is expended, unlike the Energy Pool's normal energy source (its Available Power).

KILLS: An Energy Pool may take this many Kills of damage before being destroyed. Also used for determining weight. Energy Pools (but not their Portfolio Weapons) may be Fragile just like Beam Weapons (see page 27).

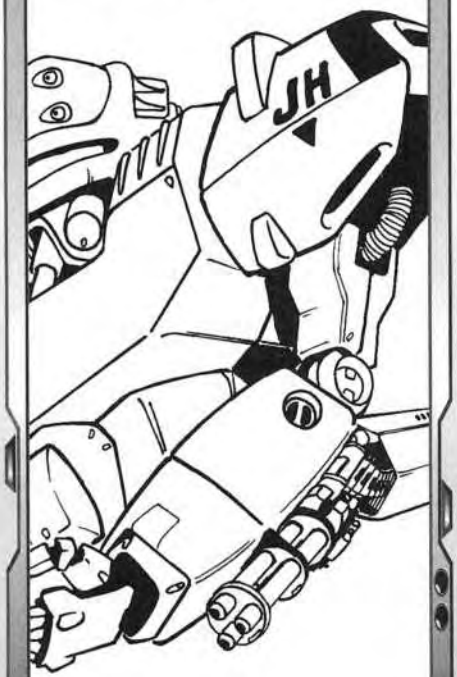
PORTFOLIO: Different Energy Pools have different ranges of application; the Portfolio value is the number of different systems the Energy Pool is capable of emulating. The weapons and Shields that are designed for the Energy Pool are "functions" of that Pool, thus they take no space. If the Pool is hit and destroyed, all of its functions are destroyed as well. An infinite (∞) Portfolio size is used for "Infinity Pools:"Such Energy Pools may function as any Beam Weapon, Energy Melee Weapon, or Reactive Shield in any configuration (such as a Burst Value Beam Weapon, an Autofire Beam Weapon, a Wide-Angle Beam Weapon, etc.) as is needed (it is advisable to pre-design a number of commonly used items to speed play). An Energy Pool can look like whatever you want it to, but no matter what forms or functions an Energy Pool has, the amount of damage it can take is equal to the Energy Pool's listed Kill value.

MORPHABLE: A Morphable Energy Pool (or Morphing Pool) is a mass of a metal-like substance which can reshape itself into any of a number of forms. Depending upon the technological capabilities of the metal, it may be able to reform itself into fixed shapes (such as blades and hooks), into flexible shapes (such as tentacles and hands), into devices with moving parts (such as saws and guns),





WEAPON PLACED IN ARM SERVO (NOTE ARMOR PROTECTION)



WEAPON PLACED IN ARM'S WEAPON MOUNT (NOTE EXTERNAL FIXTURE)

or perhaps even into energized devices (such as EMWs and Beam Weapons). Morphing Pools can be used to emulate Beam, EMW, Melee and Projectile Weapons (but not Missiles), as well as all types of Shields. As usual, the "Power Available" rating determines the Maximum cost of the device being emulated. There are a few special cases, explained below.

• PROJECTILE WEAPONS: How a Morphing Pool comes up with Ammo for such weapons is left up to the Referee. Ammo could come from random atoms in the air, from absorbing any random available material, from another dimension, or whatever, but the weapon is assumed to have **as many CPs worth of Ammunition (for all Projectile Weapons) as its Maximum Power rating divided by 10.** The costs for special Ammo types must also be factored into this cost.

For example: *My Morphing Pool (Max Power =40) can emulate a 10-CP Projectile Weapon. The Ammo will cost 0.1 CP per shot, so the Morphing Pool has 40 shots for this weapon—or, 10 shots of Armor-Piercing Ammo.*

If the Pool can emulate more than one Projectile Weapon, its 40 points of Max Power must serve all of them. Ammo may be resupplied through Material Absorption (see Stupid Mekton Tricks, page 92).

• SHIELDS: First, the cost of the Shield (including the price of its Damage Coefficient) must be within the capability of the Morphing Pool's "Power Available" rating; second, the maximum SP of the Shield may be no more than the Kills of the Morphing Pool. Whenever a Morphing Pool's Shield emulation is ablated (drops in SP), the total Kills of the Morphing Pool drops by the same amount.

• EXTENDING AND FLATTENING: Another useful ability unique to Morphing Pools is the ability to "Extend" and "Flatten." Extension is the act of stretching a Pool to reach across distances—for each 3 Power Points spent, the Morphing Pool's Melee Combat Range increases by 1 hex of distance. Flattening is the act of spreading a the Pool out thinly across a wide area—each 9 Power Points spent allows 1 hex to be covered. In this way, Morphing Pools can flatten out across the ground and envelop an opponent (an Entangling Melee Weapon with +9 CPs for Flattening)!

If reading this entry makes you say, "Hey, wait! What if I want to make my entire mecha out of liquid metal?", then refer to Morphable Mecha in the Stupid Mekton Tricks section (page 92).

Example Energy Pool Design

Let's say that the Rapier Zeta uses its two beam swords as ranged beam cannon when transformed. Each beam sword thus has two functions: one as a Beam Weapon, the other as an EMW. In MTS, each one of these two devices would be designed as low-powered Portfolio-2 Energy Pools (with enough Space Efficiency to allow them to be hand-held). We decide that the Energy Pools will look like standard beam sword "hilts" and we're in business. While this makes the Rapier Zeta's beam swords fairly expensive, it also allows for much greater versatility when dealing with those pesky Gorgons.

Weapon Mount △ ホウェプン・マウント

In *Mekton Z*, Hands are only allowed to be placed on the ends of Arm servos. In MTS you still buy Hands, but in addition to being able to place them on the Arms of your mecha, you may place extra "hands" on any servo locations. For clarity's sake, these extra "hands" are called Weapon Mounts—they allow any servo to "hold" a weapon or system of a CP value equal to the number of Kills in that servo (that is, the Mount may hold as many Spaces as the servo has Kills). Weapon Mounts act exactly like Hands, except that Weapon Mounts may not manipulate objects. They exist only for holding and using weapons or systems. Torso servos may have two Weapon Mounts; all other locations may have only one.

Weapon Mount
Cost = 2 CPs

Like a Hand, a Weapon Mount takes up as much Space as it costs: in this case, 2 Spaces from the servo in which the Mount is located. A weapon or system in a Weapon Mount may be targeted and destroyed as if the mecha were carrying it in a normal Hand. When a servo holding a

Mounted weapon is hit, the defender must make an Average Luck roll (Difficulty 15). If the roll succeeds, the attack does indeed hit the servo. If the roll fails, the attack hits the Mounted weapon and does damage to it as normal—since Mounted weapons are treated as being hand-held, they do not get the armor protection of the servo they are Mounted upon. Once a Mounted weapon on a servo is destroyed, all attacks against that servo are resolved normally. Obviously, if a servo with a Weapon Mount is destroyed, then the Weapon Mount and all it holds are also lost. Weapon Mounts themselves are not armored, and will be destroyed if they take any appreciable damage (i.e., 1 Kill or more).

A Weapon Mount has one other application, which is specific to Transformable mecha: hand-held weapon hardpoints. Most Transformations do not allow hand-held weapons to be used when the mecha is not in Humanoid mode; under such conditions, the hand-held weapons in question are assumed to be "stowed" somewhere in or on the mecha. However, if the mecha buys a Weapon Mount and places it in a servo, but does not put any weapons or systems in that Mount, it can be used to operate hand-held weapons when the mecha is transformed. One Mount may even be used for various weapons in different modes, if necessary. The only limitation is that the Weapon Mount must have enough Spaces to hold the hand-held weapons.

For example: *Let's say that the superheroic mecha "LeoRapier III" has three seperate Transformer modes: a humanoid form, a lion mechabeast form and a fighter form. It also has two hand-held weapons: a sword and an assault rifle. The LeoRapier has a Weapon Mount in its Torso, which is empty in humanoid mode. However, in lion mode, the rifle is stowed and the sword is Mounted on the rear of the mecha, standing in for the lion's tail. When in fighter mode, the sword is stowed, and the rifle is Mounted under the body like a gunpod.*

Weapon Mating △ ホウェプン・メイティング

Weapon Mating is a method of physically integrating two weapons into one. This method can be used to design a rifle with a built-in grenade launcher, a Hand-type Melee Weapon with Beam Weapons in the fingers, a Projectile Weapon with a bayonet, etc. To mate weapons, designate which weapons are to be mated together and apply the following rules:

1. Add together the Spaces taken up by both weapons, and divide by 1.33—this is how much space the mated weapon system takes up.

2. If one weapon takes damage, the other weapon takes the same damage—if one is destroyed, so is the other.

3. Although they are physically integrated, each weapon or system operates individually (unless they are also Linked).

The obvious advantage to Weapon Mating is the reduced Space requirements. However, the disadvantages are that if one weapon is lost, so is the other, and the package is only as tough as its weaker component. Becuase of this trade-off in advantages and disadvantages, Mating has no cost. Though unusual, Mating may be applied to non-weapon systems.

Weapon Mating Example:
The Rapier normally carries an assault rifle (9 Spaces, 5 Kills), but the Gun Rapier variant has a grenade launcher Mated to the assault rifle (the grenade launcher takes 8 Spaces and has 7 Kills). The two weapons are mated: their total Space requirement becomes 12.8 (9+8 =17, 17÷1.33=12.78), but a hit of 5 Kills to either weapon will destroy both.

Shields △ シールド

Shields are a popular option among many schools of mecha design—their cost-effectiveness and versatility make them an ideal choice for building budget 'bots. There are three different types of Shield: Standard, Active and Reactive.

• STANDARD: This is the most common type of Shield—essentially an enormous hunk of composite armor plating, usually mounted on the Arm servo of the mecha. This plate serves as moveable armor; it may be used to parry as per the Parry rules in *Mekton Z* (page 92). Because a Standard Shield is wholly external, it takes up only one Space from the Arm servo in which it is mounted (or from the Hand holding it), regardless of its actual Class. A Hand holding a Shield cannot hold anything else at the same time.



• ACTIVE: Also known as an "automated" Shield, this type of armor plate is attached to its own pseudo-servo (as opposed to being attached to the mecha's Arm) and thus can move independently. Automated Shields will automatically parry—successfully—one incoming Attack per round without requiring the mecha's pilot to make a Parry Roll; any additional attacks parried will still require Parry Rolls by the pilot, however. The pilot need not specify which location is to be covered or what type of attack to deflect—the Active Shield will always parry the first incoming attack directed at the mecha in a given round (thus, the pilot has no control over what attacks will be parried). Because such a system requires an enormous amount of machinery to move it about, an Active Shield takes up half its cost in Spaces from whichever servo in which it is mounted (the other half is external, and thus occupies no Spaces).

• REACTIVE: Commonly referred to as "force fields," Reactive Shields can parry an infinite number of incoming attacks (successfully) without requiring any rolls from the pilot and without specifying which locations are to be protected. Reactive Shields will automatically succeed at parrying all incoming attacks, and they are not subject to staged penetration—hence, they are exorbitantly priced. Unlike Active Shields, additional parries may not be attempted by the pilot; either the force field stops the attack or it doesn't. Not being subject to staged penetration (as is the case with Standard and Active Shields), Reactive Shields continue to operate at full strength after each hit, provided the hit is not larger than the damage capacity (SP) of the Reactive Shield itself. Should an attack be larger than the damage capacity of the Reactive Shield, the field (after providing whatever protection it can) overloads and flickers out of existence. Once a Reactive Shield is overloaded, it will take time to reset—how much time depends on the design of the system. Because Reactive Shields are totally internal, they take up as many Spaces as they cost.

Depending on the design and the special effects, it may not be desirable for a Reactive Shield to be operating at certain times. Because of this, Reactive Shields may be turned on and off at no Action cost. Should a reactive shield be struck by a multiple-hit attack (such as missile barrages, autofire, scattershot or megabeams), the attack's base damage is used (i.e., a 6-Kill megabeam attack is treated like a plain old 6K attack). In the case of mecha with multiple force fields, it must be specified (when the mecha is designed) which Reactive Shield is "inside" and which Shield is "outside"—in other words, the order in which the Shields will interact with the incoming attacks must be specified. In the case of mecha with both Reactive Shields and other Types, the force fields will always parry first.

Note: A single attack cannot be parried by two or more Shields of the same type unless they are both Reactive Shields. Multiple Standard Shields, multiple Active Shields, and/or any combination of the two will never be able to parry the same incoming attack.

SHIELDS

STANDARD SHIELDS:

Class	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
SP	5	6	7	8	9	10	11	12	13	14	15
Cost	5	6	7	8	9	10	11	12	13	14	15

ACTIVE SHIELDS:

Class	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
SP	5	6	7	8	9	10	11	12	13	14	15
Cost	7.5	9	10.5	12	13.5	15	16.5	18	19.5	21	22.5

REACTIVE SHIELDS:

Class	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
SP	5	6	7	8	9	10	11	12	13	14	15
Cost	15	18	21	24	27	30	33	36	39	42	45

Defense Ability	-4	-3	-2	-1	+0
Cost	x0.6	x0.8	x1.0	x1.25	x1.5

BINDER SPACE:

-SP	-1/4	-1/3	-1/2	-2/3	-3/4
+Space		(+2 per -1 Kill)			
Cost	x1.1	x1.2	x1.3	x1.2	x1.1

Reset Time	X	3	2	1	0
Cost	x0.5	x0.75	x1.0	x1.5	x2.0

Turns in Use	1	2	3	4	5	7	10	∞
Cost	x0.3	x0.4	x0.5	x0.6	x0.7	x0.8	x0.9	x1.0

Weakness:	Monicker:	Cost
All Attacks	—NA—	x1.0
Ablative	"Screen"	x1.0
Energy Only	"Interference"	x0.75
Matter Only	"Kinetic"	x0.75
Ranged Only	"Swashbuckling"	x0.75
Enclosing	"Mirror"	x0.5
Offensive	"Surge"	x2.5

CLASS: This is the Classification Level of the Shield. A servo may only mount (or hold in a Hand) a Shield no higher than 1 Level above its own Level; a Mediumweight Arm servo could mount or hold a Shield of no more than Light Heavy Class. This rule supersedes the rule in *Mekton Z* which says that hand-held Shields must have an SP lower than the number of spaces in the hand's arm.

STOPPING POWER (SP): The Stopping Power (in Kills) of the Shield. Standard and Active Shields are subject to the normal staged penetration rules for their armor; in addition, the cost modifiers for refined armor types (see Armor, page 22) may be applied to these Shields. To do so, simply multiply the Shield's base cost by the cost multiplier for the appropriate armor type. Reactive Shields are not subject to staged penetration and thus do not need the refined armor types—they use the special rules mentioned above for damage capacity. Note: When a Shield is used to parry a missile salvo or autofire burst, it is treated as taking the full number of hits for ablation purposes. Ouch.

COST: The cost of the Shield in CPs. Don't forget that Standard and Active Shields can be bought with increased Damage Coefficients (alpha, beta, etc) by multiplying thier base cost by the appropriate number. As is mentioned above, Standard Shields take up 1 Space, Active Shields take up 1/2 their cost in Spaces, and Reactive Shields take up as much Space as they cost. Only Standard Shields may be hand-held.

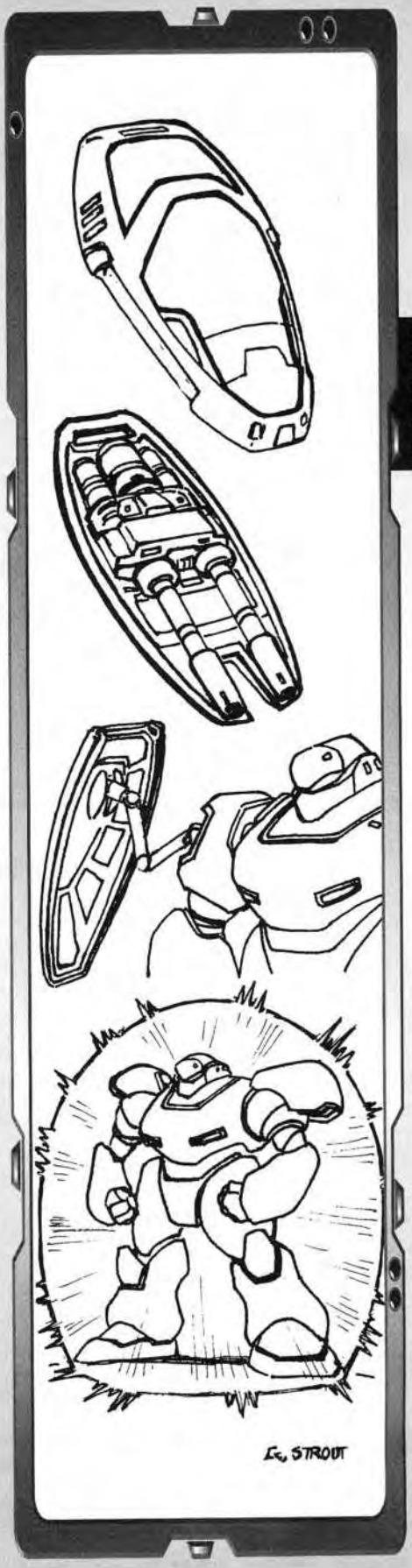
DEFENSE ABILITY: This only applies to Standard Shields, since only they require a Parry Roll to be used. The Defense Ability of a Standard Shield is equivalent to the Weapon Accuracy of a weapon; it is used to modify the pilot's Parry Roll. The Shield's Defense Ability (or DA) is subtracted from the pilot's **REF + Mecha Melee +1D10** roll, since DA relates to the amount of physical area that the Shield can cover—a small, forearm-size Shield would have a DA of -3 or -4, a typical Torso-size Shield would have the default DA of -2, and a Shield almost as large as the mecha carrying it would have a DA of -0. Note: as is mentioned in *Mekton Z* (page 97), only Shields with a DA of -0 ("Large" Shields) may parry Area Effect weapons such as Blast Missiles and Blast Grenades.

BINDER SPACE: It is a common practice to place weapons, Thrusters, and any other systems into Standard and Active Shields so as to conserve Space. A "Binder" is a Shield (Standard or Active), a portion of whose interior has been hollowed out and thus compromised for extra Spaces. Any system at all may be placed in a Binder, and it operates exactly as normal. Binder Space is bought by reducing the Shield's SP by a certain percentage; this percentage carries a corresponding cost in CPs, and for each Kill sacrificed from the Shield, 2 Spaces are made available. A Shield may not sacrifice Kills it does not have for Spaces! The cost for Binders is a multiplier which is applied to the base cost of the Shield. Reactive Shields may not be Binders.

RESET: This function is only usable with Reactive Shields, since only they are not subject to staged penetration. When a force field is hit by an attack which is larger than the Reactive Shield's damage capacity (SP), the field subtracts its full SP from the attack and then overloads. The amount of time it takes for a Reactive Shield to Reset is normally two full rounds, but this may be modified by applying the appropriate cost multiplier to the Reactive Shield's base cost. A Reset time of "0" means that the Shield will never overload—attacks which penetrate the field will not cause the Reactive Shield to shut down at all, and the very next attack will be parried as usual. A Reset time of "X" means that the field can not Reset; should the Reactive Shield be overloaded, it is rendered non-operational for the rest of the combat. A Reactive Shield which is disabled in this manner can not be used again until the mecha is repaired and a copious quantity of fuses are replaced. Note: All Reactive Shields, even those with a Reset time of "0," can be similarly disabled if they parry an attack which does twice the damage of the their SP. A Reactive Shield can be destroyed if its projector is hit (such as by a weapon or Shield Mount location hit); if such a hit penetrates the force field and the armor of the servo in which the Reactive Shield is mounted, the force field projector will automatically be destroyed—they're pretty fragile devices.

TURNS IN USE: This is the maximum number of full turns (not Actions) that the Reactive Shield can remain in use. Once the shield is out of power, it must be re-energized, requiring a mechabay pit-stop. Reactive Shields with limited Turns In Use cannot be "Rechargeable" like EMWs.

WEAKNESS: These are various modifiers to the effectiveness of Reactive Shields only. Normally, Reactive Shields will protect against





all types of attack and yet still allow the protected mecha to return fire. However, not all force fields are created equal. The default setting for Reactive Shields is "All Attacks," which allows the force field to parry attacks from any and all weapons, including mecha-grappling and Ram attacks. Whether or not the force field will also keep out all physical matter, energy, gas, heat, etc. is up to the Referee and mecha designer—that's a special effect.

• ABLATIVE: These Reactive Shields, which are referred to as Screens, operate upon the principle of degradable barriers which must be "knocked down" in order to do damage to the mecha within. Like normal Reactive Shields, Screens do not use staged penetration. Instead, they act like Ablative armor (see page 22); each attack subtracts its Kill value from the total Kill capacity of the Screen until the Shield is overloaded. Screens have a Kill capacity equal to 5x the listed SP for a Reactive Shield. For example, the Galaxy Rapier D has a Medium Striker Reactive Shield (SP8, 24 CPs). This system is modified to be Ablative, so the GRD has 40K of Screens; should the GRD be hit by a 7-Kill Missile, its Screens would drop to 33K. Once a Screen is out of Kills; it has been overloaded as if it had an "X" Reset time. Since Reset time does not apply to Screens, the cost modifiers for such are always x1.0.

• ENERGY ONLY: A Reactive Shield with this modifier can only parry energy-based attacks—it has its full SP against Beam Weapons and EMWs, but Melee Weapons, Projectile Weapons and Missiles ignore the force field completely. Such Reactive Shields are not overloaded by attacks which ignore their SP and pass through them; the non-applicability is mutual. These "interference" fields are also useful for re-entry into planetary atmospheres (whether other Reactive Shields would be usable is up to the Referee). Note: Reactive Shields may not have more than one "Only" modifier; no "Energy and Matter Only" fields for x0.56 allowed!

• MATTER ONLY: This is a Reactive Shield which can only parry physical attacks—it has its full SP against Melee Weapons, Projectile Weapons and Missiles, while Beam Weapons and EMWs completely ignore the SP of the force field. Such Reactive Shields are not overloaded by attacks which ignore their SP and pass through them; the non-applicability is mutual. These "kinetic" fields are also fully applicable against Mecha Fighting attacks such as body blows, rams and grapples (whether other Reactive Shields would be usable is up to the referee). Note: Reactive Shields may not have more than one "Only" modifier; no "Energy and Matter Only" fields for x0.56 allowed!

• RANGED ONLY: An excellent choice for those who love faceplate-to-faceplate, down-and-dirty, Handservo-to-Handservo combat. This type of Reactive Shield will stop any and all high-speed attacks such as are made by Missiles, Projectile Weapons and Beam Weapons, but the force field is permeable to the (relatively) slow-speed attacks made by EMWs, Melee Weapons and Mecha Fighting moves. Such "swashbuckling" fields are not overloaded by attacks which ignore their SP and pass through them; the non-applicability is mutual. This is a good choice for dramatic, cinematic-style campaigns.

• ENCLOSING: This is a serious disadvantage for any Reactive Shield, but one which is entirely possible (considering the questionable science of force fields anyway)—these "mirror" Shields keep the mecha from making the same attacks that the force field is parrying. Thus an Enclosing, Energy-Only Reactive Shield would block energy attacks, but would also prevent the mecha from using such weapons. An Enclosing, All Attacks Reactive Shield would keep the mecha from making any attacks at all as long as the force field was operating.

• SURGE: Reactive Shields with this advantage act like EMWs or Beam Shields; they do damage to any mecha which touches them. Surge Shields not only protect at their SP level, but also do damage in Kills equal to their SP. Any attempt to touch a mecha surrounded by a Surge Shield results in the part that was intended to touch it taking damage equal to the SP of the shield! Thus, any Grappling attack or attack with a Melee Weapon will result in the attacker automatically suffering damage; the Surge-Shielded mecha itself will also be *wicked* at performing Rams, Drops, and other such attacks!

Reflectors Δ リフレックター

The exact nature of reflector systems is arbitrary; the effect, however, is rigorously defined, as are the costs. Reflector Systems are mirrors or mirrored arrays/fields which can be maneuvered into position by the pilot to reflect (or at least deflect) away Beam or Automated EMW attacks and thus avoid damage. Though the low maneuverability of many mecha makes it difficult to make the nec-

essary fine adjustments required for efficient and reliable protection, larger mecha will often be found relying on smaller, reflector-equipped Remotes for such protection. In this way, their small size and maneuverability make it possible for them to provide protection to both themselves and the mother unit.

REFLECTOR SYSTEMS

Quality Value	Cost
1	1
2	4
3	9
4	16
5	25
6	36
7	49
8	64
9	81
10	100

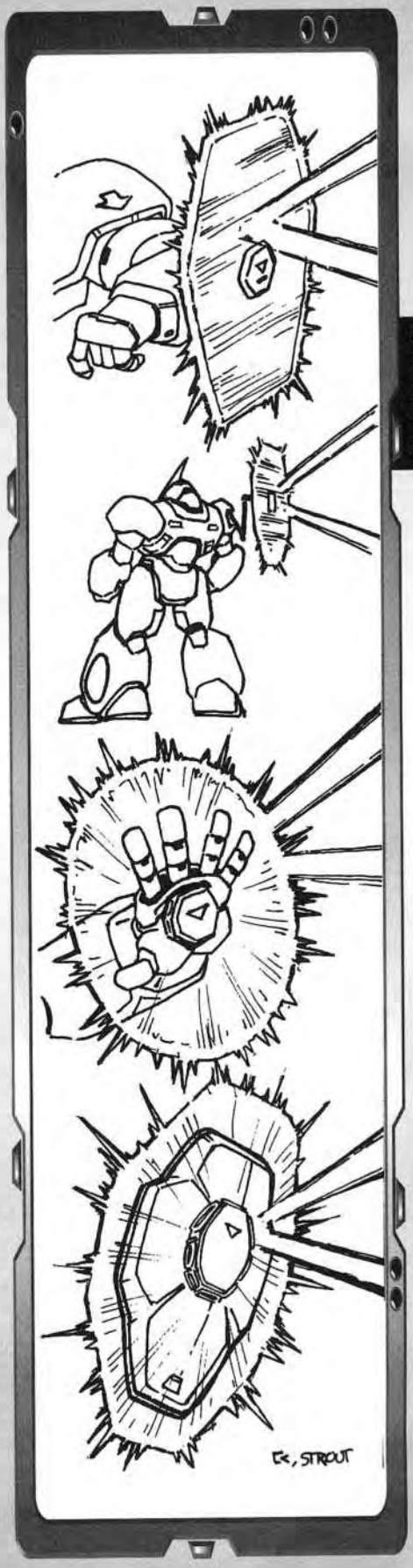
Reflectors take up as many Spaces as they cost—they can get pretty large. Remember, they can be Split between multiple locations (but not multiple mecha). Reflector Systems can be destroyed if the servo, Command Armor location, Binder or other location in which they are mounted is destroyed. A very versatile system, Reflectors may be used for three different purposes:

1) **Deflection of incoming energy attacks:** This is the simplest application of the three Reflector System applications. In this case the pilot simply attempts to reflect an incoming Beam or Automated EMW attack in a random manner (heavier emphasis on defense than counterattacking). This type of reflection may be attempted by mecha with a reflector system in lieu of a normal Parry roll (likewise, it takes no Actions). To deflect an incoming attack, the defender must roll **1D10 +MR +Mecha Piloting and add the Quality value** for the Reflector. If this total is greater than the incoming Attack Roll, then the attack is deflected and no damage is incurred; should the attacker roll be higher, the reflection was unsuccessful and damage is taken as normal.

2) **Reflecting incoming energy at a target (firer or otherwise):** To reflect an incoming Beam back at the source (or at another target), the pilot attempting to reflect the Beam must roll **1D10 +MR +Mecha Gunnery and add the Quality value** of the Reflector. From this, **the Kill value of the incoming Beam must be subtracted;** if this total is higher than the incoming Attack Roll, then the Beam has been redirected and a new target may be declared. However, if the roll is less than the attacker's total Attack Roll, the defender was struck by the Beam and takes damage as normal. When firing back a reflected Beam, the attack is treated exactly as if it had been fired directly from the reflecting mecha—with the following exceptions: Wide-Angle attacks are no longer treated as such, and the total distance traveled (before and after the reflection) must not exceed the weapon's Maximum Range (i.e., Range x Range). The same total for the reflection roll is also used as the new attack score. Like deflection, reflection replaces the normal parry and takes no Actions.

3) **Redirection of friendly Beams:** In addition to deflection and reflection of incoming fire from enemy mecha, redirection of Beams fired from friendly mecha is also possible (this is possible only for Beam Weapons, not for Automated EMW's). To redirect a friendly Beam, the redirecting pilot need only roll **1D10 +MR and the Reflector's Quality value.** If this roll is higher than the Beam's Kill value, then the Beam has been redirected and continues on as if fired from the redirecting mecha (subject to the same restrictions as above for 2-Beam Reflection). If the total roll is less than the Kill value of the weapon, the beam was not correctly redirected and the mecha attempting the redirection is grazed by the Beam. Mecha that are grazed take half damage from the Beam to a random location, neglecting effect modifiers (such as autofire).

In the case of redirection, no Skill is used, though it is entirely possible to develop a Reflector Systems Skill separately that could serve as an additional bonus in redirection attempts, as well as substitute (if desired) for Mecha Piloting and Mecha Gunnery Skills in deflection and reflection attempts, respectively. In all three of the applications for the Reflector System, the Quality value plays an important role. Quality value represents both the size and the integrity of the reflecting surface or method. **A Reflector may not deflect, reflect, or redirect beams with Kill values greater than three times the reflector system's quality value (lest they be reduced to powder).** Mecha with Reflector Systems may also deflect or reflect Beams not directed at them at the cost of one Action (with the provision that the Beam's path must take it through the hex in which the Reflector-equipped mecha is located).




ADDITIVE SYSTEMS

Crew Δ クルー

One of the most important aspects of any mecha design is deciding how many people it can seat. Assuming that there is no Internal Automation system on board (see page 74) and that the unit is not a Remote (see page 54), every mecha design must include a Cockpit. There may be as many or as few cockpits as the designer wishes, they may be in multiple locations, and they may serve different functions, but there has to be at least one seat for the driver of the damn thing!

As is explained in *Mekton Z*, your basic Cockpit takes 1 Space and is free. This Cockpit comfortably seats the pilot and has enough room for one other person to sit in the pilot's lap (the pilot has a penalty of -1 to attack and defend, but is possibly very, very happy despite the disadvantages). If you would like to fit more passengers or crew into a Cockpit area, or if you want another part of your mecha to be able to seat people, you must spend CPs and use Spaces to do so.

CREW AND PASSENGERS

Layout	Space	Cost
Cockpit	1	-0- *For Pilot only.*
Passenger (per)	1	1 CP each *No control, no Action modifier.*
Extra Crew (per)	1	2 CP each *Control and Action modifier.*

PASSENGERS: Each extra person takes up a Space and costs a CP or two, depending on whether they're passengers or crew. Note that passengers have no control over the functioning of the mecha (Extra Crew are needed to gain any control bonuses).

For example: *Rocket Russel buys two extra seats for the Rapier-G's Cockpit, places them in the Torso (where the original Cockpit is), and describes them as being one large Cockpit with three seats. This will take 2 Spaces (added to the 1 for the basic Cockpit, for 3 Spaces total) and would cost 2 CPs (since these are Passenger seats). With a little cozy squeezing, he can now cram up to 6 people into his enlarged Cockpit. Kenty brings some chips and soda and they have an impromptu party.*

EXTRA CREW: Added crewmembers are often referred to as "Gunners," although they may also serve as navigators or ECM operators. What the Gunners actually control must be specified when the mecha is designed, as each crewmember will use only certain skills—these skills can be divided any number of ways between any number of pilots (assuming each crewmember uses a different Skill). Such teamwork can really pay off: if each crewmember specializes in one specific skill, they may be somewhat skewed individually, but when working together their skills will make their mecha incredibly effective.

For example: *the Omega Rapier II has a crew of three people: one governs movement (Piloting and Awareness), one governs close-combat (Melee and Fighting) and one governs ranged combat (Gunnery and Missiles). The person governing Piloting determines the mecha's Initiative, but each crewmember determines their own MR seperately.*

Using this method, each crewmember could put the majority of their points into two skills rather than five; instead of having a +3 in each of the six Skills, each crewmember could afford to have +6 in their two specialties and +1 in the other four skills.

EXTRA ACTIONS (OPTIONAL RULE): Should the designer so wish, mecha with extra crew may take extra actions; each *extra* crew member (after the first) may add one Action to the total number of Actions the mecha can take in a turn (as always, the mecha may still not move more than its maximum MA in a turn). However, if extra Actions are being used, all crewmembers' MR will be reduced by the number of crew; a 4-pilot mecha would have +3 Actions (5 total) but all 4 crew members would be at -4 to their MR.

COMMANDERS (OPTIONAL RULE): The MR penalty caused by taking multiple Actions can be offset if one of the crewmembers is designated as Commander (or Captain, Boss, etc.). The Commander is included in the number of crew for the purposes of determining Actions and MR penalty, but becuase he must direct all his efforts to giving orders to the crew, the first Action must always be spent rolling his *Leadership* skill. If he beats a **Difficulty of (10 +# of Crew)**, the Commander's Leadership skill can be used to offset the MR penalty on a 1-to-1 basis (if his skill is larger than the penalty, no bonus is gained).

Mecha-Related Skills

The six primary skills are:
- ***Awareness***
- ***Piloting***
- ***Fighting***
- ***Melee***
- ***Gunnery***
- ***Missiles***

There are three other related skills:
- ***Electronic Warfare***
- ***Reflector Systems***
- ***Mecha-Tech***

NOTE:
This section deals only with crew space—the nature of your cockpit and its controls are covered on page 69.

Tactics Skill (INT-based)

This skill represents a working knowledge of combat maneuvers, methods and strategies.

Mutliple-Action Crew Table

Crew	A	MR	Cmr
One	2	0	0
Two	3	-2	2
Three	4	-3	3
Four	5	-4	4
Five	6	-5	5
Six	7	-6	6
Seven	8	-7	7
Eight	9	-8	8
Nine	10	-9	9
Ten	11	-10	10

A = Actions
MR = Mecha Reflex
Cmr = Commander's Skill Level Needed.

Sensor Notes

The range of Sensors covered below is rather broad. Superlight Sensors have no cost and no Kills because they represent the bare minimum—a periscope, a CB radio and a small dashboard are pretty much all you get. The larger Sensor packages provide no new functions, but boast enhanced ranges for communications and other sensor functions, and can take greater amounts of damage as well. Superior Sensor packages will also enhance the efficiency of many additional reconnaissance and surveillance systems. All Sensors take only one Space regardless of cost or Kills. Though Sensors are classed from Superlight to Megaheavy, any level of servo may mount any level of Sensors.

BACKUPS: A Backup Sensor suite is a secondary package which comes on line when the primary suite has been destroyed. It has minimal (Superlight) capabilities.

For example: *The Omega Rapier III has a crew of 5, including its Commander. It may take 6 Actions per turn, but the first Action must be spent allowing the Commander to roll his Leadership skill; if he beats a 15, the mecha's MR penalty of -5 is reduced by his Leadership skill level for that turn (with a limit of -0).*

Mecha with excessively large crews may have multiple Commanders, but only one Commander may be in control per turn. In such a case, Actions and MR penalties are calculated based on the crew following the Commander currently in control.

For example: *A 15-person Mekton could have three Commanders, each handling four crewmembers. Each turn, the mecha would operate as if it had a crew of five, and the three groups could rotate control between each other each turn.*

Should this mecha add one more crewmember to Command the three Commanders, it could act with 17 Actions per turn! However, the first Action would be when the Commander rolls his Leadership vs 14 (for himself and the three Sub-Commanders), the next three would be when the Sub-Commanders roll their Leaderships vs 15 (for themselves and their four crew each). The remaining 13 actions could be taken according to whether MR penalties were lifted or not. If the Commander fails his Leadership roll, the Sub-Commanders must make their Leadership rolls at -4, and if any one of the Sub-Commanders fails their Leadership roll, their crew would suffer -5 to their MRs.

Sensors △ センサー

In *Mekton Z*, the standard Sensor suite is a good, mid-range package which serves quite nicely under most circumstances. However, this is MTS, where variety is all. In the spirit of diversification, an expanded range of Sensor suites are now available.

What exactly does a Sensor suite encompass? The exact nature of a Sensor suite is left somewhat nebulous, allowing Referees maximum latitude in their campaigns. Generally, Sensors represent the mecha's ability to process information. It is assumed that a mecha's Sensors encompass audio and video functions, such as detection, communications, assessment and displays. Complete instrumentation (such as altimeter, speedometer, artificial horizon, fuel gauge, rangefinder, diagnostics and other readouts), computer-assisted heads-up displays and the all-important targeting systems (acquisition, designation and engagement) are also included. Depending upon the Tech Level of the campaign and mecha, limited-range infrared and radar systems are also probably included—these are largely special effects, but may be important in a roleplaying context.

Mecha may detect objects at a distance equal to their Communications range, but any recon/surveillance scans and attacks can only be performed upon objects within Sensor Range. Be sure to check your weapons' Maximum Range vs your Sensor Range—your big guns may be able to fire further than you can acquire targets! Should your sensors be destroyed, your mecha suffers a -4 penalty to all Attack Rolls and Awareness Rolls because all computer-assisted information systems are gone. This does not mean that the mecha is blind—it's assumed that manual periscopes, a blastproof canopy or even a plain old window will be available.

SENSORS

Class	Cost	Kills	Space	Sensor Range	Communication Range
Superlight	0	0	1	1 kilometer	300 kilometers
Lightweight	1	1	1	2 km	500 km
Striker	2	1	1	4 km	800 km
Medium Striker	4	1	1	7 km	1000 km
Heavy Striker	6	2	1	11 km	1300 km
Mediumweight	9	2	1	15 km	1500 km
Light Heavy	12	2	1	20 km	1800 km
Medium Heavy	16	3	1	26 km	2300 km
Armored Heavy	22	3	1	30 km	3000 km
Superheavy	27	3	1	40 km	5000 km
Megaheavy	32	4	1	50 km	Planetary (Moons & Near Orbit)
Backups:	2	2	2	1 km	300 km

Recon Systems Δ リコン・システム

The general Sensor suite found in most mecha contains standard visual, communication and targeting systems, perhaps a limited range of IR and radar scanners, and an array of heads-up displays necessary to operate the systems aboard. This package is sufficient for most front-line combat units, but it doesn't even come close to the level of sophistication necessary for spy satellites, ELINT craft and scout vehicles. Such mecha employ surveillance systems far more powerful and diverse than even a Superheavy Sensor suite. It is important to note that all Recon Systems work off the mecha's basic Sensor package; if the Sensors are hit and destroyed, all Recon systems will cease functioning as well.

ADVANCED SENSOR PACKAGE (10 CP, 2 Spaces): The Advanced Sensor Package (or ASP) features the complete array of systems one would expect from a reconnaissance unit: full range electromagnetic sensors (IR, UV, X-ray, microwave, and whatever else), magnetometer (for detecting large masses of metal), vibration-sensitive motion detectors, MAD (Magnetic Anomaly Detector, for picking out pulses of magnetism, such as from railguns), scanners for detecting energy sources, life forms and radiation, as well as the thermographic technology necessary to track mecha by their heat trails (this covers currently moving mecha as well as ones that have already passed—on the ground, underwater or flying). On top of everything else, ASP units can record sensor input for later playback.

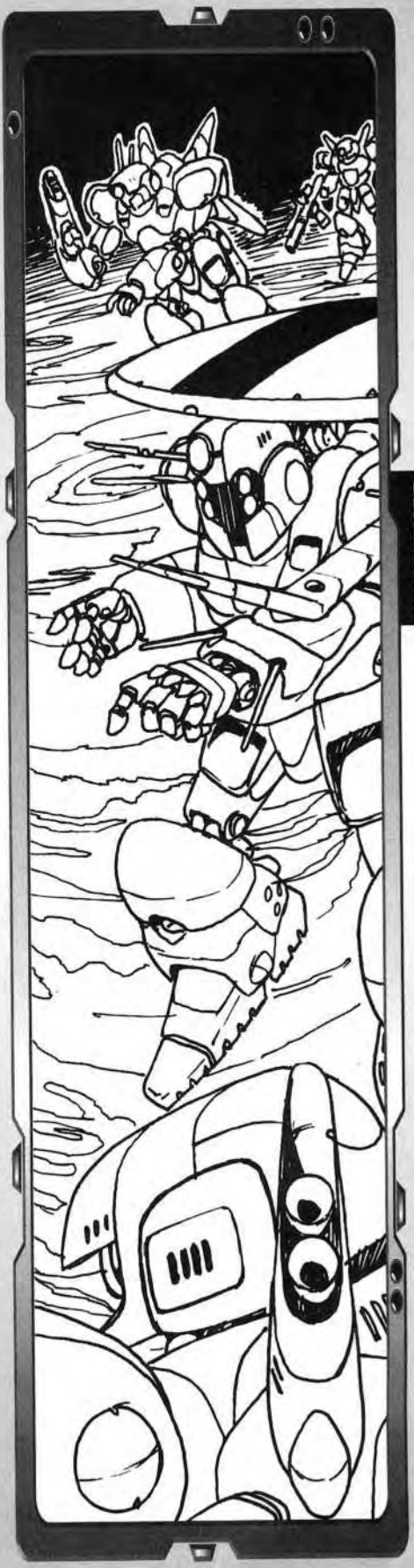
RADIO/RADAR ANALYZER (5 CP, 1 Space): This sophisticated electronics package allows a mecha to trace radio (Communication) and radar (Spotting Radar) signals to their source, provided the source is within the Sensor Range of the mecha using the Radio/Radar Analyzer. Should the source stop broadcasting while the R/RA mecha is tracing them, a Difficult Awareness Roll (20+) will allow the unit to determine and home in on the last point of origin.

RESOLUTION INTENSIFIERS (0.5 CP per level, 1 Space total): In any Sensor package, there is little or no provision for computer-enhanced magnification of visual displays (magnification is possible, but without computer enhancement and stabilization, there is too much blur and shudder to discern any detail). For high-definition magnification ability, a mecha must use Resolution Intensifiers. Every 0.5 CP worth of Resolution Intensification will provide 2X (double) magnification and resolution—thus if a mecha had 1.5 CPs (three levels) of Resolution Intensifiers, objects could be magnified to eight times their original size (2 x2 x2 =23 =8X); with fourteen, the resolution would be x214 = 16,384X (this would be sufficient to record a retinal pattern from a human eye one kilometer away)! Resolution Intensifiers may also be purchased (separately) to enhance sound in the style of a parabolic microphone.

SPOTTING RADAR (4 Kills, 10CP, 5 Spaces): This is a high-powered system which can detect and target any non-Stealth mecha within **ten times** the Sensor Range of the mecha using the Spotting Radar. Depending upon the design, this may be a Phased-Array system or may require a large dish or "Radome" on the mecha; either way, Spotting Radar systems are large and heavy (which is why they have Kills and take so much Space). Note that if an attempt is made to use a Spotting Radar to detect/target an object which is under more than 50% cover, it will fail—unless the scanning mecha also has a Gravity Lens (see below).

TARGET ANALYZER (5CP, 1 Space): This is an expert system slaved to the input of a mecha's Sensor suite—when trained upon any mecha or large object (which is not Cloaked or Stealthy) within the Sensor Range of the mecha using the Target Analyzer, tactical data will be displayed for the pilot. The target's codename, size, weight and flightspeed, as well as a list of all major systems (such as Hydraulics, Sensors, weapons, Command Armor, Transformation, Maneuver Verniers, etc.) will be provided. Note that it is up to the Referee to decide how effective Target Analyzers are in his game—has the computer ever scanned this particular unit before? Are the systems on the target mecha of a technology equal to or lesser than the scanning mecha? Is the target mecha new? How good is the information-gathering branch of the scanning unit's intelligence corps? In a worst-case scenario, the Target Analyzer may give the pilot incorrect information!

MARINE SUITE (2CP, 1 Space): When mecha go deep underwater, they soon discover that the surrounding environment has become thick, dark and cold—in other words, conven-



tional Sensors are rendered nearly useless! The Marine Suite represents a series of modifications to the mecha's standard Sensor package which allows unhindered detection and targeting while underwater; this Recon System relies primarily upon sonar and magnetometer technologies. Optical detection remains seriously hampered (so that visual Awareness Rolls still suffer penalties), but Attack and Defense Rolls are made at their full value.

GRAVITY LENS (5CP, 1 Space): A system which is beyond the levels of typical mecha technology, the Gravity Lens creates a gravitic "pipe" through which the onboard Sensors in the mecha may look. Functioning like an invisible, intangible fiberoptic cable, mecha employing a Gravity Lens system may look around corners and see various angles of any given target at once. This "pipe" may bend and twist any number of times and extend as far as the Sensor Range of the mecha's Sensors. When used in conjunction with Resolution Intensifiers and with a suitably difficult *Awareness* Roll (20-25+), a Gravity Lens can be used to look through a building's air vents, up vehicular exhaust pipes, or even down a person's throat!

MAGNETIC RESONANCE LENS (15CP, 1 Space): Employing super-advanced technology, a Magnetic Resonance Lens-equipped mecha can look right through solid, hollow objects (such as mecha), thus creating a three-dimensional image made solely of the outlines of the object being viewed. Magnetic Resonance Lenses are invaluable when used inside cities, space colonies, starships and arcologies—the tactical advantages of being able to see through most forms of cover are enormous. The 3-D model "schematic" rendered by the Magnetic Resonance Lens of objects through which it sees can also be used to see what is inside them; the pilot of a mecha (as well as its fuel supply) will appear as a solid blob of color in an otherwise framework-style shape. Mecha equipped with a Magnetic Resonance Lens may thus attack the pilot of a mecha at a -6 penalty (provided they are able to penetrate the target's armor as well).

EW Skill Roll:
INT +EW Skill +1D10 versus (Value x2) +5

EW systems, being a new system for Mekton Zeta, carry with them the need for a new Skill:

Electronic Warfare Skill (INT-based)

This skill can be learned by any character who has access to the appropriate information and equipment (primarily military and paramilitary personnel), and is based on INT. EW Skill represents a collection of knowledge which deals with certain areas of electronics, magnetism, physics and combat tactics. EW Skill is also necessary for using the Shadow Imager system (page 76), as well as for operating large radar arrays (Spotting Radars) such as those found at airfields and military bases.

Electronic Warfare △ エレックトロニック・いくさ

While it is arguable that almost every "modern" (i.e., believably sophisticated) mecha design would be equipped with some form of electronic countermeasures device, some mecha are best known for their powerful (seemingly magical) electromagnetic warfare suites. Such powerful equipment falls under the category of Electronic Warfare (EW) systems.

Every EW system can be used two ways: *Defensively* or *Offensively. Defensive* use of an EW system grants the Jammer (the mecha with the EW suite) the advantages of its EW system, and all mecha must deal with the Jammer's EW effects when targeting it (and only it). *Offensive* use of an EW system allows the Jammer to use its EW system to hinder one (and only one) targeted enemy mecha. Effective range for an Offensive EW roll is equal to the Sensor range of the mecha. To use an EW system either way, the pilot must make an ***Electronic Warfare*** **Skill roll equal to the Value of the ECM or ECCM system multiplied by 2, plus 5.**

For example: *Rocket Russel's INT is 9 and his EW Skill is +5, and he is using an Anti-Missile ECM system with a Value of 6. 6 x2 = 12, 12 +5 =17, so Rocket must roll at least a 3 (9 +5 +3 =17) in order to either (a) grant his mecha a +6 defense against missiles, or (b) make the target of his ECM roll suffer a -6 to hit anyone with missiles.*

All Electronic Warfare systems take one Action to operate each time they are used, which is why many EW mecha have a separate pilot whose sole function is to operate the EW equipment. However, once an EW system has been used successfully, it will continue to be effective—as long as at least one Action per turn is spent to maintain the effect.

EW systems come in two basic categories (as far as the rules are concerned): The first, ECM (Electronic Counter-Measures), serves to hinder enemy electronic surveillance and/or tracking equipment. The second, ECCM (Electronic Counter-Counter-Measures), is a specialized breed of Electronic Warfare system designed specifically to counteract ECM systems and thus penetrate their effects.

When EW packages are purchased, they must be one of four types, three of which fall into category number one (ECM); the fourth is category number two (ECCM). The three ECM systems must be purchased separately, but a single ECCM system is sufficient to protect against all forms of ECM. The three types of ECM types are as follows:

• SENSOR JAMMING: This reduces the effective level of the enemy's Sensors by the number of ECM points the ECM system has. This effective level is what must then be used when checking to determine (Defensively) if the target is within Sensor Range, or (Offensively) if *all* targets are within Sensor Range *and* how far communications can be sent and received. If the ECM reduces the effective level of the enemy's Sensors below Superlight, the enemy suffers a -1 penalty to all Weapon Accuracies and Awareness rolls for every 2 levels (i.e., 1 and 2 below Superlight suffer -1, 3 and 4 below Superlight suffer -2, etc.). Note: If an Offensively-jammed target has a non-Wire-Controlled Remote System (see page 54), its Control Multiple, Control Range and Operation Range are reduced in the same way as its Sensors; if the level drops below Superlight, the Remote System is fully defeated and all Remotes deactivate.

• MISSILE JAMMING: When firing Missiles, the attacking mecha must subtract the target mecha's ECM points from his attack roll. If the electronic warfare is Defensive, the attacker must subtract the Missile ECM system's Value (ECM points) from his Attack Roll only when attacking the Jamming mecha; if the electronic warfare is Offensive, this penalty applies to all Missile attack rolls made against any target by the jammed mecha. Note that in order to use this sytem effectively, the Jamming mecha might need to activate the EW system as part of his Defense Roll phase—in such a case, the action required to activate the system will be taken off his next turn.

• RADAR JAMMING: When attempting to use a Spotting Radar, the scanning mecha must subtract the target mecha's ECM points from his Awareness Skill roll. If the electronic warfare is Defensive, this penalty only applies to attempts to spot the Jamming mecha, and if the electronic warfare is Offensive, this penalty applies to all attempts to spot anything.

VALUE: This is the number of ECM or ECCM points the EW system is capable of putting out.

COST & SPACE: The cost of the EW system in CPs. Because EW systems require an enormous amount of similar equipment for all four system types, they need not be replicated—thus all EW systems purchased after the first (i.e., the most expensive) cost half. The first ECM or ECCM system bought takes up as much Space as it costs, but if more than one type of ECM system is bought, the amount of Space taken is only as much as the cost of the most expensive EW system. All other systems bought take up no space—they simply use the existing equipment of the largest EW suite. Note that ECM & ECCM systems can be destroyed when a Sensor hit location is rolled (if the attacker decides to hit the EW suite instead of the Sensors), or when an "Other System" hit location is rolled.

RADIUS: Radius is an optional advantage that may be used with any of the three ECM systems to confer the full bonuses of Defensive electronic warfare upon all mecha (friendly or otherwise) within the Radius (in hexes) of the Jamming mecha, or to apply the full penalties of Offensive electronic warfare upon all mecha (friendly or otherwise) within the Radius (in hexes) of the Jamming mecha. Offensive Radius ECCM has the effect of impeding the ECM systems of all mecha (friendly or otherwise) within the listed range; mecha within the listed range would act just as if their targets had a number of ECCM points equal to the ECCM points in the radius effect. Defensive Radius ECCM has the effect of protecting all mecha (friendly or otherwise) within the listed range; mecha within the listed range would act just as if *they* had a number of ECCM points equal to the ECCM points in the radius effect.

BEAMING: This is the range (in hexes) up to which the protection of one of the Defensive ECM systems may be conferred upon another unit (via a tight ECM beam). Defensive ECCM beams serve to grant the target mecha a number of protective ECCM points equal to the ECCM points of the beam. Offensive ECCM beams serve to hinder the target mecha as if all its *targets* had a number of ECCM points equal to the ECCM points of the beam; in this case, an INT +EW Skill roll must be made against the

ELECTRONIC WARFARE SYSTEMS

Value:	1	2	3	4	5	6	7	8	9	10
Cost:	1	2	4	6	9	12	16	20	25	30
Radius:	**0**	**1**	**2**	**3**	**4**	**6**	**8**	**10**	**20**	**60**	**100**
Hexes:	x1.0	x1.5	x1.75	x2.0	x2.25	x2.75	x3.2	x3.5	x3.9	x4.5	x5.25
Beaming:	**0**	**1**	**2**	**3**	**4**	**6**	**8**	**10**	**20**	**60**	**100**
Cost:	x1.0	x1.1	x1.2	x1.3	x1.4	x1.6	x2.0	x2.3	x2.6	x3.0	x3.5

ECCM

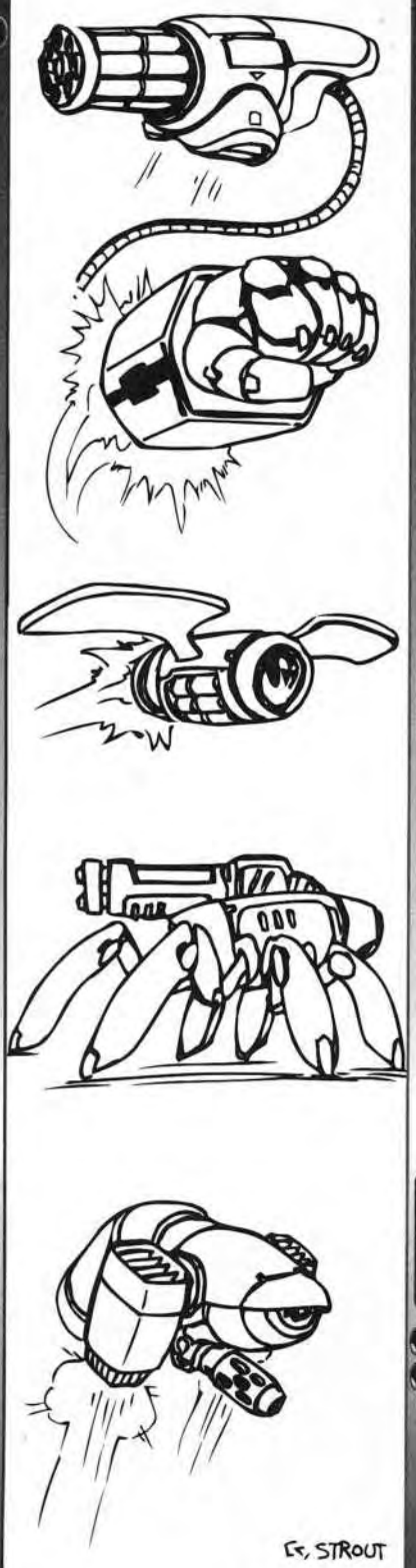
The second type of EW, and the fourth category of system. ECCM serves only to counter other types of Electronic Warfare. The capabilities of ECCM are listed above, along with the three types of ECM.

• ECCM vs. Sensor Jamming: Should the Sensor-Jammed suit possess ECCM, it may count its ECCM points against the target mecha's ECM points on a one-to-one basis. Should the defending mecha have more ECCM points than the target mecha has ECM points, no additional bonuses are gained.

• ECCM vs. Missile Jamming: ECCM may be used to counter an opponent's ECM points on a one-to-one basis. If the ECCM system's Value is greater (in ECM points) than the Missile-Jamming ECM system's ECM points (or if the opponent has no ECM system), add +1 to any Missile Attack Rolls made against that particular target. The bonus never exceeds +1, no matter how much larger the ECCM system may be.

• ECCM vs. Radar Jamming: As with ECCM vs. Missile Jamming, ECCM points may be counted against enemy ECM points on a one-to-one basis with the usual +1 to the scanner's roll if the scanner has greater ECCM than the target has ECM.





MR +Mecha Pilot skill of the target unit (a successful "hit" means that the beam has achieved its desired effect). ECM or ECCM systems with Beaming and Radius capability may generate the Radius effect described above at any point within their Beaming range. EW beams may be reflected by Reflector systems (see page 46-47) like any Beam Weapon, and are considered (for reflection purposes) to be Beam Weapons with a damage rating (in Kills) equal to the Value (in ECM points). An EW beam will lose one EW point each time it is beamed from, beamed at, or reflected by any mecha with an active Beam Refracting Cloaking system.

Remote Control △ リモート・コントロール

A Remote Control System allows a pilot to control not only his own mecha, but one or more Remote units as well. The Remotes controlled by this system are built independently from the primary ("Mother") unit. After all Remotes and the Mother unit have been completely designed, and their costs calculated, their totaled costs in CPs are added together. In terms of design, Remotes can range from one Mek of the same size as the Mother unit, to dozens of tiny "Drones." Such Drones are usually built with the capacity for flight and a only a single weapon; they usually rely on maneuverability and numbers. Remotes may even be larger (Scaled up) or smaller (Scaled down) than their Mother unit, or be capable of Combining with it (see Combiners, page *88*).

CLASS: Remote Control Systems are classed like servos and armor, from Superlight to Megaheavy. However, for this is done for reference purposes only; any level of servo may mount any level of Remote Control System.

CM (Control Multiple): Because Remotes have no pilot of their own, they must rely upon the divided attention of the Mother unit's pilot. Due to this limitation, a Remote unit's Skills (Piloting, Gunnery, Reflector Skill, etc..) and Stat values (Reflex, Intelligence, etc..) are only a fraction of those of the pilot. The exact fraction (never to exceed the pilot's actual Stat and/or Skill value!) varies from mecha to mecha depending on the Control Multiple of the Remote Control System and the actual number of Remotes. To determine a Remote unit's Stats and Skills, use the following formula:

Remote's Stat or Skill:
(Control Multiple x Pilot's Stat or Skill)
÷ Number of Remotes

COST: The price of the Remote Control System in Construction Points. The number of Spaces taken by the Remote Control System depends upon the special effects of the System and its Remotes: If the Remotes are entirely separate from the Mother unit (ie, cannot be stored within it somehow), the Remote Control System takes only one Space, no matter what its cost, and the Remotes take no Spaces (since they are external). However, should the Mother Unit be able to store inactive Remotes "under its wing" (i.e., under a flared skirt of armor, on the inside of a Shield or Binder, or whatever), then the Remote Control System takes up as many Spaces as it costs—these Spaces are where the Remotes are stored when not in use (the Spaces the Remotes take up are not determined by their construction, cost or weight). This "Space-taking" usually only applies to Drones; it's pretty hard to conceal a whole Mek inside another one! However, if inactive Drones can be stored, their location must be specified (in case that location is destroyed, in which case any stored Drones will also be lost). Remotes add weight to their Mother mecha only if they are carried in Spaces (as above).

REMOTE CONTROL SYSTEMS

Class:	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
CM:	0.5	1	2	3	4	5	6	7	8	9	10
Cost:	3	4	6	8	10	12	14	16	18	20	22
Range:											
Control:		0	1	3	5	7	9	12	15	20	
Operation:		1	3	9	15	21	27	36	45	∞	
Cost:		x0.4	x0.7	x0.9	x1.0	x1.1	x1.2	x1.4	x1.6	x2.0	

Wire-Controlled: Cost x0.6

CONTROL RANGE: In addition to being a bit inferior to mecha with actual pilots, Remotes lack sentient thought (and thus initiative). Because of this, the remote's actions must be regulated by "Programs." A Program outlines the maneuvers a Remote (or group of Remotes) will do during its Actions. An example program for a Remote might be: (1) Move to 5-hex range from target; (2) fire at target. Programs may be altered as long as all the Remotes having their Programs changed are within the Control Range of the Mother unit's Remote Control System.

Once given a Program, a Remote (or group) will attempt to follow orders to the best of its ability and then return to the Mother unit. It is possible, however to give Remotes orders such as: "Move to within 4 hexes of target, fire, move away 8 hexes from target, repeat until no targets remain." In such a case the Remotes would fly in, fire, fly out and repeat until no enemies remained.

Remotes will only deviate from their Programs if:

A) Their orders are no longer relevant (i.e., their targets are destroyed), in which case they will return to their Mother unit.

B) The Mother unit is destroyed, in which case the Remotes will continue as if a "repeat" command has been given, and then deactivate when/if their Programs become irrelevant (as in case A).

C) Anti-Sensor ECM is used on the Mother unit's Remote Control System and drops its Control Multiple below 0.5 (to Zero); in such a case, the Remotes lose contact with the Mother unit and deactivate.

D) The Mother unit or the Remote moves farther away than the Remote Control System's Operation Range, in which case the Remotes will deactivate.

OPERATION RANGE: This is the maximum distance from the Mother unit that its Remotes may travel before they lose contact and deactivate.

WIRE-CONTROLLED: A slightly less advanced form of Remote Control System, Wire Control entails actually connecting all Remotes to their Mother Unit by a long, reinforced fiber-optic cable. All commands to the Remote travel through this cable, and if it is severed the Remote will fall uselessly to the ground (or drift uselessly through the water or space, etc.). Wire-Controlled Remotes may still be any kind of mecha design at all, although they are often relatively small because they are somewhat more likely to be lost. Wire-Controlled Remotes have an Operation Range equal to their Control Range, due to the fact that the mother mecha can only carry so much of those cables. However, the advantage to Wire Control is that it cannot be jammed by Anti-Sensor ECM.

All the rules for building Wire-Controlled Remotes are the same as for construction of regular Remotes, with the following rule additions: The cable has 1 Kill of structure, so any attack that does 1 Kill or more to it will sever the cable and render the Remote useless. For defensive purposes, the wire moves with the Remote to which it is attached, so it has effectively the same Defensive rolls. The wire may be attacked at any point (or hex) between the Mother unit and the Remote. All Melee attacks are resolved normally, but any ranged attacks suffer a -5 penalty to hit. This -5 penalty can be avoided only if the ranged weapon has a Blast Radius or other area-effect ability, in which case the wire will automatically be destroyed (if it is within the area of effect).

Remote Design Notes: Depending upon the special effects, game world background, and whims of the Referee, a Remote may or may not need such elementary systems as Sensors, Hydraulics or even a Powerplant. In general, since the Powerplant and Hydraulics may be x0.0 Cost Multipliers, they may be left a non-issue. However, Sensors are another matter; Remotes MUST have sensors if they are to detect and attack targets which are not within the mother mecha's Sensor Range, Attack Arc, and/or Line of Sight.



Options Δ オプション

Options are useful things which are not actually required equipment in building a mecha vehicle. Some of these increase your abilities in combat; others are there to give your character extra survivability in roleplaying. Many of these options are so inexpensive (relative to the cost of a full mecha unit, that is), that they are listed only in tenths of Construction Points (10 of these CP options =1 CP).



STEREO (0.1 CP): Useful for going into battle with the proper theme music. The Stereo can also be linked to the P. A. External Address System of the mecha, to allow you to let the world know you're loud and proud. Takes no Spaces.

LIFTWIRE (0.3 CP): A heavy cable with a footloop at the bottom and a small electric winch at the top. Used to get into the Cockpit of large mecha if you're not going to be performing an Anime Leap. Takes no Spaces.

ANTITHEFT CODE LOCK (0.2 or 0.4 CP): A program which can be run on your mecha's main computer. You can designate any numeric code or word as the key, entering it at a panel located in some easy-to-reach spot on the outside of the vehicle. In its normal form, this program will only keep the hatch from being opened. However, it can be hooked up to a Hatch Entry Alarm (silent pager in your pocket, siren or both) for the additional 0.2 CP. Takes no Spaces.

SPOTLIGHTS (0.2 CP): These lights allow you to illuminate an area up to one mecha-scaled hex per light. They may be mounted anywhere on your unit, taking no Spaces.

NIGHTLIGHTS (0.5 CP): Infrared spotlights illuminate an area one mecha-scaled hex per light; additional IR-sensetive cameras and IR-polarized displays allow the mecha to see without using visible light.

STORAGE MODULE (1 CP, 1 Space): Can hold up to 500kg of assorted things, such as all the weapons and gear you can't stash in the cockpit of your mecha. These may even be used to carry small vehicles, such as a Motorcycle or similarly-sized 1/5th-Scale construction.

MICROMANIPULATORS (1 CP, 1 Space): This is a small set of tool-tipped manipulator arms for making repairs, opening hatchways, or doing other work too small for a normal mecha-sized hand. Micromanipulators can be mounted anywhere, although Arm servos are most commonly chosen.

SLICK SPRAY (3 CP, 1 Space): This system sprays a fine mist of frictionless liquid one hex directly behind the mecha; any unit passing through the sprayed hex must roll **MR +Mecha Piloting +1D10 higher than 15** or lose control. For every point by which the roll was failed, the mecha careens one hex in a random direction. Obviously, this system only applies to running, wheeled and tracked movement. You may cover one hex per action, up to six hexes; the Slick evaporates in 10 rounds.

BOGG SPRAY (3 CP, 1 Space): A thick, gel-like substance which acts as a form of superglue. Units passing through a Bogged hex pay for movement at a rate of 4 additional MA per hex traveled. Obviously, this system only applies to running, wheeled and tracked movement. You may cover one hex per action, up to six hexes; the Bogg does not evaporate.

DAMAGE CONTROL PACKAGE (1 CP, 1 Space): This is an option package for emergency situations, such as bailouts, forest fires, etc. Fire-retardant foam will put out fires up to four mecha-scaled hexes in size. Glue bombs will cover an area two mecha-scaled hexes wide, sealing areas in space environments that may have been breached to vacuum. Flares can be seen up to 10 kilometers away. The liferaft holds four people and contains food, water and medical supplies for one week. The bubble raft is a space-going version of the liferaft, resembling a giant plastic bubble with mylar sunscreens at top and bottom; inflated from the inside, it holds four people and contains air, food, water and medical supplies for four days. All of these goodies are crammed into a package that takes up only 1 Space from your mecha.

QUICK-CHANGE MOUNT (1 CP): This is a special mounting which allows parts of a Mek to be removed very quickly—it only takes one action to detach a component connected by a Quick-Change Mount (or QCM). Common choices for Quick-Change Mounting are Hands and Pod servos, and sometimes weapons, but really anything can be fitted with a QCM (servos, systems, etc.). Players who design mecha with a QCM component are encouraged to note down the differences between the mecha's stats with and without the component. A QCM takes no Spaces.

SILENT RUNNING (1 CP per level): A package of mufflers and insulation, this option allows mecha to move silently (or at least more quietly). The cost is 1 CP for every -1 modifier to the listener's **INT +Awareness Skill +1D10 roll, with a Difficulty of 3 per hex of distance** (the hex's 50m is modified by the Scale of the mecha; a 1/5th-Scale mecha would be a Difficulty of 3 per 10m). The Silent Running

option must be bought per mode of movement; Legs, Wheels, Treads, Boosterpacks, GES, Hydrojets, Jumpjets, Thrusters (but not Gravs, which are silent anyway) each require their own package.

PARACHUTE (0.5 CP per 10 tons of weight): A large, bulky package which allows the mecha to be dropped from a high altitude and settle safely to the ground. Descent is somewhat controlled, but not so much that it can be actually steered. Although the name of this option brings to mind the image of a large, silk parachute from which the mecha dangles (and this is certainly possible), it may just as easily be a set of rocket thrusters with enough fuel and power for a slowed descent, or a limited anti-gravity envelope, etc.. The pilot using a Parachute must make an **MR +Piloting +1d10 roll greater than 15;** success means the mecha has landed in the target hex, while failure results in missing the target area by one hex per point of failure—the direction is determined by a 1D6 roll, with each number representing a hex side. Once the mecha lands, the 'Chute is discarded. Parachutes may be either externally mounted, or stored in the mecha's Spaces: Externally mounted Parachutes take no Spaces, but their size and bulk imparts a -1 penalty on MV as well as land and flight (or other) MA, and they can only be used once. Space-stored 'Chutes carry no MA or MV penalties and may be reused.

RE-ENTRY PACKAGE (1 CP per 10 tons of weight): This Option allows the mecha to freely re-enter any planet's atmosphere from orbit (normally a suicidal proposition). This system could be a limited-use force-field, a shield-like plate, or whatever else you can think of. However, the most common form of Re-Entry Package is a "Ballute"—a combination balloon and parachute. Mecha equipped with a Re-Entry Package can be dropped from orbit into a planet's atmosphere, where the system is deployed. The mecha then blazes through the upper atmosphere, and discards the system once it has reached approximately cloud level. At this point, it must switch over to some kind of Propulsion System, or use a Mecha 'Chute, or plummet to the ground: Crunch. Re-Entry Packages may be either externally mounted, or stored in the mecha's Spaces: Externally mounted Re-Entry Packages take no Spaces, but their size and bulk imparts a -2 penalty on MV as well as land and flight (or other) MA, and they can only be used once. Space-stored Ballutes are still one-use only, but carry no MA or MV penalties.

EJECTION SEAT (1 CP): This system attaches a parachute, small stabilization thrusters and a rocket booster to the Cockpit's pilot seat. In the event of an emergency, the pilot may yank that big, black and yellow lever and be blasted clear of his mecha. The Ejection Seat will land four hexes away from the location of the mecha at the time of ejection; the direction from the mecha is rolled on 1D6, with each number representing a side of the hex the mecha occupied. Takes no Space.

ESCAPE POD (2 CP, 1 Space): This system can be added to any Cockpit, allowing you to eject safely from a unit about to go down in flames. The Escape Pod locks clamshell doors over the pilot's area, protecting it for damage as powerful booster rockets blow it free of the mecha. A parachute gently lowers the entire pod assembly to the ground. The Escape Pod will land four hexes away from the location of the mecha at the time of ejection; the direction from the mecha is rolled on 1D6, with each number representing a side of the hex the mecha occupied. The Escape Pod cannot maneuver, but does broadcast a homing/IFF signal to any friendlies nearby. It is considered a Roadstriker for the purposes of targeting.

MANEUVER POD (4 CP, 2 Spaces): This is an advanced version of the standard Escape Pod. It functions exactly the same way as an Escape Pod, except that it is fitted with a backup sensor module and a system of rocket-powered verniers. A Maneuver Pod, once ejected from a downed mecha, allows the pilot within to see outside with electronic optics and move around in the air or in Space at an MA of 8 (100km range). The Maneuver Pod is assumed to have 1 Kill, no armor, an MV of -2 and is considered a Roadstriker for the purposes of targeting.

VEHICLE POD (6 CP, 3 Spaces): This is more than a simple Escape Pod—a V-Pod is a complete mini-mecha in itself. Consisting of a small, single-seat body which houses the complete Cockpit, two collapsible wings, an MA 12 movement system and a minimal sensor suite. The movement system may be water, surface or aerospace (but only one of these), and the Vehicle Pod has a travel range of 500km. The entire vehicle is considered to have 1 Kill, 1 SP of armor, an MV of -2 and counts as a Roadstriker for the purposes of targeting.

Statistical Enhancement △
スタットをあげる

Many mecha are designed for purposes other than strict military applications; in fact, quite a few mecha can't survive combat at all. In any case, it is often desirable to have additional hardware that could aid in specific tasks. Clearly, every application might require different hardware, but this is a concern of design concept rather than system mechanics (in other words, it's a special effect). To simulate this "multi-role" nature of mecha design theory, it is possible in MTS to purchase systems that will effectively add to the pilot's base Stats (for the purposes of making skill rolls): Each such system requires 1 Space regardless of the added bonus.

Logic Processors:

+1 INT	+2 INT	+3 INT
2CP	5CP	11CP

Technical Analyzer:

+1 TEC	+2 TEC	+3 TEC
2CP	5CP	11CP

Design and Decor:

+1 CL	+2 CL	+3 CL
0.5CP	1CP	2CP

SPECIAL SYSTEMS



SPECIAL SYSTEMS

This section covers Fuel, Propulsion Systems, Boosterpacks and Command Armor—all these systems are additive, but they work somewhat differently from those listed in the previous chapter. For this reason, they have been given their own section.

All the systems listed in this section are tied directly to your mecha's weight. The weight of your Fuel is a function of your design's final weight, and you need to know your mecha's final weight in order to buy any kind of Propulsion Systems. Therefore, it is *vital* that you buy any Weight Efficiency before you buy any of the systems in this chapter (see page 15).

Boosterpacks and Command Armor are also tied to your mecha's weight, but since they're detachable, your mecha's weight and Stats will vary depending upon whether these systems are currently attached. Therefore. these two systems use a "Balance Modifier" (or B-Mod) to simulate the effects of their added weight on your mecha.

While their concepts and game effects are unique, the procedures for constructing and buying these special systems are the same as for other additive systems. So read on and trick your Mekton out!

Fuel Δ プロペラント

This is the second-to-last Additive system you will purchase for your mecha (outisde of Boosterpacks and Command Armor) you must buy Fuel immediately before you buy a Propulsion System. This is because Fuel increases your overall weight, which influences the cost and Space of your Propulsion System. See Propulsion Systems, page 61, for more.

The issue of Fuel supplies for mecha is a difficult one: Anime mecha are well-known for their remarkable technical detail, and yet Anime is notorious for ignoring the laws of physics. From a game mechanics point of view, the best way to deal with Fuel in Mekton is to fudge it. An easy out is to consider that any mecha with a Propulsion System has enough Fuel for six hours of travel. At 360 turns per hour, that's 2,160 turns; if using Fuel in combat, subtract this from the total and establish how many combat turns of Fuel are left. However, such a system is far from comprehensive. For those gearheads who want their mecha to be equipped with those cool external drop tanks, read on.

Fuel does not cost any CPs in MTS. This is because the actual nature and composition of mecha Fuel is far too vague and nebulous to be pinned down by price. However, a mecha unit's Fuel capacity is important because it affects the unit's overall weight. The mecha's Fuel storage facilities also cost CPs and take Space. The exact composition of the Fuel is irrelevant; it is technically a special effect, and could be anything from steam to crystals. However, it is commonly assumed that the fuel is some kind of "reaction mass." This means that the Fuel is not like modern jet propellants (such as kerosene), which can explode. Rather, the Fuel is assumed to be an inert (non-explosive) gas, such as helium.

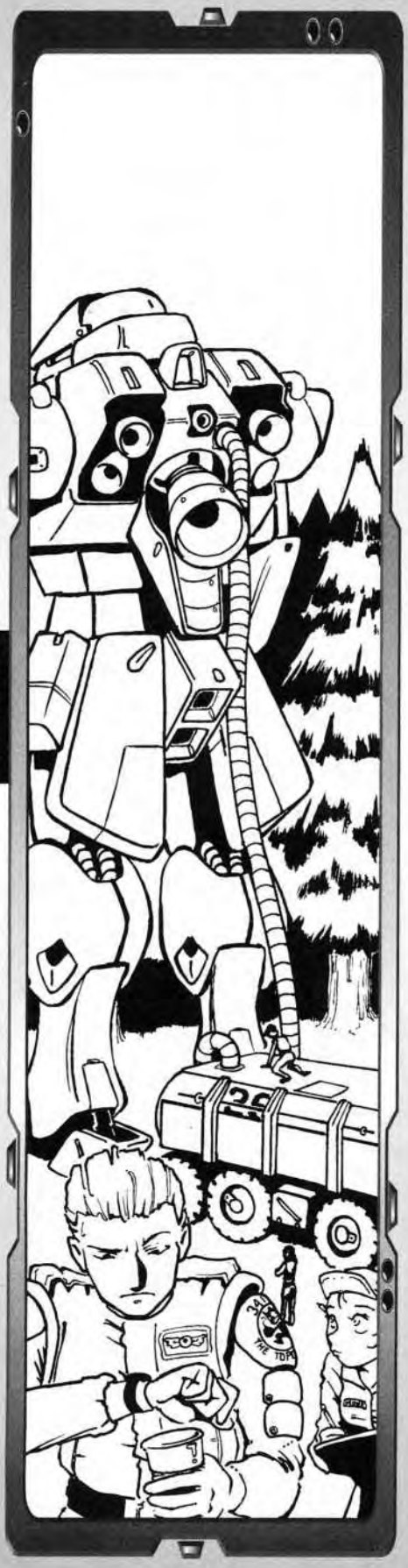
Base Fuel Load

Any Mek which purchases a Propulsion System automatically receives enough Fuel for 1,000km of travel (or 20,000 hexes, since 1 kilometer is 20 hexes long). This Fuel is free of charge and takes no Space—it is assumed to be stored in the same Spaces as the Propulsion System itself (each location has sufficient Fuel for the Spaces of Propulsion located in each servo). This Fuel load is permanent and cannot be destroyed, although sadistic Referees may allow for a Fuel leak in the case of internal damage.

The Base Fuel Load (1,000km of Fuel) weighs 10% as much as the final weight of mecha. Therefore, if a 75-ton Mek were to purchase Thrusters, for example, its total weight would increase by 7.5 tons to 82.5 tons; this new final weight would be used when purchasing the Thrusters (as well as for calculating land MA and MV). If the mecha designer desires a shorter-range (or lighter) unit, the base Fuel load may be decreased; **every 100km less drops 1% off the weight increase.** Thus, 500km of Fuel would only add +5% weight.

In the case of Jumpjet-type Thrusters, divide 20,000 by the MA of the Jumpjets—this is the number of full-distance jumps the Propulsion System can make before being refueled.





Buying Extra Fuel

Extra Fuel may be purchased in one of two ways: the internal Fuel Tank(s) may be increased, or external Drop Tanks may be added. Expanding the mecha's Internal Fuel Tanks is cheaper, because it simply involves sealing some of the empty space within the mecha's frame; External Drop Tanks are more expensive, but take less Space because they are externally mounted. For both types of Tank, each 500km added increases the mecha's weight by +5% (as always).

Internal Fuel Tanks:
+500km, +5% weight = 2 Spaces, 1 CP.

External Drop Tanks:
+500km, +0.5 B-Mod = 1 Space, 2 CP.

For example: *The designer of the Gorgon III increases its Internal Fuel Tank capacity by +3,000km (total of 4,000km); this will cost 6 CPs and take up 12 Spaces (the designer allocates 4 in each Leg and 4 in the Torso). The Gorgon III also has +2,000km of Fuel (grand total of 6,000km) in External Drop Tanks, which will cost 8 CPs and take 4 Spaces; the designer decides that these will be two Tanks, each taking 2 Spaces from the Torso.*

INTERNAL FUEL TANKS: The biggest advantage to this system is that it cannot be hit by enemy fire; only if a servo mounting a Drop Tank is destroyed will the extra hexes from that servo's Tank be lost. Thus, increased range is less likely to be lost unexpectedly during combat, which is a good thing—it really bites to fly thousands of miles to a battle, suffer severe damage, and then be unable to go home because of a leaky tank! However, the added weight of Internal Fuel Tanks is permanent, and is added to the total weight of the mecha for the purposes of calculating MA, MV and Propulsion.

Example: *The Gorgon III, with its +3,000km of Internal Fuel Tanks, will increase in weight by +30%. This new weight will be used to determine its land MA, MV, and Propulsion cost.*

EXTERNAL DROP TANKS: These are large, hollow pods shaped like cigars, bombs, eggs or spheres. Drop Tanks can be discarded instantaneously, just like Command Armor—the idea is to load your craft down with lots of extra Fuel, use it to get yourself to the battle zone, then drop them to decrease weight (thereby increasing maneuverability). The return trip is made on internal Fuel stores. Drop Tanks can be mounted anywhere on the mecha, and they can be ejected at any time at no Action cost; all tanks can be ejected at once. This is useful if the mecha suddenly enters combat, since ejecting the Drop Tanks will reduce MV (Maneuver Value) and thus increase MR (Mecha Reflex). If a servo mounting a Drop Tank is destroyed, the extra hexes from that servo's Tank are also lost automatically. However, unlike Internal Fuel Tanks, Drop Tanks can be also destroyed on an "Other System" hit location roll, or on a "Flight System" hit location roll if the attacker chooses Fuel rather than the Thrusters. For this reason, it may be wise to designate added External Fuel as multiple Drop Tanks; if one is hit, not all of the Fuel will be lost.

Because of the increased mass and altered balance which such volumes of Fuel involve, each +1,000km of External Droptank Fuel also carries a +0.5 Balance Modifier—the added weight (+5% per +500km) of External Drop Tanks does not increase final weight for purposes of calculating land MA, MV or Propulsion cost. Instead, the totalled Balance Modifiers are subtracted from MV, land MA and flying (or other) MA. When the Drop Tanks are discarded, the Balance Modifier is removed. Note: The actual mass of the Droptank(s) does add to the overall weight of the mecha, but it does not affect MA or MV (this is accounted for by the Balance Modifier). The added mass is only used for calculating knockback.

Example: *The Gorgon III, with its +2,000km of External Drop Tanks, will increase in weight by +20% only for knockback purposes; however, its Balance Modifier of +1.0 is subtracted from MV, land MA and flight MA. When the Drop Tanks are ejected, MV and both MAs will return to their normal levels.*

Fuel Consumption

When entering combat, you can either keep track of the fuel you consume (which means lots of bookkeeping), or you can use an average fuel expenditure to know if you have sufficient reserves to stay airborne. 1000km of Fuel equals about 5-1/2 hours of flight at an MA of 10 (about 180kph). Each Mek has a different travel time limit, depending upon its MA. Fuel expenditure at MA 10 is 3,600 hexes per hour of flight. If traveling faster or slower, adjust accordingly. Consult the table below:

FUEL VALUES

Flight MA	Consumption	Flight Time
MA 8	2,880 hexes/hour	7 hours
MA 10	3,600 hexes/hour	5.5 hours
MA 12	4,320 hexes/hour	4.5 hours
MA 16	5,760 hexes/hour	3.5 hours
MA 18	6,840 hexes/hour	3 hours

Propulsion Δ プロパルション

Throughout Japan's numerous mecha-oriented Anime, the appearance of flight-capable mecha is very common. Most mecha are not particularly good fliers, however, considering they are usually somewhat less than aerodynamic. A really fast mecha unit (at least, one which isn't transformed into a Fighter or other high-speed Form) might be able to travel up to 500mph with a powerful flight system—which isn't fantastic until you consider the alternative of walking at a mere 40mph. On the other hand, a winged Mechafighter may attain speeds of over 1,500mph. If you want your mecha to able to fly (or hover, or traverse bodies of water like a boat), you must purchase a Propulsion System.

Propulsion should be the last Additive System you buy for your mecha; this is because you must know how much your design Weighs in order to buy Propulsion for it. If your Propulsion system requires Fuel, you must be sure to add the weight of its Fuel before buying the Propulsion. This being the case, refer to the Fuel section (listed immediately before this section, on page 59) for how Fuel affects your mecha's weight.

Types of Propulsion

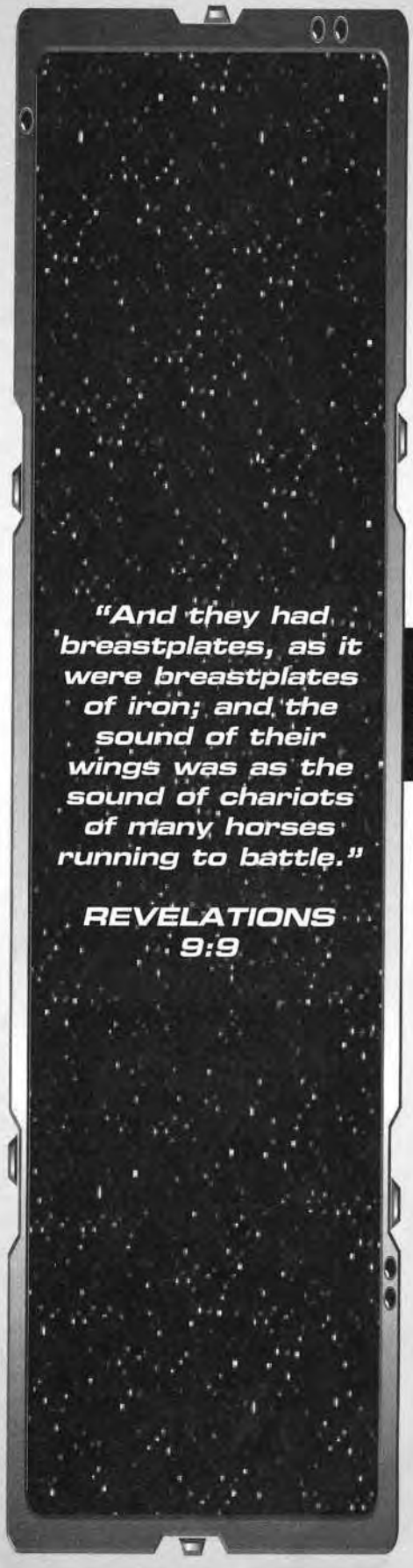
There are four separate types of Propulsion Systems in MTS. GES (Ground Effect System), Hydrojets, Thrusters and Gravitics are all listed below, but note that Boosterpacks (page 63-64) can augment or stand in for regular Propulsion Systems. The four categories sometimes overlap, as certain types of Propulsion can be modified to cover multiple functions—if you can afford it. Propulsion Systems generate MA depending on how many G's of acceleration they are designed to pump out. The cost and Space of the Propulsion System is found by multiplying your mecha's final weight by the Cost Multiple listed with that system.

Propulsion Systems can be placed in Spaces anywhere on your mecha. You may fit 1 CP worth of Propulsion in 1 Space, and you may have as many CPs of Propulsion as you have Spaces to place it (or more, if you use Space Efficiency on your Propulsion System). One advantage to this system is that you can arrange your Propulsion Spaces to maximize your ability to survive in combat. For example, if your unit required 12CP of Propulsion, you could put 6CP in each Leg servo and a backup 6CP in a Pod; such a design could now lose one Leg and still stay airborne.

GES (Cost = Weight x0.025 per 1 MA): Ground Effect Systems use ducted fans to enable a hovercraft effect. Mecha equipped with a GES can "skim" along the surface at high speeds, thereby increasing MA and ignoring most Terrain restrictions. A GES cannot actually lift your mecha any hex levels above the ground, so any obstacle that is one hex (50 meters) tall or more will still obstruct movement. A GES will not work in space, but it will function on low-gravity bodies such as moons and large asteroids (if the Referee agrees that it does not require atmosphere to function). Ground Effect Propulsion requires Fuel to function, so remember to increase your weight appropriately. GES Propulsion has a maximum MA of 20—once you're breaking the speed of sound, you're pretty much flying already. The Spaces of a GES may be placed wherever the designer wishes, but they must all be able to skirt the ground in order to grant any bonuses (so if you have GES Spaces in your Arms, no firing a hand-held weapon while hovering). A GES may be bought in addition to Legs, or may be bought instead of Legs—if all the Spaces are in the Legs, the mecha may "skate" with them (using the GES MA rather than their running MA).

HYDROJETS (Cost = Weight x0.025 per 1 MA): These represent any kind of Propulsion which allows a unit to move on or through water. Propellers are most common, although water-driven turbines and water-cooled rocket engines are also possible. Magnetically powered "caterpillar" drives do not fall under this category; they are underwater-only Gravitics, and are bought as Gravitics with a special cost limitation (refer to Gravitics, below). Hydrojets work only in or under water; they do not grant any MA at all in air or space. Note: Hydrojets may function in water, but unless the mecha is a Submarine or Boat (see Transformables), Hydrojets are subject to the universal x3 MA modifier (see Underwater Environment Protection, page 72) for moving in water, so you're actually paying weight x0.025 per 1/3 MA. Hydrojets may be used out of the water as Jumpjets (see Thrusters, below) with 1/2 their normal MA as a jump bonus if they are bought as if they cost as much as Thrusters.

THRUSTERS (Cost = Weight x0.0375 per 1 MA): This is the generic name for any kind of engine which uses directed force in order to allow your mecha to fly. Thrusters may be



PROPULSION VALUES

GES:
Weight x0.025 per 1 MA.
-or-
Weight x0.2 xMA/8

Hydrojets:
Weight x0.025 per 1 MA.
-or-
Weight x0.2 xMA/8

Thrusters:
Weight x0.0375 per 1 MA.
-or-
Weight x0.3 xMA/8

Gravitics:
Weight x0.05 per 1 MA.
-or-
Weight x0.4 xMA/8

rockets, jet engines, turbofans, ramjets, turbines or even helicopter rotorblades or propellers. No matter how the system actually functions, it is known as a Thruster system. Thrusters require Fuel to work, so be sure to increase the weight appropriately before purchasing Propulsion. Thrusters normally only work in the air (although they may be used as a GES at no additional cost), but if the mecha has the "Space" type Environment Protection (see Environment Protection, page 72), they will work in space as well as air. Thrusters may be enhanced so as to be amphibious (i.e., they may used in the water as well as the air; 1/2 MA in water) if they are bought as if they cost as much as Gravitics.

"Jumpjets" are Thrusters with an MA of 7 or less; by means of explosive liquid fuel thrust, they allow mecha to leap distances much greater than would normally be possible, even with the massive servos found in mecha Legs. Any mecha may leap as many times as it has Actions in a given turn, so it may split the Jumpjets' MA between multiple leaps if so desired, but it may take the full leap bonus from its Jumpjets only once. Jumpjets, being underpowered Thrusters, also require Fuel. Jumpjets only work in the air (they may not be used as a GES like Thrusters), but if the mecha has the "Space" type Environment Protection (see Environment Protection, page 72), they will work as Thrusters (albeit at a low MA) when used in space.

GRAVITICS (Cost = Weight x0.05 per 1 MA): This method of Propulsion actually controls the forces of gravity so as to move the mecha—almost as if by magic. The highly advanced science of gravitic propulsion is complex, so Gravitic flight systems are rare and expensive. Gravitics allows mecha to lift off of the ground, levitate, and move about in any environment (water, air and space). Because Gravitic Propulsion is absolutely silent and doesn't disturb the surrounding terrain, it is very useful for stealth, scout, and reconnaissance mecha. Even beyond this, Gravitics boast great utility in starships and other massive mecha; only with Gravitics are such huge constructions capable of freely entering and leaving a planet's atmosphere. Gravitics, being powered by the mecha's own Powerplant, need no form of Fuel and are thus lighter than other Propulsion Systems. Mecha with Gravitic Propulsion are exempt from the effects of inertia, making them unnaturally maneuverable—Gravitic Propulsion grants a +33% bonus to Maneuver Pool. In other words, the Pilot's base Maneuver Pool [his Piloting Skill -5] is multiplied by 1.33. Fractional MP Points always round down.

For example: *A Pilot with a Skill of +8 has a base Maneuver Pool of 3 Points; if he had +33% MP, his Maneuver Pool would increase to 4 Points.*

Unlike "Jumpjet"-type Thrusters, Gravitic systems bought at an MA of 7 or lower still allow true flight. Gravitics may be bought so as to function only underwater; these magnetically powered "caterpillar" drives are bought as if they cost as much as Thrusters, and work at 1/3 MA.

You may, if you wish, combine different types of propulsion systems to move your mecha—for example, you could lift the mecha with Gravitics but include Thrusters to give it increased speed. Such a technique is largely a roleplaying consideration, since the gameboard effects of such a system are slim; however, in a roleplaying context, such a mecha could hover and "cruise" utterly silently and only boom and flare when it was speeding up.

The Ins and Outs of Buying Propulsion

The cost of Propulsion is determined in the following way: First, determine the mecha's final weight—this includes Command Armor, Fuel and Weight Efficiency. Once you are sure of the unit's final weight, multiply it by the Cost Multiple appropriate for the type of Propulsion you wish to purchase (**x0.2 for GES & Hydrojets, x0.3 for Thrusters, x0.4 for Gravitics**). This is the *Lift.* Next, decide how fast (MA in hexes) you want the Propulsion System to be able to move your mecha, and divide this number by 8. The result is the *Acceleration* (measured in Gs, or Gravities). Third, multiply the *Acceleration* by the *Lift:* This is the cost and Space of your Propulsion System.

1. Weight x Cost Multiple = Lift.
2. MA/8 = Acceleration.
3. Lift x Acceleration = Cost and Space.

For example: *The Strike Rapier weighs 50 tons. Since it is going to have Thrusters, which use Fuel, the designer adds +10% (5 tons) for 1000km of flight range. The Cost Multiple for Thrusters is x0.3, so the Strike Rapier's Lift is 16.5. The final MA will be 15, which when divided by 8 grants 1.875 G's of Acceleration. The Lift (16.5) times the Acceleration (1.875) equals 30.9. So in order for the 55-ton Strike Rapier to move at an MA of 15, its Thrusters will cost 30.9 CP and take up 30.9 Spaces.*

This process may seem overly complex at first, but after doing it a few times it will become easier. Essentially, the first step establishes the cost for your unit to achieve basic flight (MA 8, or 1 G of acceleration). The second step determines how many Gs of acceleration your mecha can pull (i.e., how fast it can go). The third step

MA, Acceleration and Cost

MA (& Acceleration)	GES	Hydrojets	Thrusters	Gravitics
2 Hexes (0.25 Gs)	x0.05	x0.05	x0.075	x0.1
4 Hexes (0.5 Gs)	x0.1	x0.1	x0.15	x0.2
6 Hexes (0.75 Gs)	x0.15	x0.15	x0.225	x0.3
8 Hexes (1 G)	x0.2	x0.2	x0.3	x0.4
10 Hexes (1.25 Gs)	x0.25	x0.25	x0.375	x0.5
12 Hexes (1.5 Gs)	x0.3	x0.3	x0.45	x0.6
14 Hexes (1.75 Gs)	x0.35	x0.35	x0.525	x0.7
16 Hexes (2 Gs)	x0.4	x0.4	x0.6	x0.8
18 Hexes (2.25 Gs)	x0.45	x0.45	x0.675	x0.9
20 Hexes (2.5 Gs)	x0.5	x0.5	x0.75	x1.0
24 Hexes (3 Gs)	x0.6	x0.6	x0.9	x1.2
32 Hexes (4 Gs)	x0.8	x0.8	x1.2	x1.6
48 Hexes (6 Gs)	x1.2	x1.2	x1.8	x2.4
80 Hexes (10 Gs)	x2.0	x2.0	x3.0	x4.0
112 Hexes (14 Gs)	x2.8	x2.8	x4.2	x5.6

tells you the final cost and Space. For those of you who have an aversion to calculators, refer to the tables below. First, find the MA you want (the table covers speeds from a fast human run to escape velocity), then multiply your unit's final weight by the Cost Multiple listed under the type of Propulsion System you want.

An eye should always be kept on MA, Speed and Gs. Give your mecha what you feel is appropriate—don't give it an MA of 60 "just because." Also remember that many of the Transformables can increase MA. Keep in mind that MA21 is Mach 1 (741mph) and MA109 is Escape Velocity (25,000mph)! Gs are also an important issue—the human body can't really handle more than 9 Gs without passing out, nor 15 Gs without dying (and only this much if the pilot and crew are in good shape). There are ways around this, but it's tricky. How, you may ask, can one reach escape velocity if it's 13+ Gs? Simple: You keep accelerating slowly, so that the body can adjust to the speed. And you only move that fast high up in the atmosphere; doing 25,000mph at sea level will burn your mecha up in no time!

What's With These Gs Anyway?

The reason that Gs of acceleration are important is because Gs are an actual measurement in physics. (*"Eeek! He said the P-word!!"*) For those of you who want to use MTS to recreate mecha from your favorite Anime shows, you can determine their Gs of acceleration (and thus their MA) from their stats (which are often listed on model kit boxes and in anime magazines). To find a mecha's acceleration, simply find the total thrust output of its flight system, and divide this by the mecha's total weight. The result is the Gs of acceleration that the mecha can pull—multiply by 8 to get the MA. Spiffy, neh? Remember that a ton is 2000 lbs, and a metric ton is 1000kg (2200lbs). Who says gaming never taught you anything?

A Note on Reverse Engineering

Eager young mecha designers often build many variations of a single unit. If these variations are outfitted with the same Propulsion System, but have different weights, they will have different MAs. To spare you the time and tedium of recalculating your mecha's MA every time, here is a fast and easy way to "reverse engineer" your unit's MA from its Propulsion CPs and its weight:

1. Check total weight (including Command Armor, Weight Efficiency and Fuel).

2. Check cost of Propulsion System (not including any Space Efficiency).

3. Note the Cost Multiple for the type of Propulsion System (x0.2 for GES/Hydrojet, x0.3 for Thrusters, x0.4 for Gravitics).

4. Divide the Propulsion System's cost in CPs (step 2) by the mecha's weight (Step 1).

5. Divide the result of Step 4 by the Cost Multiple for the Propulsion System (Step 3).

6. The result of Step 5 is your Gs of Acceleration. Multiply by 8 to get the new MA.

Really, it works. Take the 55-ton Strike Rapier , whose Thrusters cost 30.9 CP. Let's say that a new version is made—call it the Strike Rapier Sigma—which weighs 44 tons (40 tons +10%, 4 tons, of Fuel). If it has the same 30.9 CP Thruster system, what will its new MA be? Let's find out!

The new weight is 44 tons (Step 1) and the Thrusters cost 30.9 CP (Step 2). Thrusters have a Cost Multiple of x0.3 (Step 3). Step 4 says to divide the 30.9 CP (the cost of the Propulsion System) by 44 (the mecha's weight). The result is 0.7, which Step 5 tells us to divide by 0.3 (the Cost Multiple for Thrusters). 0.7/0.3 = 2.3 Gs, which Step 6 tells us to multiply by 8. 2.3 x8 = 18.4, which rounds to get a new MA of 18. Presto!

Boosterpacks △ ブースターパックス

Boosterpacks are limited-use solid fuel boosters which can be attached to your mecha to increase speed. A Boosterpack holds a limited number of "MA Points;" these may be used at a rate up to the Maximum Boost rating of the Boosterpack in addition to the mecha's current flight (or other) MA. Thus, mecha can increase their top speeds for a limited number of turns; the effect is that of using afterburners, although the special effects of Boosterpacks are left variable. Boosterpacks are disposable, just like Drop Tanks and Command Armor—they may be ejected at no Action cost, so as to immediately cancel their Balance Modifier, which subtracts from land MA and MV. If a Mek has multiple Boosterpacks, it may only add as much MA per turn as the highest Maximum Boost of the Boosterpacks.

MA POINTS: This is the pool from which the bonuses to the mecha's MA are drawn. Each time the Boosterpack is used, the amount of boost it adds to MA for that turn is subtracted from the total MA Points. Once all MA Points are expended, the Boosterpack is useless until refueled. However, its Balance Modifier remains in effect until the Boosterpack is ejected.

BOOSTERPACKS

MA Points	Cost	Kills	B-Mod
10	1	1	0.05
20	2	2	0.1
30	3	3	0.15
40	4	4	0.2
50	5	5	0.25
70	7	7	0.35
100	10	10	0.5
200	12	12	0.6
500	15	15	0.75
1000	20	20	1.0

Max Boost	B-Mod
+1	x0.6
+2	x0.7
+3	x0.8
+4	x0.9
+5	x1.0
+6	x1.1
+8	x1.3
+10	x1.6
+20	x2.0
+50	x2.2
+100	x2.5

COST: This is the price of the Boosterpack in CPs. Boosterpacks, being externally mounted, take no Spaces. If the mecha designer wishes, the Boosterpacks may be built into a mecha design, taking one Space per 1 CP; in this case, ignore the Balance Modifier (see below) and simply increase the mecha's overall weight as normal (i.e., by adding in 1/2 the Kills of the Boosterpack as tonnage).

KILLS: Boosterpacks, being add-on components, have a lightly armored housing like mecha weaponry. This armor accounts for the amount of damage the Boosterpack can take before being destroyed, and also determines how much the package weighs (1 ton per 2 Kills, as always).

B-MOD (BALANCE MODIFIER): This represents the added weight and drag of the booster rocket—the totaled Balance Modifiers of all Boosterpacks are subtracted from MV, land MA and flying (or other) MA. When the Boosterpacks are discarded, the Balance Modifier is removed. Note: The actual mass of the Boosterpack(s) does add to the overall weight (1 ton per 2 Kills) of the mecha, but it does not affect MA or MV (this is accounted for by the Balance Modifier). The added mass is only used for calculating knockback.

For example: *The Strike Rapier, with its two 100 MA Point Boosterpacks, will add 10 tons only for knockback purposes; however, its Balance Modifier of +1.0 is subtracted from MV, land MA and flight MA. When the Boosterpacks are ejected, MV and both MAs will return to their normal levels.*

Note: If your mecha has Boosterpacks, Command Armor and Drop Tanks, you might want add all their Balance Modifiers together to get a grand "option equipment" total penalty to MA and MV.

MAX BOOST: This is the maximum bonus that may be imparted to the mecha's MA per turn. The entry under cost modifies the base cost of the Boosterpack as determined by MA Points. Low-end Boosterpacks may be used as short-use Jumpjet units, while the more powerful Boosterpacks can be used to make a flying mecha capable of supersonic speeds. Boosterpacks with a Max Boost of +100 are best used to design orbital booster rockets; 1000 MA Points are sufficient to escape gravity, so long as the boosted mecha has a flight MA of at least 9 (MA 109 is Escape Velocity).

Command Armor △ コマンド・アーマー

Command Armor is a second layer of armor plating which can be attached to the surface of a mecha's servos. This ejectable casing provides extra armor as well as added Space in which to mount supplementary weapons, Thrusters, Maneuver Verniers, Sensor packages and/or any other systems and equipment. Depending on the gaming universe, mecha equipped with Command Armor can go by many names: "Double Armored," "Ironclad," "Armored," and "Heavy" all come to mind. Command Armor is purchased by Classification level just like regular armor (i.e., Superlight, Striker, etc.), but along with the amount of armor protection it provides, the amount of equipment it can carry and the penalty to maneuverability it confers must also be considered.

A servo may mount Command Armor no more than two levels greater in size than the servo itself (although it may be as small as desired). Because Torsos are larger than limbs, and limbs are larger than Tails, Heads and Wings, Command Armor of a given size (such as Light Heavy) will vary in cost and effectiveness depending on the type of servo on which it is mounted. For this reason, Command Armor comes in three sizes, only one of which is appropriate for a given servo type. Note that the cost for Command Armor is listed per armor Type (Ablative, Standard, Alpha, Beta and Gamma).

TORSO: Read across the row from your Torso's Classification level to find the statistics for the given level of Command Armor.

LIMBS: Similar to the above procedure for the Torso. Logically, a Megaheavy Arm can support less equipment than a Torso of equal level.

OTHER: As above. "Other" includes Heads, Wings, Pods, Tails and other such stuff.

SPACE: This is the number of additional Spaces provided by the Command Armor location. Command Armor takes no Spaces from the servo to which it is attached.

SP (Stopping Power): This is the number of Kills of armor provided. The Type of the armor (see Armor, page 22) is determined by

Command Armor

Torso	Limbs	Other	Space	SP	B.Mod-	Abl.	Std	Alpha	Beta	Gamma
SL	STR	MW	2	1	0	1.5	2	2.3	2.5	3
LW	MS	LH	4	2	0.1	3	4	4.5	5	6
STR	HS	MH	6	3	0.2	4.5	6	6.7	7.5	9
MS	MW	AH	8	4	0.3	6	8	9	10	12
HS	LH	SH	10	5	0.4	7.5	10	11.3	12.5	15
MW	MH	MGH	12	6	0.5	9	12	13.5	15	18
LH	AH		14	7	0.6	10.5	14	15.7	17.5	21
MH	SH		16	8	0.7	12	16	18	20	24
AH	MGH		18	9	0.8	13.5	18	20.3	22.5	27
SH			20	10	0.9	15	20	22.5	25	30
MGH			22	11	1.0	16.5	22	24.7	27.5	33

the column from which the cost of the Command Armor location was read.

B-MOD (Balance Modifier): This represents how much the Command Armor's weight hinders the maneuverability of the mecha onto which it is mounted. The Balance Modifiers of all Command Armor locations (those not equal to zero) are totaled and subtracted from the mecha's MV, land MA and flight (or other) MA. The Balance Modifier of a location of Command Armor may be negated by mounting a special, additional maneuver vernier directly onto the Command Armor itself (such verniers should not be confused with the normal maneuver verniers described under Maneuver Verniers, page 73). This vernier system takes up some of the Command Armor location's Spaces and costs a little extra, but it brings the Balance Modifier down to zero. Note: The actual mass of the Command Armor (and the systems it contains) does add to the overall weight of the mecha, but it does not affect MA or MV (this is accounted for by the Balance Modifier). The added mass is only used for calculating knockback.

Balance Verniers

B. Mod	Space Penalty	Cost
0.1	-2	2
0.2	-3	3
0.3	-4	4
0.4	-5	5
0.5	-6	6
0.6	-7	7
0.7	-8	8
0.8	-9	9
0.9	-10	10
1.0	-11	11

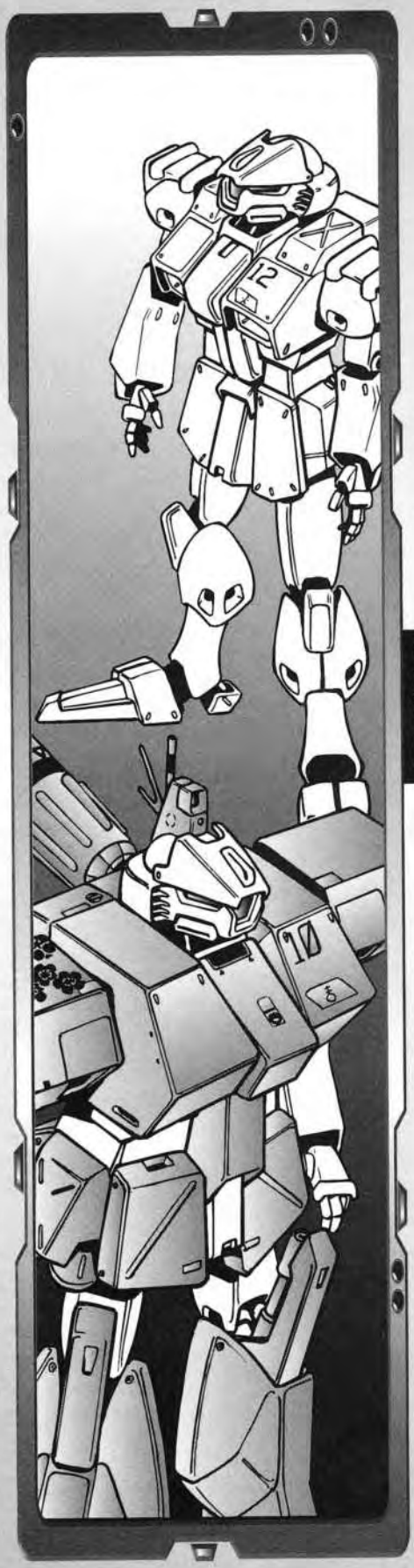
Example: *The Armored Rapier's set of Command Armor adds 26 tons only for knockback purposes; however, its Balance Modifier of 1.2 (rounded to 1) is subtracted from MV, land MA and flight MA. When the Command Armor is ejected, MV and both MAs will return to their normal levels.*

COST: Each of the five cost columns corresponds to a different Type of armor protection. All Command Armor on a given mecha unit need not be of the same Type.

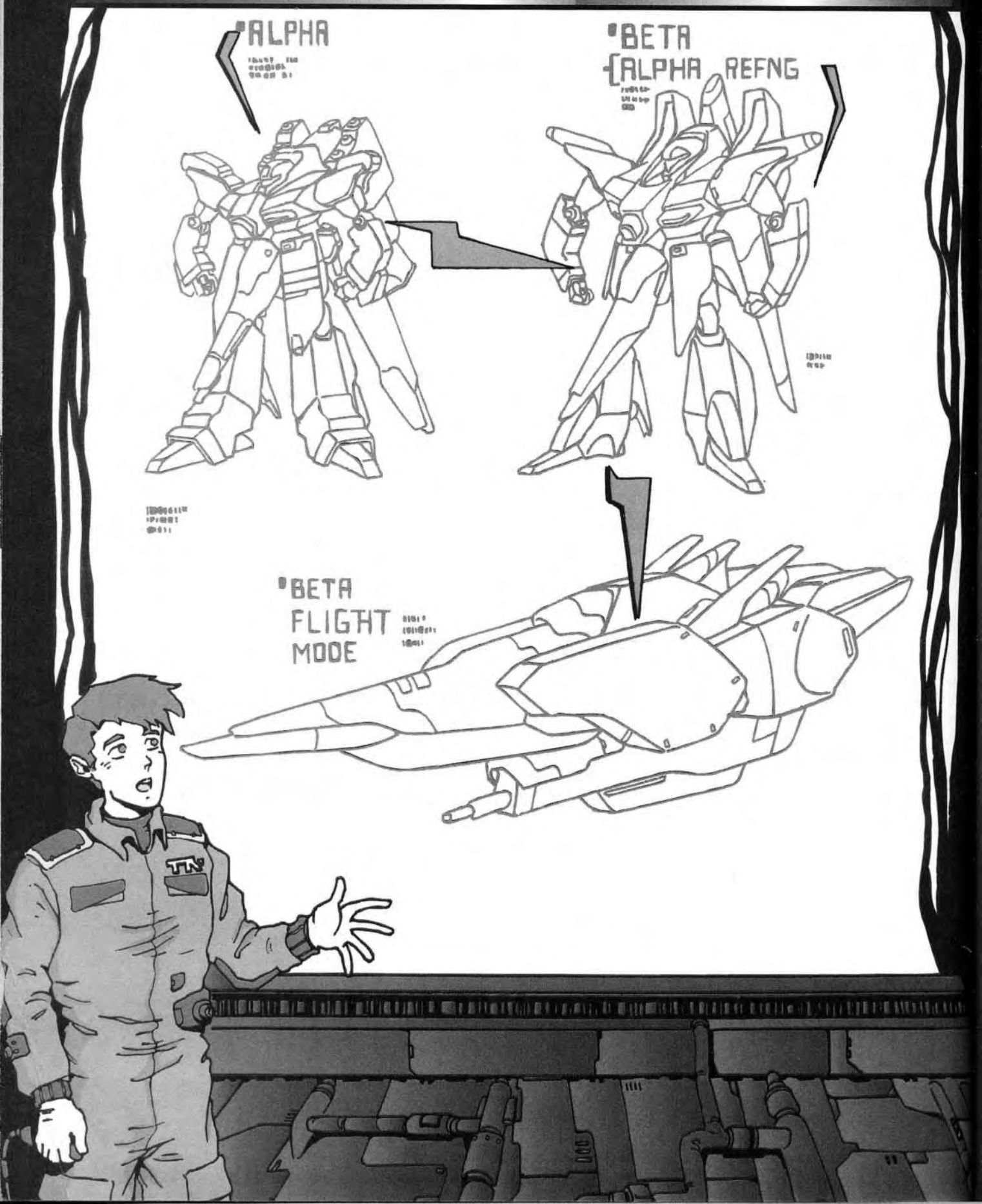
Notes on Command Armor: On any turn, the Command Armor on a mecha may be ejected (at the cost of a single Action) to remove the maneuver penalty. Note that while the ejection process is quick and easy, this does not mean that it's just as easy to put the armor back on—in fact, this takes substantially more time (Referee's decision, but at least five minutes under good conditions).

When a servo with Command Armor is hit, the Command Armor takes damage first, dropping in Stopping Power as appropriate per the staged penetration rules. Any remaining damage is then applied to the systems *inside* the armor. Should there be any remaining damage, it is then applied to the servo (armor SP first) beneath the Command Armor as normal. No matter how much damage a Command Armor location sustains, it retains its MV penalty until it is ejected.

When purchasing Command Armor, the mecha designer must decide if the Cost Multiplier systems (such as Stealth, Transformation, etc.) will affect the unit when the Command Armor is on or off. If the Cost Multiplier system(s) function while the mecha is wearing the Command Armor, the cost for the Command Armor is added to the mecha and *then* the Multiplier costs are figured. If the mecha cannot use the Cost Multiplier systems when the Command Armor is worn, the Multipliers are figured before the cost of the Command Armor is added onto the mecha's final cost.



COST MULTIPLIER SYSTEMS



Powerplant △ パワープラント

The core of any mechanized vehicle is the powerplant needed to run it. The Powerplant provides the juice to run your weapons, sensors and all other components. By purchasing a more potent Powerplant for your unit, you can use the excess power to take action faster. Powerplants are generally assumed to be a nuclear fusion furnace of some type, but there are always other options, such as fission reactors and even miniaturized matter-antimatter jobs (Referees are advised to steer clear of such gizmos; matter-antimatter Powerplants might deliver more energy and be harder to damage, but if breached the explosion would be biblical in scale).

While many mecha are run by heavily armored cold (or at least Cool) fusion Powerplants, the mecha in a great number of Anime shows are constructed with much more dangerous Hot fusion (or free plasma) Powerplants. These energy furnaces can pump out a few more ergs of spare juice than their Cool counterparts, so they impart a bonus to the Pilot's Maneuver Pool, but they are decidedly more fragile as well—Hot Powerplants have a propensity for blowing up.

CHARGE: In MTS, over- and undercharged Powerplant technologies are available. These Powerplants can modify a mecha unit's game performance as well as increase variety in mecha construction. Supercharged Powerplants represent the highest technology in megapower output, providing enough energy to overboost even the largest mecha (although nothing is so power-hungry as to *require* an oversized Powerplant).

XS (EXPLOSION SAVE): Cool Powerplants have an Explosion Save (or XS) of 1, which means that when a Cool Powerplant it hit, it will explode on a roll of 1 on a D10. If you decide instead to purchase a Hot Powerplant, your mecha will receive a bonus to its Maneuver Pool but the Explosion Save will become 5—in other words, it will detonate on a 1-5 when damaged.

COST: The Cost Multiplier for Hot and Cool Powerplants is the same; only a Standard-type Hot Powerplant costs less, because it does not impart a bonus to Maneuver Pool. Powerplants take no Spaces regardless of size or type. Note that an Undercharged Powerplant is one of the few systems that has a negative Cost Multiplier—it actually *reduces* the cost of your mecha.

MODIFIERS: Because a mecha unit's Powerplant is responsible for routing power to all components, including servos and Propulsion systems, it modifies the MV and the Land MA in much the same way as a car's engine. Should the Powerplant be of the Hot variety, it will also affect the mecha's Maneuver Pool due to lessened constrictions to conductivity and other pseudo-scientific explanations. The Pilot's base Maneuver Pool (his Piloting Skill -5) is multiplied by the listed amount. See the example in the sidebar.

SOURCE: Depending upon the pseudo-scientific kinks of your Mekton Zeta world, some breeds of mecha (such as 1/5th and 10th-Scale) may be too small to be able to use a standard fusion furnace for power. Perhaps cold fusion, or even nuclear power, has not been invented in your campaign world. In such cases, your mecha will need an alternative power Source. The particulars of the alternate power Source's technology will depend upon your Mekton Zeta world: You may wish to declare that different sizes of mecha will deplete power at different rates. You may decide that certain systems (such as

POWERPLANTS

Charge	XS (if Hot)	Cost (if Hot)	Modifiers (if Hot)
Undercharged	1 (5)	-x0.15	-1 MV, -1 MA (-1 MP)
Standard Charge	1 (5)	x0.0 (-x0.1)	+0 MV, +0 MA (0 MP)
Overcharged	1 (5)	x0.15	+1 MV, +1 MA (+33% MP)
Supercharged	1 (5)	x0.3	+2 MV, +2 MA (+67% MP)

Source	Cost	Source	Cost
Bioenergy	x1.5	Power Cell	-x0.15
Fusion	x1.0	Combustion	-x0.33
	Option:	Splitting	

Hot Powerplant Maneuver Pool Example

A Pilot with a Skill of +8 has a base Maneuver Pool of 3 Points; if he had +67% MP, his Maneuver Pool would increase to 5 Points. Fractional MP Points always round down.

EMWs and Beam Weapons) draw power more quickly than regular operation. You may want to be able to use Energy Absorbers to recharge. Such details are left up to the Referee. Outside of the standard "Fusion" Powerplant, there are three options: Power Cell, Combustion and Bioenergy.

• POWER CELL: This is a replaceable unit which contains enough power to operate the mecha for a set period of time. A Cool Power Cell would essentially be a power capacitor or battery, while a Hot Power Cell's central core would be made up of radioactive isotopes which release a constant barrage of alpha particles; thermocouple technology could convert the generated heat into electrical current and store it in a battery located in the base of the Power Cell. The servos, weapons and other systems' electrical energy is drained off by the servos, engines and weapons of the mecha, usually in a 6 to 24-hour period of operation. At this point, a fresh Power Cell can be inserted, or the old one removed and allowed to recharge its battery section. The weight and Space requirements of a Power Cell are usually small to negligible—this is, however, also left up to the Referee. In most situations, mecha would be wise to carry spare Power Cells.

• COMBUSTION: While this name immediately conjures to mind a gasoline-burning engine, a Combustion-type Powerplant could just as easily run on coal, steam, alcohol, hydrogen or dragon's blood (Hot Powerplants would use explosive fuels, while Cool ones would use much more stable materials). Whatever the fuel, a Combustion Powerplant must be refilled with it on a regular basis in order for the mecha to function. The comparative rarity or availability (and expense) of the fuel is an important factor in the limitation of a Combustion Powerplant; if its fuel is random atoms sucked out of the surrounding environment, then the inherent disadvantage of Combustion is avoided. In such a case, the Powerplant should be treated as a Fusion Powerplant. Note that the fuel burned by a Combustion Powerplant is not the same Fuel as what a mecha's Propulsion system burns.

• BIOENERGY: Relying upon a tremendously advanced grasp of biology and matter-energy principles, Powerplants which use Bioenergy as a power Source draw energy directly from their pilot. This may be the pilot's psychic emanations, "life force," or cosmic spirit; the details are up to the Referee. Cool Powerplants would use the pilot's Bioenergy in its pure state, while Hot Powerplants would convert the Bioenergy into some kind of volatile power. Any mecha which can access such a Source of power is at a distinct advantage in that it will continue to function as long as the pilot is present ... and if the pilot isn't present, why would it be operating anyway? Oftentimes, the performance of a Bioenergy Powerplant depends upon the health and emotional state of the pilot—an extremely excited or angry pilot might be able to push the Powerplant's state up to Overcharged, Supercharge, or perhaps even initiate a V-Max event. Many Bioenergy-powered mecha actually require two pilots—one to power the mecha, the other to direct the unit's actions and operate the various weapons and systems.

At the Referee's discretion, power may also be provided by other power sources, such as magic. Also, don't forget to mention the fact that mecha might be designed as a sort of symbiotic living creature, a plant, or something even more esoteric.

COST: This value is multiplied with the base Cost Multiplier for the Powerplant, so that a Hot, Overcharged Combustion Powerplant would carry a Cost Multiplier of x0.1 (0.15 x0.67); note that the various alternative power Sources generally reduce the costs of your Powerplant, but in the case of an Undercharged Powerplant, the rebate on your mecha will generally be less.

OPTION (Splitting): Not to be confused with System Splitting (described on page 14), a Split Powerplant is located in multiple servos of the mecha's frame. Some mecha have their Powerplants split between the Torso and the Head; some Split between the Torso and Arms (shoulders); between the Torso and Pod; the Torso and Legs; etc. The advantage to this is that each location has its own XS (Explosion Save) and thus your mecha is less likely to be toasted by a randomly-rolled Powerplant hit location. First, decide how many locations (and which ones) the Powerplant will be Split into. Even if they are Split, Powerplants still take no Space from the servos they are located in. Next, divide the mecha's MR, land MA, flight (or other Propulsion) MA by the number of locations the Powerplant has been split into. See the example in the sidebar.

When the mecha suffers a Powerplant hit, roll randomly to see which location (which has a part of the split Powerplant) takes the hit. Then roll vs the XS; if the Powerplant section does not explode, its XS goes up as normal. If the Powerplant section does explode, it takes that servo with it and the mecha loses the appropriate amount off its MR and MA. The advantages are obvious, but the disadvantage is that if a Powerplant-containing servo is destroyed, the mecha's MR and MA drops. Think about it.

Powerplant Splitting Example

If the Armored Gorgon (MR of 8, land MA of 6 and Thruster MA of 12) has its Powerplant split into its Torso and both Legs; each location accounts for 3 points of MR (2 for the Torso), 2 points of land MA and 4 points of Thruster MA.

Cockpit Controls Δ コックピットのコントロール

A full-blown mecha battle, when observed from outside, is a clash between blindingly fast metal giants, punctuated by flares of energy and spherical explosion shockwaves. However, when experienced from inside one of those mecha, the battle is presented among a clot of annotated displays, illuminated consoles, complex controls and a myriad of other electronic gizmos. For an Anime fan, mecha are cool-looking, fast-moving plot devices, but for a pilot, his mecha is a tool that follows his instructions. All these instructions come from the Cockpit—that cramped room in which great mechajocks live, shine and sometimes die.

When it all comes down to actually using the great machines that MTS creates, the Cockpit is the be-all and end-all of the pilot's experience. The completeness of the information he receives and the accuracy of the commands he sends are a function of the Cockpit—thus, a mecha's control system is integral to the unit as a whole. The thing is, the types of mecha controls presented in Anime are almost as varied as the mecha designs themselves. In *Mekton Z*, it is assumed that whatever control system your mecha uses is fully capable of accurately performing the actions its pilot desires. However, how well the control system presents information to its pilot can be chosen by the mecha designer.

COCKPIT CONTROLS

Control	Pool	Cost
Manual	-2	-x0.05
Screen	0	x0.0
Virtual	+33%	x0.05
Reflex	+67%	x0.1
Other	+50%	x0.07
Slave	0	as above
Submecha	-	+5cp

Enclosure

- Armored: Hit location "Cockpit" gets full SP armor.
- Canopy: Hit location "Cockpit" gets only 2 SP armor.
- Saddle: Hit location "Cockpit" gets no armor, but takes no Spaces.

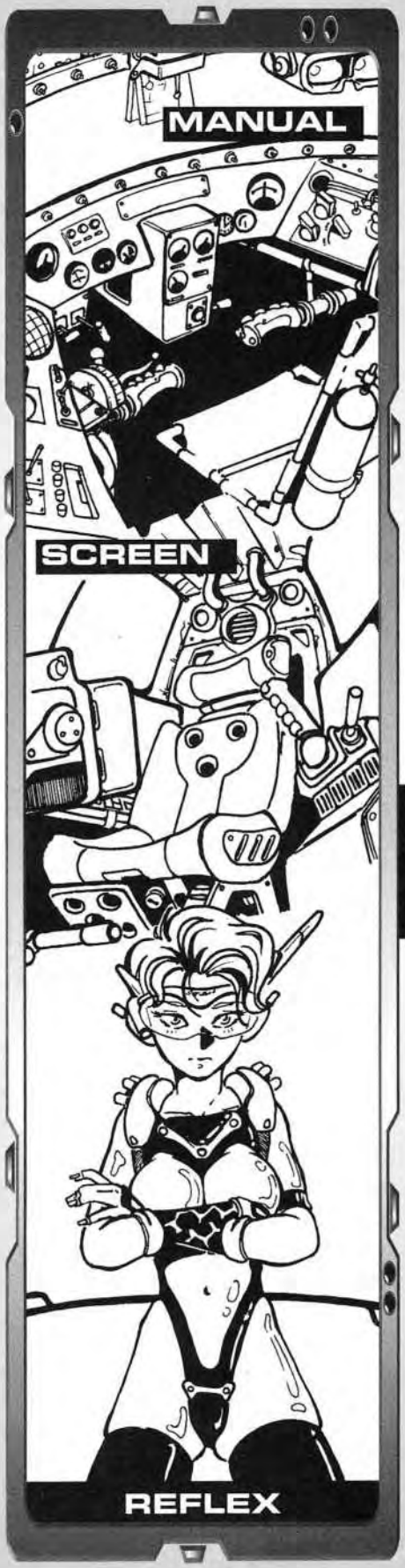
Location	Notes
Torso	No modifiers.
Head/Tail/Other	Ejection Rolls at +2.

Note that determining the number of people who can fit into your mecha is determined in another section (Crew and Passengers, page 49). The variations on the classic Cockpit listed here have different Cost Multipliers attached to them, and are explained below:

CONTROL SYSTEM: This is the type of interface between the pilot and his mecha; it affects his awareness of the battle around him, and thus his response to it. Each Control System modifies the pilot's Maneuver Pool, takes a number of Spaces and carries a Cost Multiplier for the mecha. Even if a mecha design features Cockpits in more than one location, the cost for the control system still is paid for only once. Note: The Pilot's base Maneuver Pool (his Piloting Skill -5) is multiplied by the listed amount.

For example: *A Pilot with a Skill of +8 has a base Maneuver Pool of 3 Points; if he had +67% MP, his Maneuver Pool would increase to 5 Points. Fractional MP Points always round down.*

- MANUAL CONTROLS are so simple as to border on the primitive—levers pulled physically engage pistons and actuators, and the view of the outside world is aperture-based, with the pilot peering out of a slit in the armor or through a porthole (this system actually makes your mecha cheaper)!
- SCREEN CONTROLS are assumed to be the standard type of mecha control, employing three (usually) monitors which give the pilot a 180-degree view of the outside and fly-by-wire instrumentation, ensuring accurate responses.
- VIRTUAL CONTROLS consolidate all systems and instrumentation to the pilot's seat and surround him with high-definition screens which provide a 360-degree holographic view of the surroundings. Unless otherwise desired, the mecha's body is digitally edited out of view so as not to obscure vision, while fiber-optic "fly by light" technology improves handling.
- REFLEX CONTROLS replace the traditional seat with an exoskeletal frame or skintight datasuit which monitors the movements of the pilot's body and mimics them in the movements of the mecha's servos. This system may also move the display screens to the inside of the pilot's helmet visor and relies heavily upon voice activation for weaponry and other systems.
- OTHER types of control systems are available, but are too numerous (and often outlandish) to list. Suffice it to say that such esoteric control systems as musical instru-





ments, glowing orbs, electrodes and physically mixing the pilot's blood with the mecha have all been done. In the case of direct neural linkage, the advantages are so great as to require their own section; see Thought Control on page 78. Because of their dubious nature, the cost and bonuses of "Other" controls may be modified by the Referee.

• SLAVE CONTROLS are a special case for 1/10 and 1/5 scale mecha only. The Slave control system is used when the pilot actually wears the mecha as in the case of a strength-boosting exoskeleton or a suit of powered armor. At 1/5 scale, a person takes up as many Spaces as his BOD Stat (from 2-10, average of 6)—these spaces may be allocated among the assorted servos without any cost for Splitting. At 1/10 (Human) scale, everything is assumed to be usable by an average person, so the issue of pilot Spaces is non-applicable.

• SUBMECHA CONTROLS are another special case, in which the mecha's Cockpit is actually another mecha! The "submecha" must be at least one Scale below the larger mecha, and thus will take up 10 Spaces (the difference between Scales is 10 Spaces, between 2 Scales is 1 Space, etc.). It takes 1 Action for the smaller mecha to dock with the larger mecha (or more, at Ref's discretion), and when docked the submecha serves only as a Control System and cannot act as a mecha itself. The submecha, when docked, is assumed to be fully enclosed and protected by the Mekton's servo armor.

ENCLOSURE: While there is no associated cost with the Enclosure of your mecha's cockpit, there are certain benefits and problems which are worthy of note.

• ARMORED Cockpits are built into the inner frame of the mecha, protected behind massively armored blast doors. All vision relies on screens and/or periscopes. Armored Cockpits get full armor SP when subject to a "Cockpit" hit location.

• CANOPY Cockpits are covered by a bubble of see-through blast glass (or plastic, or whatever) and normal vision is possible without screens and periscopes; these Cockpits get only 2 SP of armor when subject to a "Cockpit" hit location, but suffer only -2 to Attack rolls should their Sensors be destroyed.

• SADDLE Cockpits are entirely open (like on a motorcycle), with the pilot wearing whatever personal armor s/he feels is appropriate; Saddles grant no armor SP when subject to a "Cockpit" hit location, but they add +3 to Ejection rolls and suffer only -2 to attack rolls when their Sensors are destroyed. **Saddle Cockpits take NO Spaces.**

LOCATION: Like any other system, each Cockpit must take up Spaces from a location on the mecha (usually a servo, although Pods and even Binders are possible). The Torso, being the largest and least fragile servo, is the most common choice. However, other servos (most commonly the Head) may be chosen as the location of the Cockpit. Cockpits which are not located in the Torso gain +2 to Ejection rolls, since they are not sitting directly on top of the Powerplant and thus are somewhat more likely to be thrown clear of an explosion. (we know, we know, but this is anime, remember?)

Hydraulics △ ハイドローリックス

Whether they are made up of pistons and rotors, magnetic actuators, or electrical muscle myomers, as the "muscular" system of your unit, Hydraulics are what allows the mecha to move. Though Hydraulics are normally free, it may be desirable to purchase a larger, more powerful Hydraulics system—one capable of greater destructive feats. Larger, tougher Hydraulics are indeed available, as well as lighter, environment-specific Hydraulics; the latter are cheaper and save Space.

HYDRAULICS

Hydraulics	Cost Multiplier	Spaces	Melee Bonus	Lifting Capacity
Space Type	-x0.1	-1e	+0	x1
Marine Type	-x0.05	0	+0	x1
Standard	x0.0	0	+0	x1
Heavy	x0.1	1e	+1K	x1.5
Superheavy	x0.2	2e	+2K	x2

HYDRAULICS: The first column marks the type of hydraulics (or other actuator) system bought for the mecha. Two explanations are in order:

- SPACE TYPE: Mecha with Space-type Hydraulics can only function in space or other zero-G and near zero-G environments (such as an asteroid or moon's surface). These Hydraulics must be used only in said environments because they do not use conventional heat dissipation systems (they use the cold of space), and are not designed to withstand the stresses of gravity. Don't forget to buy Space Environment Protection (page 72)!
- MARINE TYPE: Mecha with Marine-type Hydraulics can only function when in or under water or other relatively cool liquid environments. These Hydraulics require a watery environment because they do not use conventional heat compensation systems, and use the water for conductivity and to resupply hydraulic fluid. Don't forget to buy Underwater Environment Protection (page 72)!

COST MULTIPLIER: Hydraulics are Cost Multiplier systems which use a unique method of allocating Space requirements. Note that Space-type Hydraulics are one of the few systems that has a negative Cost Multiplier—it actually *reduces* the cost of your mecha.

SPACES: The Space requirements of an Hydraulics system are paid for by each and every servo (but not Command Armor locations or other systems that give additional Spaces, such as Binders and Pods). In the case of Space-type Hydraulics, all servos *gain* an additional Space because of the room saved by the lighter equipment.

MELEE DAMAGE BONUS: This is the amount of damage added to *all* hand-to-hand, close-combat and Melee Weapon attacks.

LIFTING CAPACITY: The maximum amount of weight your mecha can lift is multiplied by this number. To determine your mecha's base Lifting Capacity, see page 117.

Environmentals Δ エンバイアンメント

The Rapier Desert Type—the Arctic Gorgon—the AstroRapier Zed—the Gorgon Mariner. The number of environment-specific mecha variations is as great as the number of hostile environments found in the cosmos. In order to match your mecha design to its projected field of operations, you need to purchase Environmental Protection systems; such an adaptation allows a mecha unit to function normally in an adverse environment. When Environmentally Protected, the mecha will ignore all the penalties (listed under each environment) that will usually apply to mecha acting in that environment.

It should be noted that all mecha are assumed to be built with a certain level of Environmental Protection automatically, so the Referee should only apply the penalties under extreme environmental stress (i.e., the North Pole, the Sahara Desert, etc.).

All Environmental Protection packages are Cost Multiplier systems and take up no Spaces from the mecha.

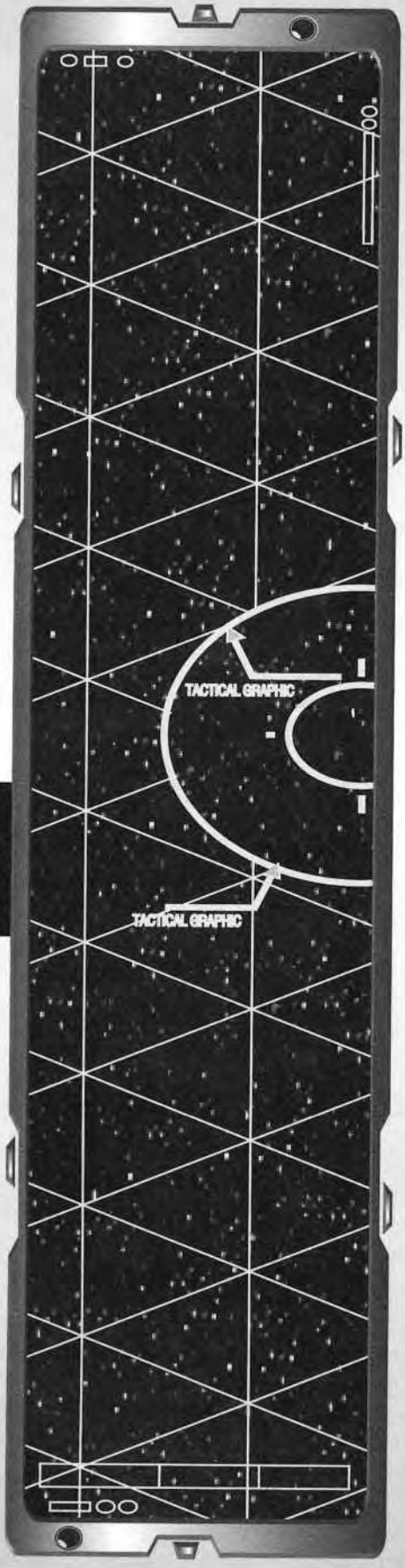
ARCTIC ENVIRONMENTAL PROTECTION (x0.05): This adaptation package takes the form of heavy insulators and defrosters which keep the mecha warm and prevent the servo joints from becoming brittle.

- ARCTIC ENVIRONMENT PENALTIES: For every day of activity in the Arctic environment, the mecha must roll 1D10, adding 1 to the roll per day; on an 8-10, the mecha's servos have seized up from the cold and the entire mecha is useless for 1D6 days as the tech crews give it a thorough defrosting. Additionally, for every three turns spent in active combat, the mecha pilot must roll his **Luck vs 12;** if the roll fails, roll on the Malfunction Table below. A **TECH +Mecha Tech Skill +1D10 roll vs 15** will bring the system back on-line.

MALFUNCTIONS

1. Servo (chosen randomly) ceases to function; all weapons and systems in that servo also useless.
2. Sensors system ceases to function; -4 to Attack Rolls.
3. Weapon (chosen randomly) ceases to function.
4. Other system (chosen randomly) ceases to function.
5. Propulsion system ceases to function (if no Propulsion systems, walking MA drops by 1/2).
6. Powerplant overheats; entire mecha shuts down.





DESERT ENVIRONMENTAL PROTECTION (x0.05): This adapts the mecha to extremely hot, sandy, dusty environments, protecting the servos and systems from overheating or getting clogged with grit.

- DESERT ENVIRONMENT PENALTIES: For every day of activity in the desert, the mecha must roll 1D10, adding 1 to the roll per day; on an 8-10, the mecha overheats and/or its servos jam with dust/sand, rendering the entire mecha useless for 1D6 days as the tech crews give it a thorough cleaning. Additionally, for every three turns spent in active combat, the mecha pilot must roll his **Luck vs 12**; if the roll fails, roll on the Malfunction Table above. A **TECH +Mecha Tech Skill +1D10 roll vs 15** will bring the system back on-line.

UNDERWATER ENVIRONMENTAL PROTECTION (x0.05): This adaptation allows the mecha to function normally in and under water, although it will still need a Marine Sensor Suite (see Recon Systems, page 51)—note that deep-diving units should buy High-pressure Environment Protection as well. There is a universal rule about underwater movement: When in or under water, all Movement Allowances (walking, Wheels, Treads, and Propulsion systems) are always divided by 3; a Mekton with a walking MA of 6 would move at an MA of 2 while underwater. Ground-Effect Systems and Thrusters will not function underwater unless they are specially designed to be amphibious (see Propulsion systems, page 61)—if your mecha has no underwater Propulsion system, it sinks and can only walk on the bottom.

- UNDERWATER ENVIRONMENT PENALTIES: All attacks made with ranged weapons are at -2 Accuracy and their Effective and Maximum Ranges are halved; Melee damage is also reduced by -2K. If an unprotected unit's Torso armor is penetrated and its Torso servo is damaged while underwater, it must surface or run the risk of flooding and sinking. Units with Underwater Environmental Protection still move at 1/3 MA (only Submarine and Boat Transformables are exempt from this; see Transformables, page 84).

HIGH PRESSURE ENVIRONMENTAL PROTECTION (x0.05): Mecha equipped with this option are better suited to handle the pressures of the deep sea (or planets with an incredibly heavy atmosphere). The protection consists primarily of servos which are designed to closer tolerances (and are thus capable of moving and functioning normally under immense pressure and internal overpressure).

- HIGH-PRESSURE ENVIRONMENT PENALTIES: All Actions taken while in the environment are at a -2 penalty. In addition, all successful attacks that penetrate armor on an unprotected unit do 2 extra Kills of damage, as the high pressures continue to twist and bend the metal after the initial attack.

SPACE ENVIRONMENTAL PROTECTION (x0.05): This adaptation not only allows protection from the hard vacuum of space, but also fine-tunes the thrusters of the mecha so that it will not go spinning out of control at the smallest turn.

- SPACE ENVIRONMENT PENALTIES: All Actions (Mecha Piloting, Mecha Gunnery, etc.) are at -2 since the unit is constantly overreacting in the weightlessness of space. If the Torso servo is damaged in any way, the pilot may be exposed to the vacuum of space (roll Luck vs 12), and will die unless s/he is wearing by a space suit.

EM ENVIRONMENTAL PROTECTION (x0.1): This adaptation protects the mecha from strong Electromagnetic forces, such as can be found in the vicinity of various cosmic events (supernovas, nebulas, magnetic storms) and near a Nuclear explosion. Also called "Hardening," this Protection package could include insulation, EM sponges, a network of slow-bleeding capacitors, or perhaps an altogether new type of circuitry which is immune to EMP.

- EM ENVIRONMENT PENALTIES: Depending upon the magnitude of the Electromagnetic pulse, the unit will suffer -1 to -10 (Referee's choice) to all Actions as the disruptive energy front overloads and destroys electronic hardware. The effects can only be removed once the mecha can be fully overhauled in a mecha hangar (takes 1D6+1 days).

RE-ENTRY ENVIRONMENTAL PROTECTION (x0.1): With this adaptation, the Protected mecha can freely reenter any planet's atmosphere from orbit (normally a suicidal proposition). Re-Entry capable mecha can descend from orbit, blaze through the upper atmosphere, and switch back over to some kind of Propulsion system (or use a Parachute) once they reach cloud level. Unlike the "Re-Entry Package" Option, Re-Entry Protection takes no Spaces and may used over and over.

- RE-ENTRY ENVIRONMENT PENALTIES: If a mecha is forced to re-enter without protection, it will be totally destroyed. The only exception to this are mecha with Gravitic Propulsion, which can perform re-entry if necessary, but it may take as long as 5 days to make the descent.

Maneuver Verniers Δ バーニアー

For every mecha design, no matter what its size or shape, maneuverability is a paramount consideration. Maneuver Verniers are sets of small rocket thrusters (or other micro-propulsion units) which are not designed for forward movement—instead, they direct the mecha's thrust (and thus movement) up, down, to the sides, or even backwards without requiring the mecha to turn or otherwise move its body. This system enhances the maneuverability of the mecha, as the Maneuver Verniers apply a bonus directly to the mecha's MV—however, this bonus may not raise the mecha's total MV above zero. While they are universally advantageous, Maneuver Verniers truly shine when they are used with the larger (and thus slower) units.

MANEUVER VERNIERS

MV Bonus	Cost	Space
+1	x0.1	5
+2	x0.2	10
+3	x0.3	15
+4	x0.4	20
+5	x0.5	25
+6	x0.6	30
+7	x0.7	35
+8	x0.8	40
+9	x0.9	45
+10	x1.0	50

COST AND SPACE: Maneuver Verniers are Cost Multiplier systems that require the listed number of Spaces. Like Propulsion systems, Verniers may be distributed freely about the mecha without requiring Linkage (this is because the Verniers are small and quantitative, rather than one large item).

ACE (Maneuver Pool) Δ エース

Ask any mechapilot about dogfighting, and he'll tell you that maneuverability is the name of the game. However, push the issue a little and you'll inevitably hear mention of that "special something," that uncanny ability of certain pilots to detect danger, avoid harm and perform the supposedly impossible. Some call it a sixth sense, some say it's natural talent ... but mechadesigners have been trying to reproduce this power ever since they heard of it. In some Anime series, the mechadesigners have succeeded. It may be improved aerodynamics and handling, computerized fly-by-light operation, an electromagnetic slickening of servos, a G-canceling system, an inertial controller, a time-slowing device, or magic. In MTS, it is known as ACE (after the real-world term Actuator Control Electronics), and it increases the mecha's Maneuver Pool.

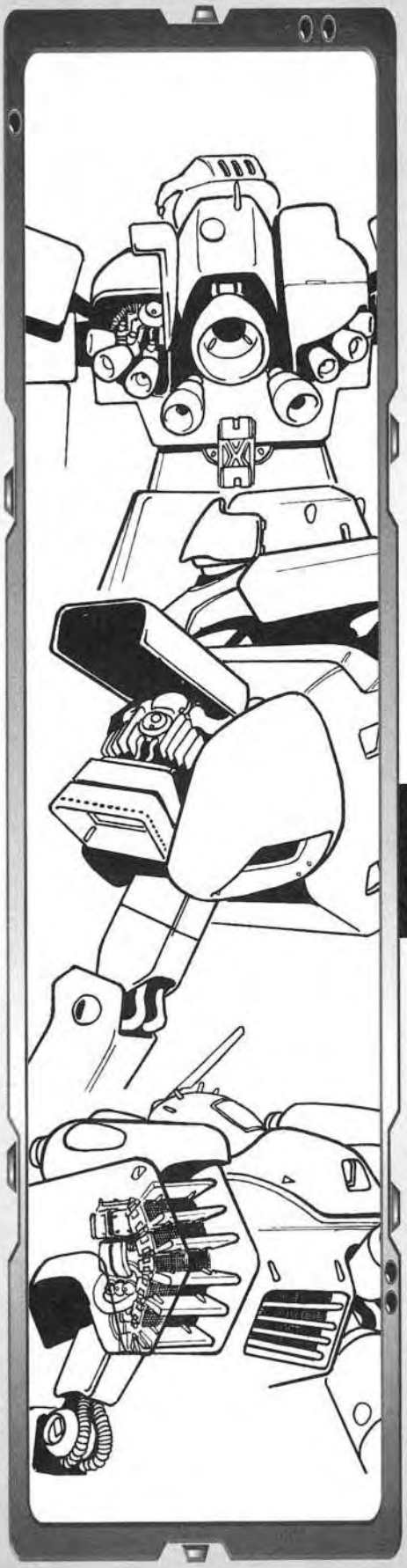
ACE

Pool	Cost
+33%	x0.05
+67%	x0.1
+100%	x0.2

POOL: The Pilot's base Maneuver Pool (his Piloting Skill -5) is multiplied by this amount. For example: A Pilot with a Skill of +8 has a base Maneuver Pool of 3 Points; if he had +67% MP, his Maneuver Pool would increase to 5 Points. Fractional MP Points always round down.

COST: ACE is a Cost Multiplier system. It takes no Space from the mecha.

There are numerous other systems in MTS which modify your mecha's Maneuver Pool, but ACE is the only system dedicated solely to this purpose. Depending upon the quality of the pilot and the presence of other Maneuver Pool enhancers, the mecha may have as much as a -2 Maneuver Pool (requiring that some rolls actually be *reduced* each turn) to a whopping +21 Maneuver Pool—this is rare, but comes in handy if the Referee is using the "Let's Active!" Actions system on page 115. Referees are advised to take care in deciding whether or not they will allow this system in their games.



IFF Codes

IFF is an acronym that stands for "Identification Friend or Foe." It is a system that first saw usage by the RAF in 1939. An IFF system consists a radio transmitter/receiver. It constantly broadcasts signals composed of a repeated chain of complex coded radio pulses. When received by a friendly unit, these signals are translated by the IFF computer to mean roughly "friend or foe?" The friendly unit then automatically transmits a signal back that says "friend." Any unit that does not respond to the query is tagged "foe," and the pilot is informed of its presence.

The purpose of IFF is to prevent pilots from being shot down by their own side. Obviously, IFF codes must be changed often. If an enemy were to obtain your codes, he could program all his mecha to respond as a "friend" to your queries, and catch you unawares. To prevent this, IFF transponders usually have a self-destruct system that activates if it crashes. Through advanced electronic warfare, it is possible that an enemy could make it seem like your mecha are broadcasting enemy IFF codes—which could lead to your own troops killing each other off! Bases are more vulnerable to this, as computer hackers could tell the base computers that friendly IFF codes are actually enemy codes.

Internal Automation △ なかのエイ·アイ

Its pilot absent, all tech crews asleep for the night—and yet when it hears the call of battle, it rises to action! It's Internal Automation—the no-care co-pilot every loner mechajock dreams of! With such a computer on board, a mecha unit may act independently of a pilot, or act as an extra crew member to support the pilot during combat. Even more remarkable, Internal Automation may be enhanced to the point of full sentience, allowing the creation of androids and other forms of artificial life.

AUTOMATION LEVEL: This is the processing power of the computer. All the computer's Skills and Stats are set at this value; therefore, a computer with an Automation Level of 6 would have Stats at 6, Skills at +6, and would roll 12 +1D10 to accomplish tasks. Any number of Automation systems may be purchased for a single mecha; each one functions as a pilot or co-pilot would, and has its own Mecha Reflexes and Actions, which are calculated normally using the system's Reflex Stat (as determined by its Automation Level).

COST: Internal Automation is a Cost Multiplier system. The base multiplier is determined by the Automation Level, and this multiplier is modified by the Portfolio; the final Cost Multiplier for an Automation system is equal to the product of the multipliers for the Automation Level and the Portfolio size. Automation computers cannot be targeted (or hit) and take only one Space from the mecha's Head or Torso, regardless of cost.

PORTFOLIO: A computer may know a number of Skills equal to its Portfolio value. These Skills can not be altered during combat, though in the hangar bay it is a simple matter to rewire the hardware and shuffle the chips to replace one Skill program with another. There is no reason why a mecha's computer couldn't be programmed with non-combat Skills (such as General Knowledge, Mecha Tech, etc.).

Note: Thought Control systems (see page 78) *may* be purchased for Automation systems with Portfolios of 5 or greater; this will grant the computer full sentience and an actual personality. Thought-Controlled IA systems are useful for designing mecha that are partially or fully alive (and thus self-aware). Stat Enhancment systems (see page 57) may be used to augment Internal Automation.

INTERNAL AUTOMATION

Automation Level	1	2	3	4	5	6	7	8	9	10
Cost	x0.1	x0.2	x0.3	x0.4	x0.5	x0.6	x0.7	x0.8	x0.9	x1.0

Portfolio	1	2	3	4	5	7	10	15	20	25
Cost	x0.4	x0.6	x0.7	x0.9	x1.0	x1.2	x1.5	x1.7	x1.9	x2.0

Cloaking △ クローキング

You've heard of it happening, but you've never actually encountered it—until now. The alien mecha, which had been caught squarely in your crosshairs, flickered for a moment and then disappeared completely. You knew it was still nearby—it *had* to be—but where?

Cloaking. This much-coveted and much-feared system renders mecha virtually invisible to the naked eye. Popular with recon, ELINT and assassin mecha, Cloaking allows the mecha to make itself (and any items it is carrying) impossible to see at almost any range.

CLOAKING

Cost	Function
x0.15	Basic Cloaking
x0.3	Active Cloaking
x0.1	Pulse Refract
x0.1	Magnetic Refract
x0.1	Beam Refract
x0.3	Fire Control
x0.2	Combat Cloak

COST: Cloaking is a Cost Multiplier system and takes up no Spaces. Because the actual nature the system is rather vague, the

extent of its protection must be determined by yourself or by the Referee in whose world you are playing (subject to the original conception of the Cloaking system's functions). The final Cost Multiplier of a Cloaking system is equal to the sum of the costs of its various functions (ie. Active +Magnetic Refract = x0.3 +x0.1 = x0.4).

BASIC CLOAKING (x0.15): This low-budget, bargain version of full-blown Cloaking is the classic "chameleon" system—essentially, conformable camouflage. Basic Cloaking provides protection only against visual detection (it will not fool mecha Sensor systems). Basic Cloaking does not allow the mecha to fire and stay hidden. Should a Basic-Cloak Mek choose to fire, it will give away its position to all observers (those who would be able to see it from where they stand). The mecha cannot return to a cloaked status until the first Action of its next turn. Returning to Cloaked status takes one action. The only options Basic Cloaking can use are the Fire Control and Combat Cloak functions.

Any observers at a distance greater than ten times the mecha's height must make a **Difficult INT +Awareness +1D10 roll (vs 20+)** to successfully spot the unit. Closer observers need only roll greater than 15+ to spot, and thus be able to shoot at, the Cloaked mecha. Those who have made their Awareness rolls are assumed to be able to retain sighting on the Cloaked mecha until it can leave their field of vision (and thus gain the opportunity to hide itself once again).

ACTIVE CLOAKING (x0.3): By distorting the light around the mecha, Active Cloaking provides full protection against visual detection *and* mecha Sensor suites. Actively Cloaked mecha are unable to fire and stay hidden; should an Actively Cloaked mecha choose to fire, it will give away its position to all observers (those who would be able to see it from where they stand). The mecha cannot return to a Cloaked status until the first Action of its next turn. Returning to Cloaked status takes one Action.

Any observers at a distance greater than ten times the mecha's height must make a **Very Difficult INT +Awareness +1D10 roll (vs 25+)** to successfully spot the unit. Closer observers need to roll greater than 20+ to spot, and thus be able to shoot at, the Cloaked mecha. Those who have made their Awareness rolls are assumed to be able to retain sighting on the Cloaked mecha until it can leave their field of vision (and thus gain the opportunity to hide itself once again).

PULSE REFRACT (x0.1): What a bummer to be invisible to everyone but that one recon suit! With Pulse Refract, you can not be spotted even with ASP; without it, you are wide out in the open! Pulse Refract Cloaking is powerful enough to distort Infrared, Ultraviolet and other methods used by ASP. Beware: This does not mean that your engines leave no heat trails, and thus you could still be followed while moving by mecha equipped with ASP (this effect can also be masked—see Stealth, in the sidebar).

MAGNETIC REFRACT (x0.1): Without this function, a Magnetic Lens could pick you out in an instant. However, should your Active Cloaking system boast this additional function, you will be as hidden from Magnetic Lenses as you are from normal observers.

BEAM REFRACT (x0.1): If your Cloak protects you against light and other forms of electromagnetic waves, why not against lasers and other Beam Weapons? Mecha with Beam Refract Cloaking may subtract one Kill from the damage of any incoming Beam or Energy Melee Weapon attack before resolving damage in the normal manner.

FIRE CONTROL (x0.3): Fire Control allows you to fire weapons while Cloaked—without giving away your position. This only applies to ranged weapons, because to attack with a Melee Weapon or EMW would clearly reveal you to the enemy—no mater how invisible you think you are.

COMBAT CLOAK (x0.2): This option allows a mecha to return to Cloaked status even while out in plain view. Once spotted, you can return to Cloaked status (that is, cause your enemies to lose sight of you) at the cost of only one Action.

Note: No Cloaking system can protect you against a Spotting Radar; this is a function of the Stealth system and must be purchased separately.

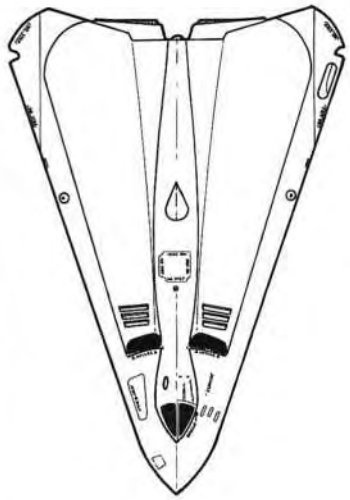
Example of Cloaking Systems: *We want to put a Cloaking system on the 200CP Rapier Zed; we give it Active Cloaking (x0.3) and Combat Cloak ability (x0.2). The total Cost Multiplier is x0.5, so the cost of the Stealth Rapier Zed is (200 x1.5) =300CP.*

Stealth Δ
ステルス

Stealth is a series of extensive modifications to a mecha unit's exterior surface and internal systems, specifically the armor and Propulsion systems. On Stealth mecha, special plastics and alloy coatings are substituted for vital sections of armor. This external plating can absorb radar energies and thus protect the Stealth mecha from being detected by Spotting Radar. Furthermore, modifications to the Powerplant, Propulsion systems, and locomotive equipment allow the mecha to fly silently, move near-silently on the ground, and leave no heat or radiation trails; thus Stealth mecha cannot be followed or tracked with the ASP Recon System.

Stealth: x0.2

Stealth is a Cost Multiplier system and takes no Spaces.





Shadow Imager △ かげ・イメージャー

Don't you hate it when you've drawn a bead on that pesky NinjaMek, and you're just about to blow him into scrap, when he starts appearing all around you, and you can't be sure which one is real and he's everywhere and you can't possibly get them all in time and you keep shooting and shooting but they keep coming and aaaAAARRGH!!!

Ahem. The effects discussed so calmly and clearly in the previous paragraph are caused by a system which MTS calls a Shadow Imager. This device creates multiple sensor-real images of the mecha—images so holographically real it is impossible for people or targeting computers to discern the real mecha from the decoys. These added images (or Shadows) appear totally real to the naked eye and even to complex equipment such as mecha Sensor suites; the effect of these sensor-real shadows is that whenever a hit is scored on a Shadow-Imaging Mek, a die roll must be made to determine whether or not the true mecha was hit.

 # OF SHADOWS: This is the effectiveness of the Shadow Imager system; the more Shadows are visible, the less likely the true mecha is to be hit.

COST: Shadow Imagers are Cost Multiplier systems, and the final Multiplier is based on the number of Shadows available and the nature of the system itself. Shadow Imagers take 1 Space per Shadow.

SHADOW TYPE: Electronic/Holographic-type Shadows are the type created by the Shadow Imaging system described above; they are equally effective against targeting computers, recon systems and human eyes. Balloon-type Shadows represents a lower-tech version of this system. They have the following exceptions: Balloons are giant, inflatable mecha, the outside of which are designed to have the same sensor signature as the mecha being duplicated. When viewed by radar or other sensor equipment, Balloons act as normal Shadows, but they will not fool the naked eye and will function only in space (seeing as they have little or no form of Propulsion). They are also incapable of movement (other than falling or drifting through space), so the duplicated mecha must maintain its position relative to the Balloons in order to benefit from their protection.

Using A Shadow Imager: At any time during its turn, a mecha unit may announce that it is deploying its Shadows, which takes no Actions. If the mecha is attacked, and its Shadows have not already been deployed, they may be launched immediately in place of making a Parry Roll.

Should a successful hit be scored on a mecha unit which has Shadows deployed, the Attacker must make an additional roll:

ATTACKER'S ROLL:
1D10 +INT +Awareness Skill
+1 for each active ECCM Point
+1 for ASP (Advanced Sensor Package)
+1 for Spotting Radar
+2 for Target Analyzer

VERSUS

DEFENDER'S ROLL:
1D10 +INT +Electronic Warfare Skill
+1 for each active ECM Point
+1 for each active Shadow
+1 for Basic Cloaking
+2 for Active Cloaking
+2 for Stealth

If the Attacker's Roll is higher than the Defender's Roll a successful hit on the defending mecha is scored (damage is then resolved as normal). Should the attacker succeed in this roll, he may also opt to hit a Shadow instead of the true target if s/he so wishes.

When a Shadow is hit it is deactivated, since it is then clear to the attacker that particular image is a decoy and thus may no longer be counted into the defender's rolls against that specific attacker in the given combat. If the Shadows are Electronic/Holographic, they are not destroyed when hit; they are simply rendered ineffective. Balloons, when hit, are destroyed.

SHADOW IMAGER

# OF SHADOWS:	1	2	3	4	5	6	7	8	9	10
COST	x0.05	x0.1	x0.15	x0.2	x0.25	x0.3	x0.35	x0.4	x0.45	x0.5

SHADOW TYPE	COST
Electronic/Holographic	x1.0
Balloon	x0.7

ESPer Lens Δ エスパー・レンズ

Psionics, Psychics, ESPers—they are the next evolutionary step. Representing a new era in human history, these people possess incredible metaphysical powers for which they are sometimes revered and often feared. It is not a surprise that new technologies would rise to work with these paranormal individuals—these new technologies culminate in the ESPer Lens. This psychic enhancer is capable of tremendously increasing the psionic ability of the pilot. Through the use of the Lens' technology, ESPers capable of, for instance, teleporting themselves would be able to teleport their entire mecha. One of the most valued abilities of an ESPer Lens is to Scale psychic combat powers up to mecha combat levels of effectiveness. In a 1:1 Scale mecha, an ESPer Lens would magnify telekinesis normally capable of moving kilograms to the level that it could now move as many tons; a blast that normally does a few Hits of damage would be increased to do as many Kills.

When Scaling the effects of an ESPer lens on psychic powers, refer to the following chart:

ESPer Scaling

Scale	Ranges	Weights	Damages
1/10	x5	x10	x1.5
1/5	x10	x100	x3
x1	x25	x1000	x15
x10	x250	x10,000	x150
x100	x2500	x100,000	x1500
Excessive	x?	x?	x?

ESPer Lenses are constructed in the same manner as weapons, with the exception that the final result is a Cost Multiplier value. Depending on the technology, Lenses vary in size and are usually (but do not have to be) placed in the Head or Torso, or are Linked between the two. The ESPer Lens is a rare and powerful item—it is unlikely that anyone other than nobility, top military brass, or corporate elite would have access to one.

RANK: Similar to ECM or ECCM value, this is the maximum level of Psionic ability (PSI Stat) that the system can Scale.

PORTFOLIO: Most Lenses are designed only to handle a particular group of Psionic powers. The Portfolio value is the number of powers that the particular Lens is capable of enhancing. Lenses with an infinite Portfolio are the most potent of all; these Infinity Portfolios can enhance any and every psychic power. The powers in a Portfolio must be specified when the mecha is designed.

DRAW: This is a measure of the ability of the Lens' computers and electronics to regulate the tremendous power requirements of artificially enhanced Psionic powers. When a psychic pilot channels his energy through the Lens, the number of expended PSI Points is equal to the amount of power that would normally be required, multiplied by the listed value for the Draw. Note that it is possible to design Lenses that make it *easier* to use Psionic powers inside the mecha than elsewhere (these are lenses with a Draw of 1/2).

For example: *If it is only necessary to expend one PSI Point to activate a Psionic power, a Lens with a Draw of x5 would need five Points to Scale that power.*

BACKLASH: Though the majority of an ESPer Lens' electronics are usually located in the Head or Torso (or both), the Lens' fine electronic networks must also reach

ESPER LENS

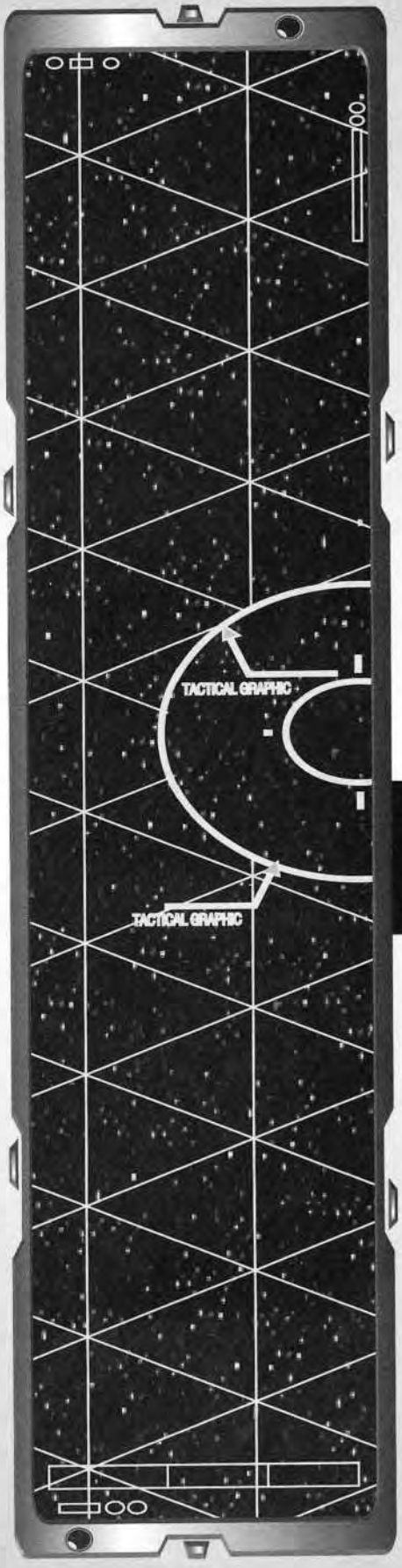
Rank:	1	2	3	4	5	6	7	8	9	10
Cost:	x0.2	x0.3	x0.4	x0.5	x0.7	x0.9	x1.1	x1.3	x1.5	x1.8

Portfolio:	1	2	3	4	5	6	8	10	∞
Cost:	x0.5	x0.8	x1.0	x1.2	x1.3	x1.4	x1.5	x1.6	x2.0

Draw:	x1/2	x1	x1.5	x2	x3	x5	x7	x10
Cost:	x2.0	x1.0	x0.8	x0.7	x0.6	x0.5	x0.4	x0.3

Backlash:	0	1	2	3
Cost:	x1.3	x1.0	x0.7	x0.5

Spaces:	1	5	10	20	30
Cost:	x2.0	x1.3	x1.0	x0.9	x0.8





through every other component of the mecha; it is this network that allows the pilot's "psychic awareness" to be expanded to the limits of his mecha. Unfortunately, this network also has a tendency to carry electrical pulses and feedback to the pilot when the mecha is damaged—as the pilot shares the awesome power of his mecha, so too must he share its pain. Whenever a servo, Command Armor location, or any other component (with the exception of armor plates and Shields) is completely destroyed, the pilot suffers the listed Backlash value worth of Hits directly to his head, ignoring armor or other protection the pilot may be wearing.

SPACES: This is the number of Spaces that the Lens must occupy. Lenses are the only system that may not be efficient, thus they must occupy the listed number of Spaces. ESPer Lenses may be Split between multiple locations (or even multiple mecha) as discussed in system Splitting (page 14); as always, should any Split portion be destroyed, the Lens is no longer functional.

Thought Control △ おもいのコントロール

Once more on the forefront of mechatechnology, the Thought Control system creates a direct link between the mind of a pilot and the body of his mecha—it eliminates the need for levers, buttons, or other controls. In fact, it eliminates any need for the pilot to move at all! Though this system has its disadvantages, it can greatly increase the ability of your mecha to maneuver and react. Additionally, this system will almost invariably cause a bond to develop between the mecha and the pilot. In most cases this bond is beneficial, allowing greater communication between the pilot and the mecha (although this too has its disadvantages).

The bond formed between the pilot and the mecha opens up the possibility for psychic feedback damage. This can cause serious problems, as the pilot actually *feels* the damage his mecha is sustaining—this may cause the pilot to suffer tremendous trauma, or even be killed. For this reason, it is wise to make sure that Thought-Controlled mecha are very well armored.

Thought Control: x0.5

Thought Control is a Cost Multiplier system and takes no Spaces. Mecha equipped with Thought Control systems are subject to the following rules:

1) Regardless of the mecha's current MV, it receives a +2 MV bonus (which *may* increase the MV above the normal maximum of zero).

2) The mecha automatically receives a +67% bonus to its Maneuver Pool. The Pilot's base Maneuver Pool (his Piloting Skill -5) is multiplied by this amount.

For example: *A Pilot with a Skill of +8 has a base Maneuver Pool of 3 Points; with +67% MP, his Maneuver Pool would increase to 5 Points. Fractional MP Points always round down.*

3) All Weapon Accuracies are increased by an additional +1.

4) If the mecha has a Remote System, the Control Multiple is multiplied by two. Other than this, however, the Remote units receive none of the other Thought Control system bonuses—unless the Remotes themselves purchase Thought Control systems of their own.

5) Because of the bond formed between the mecha and its pilot, for every three Kills of internal damage sustained by the mecha (i.e., damage that penetrates armor), the pilot suffers one Hit of damage directly to the head, ignoring any armor or other protection.

No single mecha may stack multiple Thought Control systems (the bonuses do not compound). However, multiple Thought Control systems may be purchased so that two or more pilots may benefit from the bonuses. Even Internal Automation systems may benefit from Thought Control; Thought-Controlled IA systems, in addition to becoming more efficient (thanks to the bonuses listed above), will also develop sentience and a personality—just like the many intelligent mecha from your favorite robot shows.

Thought Control is a Cost Multiplier system and takes no Spaces. However, the x0.5 Cost Multiplier only affords the listed bonuses (and penalties) for one pilot or IA system. Additional pilots and IA systems may be equipped in the above manner for an additional x0.1 Cost Multiplier. For example, two pilots and an IA system could by outfitted for Thought Control with a Cost Multiplier of x0.7 (x0.5 +x0.1 +x0.1).

Turbocharger △ ターボチャージャー

The ultimate overboost, a Turbocharger (also known as a V-Max system) is the mecha equivalent of the Nitro afterburners on funny-cars. Usually reserved for special attack maneuvers and moments of extreme desperation, the Turbocharger (a package which riddles the mecha with power capacitors) allows it to burn almost all of its internal power supply, and, in doing so, supercharge all internal systems for a brief but glorious instant of frenzied power. Unfortunately, this effect tends to degrade the mecha's overall effectiveness once the energy supplies are exhausted.

TURNS: A Turbocharger is effective for a limited number of turns only.

COST: A Turbocharger is a Cost Multiplier system; the duration (in turns) determines the cost of the system, and it takes up no Spaces.

BACKUP GENERATOR: Normally, the mecha's performance is reduced after using its Turbocharger. Mecha with a Backup Generator function return to normal operation once their Turbocharger runs out of juice; however, they can only continue to function for 1D6x10 minutes before needing their powerplants repaired at a mecha repair facility. The repair process takes a minimum of three hours to complete.

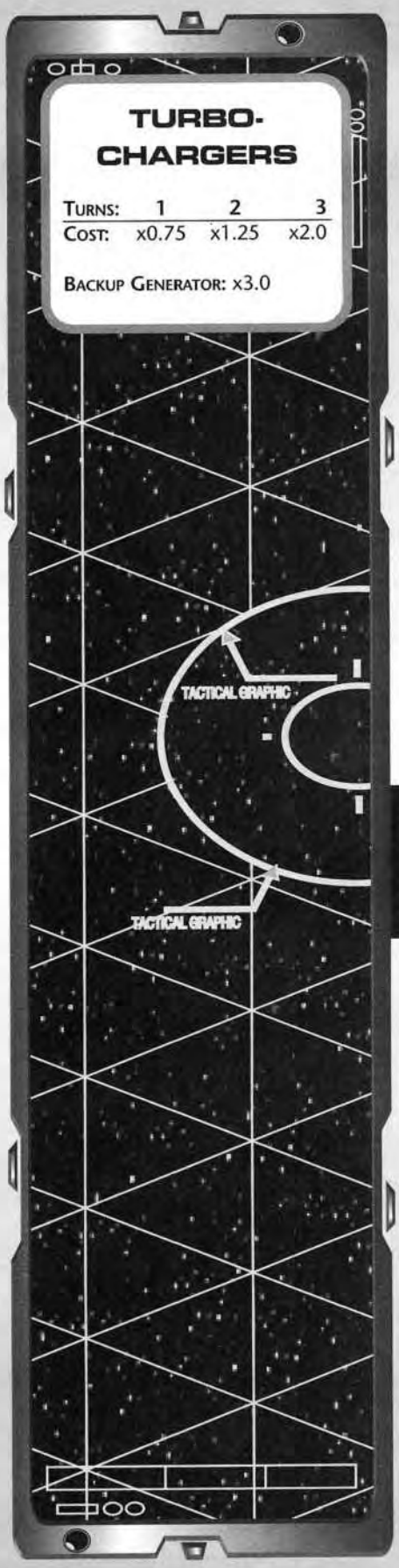
• TURBOCHARGER BONUSES: During the time the Turbocharger is active, the mecha is subject to the following rules:

1) All Beam Weapons (and Beam Weapon functions of Energy Pool Portfolios) have their range and their damage yield increased by +50% .
2) All Energy Melee Weapons (and EMWs in Energy Pool Portfolios) have their damage yield increased by +100%.
3) The mecha gains +1MV. This, like a Thought Control system, may even increase the mecha's total MV above zero.
4) All non-energy Melee Weapons do an additional 2 Kills of damage (like Beastmecha servos).
5) Leaping distances are increased by one extra hex.
6) Reactive Shields (force fields) can take 50% again their normal damage capacity.
7) All Reactive Shields (force fields) and Automated Energy Melee Weapons (point defense systems) have their PFs and AFs respectively increased by 100%.
8) The number of Actions the mecha can take increases by +1 (thus, the mecha may take 3 Actions per turn—they may even all be movement, effectively increasing MA by +50%).
9) The pilot of the mecha may not target specific systems on enemy mecha.

• TURBOCHARGER PENALTIES: Once the Turbocharger is no longer active, the now-depleted mecha is at a great disadvantage, and is subject to the rules below. These disadvantages apply until the mecha has its powerplant repaired at a mecha repair facility. The repair process takes a minimum of three hours to complete.

1) All Beam Weapons (and Beam Weapons in Energy Pool Portfolios) do 50% less damage and have 50% less range than normal.
2) All Energy Melee Weapons (and EMWs in Energy Pool Portfolios) do 50% less damage than normal.
3) The mecha suffers -1 to its MV.
4) All non-energy Melee Weapons do one Kill less damage than normal.
5) The mecha's Jump ranged are reduced by one hex.
6) Reactive Shields (force fields) can stop 50% less than their normal damage capacity.
7) All Reactive Shields (force fields) and Automated Energy Melee Weapons (point defense systems) have their PFs and AFs reduced by 50% below normal.
8) The mecha loses an Action (in other words, it may take only one Action, so its MA is effectively halved).

• DUAL TURBOCHARGERS: It is possible for a mecha to have two Turbochargers. They may be used independently (at separate times), in which case the mecha will gain full advantages both times, or the pair may be applied simultaneously. In the latter case, all of the effects listed for one system are doubled (e.g., +100% increase in Beam weapon strength, +2 extra Actions, etc.). In either case, the mecha is not assumed to have burned out the majority of its energy reserves until both Turbochargers have been used. When this has happened, however, the drain is almost absolute; the machine suffers double the listed penalties (Beam Weapons are useless, -2 MV, etc.), with one exception: The mecha will lose both Actions (i.e., be totally shut down) for only 1D6 turns. After that time, the mecha will be able to perform only one Action per turn until repaired.





Techno-Organics △ テックノオーガニックス

One hundred tons of destruction, hundreds of square meters of armor plating, weapons with the power to level cities, and somewhere within this fearsome weapon ... there is life.

Though humanity's path of technological evolution has followed the way of tools, machines, and eventually robotics and cybernetics, other cultures and alien races may choose to follow the organic route. Though these civilizations may develop their tools from genetics rather than from physics and engineering, there comes a point (as with human techno-evolution) where the magic of life inevitably meets the science of steel.

Such biomechanical mecha are built exactly like any other design, with the exception that they also purchase the Techno-Organic Cost system. A variant upon this system is the Regenerating advantage, which may or may not be combined with the Techno-Organic system. All of these ssytems are Cost Multiplier systems and require no Spaces.

TECHNO-ORGANICS

Techno-Organics: x0.5

Regenerating: x0.25

Regenerating Techno-Organics: x0.67

TECHNO-ORGANICS: Techno-Organic mecha are subject to the following rules:

1) Techno-Organic mecha possess healing powers; the high level bio-engineering used in their construction will allow any damaged servo (Torso, Head, Arm, Leg, Wing, Tail, etc..) or weapon to regain one Kill at the beginning of each new round. These systems may heal in this way only if they have not been *completely* destroyed.

2) Armor plating, Command Armor, Standard Shields and Active Shields also heal, but at a much slower rate: These systems will recover only one Kill per *day* due to their higher density and the energy required to produce their component materials. As above, these elements will not be able to return from complete destruction.

3) Propulsion Systems, Sensors, and other systems not listed above do not heal appreciably, so they must be actually repaired by technicians ... or perhaps healed by biologists?

4) Because Techno-Organic mecha, like any other living thing, feel pain, they suffer a -1 penalty on all actions for each system (excluding armor plating) that is *completely* destroyed. This penalty is cumulative, and thus can become quite a problem.

5) Techno-Organic mecha gain an overall +1 MV bonus (though this may *not* bring the mecha's overall MV above 0).

REGENERATING: Some anime series are based upon the premise that the heroes acquire a Mekton from a more advanced race, and then become the sole protectors of Earth (or wherever). In such a case, refueling, reloading and repair of the commandeered Mekton are often completely beyond the technical knowledge of the heroes and their civilization. Regeneration allows the mecha to create replacement components to take the place of damaged or expended ones ... given time. This system can be used to simulate nanotech self-repair systems, matter replicators or trans-dimensional spare-parts reserves.

With Regeneration, the mecha can refill empty Missile pods, reload Projectile Weapons, heal Servo damage, restore Armor plating and regenerate internal components such as Propulsion Systems and Sensors ... albeit at a much slower rate than that given by Techno-Organics.

Regeneration allows each and every damaged component to be restored at a rate given below, according to the Tech Level of the mecha.

REGENERATION RATES

TL	10% of Total CP Regenerates in
-5	1 Week
6-7	1 Day
8-9	1 Hour
10	5 Minutes

Systems can be restored even if completely destroyed, unless the Torso servo is destroyed (which is assumed to house the

main system). Even then, the Referee may rule against this in the case of exceptionally high Tech Level, extra-durable construction, or reality-bending bias.

REGENERATING TECHNO-ORGANICS: Mektons with this system gain the full advantages of both Regeneration and Techno-Organics; they can regenerate systems *and armor* at the rate listed under Regeneration, heal weapons and servos at the rate of 1 Kill per turn, and are subject to all other rules which apply to Techno-Organics.

Lightspeed Δ あかりのはやさ

Call it what you will—Hyperdrive, Warp Propulsion, Jump System, Space-Fold Device, Subspace Engine, Ultimate Unbelievability Motor—in MTS, a Lightspeed Drive is a Cost Multiplier system which allows your mecha to travel at *really fast* speeds. Exactly how fast depends upon whether you buy a Sublight or Hyperlight Drive, and usually is also affected by the Tech Level of the design.

Lightspeed Drives are Cost Multiplier systems, and they take no Spaces since they are essentially a function of the Propulsion systems and Powerplant of your mecha. In the rare case that your mecha has no Propulsion system (i.e., Thrusters, Gravitics, etc.), the system takes up as many Spaces as the mecha's weight/10.

Lightspeed travel is measured in two units: AU and Light Years. An AU (Astronomical Unit) is the distance from Earth to the sun (roughly 150,000,000 kilometers), and a Light Year (or LY) is the distance light traverses in one year (roughly 15.5 trillion kilometers). The speed of light is about 295,000 kilometers per second, which is about 1 AU per 8.5 hours. Although the exact Speeds attainable by Sublight and Hyperlight Drives are (as ever) up to the Ref, guidelines are given in the sidebar.

LIGHTSPEED

Drive:	Sublight	Hyperlight
Cost:	x0.75	x1.25

Lightspeed Drives usually take some time to engage: anywhere from one Action spent preparing to one hour of calculation. The availability and special effects of Sub- and Hyperlight technology are also left up to the Referee. Perhaps only Hyperlight is available, due to the use of "tesseract" science. Perhaps only Sublight Drives are available, but their speeds vary greatly from mecha to mecha: In such a case, the Referee should feel free to vary the cost depending upon how fast the Drive is.

For example: *In my Mekton Zeta campaign world (Tech Level 8), only Sublight Drives are available. The average Sublight speed is 1 AU in 36 hours, but the SunLancer Corvette is supposed to be a fast ship, so I say that its speed is 1 AU in 24 hours and price its Drive at x0.85. Meanwhile, the Dang Racket is a relatively sluggish freighter, so its speed becomes 1 AU in 48 hours, dropping its Drive's cost to x0.65.*

LIGHTSPEED TRAVEL

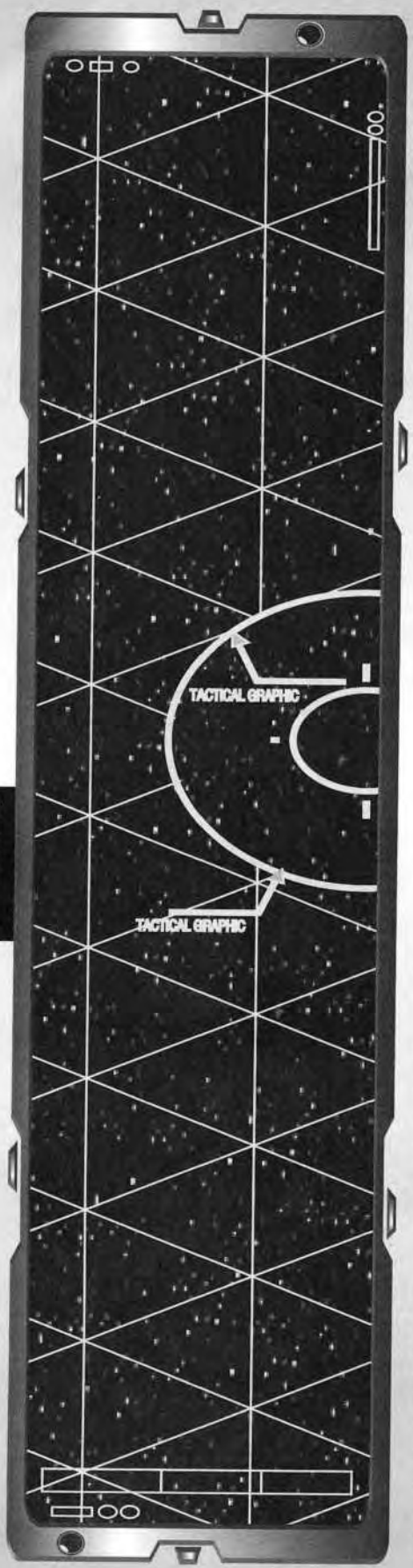
TL	Sublight	Hyperlight
6	AU/Week	LY/Year
7	AU/5 Days	LY/Week
8	AU/3 Days	LY/Day
9	AU/Day	LY/Hour
10	AU/12 Hours	LY/Second

Teleportation Δ テレポーテーション

A thousand years of technological advancement beyond the warp drives used to propel million-ton gateships through space, Teleportation systems are totally outside the grasp of most cultures. However, in Mekton Zeta worlds which feature exceptionally high technology, or in the hands of an alien race or designer, such a system would be possible—and most potent indeed.

COMBAT TELEPORT: A Teleportation system can move mecha up to the system's full Combat Teleport range in one Action, ignoring intervening terrain and other features, provided that the mecha or its pilot has some method of perceiving the target location.

GLOBAL TELEPORT: Mecha with Teleportation capability may also perform a Global Teleport; this technique has far greater range, but requires much more extensive preparation beforehand (Referee's decision—anywhere from a minute to an hour or more) in order to build up power and to do the calculations necessary to insure a safe and accurate translocation. A Teleportation system's Global range is equal to its Combat range raised to the fourth power (multiplied by itself three times) in kilometers. In the case



TELEPORTATION SYSTEMS

Combat Teleport (Hexes):	2	3	4	5	6	7	8
Global Teleport (km):	16	81	256	625	1296	2401	4096
Cost Multiplier:	x0.4	x0.5	x0.6	x0.7	x0.8	x0.9	x1.0

Dimensional: x5.0

of Global Teleportation, the target area need not be in sight, but Global Teleportation is not as accurate as Combat Teleport—the mecha must teleport to a relatively open area (parking lot, baseball diamond, open fields, the sky, empty space, etc.). Mecha may not teleport into, or out of, an area surrounded with a force field (that is, a Reactive Shield).

COST MULTIPLIER: Teleportation systems are Cost Multiplier systems and take no Spaces.

DIMENSIONAL: This expensive enhancement increases the capability of the Teleportation system by allowing it to manipulate the fourth dimension, so that incredibly long-distance translocation is possible. Dimensional Teleportation systems use the listed Global Teleport rating (in kilometers) to measure their Combat Teleport range, while they use the listed Combat Teleport rating (in an increment of the Referee's choosing—thousands of km, millions of km, AU, Light Years) to measure their Global Teleport range!

For example: *The God-Rapier XIX (rebuilt by cosmic aliens) has Dimensional Teleportatation ability; it can jump 625 kilometers in one Action, or it can, with some preparation, teleport 5 light years away! This rather impressive system increases the God-Rapier XIX's base cost by 3.5 times.*

Transformation △ へんしん

The term "Transformable" refers to any mecha built in an alternative servo configuration, or capable of changing to and from an alternative servo configuration. Welcome to the realm of mechanized shapeshifters.

Transformable mecha are constructed in the same way as normal Mektons. When the "native form" is complete, any number of Transformations can be purchased for the listed Cost Multipliers; Transformation takes no Spaces from the mecha. In game play, the process of Transforming from one Form to another takes one Action—how long it takes in "real life" is up to the Referee.

Note that the "native form" of any mecha need not be Humanoid. Mecha which have no humanoid form may choose any single Transformer mode at *no cost*, and all of the advantages and disadvantages of the chosen form are applied in full.

While it may seem that many of the listed Transformer modes may only be appropriate to certain Scales ... well, Anime is not about limitations. Giant motorcycle battleships, subcompact car-sized minitanks and planet-size humanoid mecha may be *strange*, but they are not (for MTS) impossible.

Note: Many of the Transformer modes provide MV bonuses. As with most other forms of MV bonuses, these may not serve to increase the mecha's MV above zero.

All Transformables are listed in the following format:

FORM: The official (i.e., generic) name of the Transformable; you might call it an "Interceptor," "TurboStriker" or "Maneuver Escort," but in MTS it's a Fighter.
COST: The Cost Multiplier which is applied to the totalled Base Cost of your mecha.
MODIFIERS: Any alterations to the mecha's base MA, MV, servo damage bonuses, etc..
PROPULSION: The type(s) of movement system(s) that this Transformable needs to be able to move, listed from among Wheels, Treads, Hydrojets, GES, Thrusters, Gravitics, Legs or Wings.
HARDPOINTS: The only locations from which the mecha's weapons will operate. Weapons in other locations than those listed under "Hardpoints" will not operate in this Form.
SPECIAL: Any advantages or disadvantages associated with this Form are briefly mentioned here; full explanations can be found in the Form's description paragraph.

HUMANOID (MEKTON) FORM
COST: x0.0
MODIFIERS: . . . . . .None
PROPULSION: . . . . . .Any
HARDPOINTS: . . . . . .All
SPECIAL: . . . . . .None

HUMANOID is the "default" Form in which all mecha are initially designed; the mecha may not necessarily take the shape of the human body, but if it does not have the bonuses of any of the Transformables, it is considered a humanoid—or in MTS parlance, a Mekton. Humanoids can walk and fly in reverse at 1/2MA. Mecha which can transform between Humanoid form and another Form(s) pay the cost for the Transformable; you *can not* design a mecha whose native (free) Form is a Fighter and then have it Transform to a Mekton for a Cost Multiplier of x0.0!

FIGHTER (CORVETTE) FORM
COST: x0.3
MODIFIERS: . . .-2 to Maneuver Value, 2x Movement Allowance (Propulsion system only)
PROPULSION: . . . . . .GES, Thrusters or Gravitics
HARDPOINTS: . . . .Torso, Pod, Head, Wings,Binders
SPECIAL: . . . . . .Minimum MA of 4 hexes per turn

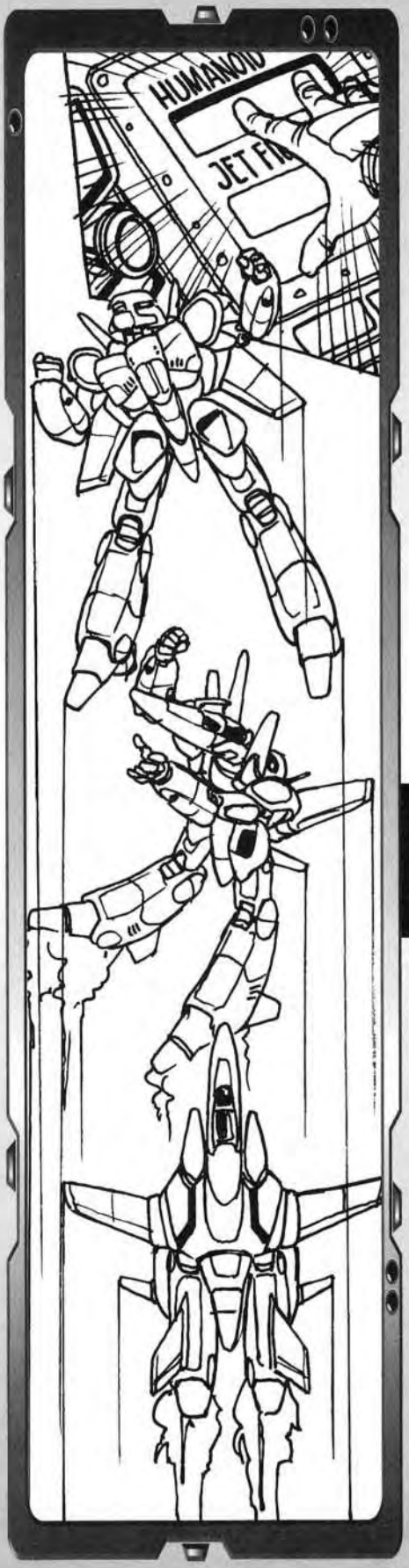
FIGHTERS are designed for atmospheric or space use, and are aerodynamic and lightning-fast. While they aren't quite as maneuverable as humanoid mecha, this is more than made up for by their higher speeds and tactical versatility. Fighters don't need to have Wings (although they may still purchase them, if desired, for the additional MA bonus), but because of their design, they may move no slower than 4 hexes per turn or they will be considered to be falling—obviously, this only applies during gravity situations. Fighters cannot fly in reverse. The larger version of this Form (generally, a x10 Scale Fighter) is referred to as a "Corvette"—a fast, formidable craft midway between a Fighter and a Starship.

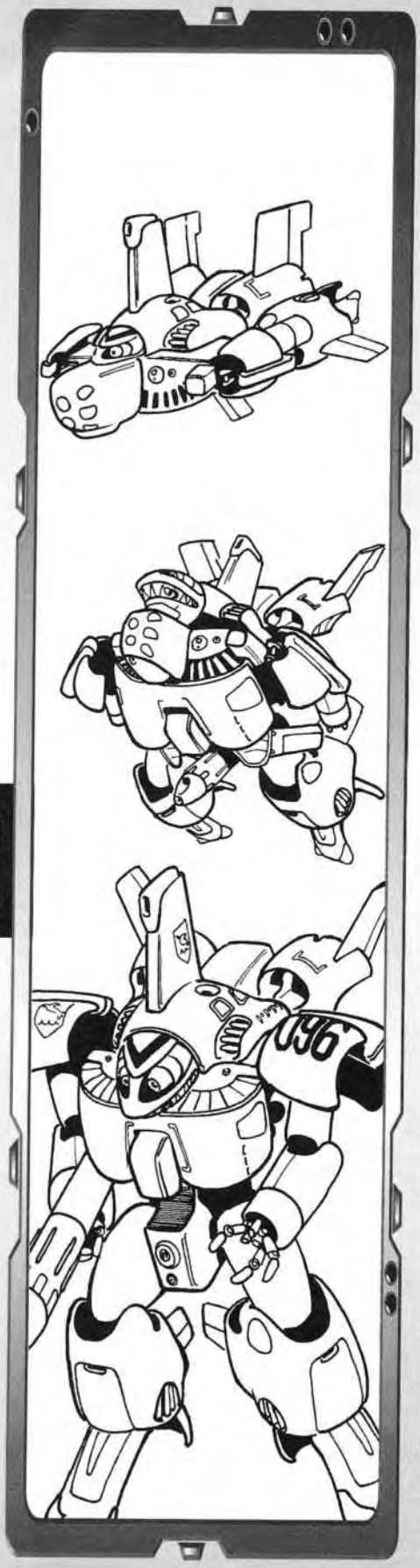
HYBRID FORM
COST: x0.35
MODIFIERS: . . .-1 to Maneuver Value, 1.5x Movement Allowance (Propulsion system only)
PROPULSION: . . . . . .GES, Thrusters or Gravitics
HARDPOINTS: . . . . . .All
SPECIAL: . . . . . .None

HYBRID is an exceptionally versatile Form, part humanoid and part Fighter. A Hybrid usually looks like a jet fighter which stands on reverse-knee "chicken" legs and has arms sticking out from its sides. However, a Hybrid mecha does not necessarily have to have a humanoid and/or a Fighter Form. Hybrids are superb all-purpose mecha, as they're faster than most other Forms and are able to use weapons mounted in any location. Hybrids can also walk and fly in reverse at 1/2MA. However, while Hybrids are exceptionally fast and maneuverable, they still suffer a -1 penalty to their Maneuver Value due to the halfway-transformed state of their limb servos.

HELICOPTER FORM
COST: x0.25
MODIFIERS: . . . . .+6 MA (flight only)
PROPULSION: . . . . . .None necessary; may use Thrusters, GES or Gravitics
HARDPOINTS: . . . . . .Torso, Head, Pod, Wings
SPECIAL: . . . .No Hands or hand-held weapons, flight without a Propulsion System.

HELICOPTER form mecha, often called Gunships, serve mainly as flying ground-attack platforms. They use a relatively unique form of propulsion, namely rotorblades, since a relatively low flightspeed is tactically vital to their design and purpose. This distinct flight method is reflected in the Helicopter Form's most distinct advantage: It allows a non-flying mecha to take to the air. If they have bought the Helicopter Transformation, even mecha with no Propulsion System at all can fly. Their Flight MA is equal to their Land MA +6. Should the designer of the Helicopter want a higher MA, some form of Propulsion must be purchased; its MA will be added to the mecha's Flight MA in Helicopter Form, and function normally in other Forms. Helicopters also have the ability to hover just like Humanoids, Hybrids and mecha with Gravitics, and they can fly in reverse at 1/2MA. Naturally, Helicopters can only fly while in atmosphere. Being exceptionally maneuverable, they suffer no MV penalty when transformed. **Note:** Should a Helicopter Form mecha suffer a 4 on the Special Hit Chart (Flight System), any damage which penetrates armor completely eliminates the Helicopter's ability to fly (this simulates the destruction of the rotorblade system).





TANK FORM

COST: x0.3
MODIFIERS: . . .-1 to Maneuver Value
PROPULSION: . . . . . .Wheels, Treads, GES or Gravitics
HARDPOINTS: . . . . . .Torso, Head, Pod, Binders
SPECIAL: . . . .No Hands or hand-held weapons, +2 armor SP to all locations

TANKS are designed to consolidate armor protection, so they gain +2 SP to all locations thanks to overlapping armor plates, better-angled surfaces (for improved deflection vectors) and the closing of unnecessary joint and seams. Since Tanks are designed for ground-based operations, Tank Form mecha which are equipped with Gravitics may not fly more than one hex level above the ground (they essentially act as Gravitic Ground-Effect Systems). They may, however, use such systems to slow any falls so as to take no damage. Tanks may move in reverse at 1/2 normal MA. Additionally, Tank Form mecha may designate one (but only one) servo, either the Torso or Head as a "turret," and any weapons which are mounted in that servo may have a 360-degree firing arc.

SUBMARINE FORM

COST: x0.25
MODIFIERS: . . .-2 to Maneuver Value, greater MA on and in water
PROPULSION: . . . . . .GES, Hydrojets, Thrusters or Gravitics
HARDPOINTS: . . . .Torso, Pod, Binder
SPECIAL: . . . .No Hands or hand-held weapons, can function on and under water only

SUBMARINE mecha may only move on or in water hexes—this means oceans, seas, lakes and large rivers. Submarine Form allows the mecha to reduce the MA restriction for moving in water from x3 to x2. Submarine Form also cancels the need for a Marine Sensor Suite (see Recon Systems, page 51) and a water-specific Propulsion system, and grants the mecha the Underwater and High Pressure types of Environment Protection (see Environment Protection, page 72). Submarines can move in reverse at 1/2MA. However, these advantages only apply in Submarine Form; any other forms will not get these benefits. If the mecha wants these advantages all the time, it must buy the individual systems.

BOAT FORM

COST: x0.3
MODIFIERS: . . .-1 to Maneuver Value, Full MA on water surface
PROPULSION: . . . . . .GES, Hydrojets, Thrusters or Gravitics
HARDPOINTS: . . . . . .Torso, Pod Head, Binder
SPECIAL: . . . .No Hands or hand-held weapons, can function on water only

BOAT Form is, as always, generic—this Form could just as easily be a trimaran, catamaran, jetski or any other waterborne vessel. Mecha which take this Form may only move on water hexes—this means oceans, seas, lakes and large rivers. Boat Form allows the mecha to ignore the x3 MA restriction for moving through water, so that the MA value becomes x1. It also eliminates the need for water-specific Propulsion Systems and grants the mecha the Underwater type of Environment Protection (see Environment Protection, page 72). However, these advantages only apply in Boat Form; any other forms will not get these benefits. If the mecha wants these advantages all the time, it must buy the individual systems. Boat Form mecha may not travel beneath the surface of the water like Submarine Form, but they can travel in reverse at 1/2MA and may use Head-mounted weapons like Tank turrets (that is, Head-mounted weapons get a 360-degree firing arc).

AUTO FORM

COST: x0.25
MODIFIERS: . . .-1 to Maneuver Value, +5 Movement Allowance
PROPULSION: . . . . . .Wheels, Treads, GES or Gravitics
HARDPOINTS: . . . .Torso, Pod, Binder
SPECIAL: . . . .No Hands or hand-held weapons, driver usually enclosed

AUTOMOBILES of any type are considered Auto Transformables; Jeeps, Cars, Sedans, Vans, Trucks, Semis and huge roadhaulers are all possible (just remember that most car-sized mecha are 1/5th-Scale designs). Designed for ground use, Auto Form mecha using Gravitics may not fly more than one hex level above the ground. They may, however, use such systems to slow falls so as to take no damage. GES-equipped Autos generally follow the classic hovercraft idea, but in most Anime, Autos use Wheels—lots of Wheels. Anime mechacars have been

known to be supported by more than a dozen Wheels on as many as six different axles; this is because small, individual Wheels are relatively easy to destroy, but having many means that any single Wheel hit is unlikely to disable the vehicle. The advantages to Auto Form are its lower profile and its increased speed—Autos increase their land MA by +5 (however, they suffer a -1 penalty to MV). This MA bonus is added on top of the MA bonus for having Wheels; should the mecha have a land MA of 6, and get +2 for Wheels, its Auto Form MA would be 12 (6 +2 = 8, 8 +5 = 13). Remember that walking MA Scales down, but Wheeled MA does not. Most Autos enclose the driver inside, but some mechacars may be jeeps, convertibles, or feature other Saddle-type Cockpits (Cockpits may change from enclosed to exposed through Transformation). Autos may move in reverse at 1/2 normal MA.

CYCLE FORM

COST: x0.35
MODIFIERS: .+5 Movement Allowance
PROPULSION: . . . . . .Wheels, Treads, GES or Gravitics
HARDPOINTS: . . . .Torso, Pod, Binder
SPECIAL: . . . .No Hands or hand-held weapons, driver usually exposed

CYCLE Form represents Motorcycles, 'Bikes, 'Trikes, 4-Wheelers and any other small, fast, maneuverable ground vehicle designed for one or two people (remember that most cycle-sized mecha are 1/5th-Scale designs). These are ground-use mecha—flying bikes and other such vehicles should be designed as normal Mektons (or maybe Fighters). Cycle Form mecha using Gravitics may not fly more than one hex level above the ground. They may, however, use such systems to slow falls so as to take no damage. The advantages to Cycle Form are its maneuverability and its increased speed—as well as being able to weave through traffic, Cycles increase their land MA by +5 hexes. This is added on top of the MA bonus for having Wheels; should the mecha have a land MA of 8, and get +2 for Wheels, its Cycle Form MA would be 15 (8+2 = 10, 10 +5 = 15). Remember that walking MA Scales down, but Wheeled MA does not. Motorcycles cannot move in reverse. Most Cycles leave their driver exposed, although some mechabikes may feature an enclosing canopy (Cockpits may change from exposed to enclosed through Transformation). The larger transformable mechabikes usually become a miniature Mekton, with an enclosed Torso Cockpit, while the smaller ones are capable of becoming a suit of powered armor for the pilot (in such cases, the pilot must wear some kind of hard armor for the mecha to latch onto).

MECHARIDER FORM

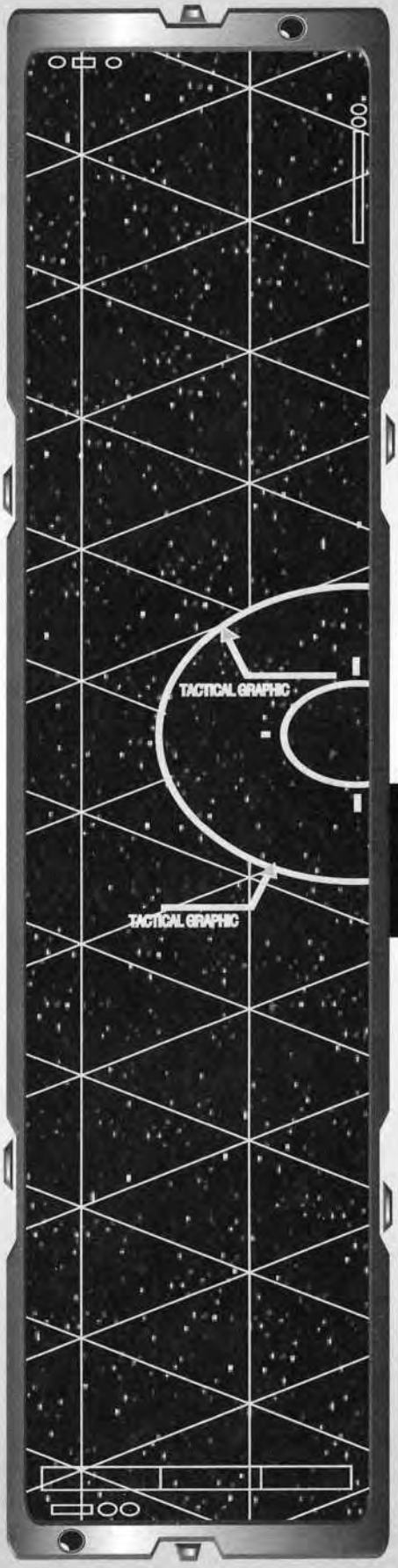
COST: x0.2
MODIFIERS: . . .-2 to Maneuver Value,
PROPULSION: . . . . . .Any
HARDPOINTS: . . . . . .Any
SPECIAL: . .May carry 5x own weight, confers MV to rider(s)

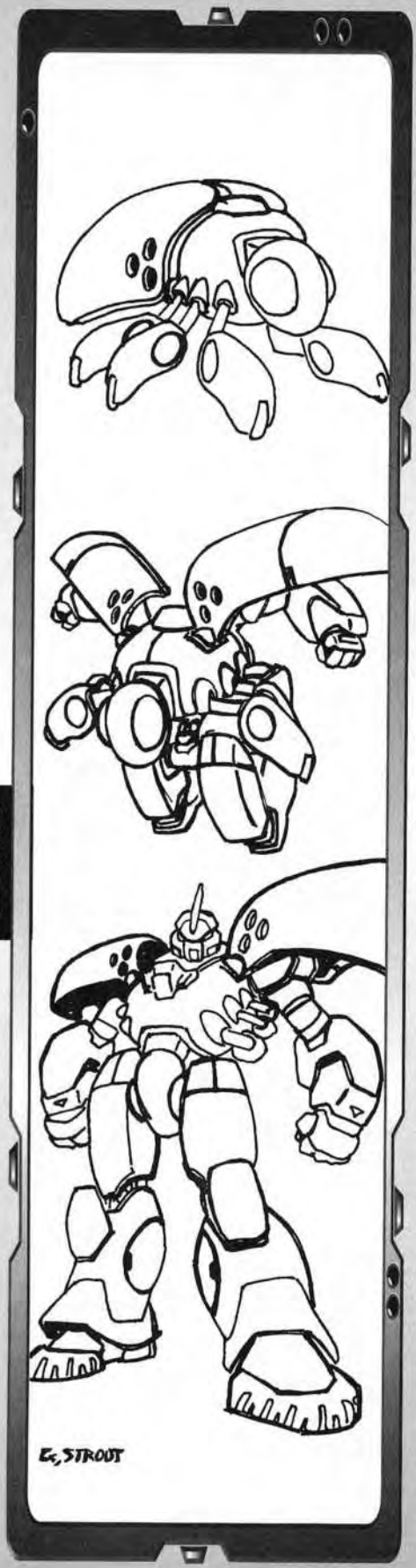
MECHARIDERS are designed to carry other mecha, usually to move the riding mecha from place to place faster than they could travel unassisted. Mechariders can take the form of anything—giant mecha motorcycles, surfboards and hover platforms have all been done. Mechariders are built like normal mecha, but they do not necessarily need a crew, since they are usually controlled by the riding mecha. Mechariders may carry (at no penalty) five times their own weight in mecha, and they follow all the rules for Mechariders as listed in *Mekton Z*, page 73. Mechariders cannot move in reverse. Transformable Mechariders are exceptionally versatile units on the battlefield, allowing for remarkable teamwork and cost-effectiveness.

SHIP (BASE) FORM

COST: . . . . . .x0.0 for Crew 8+1D10
x0.1 for Crew 10+1D10
x0.2 for Crew 12+1D10
x0.4 for Crew 13+1D10
x0.6 for Crew 14+1D10
x0.8 for Crew 15+1D10
x1.0 for Crew 16+1D10
MODIFIERS: . . . . .Uses Starship rules (see *Mekton Z*)
PROPULSION: . . . . . .Any
HARDPOINTS: . . . . . .Any
SPECIAL: . . .Cost reflects crew quality

SHIPS are seldom Transformable (but they can be); this form is exclusively reserved for x100 Scale mecha, and usually is chosen as the "native" Form of the huge mecha. The actual shape of the Ship is up to the designer; a Torso with Pods and/or Wings is most common, but x100-Scale Tank-Ships and Submarines are quite possible. In the case of Transforming Ships, the cost of the Ship Form (based on Crew quality) and the cost of the other Form are added together; Ship-Humanoid





Transformables must pay an added x0.25. Note that Ships and other x100 Scale mecha use special rules for weight and storage capacity (see Scaling, page 112). For Ship Forms only, **MV only affects Initiative** (based on the Crew Quality). Remember that Ships are not automatically assumed to be capable of easy interstellar travel—to do so, they must purchase some form of Lightspeed Drive (see page 81). Ships may move in reverse at 1/2MA.

BEAST FORM

COST: x0.3
MODIFIERS: . . .-1 to Maneuver Value, +2 MA (land only), +2K damage in melee
PROPULSION: . . . . . .Legs only
HARDPOINTS: . . . . . .Any
SPECIAL: . . . .No Hands or hand-held weapons

MECHABEAST Transformables cover any animalistic shape, but the shape must be specified when the mecha is built—lions, bears, rhinos, horses, non-flying insects, dinosaurs, even fish (although these might be better represented by a Submarine Form). Any kind of animal is possible—even snakes, frogs and slugs—as long as it cannot fly. Beast Form mecha are designed to take maximum advantage of their servos and internal mechanical musculature; they are both faster and more powerful than other mecha. All claws, talons, pincers and other mounted Melee Weapons receive an additional +2 Kills of damage when used in Beast Form. Beast Form mecha may move in reverse at 1/2MA. Because of their more limited range of movement, they are slightly less maneuverable than humanoids, and since no animals have hands, they may not use any form of hand-held weapons (Ape, Monkey and Gorilla-mecha are considered humanoids). Mecha-snakes (and eels, worms, etc.) are the only Beast Forms which do not need legs; they require a Head (except for worms), Torso and Tail, and receive a Land MA as if they could walk.

AVIAN FORM

COST: x0.35
MODIFIERS: . . . .-1 MV, +2K in melee +6 MA (Flight only)
PROPULSION: . . . . . .Land: Legs, Flight: None necessary, but may use GES, Thrusters or Gravitics.
HARDPOINTS: . . . . . .Any
SPECIAL: . . . .No Hands or hand-held weapons, flight without Propulsion

AVIAN Form is very similar to the Beast Form, except that it represents a flight-capable animal of any type (again, the shape must be specified when the mecha is built). Birds, dragons, flying insects and winged dinosaurs are all possible—while most Avians have Wing servos, other limbs may transform into wings if none are present. Avian Form mecha have the same re-configured servo capabilities as Beasts; all claws, talons, pincers and other mounted Melee Weapons receive an additional +2 Kills of damage, but they may not use any form of hand-held weapons. Avians can walk in reverse at 1/2MA, but they cannot fly in reverse. Avians gain no bonus to their land MA, but they are capable of flight without using any Propulsion system at all: Avians can automatically fly at a speed equal to their Land MA+6. How this is achieved is a special effect: It could be due to wing-flapping, a helicopter-style rotorwing effect, or control over the very wind for that matter! Whether Avians can fly in space is up to the Referee. Should the designer of the Avian want a higher MA, some form of Propulsion must be purchased; its MA will be added to the mecha's Flight MA in Avian Form, and function normally in other Forms.

Transformable Options △ へんしんのオプション

These are not complete Forms into which Mecha may change, but rather are *functions* of Transformation. Most of these options are used to enhance Transformation, but some can be bought on their own to alter mecha.

CONCEALMENT Cost: x0.1

Sometimes it is desirable for a mecha to Transform into another Form in such a way as to conceal the fact that it is really a mecha at all. This can be accomplished by paying x0.1 for each form in which the mecha wishes "concealment." Concealed Forms will appear just as if the mecha were one of whatever vehicle is being chosen. For instance, a humanoid-Auto Transformable mecha with the Concealment ability could, in Auto Form, look exactly like a Ford Model-T (or whatever the designer designates it as). While this option is generally not so useful for 100-foot Beast or Avian Form Transformables, this

option *can* be bought for a mecha which does not actually Transform: A humanoid mecha built at 1/10th Scale with the Concealment option would look like a real person!

CONDITIONAL MOVEMENT Cost: -x0.1
This is an option available only to Transformable mecha. Many Transformable mecha demonstrate the ability to fly, drive or otherwise use some kind of movement system only in one (or some) of their Forms. If you wish to design a Transformable mecha which can only make use of its movement system (Wheels, Treads, GES, Hydrojets, Thrusters or Gravitics) in one or some of its Forms, buy Conditional Movement. This grants a 10% rebate on the cost of the mecha, and limits the use of the movement system to Forms specified at the time of construction. Note that this option cannot be used if it does not actually limit the mecha: A Mekton-Tank Transformable which uses Thrusters in Humanoid Form could not get the Conditional Movement rebate for its Thrusters (which are not used in Tank Form) because Tanks cannot use Thrusters *anyway!*

EFFICIENT TRANSFORMATION Cost: x0.1
This option allows the mecha to Transform instantaneously. By using a combination of grease, magnetic actuation and/or high-tension myomer systems, Efficient Transformables do not have to expend any Actions to Transform. The x0.1 Cost Multiplier applies to all the Forms a mecha has (including Metaforms), so it need only be bought once.

METAFORM LEGS Cost: x0.05
This is a modifications package for limb servos allowing arms or legs to separate into multiple legs, as is popular for insectoid beastmecha; humanoids have two limb servos less than antlike Beastmecha, and this system makes up the difference. This Metaform is available for transforming mecha only and need only be paid for once, no matter how many extra limbs you want. The system allows limb servos to redistribute their kills and armor somewhat like Combiners—For example, the AntLion is a humanoid which can transform into a six-legged insectoid Beastmecha; in humanoid mode it has two Arms and two Legs, but in Beast form it has six Legs. In humanoid form the Arms each have 4 Kills and 4 SP, the Legs each have 5 Kills and 5 SP; in Beast form, each Arm and Leg "pools" their Kills and SP into 9K and 9 SP, which (thanks to the Metaform Legs system) separates into three Legs, each with 3K and 3 SP. In such situations, the restriction of Legs-Torso compatibility (i.e., Legs can be no smaller than 1 level lower than the Torso) is ignored.

METAFORM WINGS Cost: x0.05
This is a modifications package for limb servos—special structures allow either Arms or Legs to flatten into wing surfaces in lieu of adding a set of regular Wings. Usable on either transformable or non-transformable mecha, this Metaform function eliminates the need to buy a full set of Wings (and also eliminates the added weight), but the bonuses for having Wings will only apply when transformed. This Metaform need only be paid for once per *pair* of limbs/Wings. Refer to the example in the sidebar.

MODULAR METAFORMS Cost: x0.05
This is a "semi-transformation" which allows a part of the mecha to transform into something else: Legs might become Wings, Arms might transform into Beam Weapons, Wings might transform into Command Armor, etc. The mecha does not need to be Transformable to use this Option, but may be if it so wishes—the difference between Metaforms and Modular Metaforms is that Modulars do not *have* to be part of an overall Transformation. The advantage to Modular Transformation is the savings in Space and weight, while the disadvantages are the Action that Transformation requires, and the sharing of Kills by the transformable components. The elements (Modules) of a Modular Metaform must be designated (i.e., servo and weapon, etc.) when the mecha is designed, and one of the Modules MUST be a servo. Metaform Modules average their Kills and/or SP (that is, add them together and then divide by 2), take one action to transform, and the space taken up by the Module which is not a servo (if both Modules are servos, ignore this) is reduced by 50%. The similarities to both Metaform limbs (above) and Weapon Mating (see page 43) are obvious, but remember: 1) if one Module is destroyed, so is the other, and 2) both Modules are made more fragile overall, having had their Kills averaged together. However, the averaging of Kills saves weight. Although they are physically integrated, each system, weapon or servo operates individually (unless they are also Linked). Modular Metaforms may even allow a servo (such as a Pod) to split into several discrete Modules (such as Command Armor) when transformed. This is a good system for saving weight and Space, if you can spare the action required to use the Metaform. See the example in the sidebar.

Metaform Wing Example

The Rapier X-Zero is a humanoid which can transform into a Fighter; in humanoid mode it has no wings, but in Fighter form its legs become wings, thereby granting +4 (+2 x2) to its already doubled MA.

Modular Metaform Example

The Thunder Gorgon II has Mediumweight Arm servos (7 CPs, 7K) and its right Arm is designed as a Modular Metaform Beam Cannon; the Beam Weapon does 7K and costs 14 CPs (and would take up 14 Spaces from the Arm—big time efficiency needed here). However, since the Beam Cannon is a Metaform Module, its Space requirement is reduced to 7 and its 7 Kills are averaged with the Arm's 7 Kills for a total of 7 Kills. The two Modules become one location for the purposes of hit determination (the location is the Arm servo); if the Arm servo is hit with 7 Kills (after any armor), both it and the Beam Weapon are destroyed.

Cost Multipliers Systems △ ねのふえる

TRANSAT ABILITY Cost: x0.15

This option is generally applied as an added option to Fighters (or Corvettes, if the mecha is x10 Scale). It makes the Transformable capable of achieving orbit (with a one-use afterburner/booster system; once the afterburner and/or booster system is used, it must be refueled) and performing re-entry (through deployable heatshields). The Transatmospheric Ability gives the mecha tactical superiority in that it can enter, leave and travel through the atmosphere and space. Remember that these advantages only apply in Fighter/Corvette Form; if the mecha is to have these abilities in all forms, it must buy an actual Re-Entry Package (or Re-Entry Environment Protection) and a maximum-level Boosterpack.

VTOL ABILITY Cost: x0.05

A system of ducted thruster nozzles which allows a Fighter Form to fly so slowly as to be standing still (moving at 0 MA)—Fighters with this option can ignore the minimum 4-hex-per-turn MA restriction. This makes your mecha into a Vertical Take-Off and Landing vehicle.

WEAPON NETWORK Cost: x0.1

This option (which is only useful to transformable mecha) allows the mecha to use all of its weapons when Transformed. The only weapons excluded from this are Hands and hand-held Melee or Energy Melee Weapons—unless the Transformable is a Hybrid, it may not use such weapons. The x0.1 Cost Multiplier applies to all the Forms your mecha may have, so it need only be bought once.

"I'LL FORM THE HEAD!"



SAMPLE COMBINER "RAPIER SIGMA" (AS LISTED IN DAMAGE SCALE ON NEXT PAGE)

—

HUMANOID COMBINER FORMED FROM THREE SUB-MECHA: "SKY RAPIER ZED" (FIGHTER), "LAND RAPIER X" (TANK) AND "SUB RAPIER G" (SUBMARINE).

Combiners △ がったい

In Anime and live-action "Sentai" features, the concept of two or more mecha combining into a single super-weapon is understandably popular. While in theory Combiners are little more than glorified Transformables, the game mechanics necessary for their inclusion in MTS require more explanation. This unique breed of Transformables—Combiners—is subject to the same rules as normal Transformables (one Action to transform, etc.), as well as requiring a special Damage Scale.

To design a Combiner, first design and write up the "Greater" mecha. This is the mecha into which the "Lesser" mecha will Combine, and it need not possess any special mechanics or hardware. However, be sure your pilots have somewhere to end up—if more than one of your Lesser mecha has pilots, you'd better buy some spare Cockpits for the Greater mecha!

Combiner: x0.5

The cost of the transformation is a x0.5 Cost Multiplier of the Greater mecha, but is paid for by the Lesser component mecha. Thus the machinery may be divided between any or all of the Lesser mecha as long as, in total, the entire cost is paid. There must *always* be at least two lesser mecha involved in a Combiner, although there is no upper limit: Fifteen or more mecha have been known to come together to form one super-robot!

For example: *If a Combiner unit costs 300 points and has two Lesser component mecha, the two mecha must pay a* ***total*** *of 150 points. These points may be split evenly, or in any combination the player desires. If the mecha split it evenly, they would pay 75 points apiece.*

Regardless of total cost, Kills, or anything else, the weight of the Greater mecha must be exactly equal to the combined weights of the Lesser mecha. Therefore, Weight Efficiency is the best friend of any Combiner.

Once the Greater and Lesser mecha have been finished, a "Damage Scale" must be designed. A Damage Scale is a simple chart that correlates the various servos and components in the Lesser mecha to the various servos and components in the single Greater mecha. By means of this chart, a hit to a servo on the Greater mecha (a Leg, for example) will also cause damage to the servos of the Lesser units used to make up that Leg. The only limitation on the arrangement of the Damage Scale for your Combiner is that every servo and component that can be attacked must be accounted for. In addition, every piece of the Greater mecha must be comprised of at least one piece of at least one of the Lesser mecha. Finally, the Greater mecha's servos and Command Armor must map to the Lesser mecha's servos and Command Armor, weapons must map to weapons (weapons include Energy Pools), and other remaining systems may map to any other remaining systems.

A simplified Damage Scale—listed "servo (Armor/Kills)"—might look like the scale in the sidebar. As can be seen from this chart, a Combiner's total *can* be greater than its parts—such is the magic of Combiner technology. Look, for instance, at the Torso listing on the chart: The Rapier Sigma's Torso has 12 Kills (Mediumweight), but only 8 Kills go into it from the Lesser mecha. MTS sets no limit on

Sample Combiner Damage Scale

Combined Mecha "Rapier Sigma"	Sub Mecha #1 "Sky Rapier Zed"	Sub Mecha #2 "Land Rapier X"	Sub Mecha #3 "Sub Rapier G"
(Humanoid)	(Fighter)	(Tank)	(Submarine)
Head (8/6K)	Torso (2/2K)	•	•
Torso (8/12K)	Torso (1/4K)	Torso (2/4K)	•
Arms (8/7K)	Wings (2/2K)	Head-Turret (2/2K, 2/2K)	•
Legs (8/8K)	•	Torso (1/2K, 1/2K)	Torso (2/3K, 2/3K)
Sensors (2K)	Sensors (1K)	Sensors (1K)	Sensors (1K)
EMWs (10K)	Beam Guns (4K)	•	•
Missiles (4K)	•	•	Torpedoes (2K)
Railcannon (8K)	•	Railgun (5K)	•

the amount of Kills that may be gained by Combining, although your Referee might do so. Strict, "realism"-oriented Referees might even declare that NO extra Kills may be gained from Combining (although this can become a number-crunching hassle).

Damage done to Combiners depends upon whether the Greater mecha is being damaged, or the lesser mecha are not combined. The basic rule is: Damage done to one side of the chart is also *applied* to the other side, but the *effects* are not felt on that other side until it is active. In other words, damage done to the Greater mecha is also *applied* to the Lesser mecha, but the *effects* are not felt by the Lesser mecha until the Greater mecha de-Combines. Likewise, the effects of damage done to the Lesser mecha are not felt by the Greater mecha until it has been formed.

To explain, refer again to the Damage Scale chart above. A hit to the Rapier Sigma's Torso (after armor and other protection) that did 5 Kills of damage would also do a total of 5 Kills (directly to the Torso servos) of the Sky Rapier Zed and the Land Rapier X. This damage must be divided as equally as possible between the two Torsos; 2K and 3K is the most equal division of the damage. In cases such as this (where the damage is not equal for all parts) the defender may choose which part receives 2K and which one receives 3K (this also applies to damaging armor and other components).

Should any system or servo of the Greater mecha be destroyed, any components corresponding to it from the Lesser mecha of the Damage Scale are also destroyed. For example, were the Rapier Sigma's right Arm to be destroyed, so too would the right Wing of the Sky Rapier Zed—however, the Land Rapier X would only lose 2K from its Head-Turret (the Land Rapier X's whole Head-Turret would not be destroyed in this case).

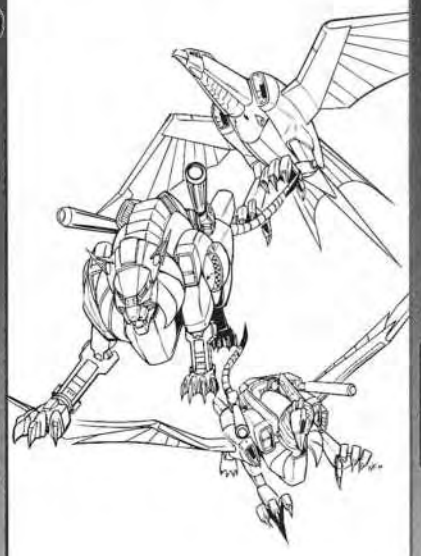
If the damage done to a servo (or other system) of the Greater mecha is not enough to destroy it, but *is* enough to destroy one, some or all of that servo's components from the Lesser mecha, the result is a special case. In such a situation, the Greater mecha's servo/system will continue to function as long as the Greater mecha remains Combined. Once it disassembles, the "destroyed" elements of the Lesser mecha disintegrate. Use any pseudo-scientific rationale you like to explain this phenomenon: electromagnetic stressed fields, expanding plasma, dimensional mass-shunting, nanotech support nets, whatever.

In the case of damage done to the Lesser mecha, destruction of a component part also disables the Greater mecha's corresponding part. For example, destruction of the Land Rapier X's Railgun would obviously mean that, once Combined, the Rapier Sigma would be missing its Railcannon. However, destruction of the Head-Turret would mean that, once Combined, the Rapier Sigma's Arms would also be disabled—both of them. Only the items on the opposite side of the chart are disabled in such cases; hence, both of the Sky Rapier Zed's Wings would remain intact even if the Land Rapier X's Head-Turret were destroyed.

Remember, Combiners are simpler than they may at first seem. The Damage Scale exists for two reasons: It tells you what parts go where on your Combiner (for the sake of artistic values), and it is used to allocate damage to the component units when the Combiner is hit.

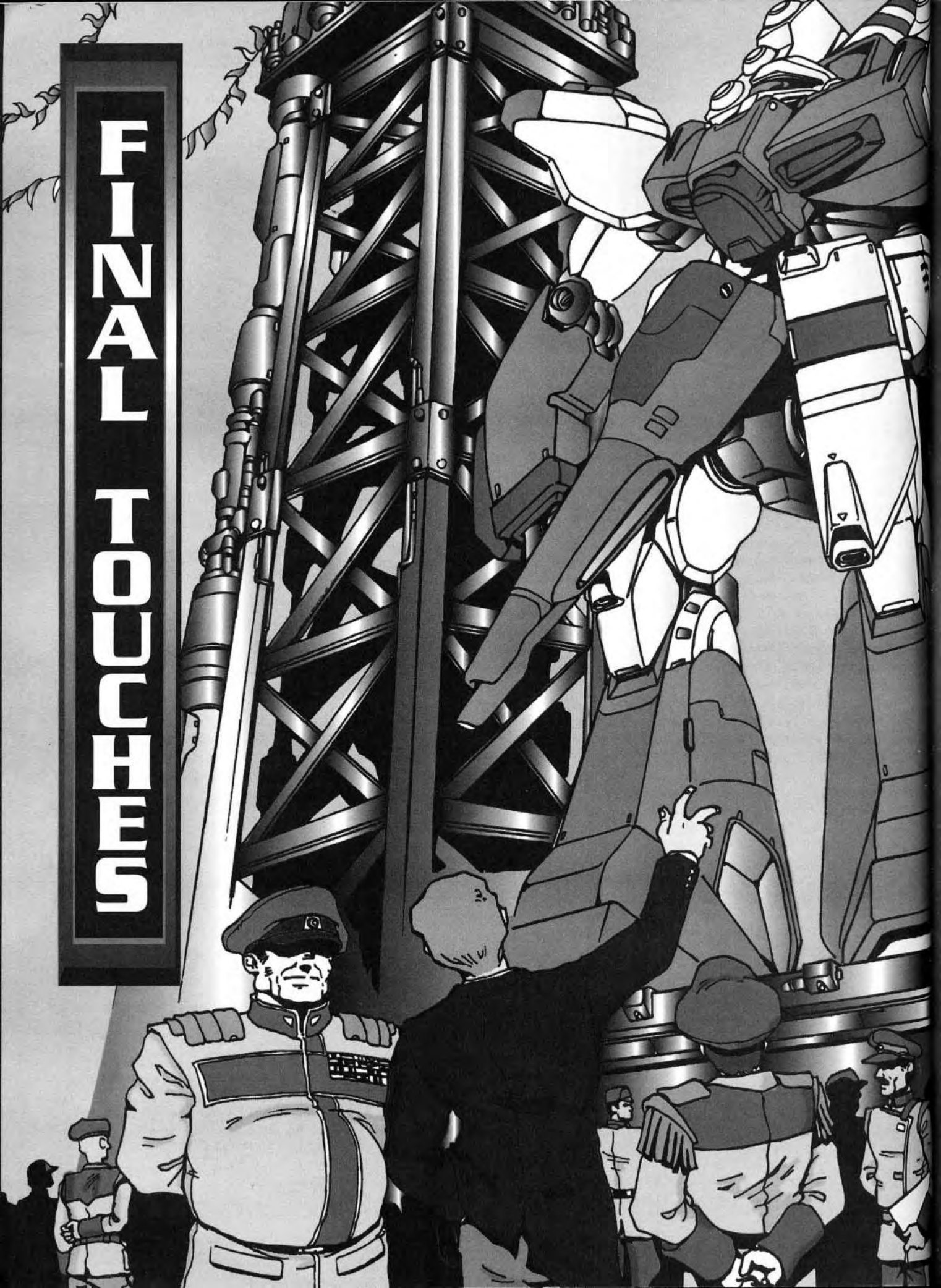
Combining Weapons

Sometimes it is desirable to have two or more weapons Combine into one mighty tool of destruction. This is done in the same manner as Combining mecha. First design the Greater weapon, then the Lesser weapons. Usually, the Lesser and the Greater weapons are all of the same type (e.g., Beam, Projectile, Energy Melee, or Melee, but **no Combiner Missiles**), but it is not unheard of for various types of weapons to combine. The Greater weapon must occupy the same number of Spaces as the total of the Space requirements of the Lesser weapons (another good use for Efficiency). Now pay x0.5 the cost for the Greater weapon, allocate the CPs to the Lesser weapons, and you're set! Like any Transformation, putting together and taking apart Combining weapons takes one Action.



What About All Those Guys in the Feet?

When combined, the it is very likely that your Greater mecha is going to have more than one crew member. For the ins and outs of multi-pilot mecha, see Crew on page 49. However, keep in mind the fact that Combiners are piloted differently from anime to anime; in some features, Combiners may act numerous times per turn. In others, they act just as often as single-crewed mecha. There have even been instances where only one person gets to control the Combiner, while the other crew members just sit there. This option can sometimes get boring for the guy in the left foot—Referees are advised to carefully consider how their Combiners are controlled. Remember, you may allow control can be transferred between crew members once per turn. This means that control of the overall Combiner can be traded between crew members, allowing everyone a chance to say, "And I'll form the head!"


FINAL TOUCHES

Final Touches

This section represents the finish line, gearheads—you have now read the entire construction section. This chapter walks you through the actual build process, showing you step-by-step how to make your own mechanized wonders. Preceeding the sample construction is SFX: An essay on how to mess with the MTS rules wihout regretting it. However, before any of this is a section which we affectionately refer to as "Stupid Mekton Tricks." Read on and keep an open mind...

Stupid Mekton Tricks △ ぐメクトンてだて

Anime fascinates fans across the world for its mature handling of characters and storytelling, for its technical detail, for its tantalizing titillation—but it's also a cartoon. Let's face it, sometimes Anime gets silly. Call it artistic license, call it dramatic embellishment, call it fantasy, but it's still silly. Sometimes this silliness even spills over into—*gasp!*—the sacred realm of mecha.

Stupid Mekton Tricks are those abilities displayed by mecha which can't be rationalized by even the most stretc.hed standards of pseudoscience. Such abilities are usually found in the more superheroic of mecha shows, wherein there is one (or only a few) super-mecha facing off against an entire army of horrible enemies.

Stupid Mekton Tricks are not for everyone; Referees should take great care in allowing these abilities in their games. A "hard SF" Mekton Zeta campaign will not be enhanced by mecha which can transform into little cameras!

All Stupid Mekton Tricks are listed in the following format:

TRICK: The official (i.e., generic) name of the Stupid Mekton Trick. All tricks have appeared in at least one Anime, Manga or Sentai feature.
EFFECT: The meaning of the Trick in plain English—in other words, what it allows your mecha to do.
COST: The Cost Multiplier value which is applied to the totaled Base cost of your mecha.
MODIFIERS: Any alterations to the mecha's base MA, MV, servo damage bonuses, etc..
SPECIAL: Any advantages or disadvantages associated with this Form are briefly mentioned here; full explanations can be found in the Form's description paragraph.

DIMENSIONAL STORAGE
Effect: . . . . . .Mecha can produce a hand-held weapon or other device from nowhere.
Cost: x0.1
Modifiers: . . . . .Takes no Actions to re-store (put away) weapon or Device.
Special: . . . . .When stored, weapon or device is inaccessible and invulnerable.

DIMENSIONAL STORAGE: How is that so many mecha can draw their incredible swords from thin air? Where does the trailer go when a semi-truck transforms? The answer is Dimensional Storage. With this Stupid Mekton Trick, your mecha has instant access to any hand-held weapon and/or external device (such as Command Armor, Combiner mecha, etc..) which was designated as being Dimensionally Stored at the time the mecha was created. Dimensionally Stored equipment, when "stowed" in its pocket dimension, is completely inaccessible by anyone/anything other than the mecha to which it belongs. Unlike regular weapons, such equipment also requires no Actions to put away.

EXPANDING PLASMA
Effect: . . . .Mecha may change Scale.
Cost: . . . . . .x0.5 per Scale
Modifiers: . . .Mecha must be built at the largest Scale it can achieve.
Special: . . . . . .Changing Scale takes one Action.

EXPANDING PLASMA: For those giant robots which can transform into cameras, cassette decks and handguns—for those mecha which can transform from a street-legal sportscar to a 300-meter robot—for all





these designs, and many more, Expanding Plasma may be the ultimate Stupid Mekton Trick. The x0.5 Cost Multiplier for Expanding Plasma is applied for each Scale that the mecha can shift through; a mecha which could go from x10 to 1/5th Scale would have to pay a x1.0 Cost Multiplier because it can shift two full Scales. Mecha which use Expanding Plasma must be built at the largest scale they can achieve, and then pay for the Scales they can be reduced to (or grow from, if you prefer). If the mecha can shift through more than one Scale, it is up to the designer as to whether it can act at its "intermediate" Scale. For those designs which can shrink down to extra-small, pocket-size devices (such as the ever-popular Giant Robot/Cassette Deck transformable), build them as 1/100th (Micro) Scale, with a Scale factor of 1/100th (1 Kill = 0.25 Hits, etc.) and a Cost Factor of 1/75th. Heck—you could even design cheap, shoddy robot toys at this Scale if you really wanted!

MATERIAL ABSORPTION
Effect: . . . . .The mecha may absorb mechanical matter and integrate it into its own structure.
Cost: x0.5
Modifiers: . . . . . .Mecha gets 1/4 its tonnage in Efficiency Points.
Special: . . . . . .Takes 1 Action per 5 CP absorbed.

MATERIAL ABSORPTION: Some of the more monstrous mecha in Anime have the ability to absorb mechanical matter into their own bodies and make use of the absorbed devices. Usually this is done with weapons, but other systems (such as dismembered servos, Boosterpacks, etc..) can also be absorbed. Material-Absorbing mecha have a pool of "Efficiency Points" (equal to 1/4 its weight) which allow them to absorb material. The absorbing mecha must be touching the object, and then must be able to fit the object into whatever Spaces are free in its servos. This is where the Efficiency Point pool comes in: If the absorbed object takes up more Spaces than are available, Points from the Efficiency Pool must be used to make it fit (in the normal Space Efficiency manner). Each 5 CP of the object takes 1 Action to absorb. Once absorbed, the object can be used as if it had been built into the mecha from the outset. Keep in mind that absorbed objects will increase the mecha's weight, thereby lowering land and flight MAs as well as the all-important MV.

MERGING WITH YOUR MECHA
Effect: . . .Pilot physically merges with the mecha instead of using a traditional Cockpit.
Cost: x0.25
Modifiers: . . . . . .+1 MV, +67% base Maneuver Pool.
Special: Pilot cannot be hurt; "Cockpit" hit location roll does not apply.

MERGING WITH YOUR MECHA: Generally, but not exclusively, reserved for superheroic mecha is the ability to Merge the pilot with the mecha s/he is operating. This often involves converting the pilot's body to pure energy and then infusing the mecha with this energy to enhance its performance (mecha with this ability are often also equipped with Internal Automation). It takes one Action for the pilot and mecha to Merge, and as long as they are Merged the mecha gains +1 MV and +67% to its base Maneuver Pool. Since the pilot is translated into energy which surges through the mecha, s/he cannot be hurt unless the mecha is destroyed while they are Merged, in which case the Pilot must make an Ejection Roll at -6 or die with the mecha.

MORPHABLE MECHA
Effect: The mecha is liquid metal, and has complete control over its shape.

Cost:	**x0.5**	**x1.0**	**x1.6**	**x2.0**	**x3.0**
(Portfolio:)	2	3	5	10	∞

Modifiers: . . . .All modifiers depend upon the form taken.
Special: . . . . . .None.

MORPHABLE MECHA: This Stupid Mekton Trick allows you to create mecha without a set configuration—be it through the use of molecular memory plastics, hive-mind cell structures, liquid metal or any other similar technology, the mecha is a mass of a metal-like substance which can reshape itself into any form. Morphable Mecha begin as a set number of CPs—this is the pool of CPs available to build mecha shapes from. The pool of CPs can be used to build any mecha with any capabilities the Referee sees fit. Just like Energy Pools, Morphable Mecha must set their Portfolio Size to determine how many forms they can assume. Note that all forms assumed must be of exactly the same weight (a good use for Weight Efficiency), and each form that the mecha can assume should be written down on a separate mecha spec-sheet (much like a Combiner). When a morphable mecha is damaged, all of its forms must lose the same number of Kills from randomly-rolled loca-

tions and/or systems (in other words, certain forms will be more fragile than others). A useful side effect of being a Morphable Mecha is the ability to "Extend" and "Flatten." Extension is the act of stretc.hing a servo to reach across distances—**for each 3 Kills (and/or SP) subtracted from a servo, it can reach across 1 hex of distance.** Flattening is the act of spreading a servo (or the whole mecha) out thinly across a wide area—**each 9 Kills (and/or SP) allows 1 hex to be covered.** Yes, Morphable Mecha can actually flatten themselves out across a battlefield and then envelop an opponent! If you want only a part of your mecha to be Morphable, then refer to the Morphing Pools entry in the Energy Pools section (page 41-42).

'OID
Effect: An artificial life-form, effectively the same as a human (or whatever)
Cost: x3.0
Modifiers: . . . . . .No MV
Special: . . . ."Non-human" functions manifest as "super powers."

'OID: Beyond Techno-Organics, beyond Internal Automation, there is the 'Oid Stupid Mecha Trick—which isn't very stupid at all. Whther you decide to call it an Android, Biozoid or Technoid, this expensive ability renders the mecha design fully conscious and in every way alive. 'Oids are usually built at Human (1/10) Scale, and do not need to buy Techno-Organics, Internal Automation, Thought Control or the Transformable Option of Disguise; the 'Oid effect covers all of these. 'Oids, being alive, need to sleep, eat and drink (how much and how often are up to the Referee) and can heal at the same rate as humans, or perhaps a little faster. Being sentient, they get INT, REF, COOL, TECH, LUCK, and EMP Stats like normal characters do; ATT can be set by the designer, while MA and BOD are superseded by the capabilities of an artificial body. 'Oids have no MV—they have a regular REF Stat rather than MR (Mecha Reflexes). 'Oids may have INT, TECH and COOL Stats above 10 through the Statistical Enhancements systems, and REF may be boosted through "Maneuver Verniers" (although these will probably not be actual rockets) at a value of +1 REF per +3 MV. Any capabilities the 'Oid has which are not normal for humans (such as guns in your arms, for example) manifest as "powers" or apparent cybernetics. Referees should be very careful about letting players be 'Oids; they're likely to overwhelm all other PCs.

NINJA LEAPING
Effect: . . . .The mecha can perform lightning-fast, long-distance leaps across terrain.
Cost: . .x0.05 per +1 hex leap bonus
Modifiers: . . . . . .Mecha must have Leg servos.
Special: . . .A full leap may be made each Action.

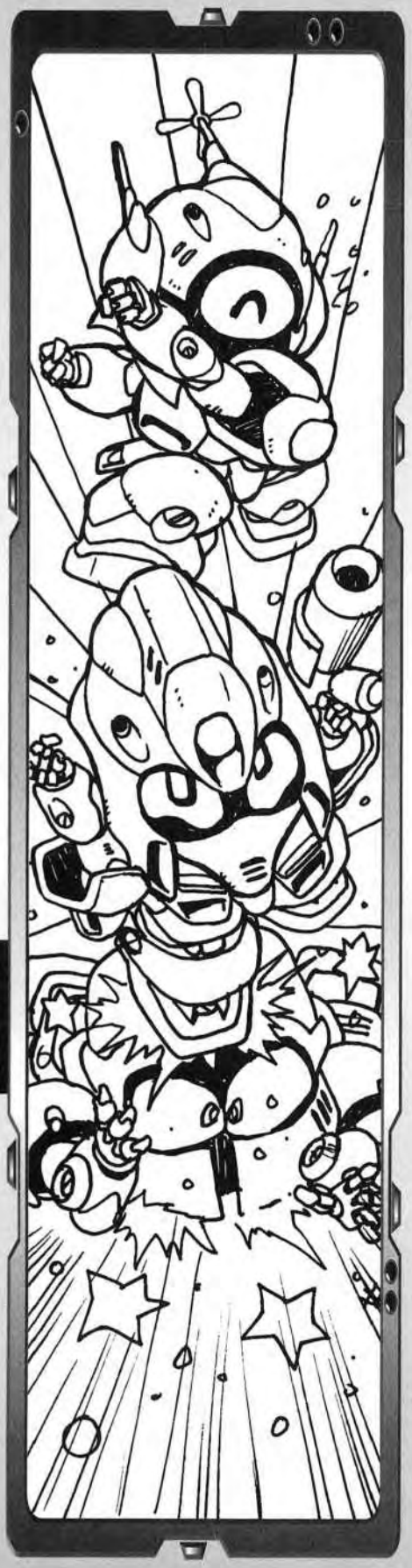
NINJA LEAPING: By means of high-tension, boosted servomotors (or is it secret Ninja magic?) a mecha may leap distances greater than that which would normally be allowed (normally, mecha may leap 1/4 their MA). With the Ninja Leap Stupid Mekton Trick, the mecha may leap as many times as it has Actions in a given turn (so long as the leap begins and ends on a solid surface), and it may take the full leap bonus each time if so desired. It may also split up a single leap around another Action (such as an attack) if so desired. The Ninja Leap system costs x0.05 per +1 Leap (so that a +4 hex leap would cost x0.2) and takes one Space from each leg on the mecha per +1 Leap bonus.

PIRACY SYSTEM
Effect: . . . . . .The ability to take control of other mecha.
Cost: x0.33
Modifiers: . . . . . .-2 MV per mecha controlled.
Special: . . . . .Must be within 1 hex to take over target mecha.

PIRACY SYSTEM: Mecha with Piracy capability can forcibly take over and control other mecha. How this is done is generally a special effect; it may be an electronic warfare-type system, a magical "spell," or some kind of intrusive melee weapon which coils into the target's servomusculature. The important thing is the result—enemy mecha may be controlled against their will. To take over an enemy mecha requires a **MR +Piloting +1D10 roll vs MR +Piloting +1D10** roll. If the defender wins, his mecha is not under hostile control; if the attacker wins, the target mecha is successfully controlled for as many turns as the roll was won by. After this time has elapsed, the defender may make another **MR +Piloting +1D10 roll vs MR +Piloting +1D10** roll to escape Piracy. The rules for controlling enemy mecha are the same as for controlling Remotes (see Remote Control, page 54), but the Control Range and Operation Range are both considered to be equal to the Pirating mechapilot's *Piloting* Skill.



ROOT'S INC.
MODEL 743
FEMROID
Actuator Control
Electronics: 66.67%
Options:
Radio/Radar Analyzer
Resolution Intensifier (512X)
Target Analysis Recon System
Mark-III Logic Processor



SELF-DUPLICATION
Effect: .The capability to make exact, functioning duplicates of the mecha.
Cost: . . . . . .x0.75 per duplicate
Modifiers: . . . . .Duplicates only last as long as they are serving a supplementary function.
Special: . . . . . .None.

SELF-DUPLICATION: Impossible though it may seem, it has happened before and it will happen again—mecha which can actually replicate themselves run amok through Anime! How such a feat is achieved is once again the realm of special effects; ninja magic, time/space warp fields, or energy-matter conversion are all possibilities. The important factor to consider is that this Trick is reliant upon the condition that duplicates must be dedicated to some specific function. A likely use for Self-Duplication is a case such as Combiners; sometimes, an assortment of mecha units may be designed to Combine with the same mecha unit. In such a case the unit in question might duplicate itself so as to be able to combine with more than one of the other mecha at a time.

SPECIAL EFFECT WEAPONS
(Freeze Ray, Water Beam, Sonic Blast, etc.)
Effect: . . . . . .Depends upon the Special Effect desired.
Cost: . . . . . .Weapon cost x1.33
Modifiers: . .Varies by Special Effect.
Special: . . . . . .Kills +10 = Difficulty to resist Special Effect.

SPECIAL-EFFECT WEAPONS: Many weapons in Anime have special effects which cannot be exactly duplicated by MTS selection of five weapon categories. However, for a blanket modifier of x1.33, you too can design weapons with such questionable special effects as: icy freeze rays, sonic blasts, ground-shaking earthquake punches, soul-sucking vampire systems, and a host of others. The basic formula for determining the effectiveness of a Special Effect Weapon is to take the Kills done by the weapon and add +10. This number (ranging from 11 to 30) will represent the Difficulty number associated with the particular Special Effect associated with the weapon. For instance, a 6-Kill "freeze ray" Beam Weapon would, along with doing 6 Kills to its target, also encase it in an immobilizing mass of ice; to escape from this ice shell, an MR +Mecha Fighting +1D10 roll vs 16 would have to be made. The topic of Special Effect Weapons is far too diverse to be distilled into a mere rules set. After all, there are thousands of you and only about a dozen of us. Your imaginations have the drop on us! Therefore, these guidelines are all that can be offered—the rest is up to you.

SUPER-DEFORMED MEKTONS
Effect: . . . . . .A "midget" version of normal mecha (much cuter).
Cost: . . . . . .**(KWI:)**
-x0.3 0
-x0.25 . . . . . .+/-1
-x0.2 . . . . . .+/-2
-x0.15 . . . . . .+/-3
-x0.1 . . . . . .+/-4
-x0.05 . . . . . .+/-5
Modifiers: . . . . .All servos but Head have 1/2 Kills, 1/2 walking MA.
Special: . . . . . .Mecha gets new Stats (KWI, Bonk, etc.)

SUPER-DEFORMED MEKTONS: Hee hee! While this may be perhaps the Stupidest of all Mekton Tricks, Super-Deformed mecha are incredibly popular—perhaps because they're so darned cute! If you want your mecha to have short, stubby limbs, an oversized head, and big, emotive eyes, well ... this Trick's for you. SD mecha have several special rules governing their creation and use:

(1) SD mecha have 1/2 the normal amount of Kills in their servos, except in the oversized Head (a Mediumweight Torso would have 6 Kills). Weight remains the same despite the reduced Kills, and armor still has the same SP.

(2) SD mecha move at 1/2 normal walking/running MA, since they can only scurry like cockroaches on their stubby little legs.

(3) All Kills (both structural and damage-related) are translated to "Bonk." Bonk is very important; if SD mecha could be destroyed, it would be a miserable reflection on our violence-prone society, wouldn't it? So, in the classic tradition of SD Anime, no SD mecha gets killed. Instead, they get Bonked. Bonk works exactly like Kills, in that it is whittled down as damage is done to your SD mecha. When any Arm, Leg, Wing, Tail or Pod servo's Bonk reaches Zero, the SD mecha's eyes bug out and it runs around screaming and holding its Bonked servo, which is red, swollen and throbbing; if the Head or Torso servo's Bonk reaches zero, the SD mecha is reduced to reeling dizzily, smoking slightly, and generally looking stupid. This "Bonked-Out" condition lasts for 1 round for every point of negative Bonk, while

everyone else gets to do something interesting. Once you've sat out the required number of rounds, your Bonk is instantly restored to its original amount.

(4) SD mecha get a new Stat, KWI (pronounced "kiwi"), which determines their cost. The KWI Stat has a range of from -5 to +5, depending upon whether your SD Mekton is all cuddly and lovable (like a teddy bear or chinchilla) or spooky and scary (like a demonic teddy bear or rabid chinchilla). Cute SD Mektons (those with a positive KWI) are "Kawaii" (Japanese for "cute"), while scary SD Mektons (those with a negative KWI) are "Kowai" (Japanese for "scary"). Kawaii and Kowai SD mecha are usually enemies, and tend to have lots of scuffles over whose toys should be marketed more heavily. When such scuffles occur, combatants compare their respective KWI's—the result is the modifier to all attacks made during a scuffle.

For example: *The SD Gorgon has a Kowai of -3 and the SD Rapier has a Kawaii of +2; since the result is -1 (-3 +2), the SD Rapier suffers a -1 penalty to all rolls because he's shaking with fear! If the SD Rapier had a Kawaii of +4, the result would be +1; the SD Rapier would get a +1 to all rolls, being comfortable in its cuteness while the SD Gorgon is appalled.*

Note: While unusual, it is not impossible for mecha to be Transformable between "normal" Form and Super-Deformed Form; in such a case, the Cost Multiplier for this Stupid Mekton Trick is positive instead of negative, applied to the cost of the "normal" Form for the ability to Super-Deform.

SUMMONING YOUR MECHA
Effect: . . . . . .Mecha shows up in one Action.
Cost: x0.33
Modifiers: . . . . . .None.
Special: . . . . . .Mecha will show up in closest open area.

SUMMONING YOUR MECHA: If your mecha has this Stupid Mekton Trick up its sleeve, it will automatically come when you call it. Always. There is usually some kind of "ritual" associated with the summoning of a mecha (such as a slogan shouted out, a series of body movements, etc..), and in the same Action as the ritual is performed, the mecha shows up. The special effects of the mecha's appearance are left nebulous; it might suddenly drop from orbit, it might step out of a dimensional gateway, it might come thundering across the landscape, it might pop out of some charmed object (like a genie from a lamp), or it might just conveniently be waiting right around the corner. While the issue of where the mecha comes from is theoretically only a special effect, it should be discussed with the Referee; it will be important to know where your mecha is while waiting for your call—is it in a hangar somewhere, in a pocket dimension, or is it stowed in your pocket? Also note that this Trick has no effect upon the performance of the mecha; even if, when summoned, your mecha teleports to you, that does not mean it can teleport wherever else it wants (you must buy the Teleportation System for this ability). Finally, remember that your mecha appears in an open area closest to you—if you're in a building, your mecha will show up outside or on the roof. Many mecha with the Summoning ability also buy Internal Automation.

TRANSFORMATION: BUILDING
Effect: . . . . . .Mecha can Combine with itself into a single Torso servo of boxlike shape.
Cost: x0.5
Modifiers: . . . . . .Mecha may not move when transformed (all MAs=0).
Special: . . . .Mecha can not Dodge or Parry; Head-mounted weapons get 360° firing arc.

BUILDING: While the Ship/Base Transformable *officially* covers the ability to transform into a building (see page 85), this effect is a little different—the Building Transformation allows the mecha to Combine with itself! All servos and armor combine into one location, allowing the mecha to become a great deal tougher (since it can spread damage across all its servos). As with any Combiner, two spec sheets will be needed, and a Damage Scale must be created. Depending upon the size of the mecha design, this could actually be a transformation into anything from a city to a Coke machine; essentially, the mecha rearranges and spreads itself into a boxlike shape (or shapes), increasing its internal volume and sprouting interior design features all over the place—Building mecha may have room and furnishings (in Building Form only) for as many people as the design calls for. Remember that as a building, the mecha cannot move (or Dodge, or Parry, or pick things up, or use hand-held weapons, etc..). As always, this Transformable may be chosen as the "natural Form" of your mechadesign.





TRANSFORMATION: GIZMO
Effect: . . . . . .Mecha can transform into a device such as a camera, cassette, microscope, etc.
Cost: x0.2
Modifiers: . . .Mecha may not move when transformed (all MAs=0).
Special: . . . .Mecha can not Dodge or Parry, but can perform functions of device.

GIZMO: For those who enjoy extra-esoteric mecha designs, your mecha could be capable of transforming into as incongruous a device as a TV set, telescope, radio, dishwasher, or whatever else you wish. Any device, be it electronic or mechanical, may be achieved with the Gizmo Transformation. It is important to note that unless you also buy the "Expanding Plasma" ability (see the entry in this section) for your mecha, the Gizmo Form will just be as large as your untransformed mecha ... giant cassette decks are not unheard of, though. When transformed, the mecha can do whatever such a device could do: TVs can flip through channels, cameras can take pictures, etc.. (but no weapons can be used in this form; all weapons are retracted into the structure of the device). As always, this Transformable may be chosen as the "natural Form" of your mechadesign.

TRANSFORMATION: GUN
Effect: . .Mecha can become a huge gun, Scaling up one of its weapons.
Cost: x0.5, x0.45 (x0.4, x0.35)
Modifiers: . . . . . .-3 MV, +5 WA to weapon (or no Actions, +2 WA)
Special: . . . . . .Mecha may be self-mobile, or weapon only.

GUN: By realigning servos into a massive barrel and firing mechanism, and by optimizing energy conduits into a massive linear accelerator, a Mekton can actually transform itself into a gigantic cannon. Such a transformation most commonly yields a huge Beam Weapon, but transformed Projectile weapons are also possible. Once transformed, the mecha treats one weapon (or one set of Linked, identical weapons) as being of the next Scale up for the purposes of range and damage—these are the only weapons that may be used in Gun Form. The cost of this Transformation depends upon the number of Shots available to the Gun Form and the method in which it is operated. Depending upon the price paid, the Transformed mecha may operate itself (i.e., become a self-mobile artillery piece capable of moving and firing itself), or it may become a dedicated weapon of destruction (incapable of acting on its own, requiring another mecha to fire it). Self-operated Gun Transformables suffer a -3 penalty to their MV, but gain +5 WA to the Scaled-up weapon (effectively getting +2WA with that weapon), while externally operated Gun Transformables are treated as a weapon used by another mecha; the Gun-mecha's MV does not apply, but the Scaled-up weapon does gain +2 to its WA. Check the chart below to determine the cost of the Transformation (the "same" listing for Shots means that the weapon has the same number of Shots as it does when unscaled).

Cost	x0.5	x0.45	x0.4	x0.35
Operation	Self	Self	Other	Other
Shots	Same	1	Same	1

As always, this Transformable may be chosen as the "natural Form" of your mechadesign. It is important to note that unless you also buy the "Expanding Plasma" ability (see the entry in this section) for your mecha, the Gun Form will just be as large as your untransformed mecha ... giant energy pistols are not unheard of, though!

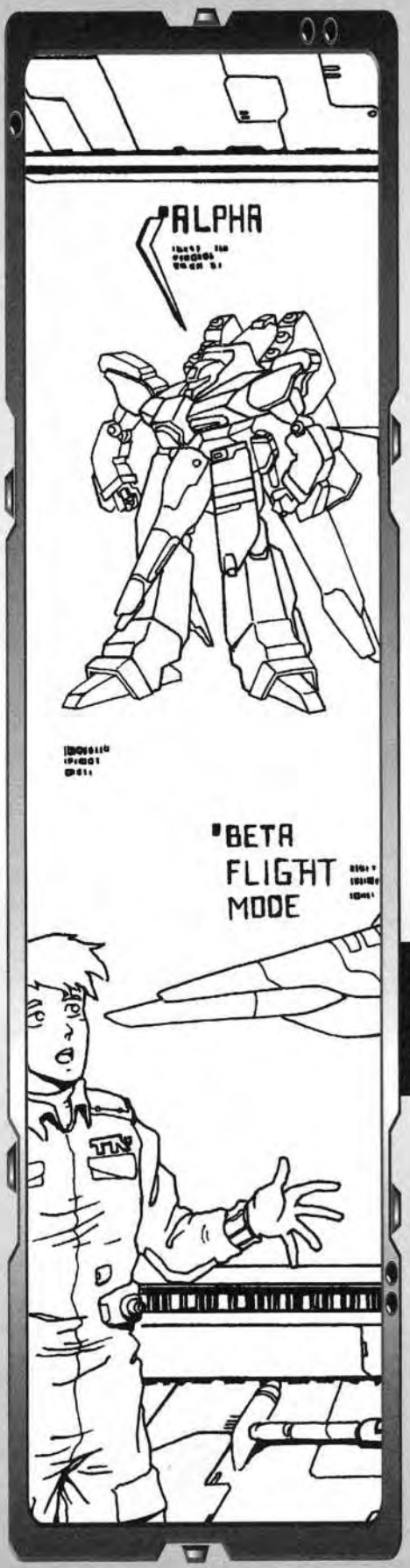
TRANSFORMATION: MUNDANE
Effect: . . .Mecha can transform into an everyday Vehicle (Train, Dumptruck, Bus, etc.).
Cost: x0.25
Modifiers: . . . . . .-2 MV, +1 MA
Special: . . . . . .Mecha takes on the characteristics of the mundane vehicle.

MUNDANE: While it may not seem terribly useful, you may design a transformable bullet train, bus or even a bicycle—any type of vehicle, no matter how humble, may be recreated with the Mundane Transformation. You could even design a Transformable Mundane/Auto mecha (say, a van which transforms into a sportscar)! When transformed, the mecha may do whatever such a vehicle could do: Trains would ride on tracks, dump trucks could haul dirt, etc.. (note that no hand-held weapons may be used when transformed). As always, this Transformable may be chosen as the "natural Form" of your mechadesign.

TUNNELING

Effect: . .The ability to bore through rock and move underground.
Cost: x0.3
Modifiers: .1/2 MA while tunneling.
Special: . . . . . .None.

TUNNELING: One of the gimmicks popularized by Anime mecha is the ability to bore underground and through rock like some kind of super-mole. While admittedly silly, Tunneling has distinct tactical and practical applications; construction, excavation, exploration, rescue and surprise attack come to mind. Mecha with the Tunneling ability can move underground at 1/2 their regular land MA—this applies to walking, Wheeled and/or Tread movement. If the mecha Tunnels down to a depth of more than 1 hex, it is undetectable to other mecha on the battlefield (unless they have an Advanced Sensor Package or Gravity Lens) and can ambush them by surfacing behind or beneath the enemy. Ram attacks gain +2 WA from this maneuver, and such Rams receive a damage bonus from their drill's damage rating. This damage bonus only accrues if the mecha's drill was built as a weapon (specifically, an Armor-Piercing Melee Weapon); while Tunneling mecha almost universally feature a drill as part of their design, many are not able to use their drills as weapons. If the drill can be used as a weapon, design an Armor-Piercing Melee Weapon for your mecha—that's your drill. If your mecha cannot use its drill as a weapon, simply pay the Cost Multiplier for Tunneling. The cost of this ability can be halved (x0.15) if it is connected with a Transformation; if a mecha is designed to be able to Tunnel only when transformed into "Drill-Tank" Form, for example, the cost would be x0.45 (x0.3 for Tank Form, x0.15 for Tank Form-only Tunneling). If a Tunneling mecha penetrates the Earth's crust, it will be incinerated by the magma beneath. Also beware of earthquakes, which can shred or crush Tunneling mecha.



SFX △ エセフェクス

You *can* change the laws of physics!

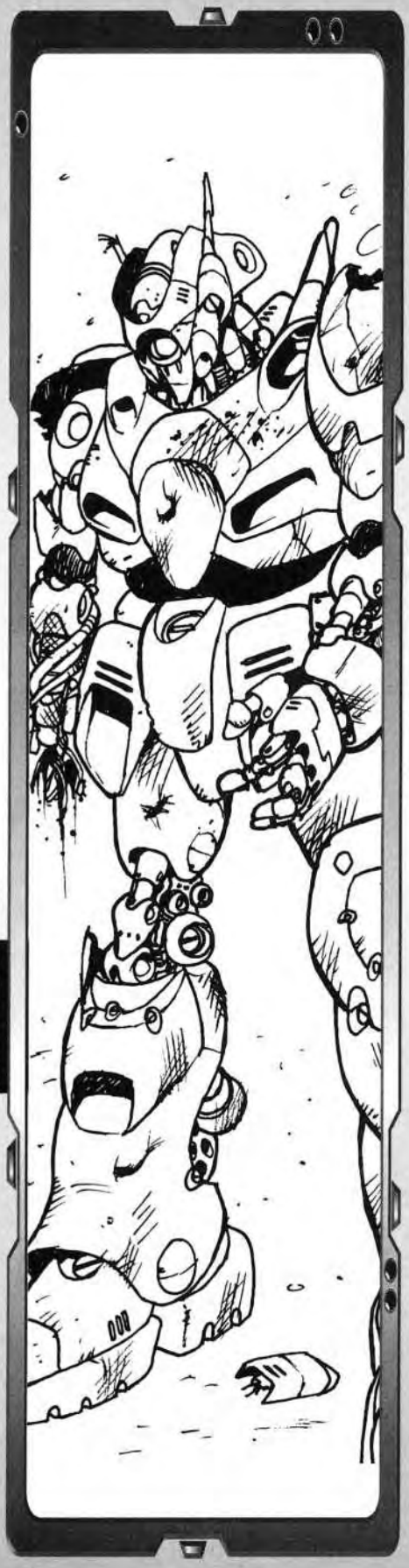
Pull up a chair, gearheads—it's time to talk MTS theory.

At the most basic level, *Mekton Z* and the Mekton Technical System operate upon a set of fundamental assumptions: Two Kills equal one ton, there are six definite Scales, one Kill represents 25 Hits, one point of MA is 18kph, et cetera. These "Laws of Mekton Physics" may seem arbitrary, but they were carefully chosen to strike the best balance between efficient system mechanics, emulation of Anime, believability and satisfying game play. What is most important is that these assumptions are *consistent* throughout the entire game—in other words, they are constants. These constants should serve perfectly well in any game setting, but there are always those players and Referees who simply can't resist Messing With The Rules. You know who you are.

Rather than trying to persuade you to resist your very nature (a foolhardy proposition), this section advises you in How To Mess With The Rules And Not Regret It. But first, a word of caution: If you are a Referee, make sure your players are aware of and understand the changes you intend to make. Pulling unannounced system warps out of your hat is a great way to alienate players! If you're a player, be sure to check with your Referee before you build mecha which defy Mekton physics. Otherwise, your brand new weapon of destruction is likely to vanish in a puff of logic.

The secret to Not Regretting It is to be consistent. This is the paramount rule. Whatever changes you make, make them apply universally—exceptions tear a system up. For example, if you're going to have 6 Kills equal a Ton, make sure that this law is applied universally. Otherwise, the cost values of mecha lose any frame of reference. Another necessity to Not Regretting It is to think about balance. Balance is what makes a game fun to play. If all the cards are stacked against you, why play at all? If, for instance, you decide that your game not only has 6 Kills to a Ton, but each Kill is 100 Hits, you'll run into all sorts of problems in the scaling department. Consider: A 1/5th-Scale design (say, a motor-scooter) with a 2-Kill torso would scale down to a vehicle which weighed 66 kilos (around 145 pounds) and has 40 hits—and that's the smallest design possible!

Hopefully the lessons to be learned are clear: **Consistency and Balance are the keys.** Adhere to these two maxims and you will Not Regret It.



Tons of Trouble

Normally, 2 Kills equals 1 Ton. However, in certain long-running anime series a phenomenon of "shrinkage" has been observed; over decades, mecha technology advances so far that the average height of mecha drops by 15-25% while the average weight drops 66% or so. In Mekton Zeta, this would be reflected by a change in weight (a large decrease) disproportionate to a change in Kills (a small decrease); this can be recreated in MTS by the use of Weight Efficiency, but what about Consistency and Balance? If you are going to be dealing with shrinkage, you must consider this question: Are all mecha in your game going to be affected by shrinkage, or only some of them?

If only *some* mecha are shrunk, Efficiency is the way to go: They weigh less than other mecha but have equal Kills, and pay for this advantage in Weight Efficiency. However, if *all* mecha are shrunk, a problem crops up: when all mecha Weigh about the same (say, 15-25 tons), there is very little variation in MVs and Land MAs.

The solution to across-the-board shrinkage is a corresponding across-the-board compression of the weight-statistics relationship. For example, let's assume that all mecha in the "Silhouette Rapier 99" campaign are shrunk to a weight range of 15-25 tons. This is roughly 1/4 the range of typical Mekton Zeta mecha (10-100 tons). Therefore, the weight values which determine MV and Land MA should also be quartered: -1MV would accrue every 2.5 tons (after the first 2.5) rather than every 10, and the Land MA chart would be measured in 5-ton increments rather than 20-ton increments. In "Silhouette Rapier 99," a weight of 19 tons would represent an MV of -6 and a base Land MA of 4.

Damaging Results

In Mekton Zeta, one Kill is equal to 25 Hits of damage (also called SDP, or Structural Damage Points). Depending on what power-level you play at, you may wish to alter this number. If you play another game system entirely (i.e., one which is not Interlock-based), but would like to use MTS, you will almost definitely want to Mess With These Rules (*Cyberpunk* and *Cybergeneration* players should refer to page 119 for conversion rules). Altering the SDP-to-Kill ratio is fine, as long as it's ALWAYS the same number; a Kill can't be 25 Hits for the Bad Guys and 40 Hits for the Good Guys! That would throw Balance and Consistency out the airlock.

It is also important to resist the temptation to make a Kill represent too many Hits, unless you are prepared to alter scaling and weight as well. If you want to assign 100 Hits to a Kill, that's fine, but it would be advisable to change Roadstrikers to 1/10th scale and Humans to 1/100th scale (this is not as crazy as it may at first seem—statistics listed in some animes bear this scaling system out). Altering the Hits-to-Kill ratio carries with it decidedly less dire consequences than other possible changes (because it plays no role in full-scale mecha combat), but still pay attention to Consistence and Balance.

Tipping the Scales

The scaling system uses six different scales, from Human (1/10th) to Excessive (X). Once you've read the rules and know how scaling works, you may still have some questions. You may even be tempted to Mess With The Rules. If you want to make sure you do Not Regret It, read on.

The scaling system is skewed towards playability over hyper-realism. Players must accept this fact if they are to be comfortable with scaling. Scaling is linear from Roadstriker (1/10th) scale to Corvette (x10) scale, with size, weight and toughness are all directly consistent with each other. However, at the Human (1/10th) and Starship (x100) scales, weight is removed from the equation and is relegated to the status of a Special Effect. At the Excessive (X) scale, *everything* is a special effect. Within most campaign settings, this system serves quite well; human-size equipment should be carriable by humans, and who really needs hard Stats for a planet-sized plot device?

Still, there are some campaigns which focus on large-scale (or even micro-scale) mecha and combat, and in such settings there may be a call for more comprehensive Scales. Suppose, for example, that the "cosmo dreadnaught Rapier Fortress" campaign dealt mostly with kilometer-long starships and glossed over smaller-scale issues. Assuming these kilometer-long mecha weighed about 25 million tons each, they would all wind up as Excessive (X) scale—not suitable if they are the focus of the campaign. In such a situation, a new scale could be introduced: x1M scale. All these mecha would be built as normal, but would be scaled by a factor of 1 million. Should there also be smaller, "Escort" craft weighing only 750,000 tons or so, they could be built at a x100K scale. Why not?

Actually, there are two problems with rampantly creating new Scales: bookkeep-

ing and overlap. Bookkeeping for scales with a factor of x1 million would be a nightmare—unless you don't bother to scale anything but range, which you could mark in kilometers (for smaller numbers). In such a case, all combat would go on at a "faked" 1:1 Scale, and the only time the scaled damage and Kill values would be needed is if something of another scale entered combat (such as one of the aforementioned Escorts). The problem of overlap is less obvious, but more serious: when creating new scales, always try to keep them in multiples of 10. The reason for this precaution is that if the scales are "closer" to each other than a factor of 10, the top end of a scale overlaps too much with the low end of the next scale. You could create a x500 scale, a x5000 scale, etc.., but don't try a x500 scale and a x1000 scale—in such a case it would be unclear whether a 40,000-ton mecha was an average-sized x1000 scale mecha or a large x500-scale mecha. Beware the hazard of over-scaling!

Speed and Time

Hexes are the primary measure of distance in Mekton Zeta, and are consequently vital to measuring speed as well. The other necessary measure of speed is time, which Mekton Zeta breaks up into rounds. With one hex representing 50 meters and one round representing 10 seconds, one point of Movement Allowance is 18kph. However, since MA is calculated from weight and thrust, it is actually a measure of acceleration rather than speed. On page 64 of *Mekton Z*, one can see that the relationship of speed to MA is not directly linear—if it were, an MA of 66+ would be necessary to reach Mach 1. Instead, a formula extrapolates speed semi-exponentially from MA so that Mach 1 is reached at an MA of 21. With such a formula in place, most Mektons are not expected to go much faster than MA50 (about Mach 7).

Should a campaign call for mecha with different "top speeds," players and Referees may wish to alter the values for hexes, rounds or the speed formula. Changing the distance covered by a hex changes not only speeds, but ranges; a 100-meter hex value would double all speeds, but would also double all combat ranges and quadruple all maximum ranges. Changing rounds changes speed without changing ranges, but shortens the length of combats; a 3-second round would triple all speeds, but would reduce the length of a 6-round combat from 1 minute to 20 seconds. Changing the speed formula changes only speed; if you wanted really slow mecha, you could set speeds at 1 MA = 18kph, thereby making an MA of 21 equal to 378kph (235mph). It is entirely up to you, but be sure you remember to consider all the ramifications of such changes.

When Burst Comes to Burst

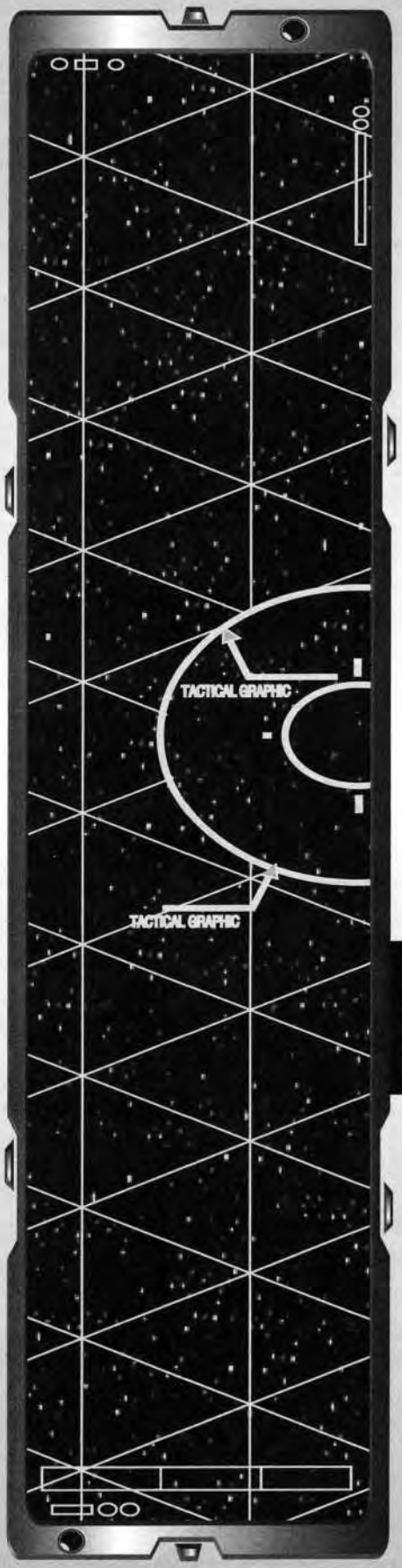
Perceptive Mekton Zeta players will have noticed already that this game system places a great deal of value on the ability to attack more than once in an Action. Rapid-fire weapons are very expensive—almost as expensive as buying a number of weapons equal to the listed Burst Value. Some players may argue that the listed Burst Values are too low: 8 rounds in 10 seconds could hardly be called "rapid fire," right?

Wrong. Like all of MTS, game effects are not literal representations of real-life values. A 3-Kill, Burst Value 4 attack does not necessarily mean four 3-Kill shells; the attack could be 16 1-Kill shells hitting potentially 4 locations or 10,000 slivers of glass traveling at 50,000 feet per second. The duration of the burst and the actual number of projectiles is left nebulous. What matters is the game effect: four 3-Kill attacks.

This reasoning is another one of MTS' fundamental assumptions, one of the "Laws of Mekton Physics." However, if you are converting to or from another system, you may desire a more literal "Burst Value" to "Rate of Fire" translation. Maybe you want more "suppressive fire" ability, or perhaps you just want to kill everything. Fine. First, determine a universal Burst duration—2 seconds usually serves. Second, decide how you want to alter Burst Value: Do you want to multiply BV by some number, or increase it through some exponential or logarithmic formula, or perhaps simply be arbitrary? It's up to you. From a Consistency point of view, the same method of conversion must *always* be applied, and from a Balance standpoint—20 hits from *any* weapon is guaranteed to be devastating.

Sample Construction

On the next six pages, you will find a flowchart which takes you through the MTS design process step-by-step. There are also filled-out Z+ mechasheets, so that you'll be clear on what goes where.



1 **NOTE: See page 15-17, "Building Your Mecha," for the Steps referred to in this building process.**

CONCEPT: Since this section is supposed to demonstrate how to design mecha in MTS, the mecha designed will make use of every single system. This will cost a heck of a lot, and make for a ridiculous mecha, but it will clearly demonstrate the ins and outs of MTS construction. Don't build mecha like this at home, kids!

2 **CONSTRUCT A FRAME:** Now that you know what you want your mecha to do, it's time to assemble its Frame—the "skeleton" of servos and armor into which everything else will be built.

Servo	Class	Spaces	Kills	Cost	Melee+	Throw	Armor	SP	DC	Absorption	New SP	Cost
Head	MW	6	6	6	-	-	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Right Arm	MW	7	7	7	+1	4 hexes	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Left Arm	MW	7	7	7	+1	4 hexes	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Right Leg	LH	8	8	8	+3	-	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Left Leg	LH	8	8	8	+3	-	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Pod	MW	12	0	6	-	-	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
Torso	MW	12	12	12	-	-	MW-a	6	2	1/4	5 (6 x0.8 =4.8)	6 x1.25 x1.8 =13.5
		48K =24t	**54 CP**					**35K=17.5t**				**94.5 CP**

2A. Body Form: Humanoid (Torso, Head, 2 Arms, 2 Legs and a Pod).

2B. Servos (24t, 54 CPs): Being a humanoid, our mecha gets a Head, 2 Arms and 2 Legs on its Torso—the Legs are increased by one level so that they'll be bigger than the Arms.

2C. Wheels and Treads (3t, 6 CPs): Mediumweight Wheels (6K, 6 CP); 3K in each Leg (in the foot) to "skate" at +2 MA.

2D. Armor (17.5t, 94.5 CPs): Mediumweight servos may as well get Mediumweight armor; the Energy Absorption capability will be kept low to save CPs.

3 **CHOOSE YOUR WEAPONS:** This humanoid mecha needs 2 Hands, and is armed with defensive energy weapons. Its main offensive weapons are Smart Missiles, and it has an Energy Pool assault rifle which can draw from the Energy-absorbing armor.

Beam Weapon (0.5t, 6.2 CP): Head Laser: Damage =3K, Kills =3, Base range =7 hexes, Base Cost =4.5; -1 WA = x0.8, 5 Shots = x0.8, Variable Anti-Missile = x1.8, Fragile (1 Kill, 0.5 tons); Cost: 4.5 x0.8 x0.8 x1.8 = 5.2 CP; +1 CP Efficiency; in Head, taking 3.2 Spaces.

Energy Melee Weapon (0.5t, 21 CP): Defense Screen: Damage =5K, Kills =1, Base cost =5; 0 WA = x0.9, Attack Factor of 2 = x2.0; Cost: 5 x0.9 x3.0 = 9 CP; Split between all 4 limbs and the torso, taking 1.8 Spaces from each. Splitting cost is 3 x4 =12 CP.

Melee Weapon (1t, 4.0 CP): 2 Hands: Damage =1K, Kills =1, Base cost =0.5; Handy = x1.5, Quick = x2.0; Cost: 0.5 x1.5 x2.0 = 1.5 CP each; with Space Efficiency, cost goes up to about 2 CP each, and Space goes down to 1 Space each. One is mounted in each Arm, taking 1 Space each. *Note: This is the standard Hand design in MTS.*

Missile Weapon (3.5t, 100.1 CP): Smart Missiles: Damage =9K, Base range = 11 hexes, Base cost =0.9; Long Range =x1.33 (-2 WA from 1 to 121 hexes), Smart-2 = x3.0, Skill 12+ = x1.6; Cost: 0.9 x1.33 x3.0 x1.6 = 5.7 CP each; each one will have 2 CP of Space Efficiency, so that each one takes 1.7 Spaces and costs 7.7 CP. 3 placed in each Leg (2K, 5.1 Spaces, 23.1 CP), 7 in a Weapon Mount on the Torso (4K, 11.9 Spaces, 53.9 CP), 13 total. They aren't Linked.

Weapon Mount (2 CP): A Weapon Mount is placed in the Torso to Hold 7 Smart Missiles; the cost is 2 CP and it takes 2 Spaces from the Torso—this Weapon Mount has as many Spaces as the Torso (12), which just fits the Missiles.

Mated Weapon System (7.5t, 31.8 CP):

(1) Projectile Weapon (3.5t, 6.2 CP): Damage =7K, Kills =7, Base range =8 hexes, Base cost =7; -2 WA = x0.6; Cost: 7 x0.6 = 4.2 CP. Ammunition: 6 Shots of Blast II Ammo: 0.042 x10 x6 = 2 CP, 0.2 Spaces and no Kills. Total weapon takes 4.4 Spaces and has 7 Kills.

(2) Energy Pool (4t, 22.5 CP): Base cost = 30, Power Available = 15, Maximum Power = 45, Kills =8; Portfolio 2 = x0.75; Cost = 30 x0.75 = 22.5; Portfolio 1 is a 10-Kill Beam weapon (+1 WA, range of 13 hexes, ∞ Shots, "power" = 15 CP); Portfolio 2 is a 20-Kill Beam Weapon (+2 WA, range of 6 hexes, Warm-Up 2, "power" = 26.1 CP)—this weapon can only be used once 12 Kills of energy have been absorbed by the mecha's Energy-Absorbing Armor.

Mated Energy Pool & Projectile Weapon: The weapons take a total of 26.9 Spaces, which becomes 20.2 with Mating, and if either weapon takes 7 Kills both will be destroyed. This Mated Weapon System will be hand-held (max Space of 14 CP), so the total Space (20.2) will be Efficiencied down to 14, costing 3.1 CP. Total hand-held Mated Weapon System will take 14 Spaces and cost 31.8 CP.

Reflector (22 CP): Quality of 4 costs 16 CP; to fit in the Binder (4 Spaces, below) means 6 CP of Space Efficiency. Total cost is 22 CP.

4 **SHIELD (2.5T, 68.9 CP):** An active Shield with a high level of Energy Absorption (since it will get hit the most) and enough Binder Space to hold a modest Reflector System.

Class	Armor	SP	DC	Absorption	New SP	Cost
LH Active	Alpha	11	2	1/2	7 (11 x0.67 =7.4)	16.5 x1.25 x2.5=51.6

Subtracting 1/4SP (2SP) gets 4 Binder Spaces (51.6 x1.1 = 56.8 CP), dropping SP to 5.Space Efficiency: 56.8 CP for an Active Shield will take 28.4 Spaces, so to make this Active Binder only take up 4.2 Spaces (all that's left in the Left Arm) will cost 12.1 CP; final cost is 68.9 CP.

5 **CREW & SENSORS (1t, 8.1 CP):** There will be a 2-seat cockpit (1 pilot, 1 gunner) in the Head; this will take 2 Spaces and cost 2 Cp. Since the longest-range weapon is the Energy Pool's normal Beam (Range =13, so Max Range =169 hexes or 8.45km), the Sensors should be able to target out to at least 8.45km; thus, we buy Heavy Striker Sensors: 6 CP, 2 Kills, 1 Space from the Head, 11km targeting range, 1300km commo range. The Sensors will be placed in the Head, but they need to lose 0.2 Space to fit, so their cost goes up to 6.1 CP. No backups.

6 **OTHER ADDITIVE SYSTEMS:** There are lots of goodies, for demonstration purposes.

Recon Systems (2t, 10 CP): Spotting Radar: 4 Kills, 10 CP, 5 Spaces. This will allow detection of mecha out to 110km (11km targeting range x10). We place this system in the Torso.

Electronic Warfare (17.5 CP): Missile Jamming at Value 5 costs 9 CP and takes 9 Spaces; ECCM at Value 5 would also cost 9, but since it is a second EW system, it only costs 4.5 and takes no Space. 4 CP of Space Efficiency make this a 1 Space system, placed in the Right Arm.

Remote Control (8.5 CP): Control Multiple =1, cost =4, Control and Operation Range =20/∞. This mecha is designed to control only 1 Remote (which we will not bother building for the sake of brevity). The cost is 4 x2 =8 CP. Since the Remote cannot be stored by the mecha, Space is only 1 (reduced to zero by 0.5 CP of Space Efficiency—yes, you can do this).

Options (9 CP): 2 Ejection Seats (2 CP, 0 Spaces), Silent Running at -5 Awareness (bought for walking only, 5 CP), and Stat Enhancement (+3 COOL—why not?).

7 **FIGURE BASE WEIGHT:** At this point, all the standard Additive systems have been purchased. It is now time to add up all Kills and divide by 2. In this example, all Kills have already been divided by 2, so we will just add up all Tons: The result is 63.0 tons.

7A. Fuel (6.3t, 0 CP): Internal Fuel Reservoir has 1000km as the standard load (thus taking no Spaces and having no cost) but it does add +10% to the mecha's weight; +10% weight =+6.3 tons. The Fueled-up weight of the mecha is 69.3 tons.

8 **WEIGHT EFFICIENCY (43.2 CP):** Desiring a smaller mecha unit, the weight will be dropped from 69.3 tons to 46.2 tons (approximately 2/3 the original weight). Removing 23.1 tons costs 46.2 CP—we'll save this value, to be added in Step 12.

9 **PROPULSION SYSTEMS (20 CP):** New weight is 46.2 tons: A flight MA of 10 with Thrusters is desired; 0.0375 x10 = 0.375, 46.2t x0.375 = 17.3 CP and Spaces. The Thrusters will all be placed in the Pod (which has 12 Spaces), so 5.3 Spaces must be cut, costing 2.7 CP in Space Efficiency.

10 **FIGURE BASE COST:** Adding all costs so far accrued yields a Base cost of 526.8 CP, which is astronomically expensive, but understandable for this extreme design.

11 **CHOOSE MULTIPLIER SYSTEMS:** Like Additives, this mecha will have pretty much every Multiplier system in the book!

11A. Powerplant (x0.15): Overcharged Hot Fusion (+1 MV, +1 MA, +33% MP); XS=5.

11B. Cockpit Controls (x0.05): Virtual (+33% MP), Canopy Cockpit located in the Head.

11C. Maneuver Verniers (x0.1): May as well give the MV a boost: +1 MV costs x0.1 and takes 5 Spaces; 1.1 per Leg, 2.2 in the Torso, and 0.6 in the Right Arm.

11D. Environment Protection (x0.1): It can operate work in Space (x0.5) and, let's say, the Arctic (x0.5), as well as in a regular Earth-like environment. It can't perform re-entry, and it won't work underwater (doesn't have a Marine Sensor Suite anyway).

11E. Transformables and Combiners (x0.4): This mecha can transform into the ever-popular Fighter Form (x0.3), thereby doubling its MA (and suffering -2 MV, etc.). It also buys Metaform Wings for its Legs (+2MA x2 = +4MA, x0.05) and VTOL Ability (x0.05) for a potential flight MA of 0 in Fighter Form (Max MA is 24). This mecha will have no combining capability (simply for the sake of brevity).

Hydraulics (x0.0): No special Hydraulics for this mecha—there really isn't Space.

ACE (x0.1): This mecha, being oh-so-cool, gets +67% to its Maneuver Pool.

Internal Automation (x0.14): A low-level autopilot; not combat-effective, but satisfactory as a backup. Automation Level =2 (x0.2), Portfolio 3: Piloting, Navigation, Awareness (x0.7).

COST MULTIPLIER SYSTEMS CONTINUED...

Cloaking (x0.4): Active Cloaking (x0.3) and Pulse Refract (x0.1). Handy.
Stealth (x0.2): This mecha, naturally, is Stealthy.
ESPer Lens (x0.27): This system can't be Efficient, so it better be small. Rank will be 10 (x1.8), but with a Draw of x10 (x0.3), Backlash of 3 (x0.5) and a Portfolio of 1 (x0.5). Space Taken will be 1 (x2.0) from the Right Arm (leaving 1.6 left); say it's in the mecha's palm.
Shadow Imager (x0.05): Seeing as how Shadow Imagers take 1 Space per Shadow, only one Shadow (electronic) will be bought. The projector will be in the Right Arm (leaving 0.6 Spaces).
Thought Control (x0.5): This mecha gains +2 MV, +67% Maneuver Pool, +1 to all Weapon Accuracies, the Control Multiple for its Remote Control system becomes 2 (instead of 1), and then there's that pesky pilot-mecha bond.
Turbocharger (x1.25): This system can function for 2 turns; no backup generator.
Regenerating (x0.25): This mecha can Regenerate at TL6 levels.
Lightspeed (x1.25): On top of everything else, this thing can travel at the speed of light.
Teleporter (x5.0): Just to be extreme, this mecha has the Dimensional Teleport function: 4096 kilometers of Combat Teleport!

12 CALCULATING MULTIPLIED COST: Adding all the Multipliers grants x10.21. To this, a x1.0 multiplier must be added (the original cost of the mecha), for a result of 11.21 x526.8, or 5,905.4 CP. Add the 46.2 CP Weight Efficiency (from Step 8) for a total of 5,951.6 CP.

13 OVERVIEW MECHA: As a whole, it looks good. No changes—we knew this thing was gonna be sick when we started.

14 STATS: *Maneuver Value* is -4 (for 46.2 tons of weight), +1 (Powerplant), +1 (Verniers), and +2 (Thought Control); this grants an MV of -0. Don't forget that there is an extra -2 MV (for an MV of -2) when transformed. *Maneuver Pool* is +33% (Powerplant), +33% (Cockpit), +67% (ACE), and +67% (Thought Control); this grants an MP of +200%. *Land MA* is 4 (for a 40-60 ton weight) and +1 (Powerplant); this grants a running MA of 5. When this mecha uses the Wheels in its Legs, its Land MA becomes 7 (Wheels grant +2). *Flight MA* is 10 (Thrusters), 24 in Fighter form (Fighter Transformation with Metaform Wing function).

15 BUY COMMAND ARMOR (5t, 55.3 CP): This is not filled with any equipment (again, for brevity) except for Verniers which cancel out the Balance Modifiers; while the mecha will be 5.0 tons heavier (51.2t) with this armor, it suffers no penalties to its Stats.

Servo	C.A. Class	SP	DC	Spaces	CP	B. Mod
R. Leg	LH	5	2	10-5=5	11.3+5=16.3	0 (was 0.5)
L. Leg	LH	5	2	10-5=5	11.3+5=16.3	0 (was 0.5)
Torso	LH	7	2	14-7=7	15.7+7=22.7	0 (was 0.7)
		10K =5.0t			**55.3 CP**	**0 (was 1.7)**

15A. Boosterpacks (3t, 6 CP): Two 30-Point, +5 MA Boosterpacks (3 CP each) are bought, to be attached to the Pod (taking no spaces). The mecha can now boost up to +5 MA for 12 turns. The Boosterpacks' combined Balance Modifier is -0.3 (which rounds down to zero, so no biggie). These are not actually put **in** the Command Armor, but act in a similar manner (they're ejectable, they have a Balance Modifier) so they're bought now. They'll add 3 tons but, like Command Armor, only for knockback purposes.
15B. Calculate Mecha's New Stats: Stats are the same with full Command Armor and Boosterpacks, except weight goes up from 46.2 tons to 54.2 tons. Final cost is 6,012.9 CP (5,951.6 CP for the finalized cost, +61.3 CP for Command Armor and Boosterpacks).

16 SCALING: This is a 1:1 Scale mecha, so nothing need be done here. Check the Scaling chapter for Scaling effects if your mecha is not supposed to be a 1:1 Scale design.

17 REMOTES: This mecha can indeed control remotes, but let's not bother building them right now. If you really must know, let's say the remote is an exact duplicate of this mecha and just walks along with it. In such a case, the actual cost of the whole mecha would be twice it's cost (once for itself, once for its remote duplicate). That's 6,012.9 CP for the finalized cost, plus another 6,012.9 if there's a remote duplicate; total would then be 12,025.8 CP. Ouch.

18 **PRESTO!** Let's call it "Super Rapier EX," with EMA-X1 (Emergency Maximum Attacker, eXperimental unit mark-1) as its serial number. The Pilot's important Stats aren't an issue here—go back to *Mekton Z* for that. This page is a filled-out MZ+ **Play Sheet** (this sheet has all data necessary for play, but no build data) and the next two pages are a full **Build Sheet** (all info covered).

Configuration	MV	MR	Land MA	Flight MA
Humanoid	-0		5-7 Hexes	10 Hexes
Fighter	-2		0 Hexes	24 Hexes
Armored Humanoid	-0		5-7 Hexes	10 Hexes
				(15; 12 turns)

Maneuver Pool +200%

Mecha Combat Skills

Mecha Piloting	+ MR=	
Mecha Fighting	+ MR=	
Mecha Melee	+ MR=	
Mecha Gunnery	+ MR=	
Mecha Missiles	+ MR=	

Main Systems

Powerplant XS:	5
Space & Arctic Protection	
IA-2; Pilot, Navigate, Awa.	
Stealth, Active-Pulse Cloak.	
ESPer Lens: Rank-10, Back-3, Folio-1.	
1 Shadow / 2-turn Turbocharger	
Lightspeed / 4096 Teleport.	

Command Armor, Armor & Servos

Servomodule	CA-SP	CA-DC	CA-ABC	SP	DC	ABC	Kills	Add+
Head	-	-	-	5	2	1/4	6	-
Torso	7	2	-	5	2	1/4	12	-
Right Arm	-	-	-	5	2	1/4	7	+1K
Left Arm	-	-	-	5	2	1/4	7	+1K
Right Leg	5	2	-	5	2	1/4	8	+3K
Left Leg	5	2	-	5	2	1/4	8	+3K
Pod	-	-	-	5	2	1/4	0	-

Movement Systems

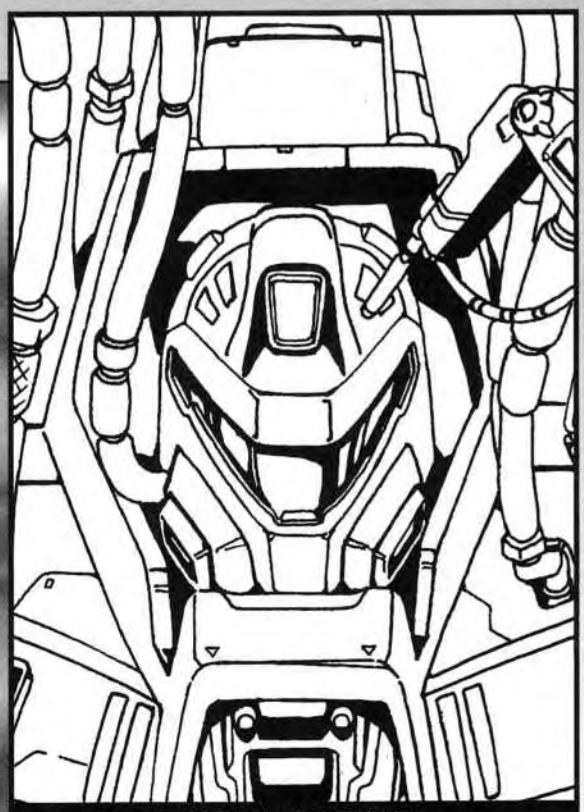
Movement System	Loc	Kills
Wheel	RL	3
Wheel	LL	3
Thrusters	Pod	0

Sensors

Sensors	Main		
Loc	Head		
Range	11km		
Comm	1300km		
Kills	2		
Notes	Spotting Radar		
	110km Sensor Range		

Armament

Weapon	WA	Range	Damage	Shots	Kills	Loc	Notes
Right Hand	+1	M	1K+	-	1	RA	Quick, Handy.
Left Hand	+1	M	1K+	-	1	LA	Quick, Handy.
Head Laser	-0	7	3K	5	1	H	V.Anti-Missle.
Defense Screen	+1	M	5K	-	1	T, 4L	AF=2.
Smart Missiles	-1	121	9K	7	2	RL	Smart-2; 12+
Smart Missiles	-1	121	9K	3	2	LL	Smart-2; 12+
Smart Missiles	-1	121	9K	3	4	T-M	Smart-2; 12+
Rifle - Beam	+2	13	10K	∞	8 (7)	2H	P-2 pool, mate.
Rifle - (Blast)	+3	6	20K	(-12K)	-	"	Pool, NRG-abs.
Rifle - Grenadier	-1	8	7K	-	7	"	Mated.
Grenades	-	-	Blast II	6	-	"	Blast-II.
*All WAs +1; Thought-C.							



Mecha Profile

Name	EMA-X1 Super Rapier EX	Weight	Cost
		46.2 (54.2)	12,025.8

Subassemblies

Cockpit	# Crew	Type	Enc.	Options
Head	2	VR	Canopy	E-Seats

Subassemblies	Loc	K
Binder Reflector (Quality-4)	Bndr	-
EW (Missile Jamming & ECCM 5)	RA	-
Silent Running (-5 AWA vs Walking)	-	-
+3 COOL	-	-
1000km Fuel	T	-
Boosterpack (+5MA, 30 MA points)	Pod	3
Boosterpack (+5MA, 30 MA points)	Pod	3

Shielding

Shield	DA	SP	DC	ABC	Loc	Notes
Binder	-2	5	2	1/2	LA	Reflector

Remote Information

Control Multiple	Control	Operation
2	20	∞

Servos & Armor	Weapons
Same as this sheet	Same as this sheet.

Other Systems

Same as this sheet.

Weight	MV	MR	Skill	L-MA	F-MA	MP
54.2	0		x1	5	10	x3

FINALS

多次元機甲戦士道

メクトン

MECHA NAME	EMA-X1 Super-Rapier EX		
COST	12,025.8 (6,012.9 x2)	WEIGHT	46.2 tons
APT		MANEUVER POOL	+200%

CONFIGURATION	MV	MR	LAND MA	FLIGHT MA
Humanoid	-0		5-7 Hexes	10 Hexes
Fighter	-2		0 Hexes	24 Hexes
Armored Humanoid	-0		5-7 Hexes	10-15 Hexes

0 COST MULTIPLIERS x10.21

POWERPLANT	SOURCE	XS	MV	MA	MP	COST
Over, Hot.	Fusion	5	+1	+1	+33%	x0.15

CONTROL SYSTEM	M-POOL	COST
Virtual	+33%	x0.05

HYDRAULICS	SPACE	MELEE	LIFT	COST
Standard	+/-0	+0	x1	x0.0

SYSTEM	NOTES	SPC	EFF	COST
Verniers	+1 MV (1.1/L, 2.2T, 0.6RA)	5	0	x0.1
Enviro-P	Space & Desert	0	0	x0.1
T-Form	Fighter	0	0	x0.3
Wings	Metaform Legs	0	0	x0.5
VTOL	Min MA = 0	0	0	x0.5
ACE	+67% Manuever Pool	0	0	x0.1
I-A	IA2; Pilot, Nav, Awa.	0	0	x0.14
Cloaking	Active & Pulse	0	0	x0.4
Stealth	Anti-Radar	0	0	x0.2
ESPer Lens	R10, Dx10, B3, P1 (RA).	1	0	x0.27
Shadow	One Image (RA)	0.6	0	x0.05
Thought-C.	+2 MV, +67%MP, +1WA, etc.	0	0	x0.5
Turbocharge	Two Turns	0	0	x1.25
Regenerate	10% per day	0	0	x0.25
Lightspeed	1x C speeds	0	0	x1.25
Teleport	4096 Combat 'Port	0	0	x5.0

16 SENSOR SYSTEMS Tons 3

SENSOR	LOC	RANGE	COMM	KILLS	CP	EFF	SPACE	COST
Heavy Striker	H	11km	1300km	2	6	0	1	6
Spotting Radar	T	110km	-	4	10	0	5	10

26 MOVEMENT SYSTEMS Tons 3

SYSTEM	MA	LOC	KILLS	CP	EFF	SPACE	COST
Wheel	7	R. Leg	3	3	-	-	3
Wheel	7	L. Leg	3	3	-	-	3
Thrusters	10	Pod	0	17.3	2.7	12	20

54 SERVOS & ARMOR Tons 24

SP	DC	KILLS	LOCATION	CLASS	MELEE+	SPACE	COST
6	2	6	Head	MW	-	6	6
6	2	12	Torso	MW	-	12	12
6	2	7	Right Arm	MW	+1	7	7
6	2	7	Left Arm	MW	+1	7	7
6	2	8	Right Leg	LH	+3	8	8
6	2	8	Left Leg	LH	+3	8	8
6	2	0	Pod	MW	-	12	6

ARMOR	TYPE	ABSORPTION	COST
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5
MW	Alpha	1/4	13.5

163.1 WEAPONS Tons 13.5

WEAPON	WA	RANGE	DAMAGE	SHOTS	KILLS	LOC	CP	EFF	SPACE	COST	NOTES
Right Hand	+1*	Melee	1K+	-	1	RA	1.5	0.5	1	2	Quick, Handy
Left Hand	+1*	Melee	1K+	-	1	LA	1.5	0.5	1	2	Quick, Handy
Head Laser	+0*	7	3K	5	1	H	5.2	1	3.2	6.2	Variable Anti-Missile
Defense Screen	+1*	Melee	5K	∞	1	T, 4L	9	12	1.8e	21	Attack Factor 2, Split
Smart Missiles	-1*	121	9K	7	4	T-M	39.9	14	11.9	53.9	Smart-2, Skill 12+1D10
Smart Missiles	-1*	121	9K	3	2	RL	17.1	6	5.1	23.1	Smart-2, Skill 12+1D10
Smart Missiles	-1*	121	9K	3	2	LL	17.1	6	5.1	23.1	Smart-2, Skill 12+1D10
Rifle (Beam)	+2*	13	10K	∞	7 (8)	2H	22.5	3.1	14	31.8	E-Pool 'Folio-1; Mated
Rifle (Blast)	+3*	6	20K	(-12K)	-	"	(26.1)	-	-	-	E-Pool 'Folio-2; Mated
Rifle (Grenade Launcher)	-1*	8	7K	(-)	7	"	4.2	-	(4.2)	(-)	Mated to E-Pool
Grenades	-	-	Blast-II	6	-	"	2	-	(0.2)	(-)	Blast Radius = 2
*+1 WA Thought Control included.											

FINALS

MECHA NAME	EMA-X1 Super Rapier EX		
COST	6012.9	WEIGHT	46.2 tons

1. Base Weight (All Kills / 2)	63.0t
2. Fuel Weight	6.3t
3. New Weight (1 + 2)	69.3t
4. Base Cost (All CPs)	526.8 CP
5. Cost Multiplier (All, +x1.0)	x11.21
6. Multiplied Cost (4 x 5)	5,905.4 CP
7. Weight Efficiency (- Tons)	-23.1t
8. Weight Eff Cost (7 x2)	46.2 CP
9. Efficient Weight (3 - 7)	46.2t
10. Efficient Cost (6 + 8)	5,951.6 CP
COMMAND ARMOR, BOOSTERPACKS, ETC	
11. Base Weight (Kills / 2)	8t
12. Base Cost (All CPs)	55.3 CP
13. Cost Multipliers (All, +x1.0)	x1.0
14. Multiplied Cost (12 x 13)	55.3 CP
15. Weight Efficiency (- Tons)	-0
16. Weight Efficiency Cost (15 x2)	0 CP
17. Efficient Weight (11 - 15)	8t
18. Efficient Cost (14 + 16)	55.3 CP
REMOTE UNITS	
19. Base Weight (All Kills / 2)	63.0t
20. Fuel Weight	6.3t
21. New Weight (19 + 20)	69.3t
22. Base Cost (All CPs)	526.8 CP
23. Cost Multiplier (All, +x1.0)	x11.21
24. Multiplied Cost (22 x 23)	5,905.4 CP
25. Weight Efficiency (- Tons)	-23.1t
26. Weight Eff Cost (25 x2)	46.2 CP
27. Efficient Weight (21 - 25)	46.2t
28. Efficient Cost (24 + 26)	5,951.6+55.3 CP
30. Number of Remotes	1
31. Remotes Cost (28 x 30)	6012.9 CP
32. Remotes Weight (27 x 30)	46.2t (+0)
TOTAL VALUES	
32. Total Cost (10 + 18 + 31)	12,025.8 CP
33. Total Weight (9 + 17 + 32*)	46.2t x2
SCALING	
34. Scale	x1
35. Cost Scale Factor	x1
36. Weight Scale Factor	x1
37. Final Cost (32 x 35)	12,025.8
38. Final Weight (33 x 36)	46.2t x2

多次元機甲戦士道 メクトン

ADDITIVE SYSTEMS

59 — T 6.3

Crew	Loc	Enclosure	Notes	CP	Eff	Spc	Cost
Two	H	Canopy	1 Pilot, 1 Gunner.	2	0	2	2

System	Loc	Notes	K	CP	Eff	Spc	Cost
Reflector	Bndr	Quality-4; housed in Binder	0	16	6	4	22
EW System	RA	Missile Jamming & ECCM-5	0	13.5	4	1	17.5
Remote-C.	T	CM=2*, Range = 20/∞	0	8	0.5	0	8.5
Eject-Seats	H	One per crew.	0	2	0	0	2
Silent Running	T	Awareness -5 (Walking)	0	5	0	0	5
Stat En.	All	+3 COOL	0	2	0	0	2
Fuel	T	1000km = 6.3t	0	0	0	0	0

REMOTE BUILD INFORMATION

6012.9 — T 46.2

CM	MV	MR	APT	MP	Land MA	Flight MA
2	0/-2			x3.0	5-7	10-24

SP	DC	K	Servo	Spc	CP	Armor	CP	System	Notes	Spc	K	CP
									Same.			

Weapon	WA	RNG	DMG	#SH	K	Loc	CP	Eff	Spc	Cost	Notes
Same.											

FINALS

SHIELDS

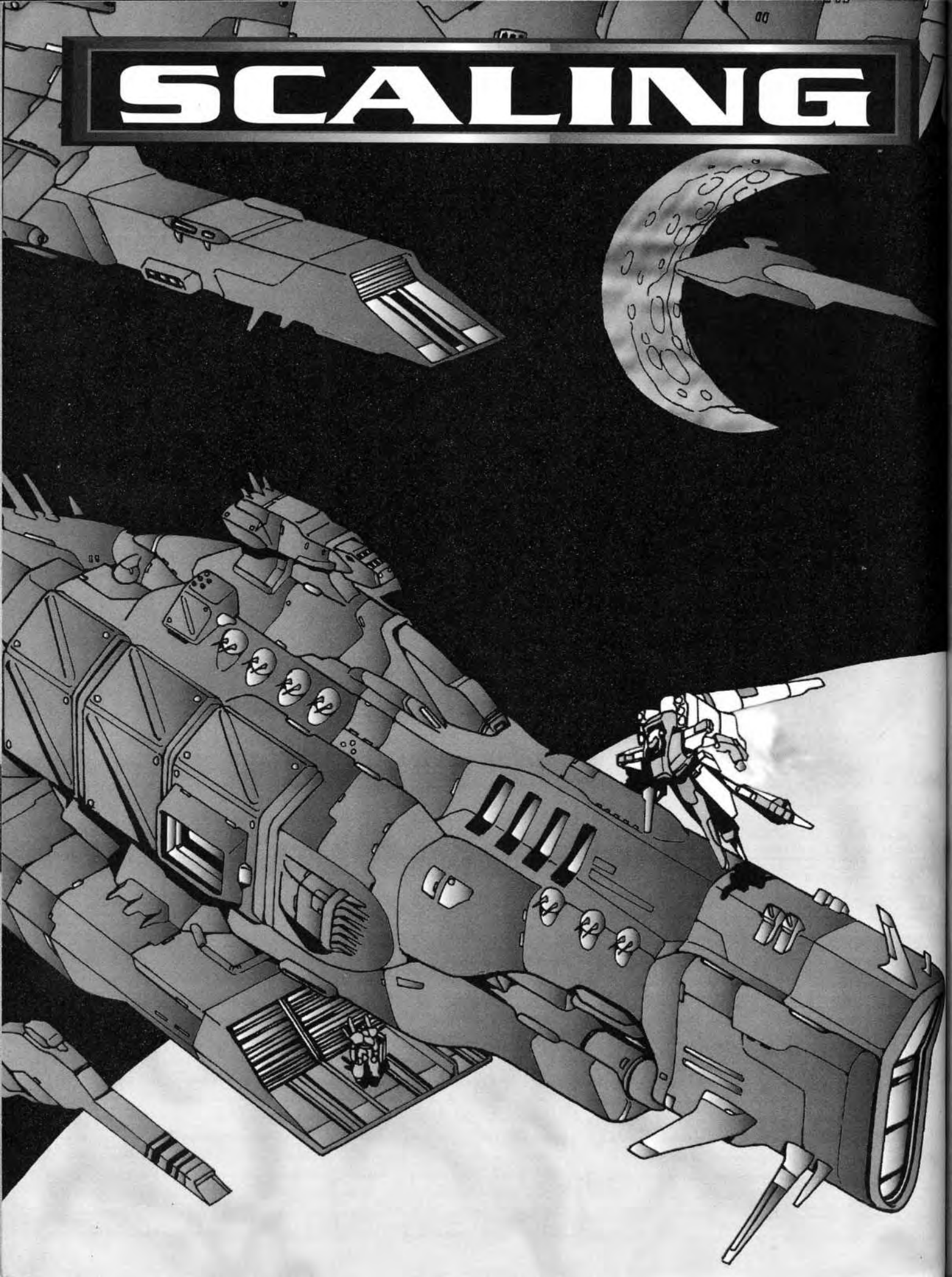
68.9 — T 2.5

Location	Class	Type	DA	SP	DC	Absorption	Space	Loc	Cost	Notes (Binder Space, Reset, etc)
Active	LH	Alpha	-2	5	2	1/2	4.2	LA	68.9	Binder-Space: 4 (used by Reflector).

COMMAND ARMOR, BOOSTERPACKS & DROP TANKS

55.3 — T 8

Location	Class	Type	SP	DC	Absorb	Space	B.Mod	Cost	Equipment
Torso	LH	Alpha	7	2	-	14/7	0 (0.7)	22.7	Balance Vernier
Right Leg	LH	Alpha	5	2	-	10/5	0 (0.5)	16.3	Balance Vernier
Left Leg	LH	Alpha	5	2	-	10/5	0 (0.5)	16.3	Balance Vernier
Pod Booster	+5MA	30	-	-	-	0	0.15	3	3 Kills
Pod Booster	+5MA	30	-	-	-	0	0.15	3	3 Kills


SCALING

SCALING

In MTS, the size of any mecha designed is generally left undefined. MTS' fundamental measure of "size" is effectively Weight, universally measured in metric tons. Most mecha are between 3 and 33 meters (depending on design, configuration and style) and while such mecha are a good standard, they aren't always enough to satisfy an ambitious Referee.

For example, in a roleplaying-over-firepower campaign, large mecha may be too awkward for many adventures—and thus find themselves in the parking lot all the time. After all, one can hardly sneak into a crimelord's hideout in a 70-ton mekton! On the other hand, smaller mecha may not be right either; what good is a mechabike when you're weightless in space, surrounded by alien star-cruisers?

Rather than using separate construction systems for each size of mecha, MTS uses a method which allows mecha to be designed at normal size (referred to as "1-to-1," "1/1," or "x1") and then be resized to a new Scale (such as x1/5, or "Roadstriker" scale). This method is referred to as **Scaling.**

To create mecha of a Scale other than 1/1, you must first decide which of the five other Scales is appropriate. Refer to the sidebar chart, which lists the six Scales.

Once a Scale has been chosen, the mecha must be designed—completely—and its Cost must be figured. Then the mecha must be modified by the Scale Factor (the first number in the sidebar chart)—this is the number by which all Kills, Weapon Damages, Ranges, Weights and other factors are multiplied. Each Scale has a section; refer to the appropriate Scale's section to alter your mecha. Then figure the new Cost. This is done by multiplying the total Cost by the Cost Multiplier on the chart (thus, should your 1/1 Scale mecha Cost 250 CP, it would Cost 6,250 CP at x10 Scale). At this point your Scaled mecha is complete.

Scales may also be mixed; mecha may use out-of-Scale systems **if** they can handle the Space requirements; a 1/1 Scale mecha could fire a x10 scale Weapon as a kind of super-bazooka, or a x100 Scale starship could be armed with a series of 1/1 Scale Weapons for mecha-defense. Larger-scale ECM suites, Reactive Shields, even out-of-Scale Cockpits are possible. Don't forget the variance in CP and Space; since all designs start at 1/1 Scale, CP and Space must be adjusted when bought.

For example: *a x10-scale Corvette could be armed with several x1-Scale weapons, but they should be bought (initially) at 1/25th their normal price; that way, when the entire design is scaled up, it's cost will be increased by x25 (thereby bringing the x1-Scale weapons up to their correct CP value). The x1-scale weapons will also take up 1/10th their normal Space, since they are out of Scale to the rest of the mecha.*

Scaling is a powerful tool. It's excellent for building those things which may not be "Mektons" in the conventional sense, but are still mecha deserving a formal write-up. Such items include cars, bikes, starships and any other important mecha. Note that Scaling often works in conjunction with Transformables (see page 82), using one of the Forms as the Scaled mecha's natural shape (such as Motorcycle, Ship, etc.).

THE SCALES

Scale	Cost	Name
x1/10	x1/5	Human
(Androids, Armor, Handguns)		
x1/5	x1/3	Roadstriker
(Cars, Bikes, Powered Armor)		
x1	x1	Mekton
(Standard Mecha)		
x10	x25	Corvette
(Small Spacecraft, Huge Mecha)		
x100	x500	Starship
(Starships, Star Bases)		
X	x?	Excessive
(Referee's domain)		

Scaling MA

Mekton Zeta may have six Scales, but there are two—and only two—measurements of movement: hexes and meters. One hex represents fifty meters. When dealing with human-level combats, almost all movement and distances are measured in meters; for mecha-level combats, movement and distances are almost always measured in hexes. There will be times, however, when these two measurements will overlap, most commonly with Roadstrikers. Roadstrikers (and Human-Scale mecha) measure their walking MA in meters per turn (MPT), but they use hexes for flight, driving and other types of MA. There are two ways to handle this. In a purely roleplaying situation, it is most effective to measure all distances in meters; you'll be less constrained by artificial definitions. This method also works well for miniatures battles which use some kind of measuring tape instead of employing a hexboard (it's very easy to measure fractional values with a tape measure). However, when using a hexmap for your miniatures battles, MPT-type MAs can wind up representing fractional hex-type MAs. In such a case, simply round MPT to the nearest MA; the values shake out as 10-20 MPT = 1 hex MA, 30-70 MPT = 2 hexes MA, 80+ MPT = 3 hexes MA. Now all you have to do is play!

Human Scale △ にんげんのスケール

SCALE FACTOR: 1/10th
(1 Kill = 2.5 Hits, 1 Hex = 5m);

COST FACTOR: x1/5
(1 CP = 0.2 CPs).

SERVOS

Damage capacity: Kills x2.5 = Hits. If the designer so wishes, Kills/2 (Kills/4 for Torso) may be used as a "Toughness" number: Instead of having Hits of servo structure, Toughness is *always* subtracted from any damage which penetrates armor SP before affecting the person within. No design may have both servo Hits and Toughness.

Hand-to-hand Damage bonuses: Kills x2.5 = +Hits (this can add to the Body Type bonus of a wearer of a powered suit).

Spaces: Does not scale.

Arm Throwing Range: 1 Hex = 5m range (adds 1/2 above to wearer=s throwing range if powered armor).

Scaling Armor

At Human, Roadstriker and Mekton Scales, Armor Scales normally (i.e., 10-Kill Armor becomes 2-Kill Armor at 1/5th Scale). However, at Corvette and Starship Scales, Armor does not Scale directly—instead, Corvettes get x1 Scale Armor and Starships get x10 Scale Armor. This is becuase the amount of raw material needed to cover such large masses grows exponentially, while the protection granted by layering so much material grows very slowly. Therefore, while Corvettes only get the same Armor as Mektons, their weight increases normally (i.e., 10SP Armor for Corvettes weighs 50 tons). If you want to design a Scaled-up mecha which has proportionately Scaled Armor, pay **5x** the Armor's cost for "Scaled Armor." In game terms, this Armor weighs the same amount as regular Armor, but grants fully scaled SP vs all attacks.

For example: *The Super Rapier is buys Superheavy Armor. Being a x10-Scale design, each location's layer of Armor will grant 10SP, weigh 50 tons and cost 250 CP. However, the Super Rapier buys Scaled Armor, so its Superheavy Armor grants 100SP, weighs 50 tons and costs 1250 CP.*

If the designer wants Scaled Armor to weigh more, s/he may simply apply Weight Inefficiency to the design. Note: This rule does not apply to Shields; their SP always Scales as normal. While Human Scale armor Scales as normal, such designs may also purchase Scaled Armor for 5x armor cost, in which case their armor's SP is equivalent to that of a 1/5th Scale design.

ARMOR

Stopping Power: Kills x2.5 = Hits, unless "Scaled Armor" is bought; then Kills x5 = Hits.
Damage Coefficient: Kills x2.5 = Hits, unless "Scaled Armor" is bought; then Kills x5 = Hits.
Armor Ablation Rate: Loses 1 Hit per successful attack of 5 Hit-increments.
Absorption Coefficient: Does not Scale.

WEAPONS

Damage: Kills x2.5 = Hits.
Range (Maximum): Equal to (unscaled Combat Range x50 meters).
Range (Combat): Equal to (unscaled Combat Range x5 meters).
Accuracy: Does not scale.
Shots, Turns in Use, Warm-Up, Wide Angle, Burst Value, Attack Factor: Do not scale.
Ranged Entangling Melee Weapons: Damage sacrificed for Hexes x 5 = Meters.
Smart Missiles and Skill: Do not Scale.
Blast Radius: Hexes x 5 = Meters.
Screen beam reduction: -Kills x2.5 = -Hits.
Shock Weapons: The original Damage (in Kills) is subtracted from the target's consciousness roll—do not Scale this effect.
Nukes: Ranges Scale; Hexes x 5 = Meters.

ENERGY POOLS

Weapons in Portfolios: Scale normally.
Power Requirements: Costs are Scaled by 1/10 (Scaling factor), not 1/5 (Cost factor).
Available and Max Power: Divide by 10.
Portfolio Size: Does not scale.

WEAPON MOUNT

3 Hits is sufficient to destroy a Mount.

SHIELDS:

Stopping Power: Kills x2.5 = Hits, unless "Scaled Armor" is bought; then Kills x5 = Hits.
Damage Coefficient: Kills x2.5 = Hits, unless "Scaled Armor" is bought; then Kills x5 = Hits.
Armor Ablation Rate: Loses 1 Hit per successful attack of 5 Hit-increments.
Defense Accuracy: Does not scale.
Binder Space: Does not scale.
Reset Time: Does not scale.

REFLECTOR SYSTEMS

Quality: Does not scale; calculations for Reflection should be done using the incoming beam's *unsacled* Kills.

SENSORS

Damage Capacity: Kills x2.5 = Hits.
Sensor Range: Divide by 2.
Communication Range: Divide by 50km.

RECON SYSTEMS

Work the same as always, except for:
Spotting Radar: Uses (Sensor Range x5), not (Sensor Range x10).

ELECTRONIC WARFARE (ECM AND ECCM)

Value: Does not Scale.
Radius Effect: Hexes x 5 = Meters.
Beaming Range: Hexes x 5 = Meters.

REMOTE UNITS

Control Multiples: Does not scale.
Operation and Control: Hexes x5 = Meters.

STATISTICAL ENHANCEMENTS:

Do not scale.

OPTIONS

Storage Module: Volume is 50 kilograms.
Spotlights and Nightlights: Illuminates 10m.
Micromanipulators: Do work too small for human hands.
Slick and Bogg Spray: Covers a 5m area.
Damage Control: Fire foam can handle 20m, glue bombs cover 10m, liferaft/bubble raft holds 1 person.
Escape Pods: Usually not applicable; for armor suits, blows armor off wearer.

COMMAND ARMOR

Stopping Power: Kills x2.5 = Hits.
Damage Coefficient: Kills x2.5 = Hits.
Armor Ablation Rate: Loses 1 Hit per successful attack of 5 Hit-increments.
Spaces: Does not scale.
Balance Modifiers: Do not Scale.

WHEELS AND TREADS

Damage Capacity: Kills x2.5 = Hits.
Wheel MA Bonus: Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.
Tread Terrain Bonus: As normal.

BOOSTERPACKS

MA Points: Does not Scale.
Damage Capacity: Kills x2.5 = Hits.
Balance Modifiers: Do not Scale.
Max Boost: Does not Scale.

FUEL

Works the same as always.

PROPULSION SYSTEMS

Flight (or other) MA: Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

POWER PLANTS

Explosion Save: Does not Scale.

COCKPITS

Space is not an issue at this scale; it is assumed to be usable/wearable by a human person.

HYDRAULICS

Melee Damage bonuses: Kills x2.5 = +Hits (if armor, added to wearer=s HTH damage).

ENVIRONMENTAL PROTECTION

Works the same as always.

MANEUVER VERNIERS

Works the same as always.

ACE

Works the same as always.

INTERNAL AUTOMATION

Works the same as always.

CLOAKING

Beam Refract beam protection: Reduces energy attacks by -3 Hits.

ESPER LENSES

Rank, Draw, Backlash, Portfolio: Don't Scale.

Only Scale *effects* of ESPer powers: Ranges are 5x normal, Weights are 10x normal, Damages are 1.5x normal.

SHADOW IMAGER

Works the same as always.

STEALTH

Works the same as always.

TELEPORTERS

Combat Teleport: Hexes x5 = Meters.
Global Teleport: Kilometers/10 = Kilometers.

TECHNO-ORGANICS

Healing Effects: Rates in 2.5-Hit increments.
MV bonus: Does not scale.
Regeneration: Works the same as always.

THOUGHT CONTROL

Works the same as always.

TRANSFORMABLES

Seldom applicable at this Scale, but can work the same as normal if used.

COMBINERS

Seldom applicable at this Scale, but can work the same as normal if used.

SUPERCHARGER

Works the same as always.

LIGHTSPEED

Works the same as always.

WEIGHT

Any design is assumed to be usable by a human; 2 unscaled Kills are 1 kilogram.

GROUND MOVEMENT

Land MA: If armor, based on wearer's own MA. If powered armor, it may add 1/2 its land MA to the wearer's MA. If it's a robot or other non-human-augmentation design, multiply land MA by 1.5 to determine new character-style Movement Allowance.
Jumping Range: Based on new MA.

MANEUVER POOL

Does not Scale.

MANEUVER VALUE

Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

Roadstriker Scale Δ ロードストライカーのスケール

SCALE FACTOR: 1/5
(1 Kill = 5 Hits, 1 Hex = 10m);

COST FACTOR: x1/3
(1 CP = 0.33 CPs).

SERVOS

Damage capacity: Kills x5 = Hits.
Hand-to-hand Damage: Kills x5 = Hits.
Spaces: Does not scale.
Arm Throwing Range: 1 Hex = 10m range

WHEELS AND TREADS

Damage Capacity: Kills x5 = Hits.
Wheel MA Bonus: Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.
Tread Terrain Bonus: As normal.

ARMOR

Stopping Power: Kills x5 = Hits.
Damage Coefficient: Kills x5 = Hits.
Armor Ablation Rate: Loses 5 Hits per successful attack of 1 Kill (25 Hits) increments.
Absorption Coefficient: Does not Scale.

WEAPONS

Damage: Kills x5 = Hits.
Range (Combat, Maximum): Do not Scale.
Accuracy: Does not scale.
Shots, Turns in Use, Warm-Up, Wide Angle, Burst Value, Attack Factor: Don't scale.
Ranged Entangling Melee Weapons: Damage sacrificed for Hexes x 10 = Meters.
Smart Missiles and Skill: Do not Scale.
Blast Radius: Hexes x 10 = Meters.
Screen beam reduction: -Kills x5 = -Hits.
Shock Weapons: The original Damage (in Kills) is subtracted from the target's consciousness roll—do not Scale this effect.
Nukes: Ranges Scale; Hexes x 10 = Meters.

ENERGY POOLS

Weapons in Portfolios: Scale normally.
Power Requirements: Costs are Scaled by 1/5 (Scaling factor), not 1/3 (Cost factor).
Available and Max Power: Divide by 5.
Portfolio Size: Does not scale.

WEAPON MOUNT

5 Hits is sufficient to destroy a Mount.

SHIELDS

Stopping Power: Kills x5 = Hits.
Damage Coefficient: Kills x5 = Hits.
Armor Ablation Rate: Loses 5 Hits per successful attack of 1 Kill (25 Hits) increments.
Defense Accuracy: Does not scale.
Binder Space: Does not scale.
Reset Time: Does not scale.

REFLECTOR SYSTEMS

Quality: Does not scale; calculations for Reflection should be done using the incoming beam's original Damage value (Kills before Scaling), rather than the new value.

SENSORS

Damage Capacity: Kills x5 = Hits.
Sensor Range: Does not Scale.
Communication Range: Divide by 10km.

RECON SYSTEMS

Work the same as always, except for:
Spotting Radar: Uses (Sensor Range x5), not (Sensor Range x10).

ELECTRONIC WARFARE (ECM AND ECCM)

Value: Does not Scale.



Scaling Example

Since Scaling is a concept which some people find difficult to follow at first, we offer this example of the Scaling process to clarify things for you.

The basic idea will be to design a combat motorcycle—definitely a 1/5-Scale vehicle. First, we build it at x1 Scale, and then we reduce it.

- **Frame (4t, 9 CP)**: Lightweight Torso (4K, 4CP, 4 Spaces +2 Spaces; -1K = 3K, 6 Spaces) with Striker standard-type Armor (3SP, DC1, 3 CP) and LW Wheels (2CP, 1K each).
- **Forward Laser (0.5t, 2 Spaces, 10 CP)**: 4-Kill Beam (4K, 6 CP, Range 8), with range cut to 4, WA +0, Fragile, Variable Anti-Personnel, mounted in the Torso; -5.3 Spaces via Efficiency.
- **Cockpit (2CP, 0 Spaces)**: One crew is free, plus one passenger. These will be Saddle-type cockpits (it's a bike, jim), thus taking no Spaces.
- **Sensors (0.5t, 1 Space, 0 CP)**: Superlight, in the Torso.
- **Options (9.5 CP, 2 Spaces)**: Stereo, Lock, Spotlight, Storage Module, Slick Spray, Silent Running (-5 Awa).
- **Powerplant (x0.15)**: Overcharged, Cool: +1MV, +1MA.
- **Stealth (x0.2)**: Radar invisibility.
- **Form (x0.0)**: Cycle; +5 MA.
- **Stats**: Weight is 6t, MV is -0 (-1 for 6t, +1 for Overcharged Powerplant), Maneuver Pool is +0, Wheel MA is 11 (6 for 6t, +5 for Cycle Form) and Cost is 41.2 CP (30.5 x1.35).

SCALING

- **Frame**: Torso has 15 Hits with 15 Hits of Armor and two 5-Hit wheels.
- **Laser**: Does 20 Hits of damage, can take 5 Hits, Combat Range is 4 (200m), Max Range is 16 (800m).
- **Cockpit**: Were it not Saddle-style, it would take 20 Spaces (10/person)—a good thing to remember when building 1/5th-Scale mecha!
- **Sensors**: Can take 5 Hits, Sensor Range = 1km, Comm Range = 30km.
- **Options**: Storage Module holds 100kg, Slick Spray covers 10m.
- **Stats**: Weight is 750kg, MV is -0, M-Pool is +0, Wheel MA is 11 and Cost is 13.7 CP (41.2÷3).

Radius Effect: Hexes x 10 = Meters.
Beaming Range: Hexes x 10 = Meters.

REMOTE UNITS

Control Multiples: Does not scale.
Operation and Control: Hexes x10 = Meters.

STATISTICAL ENHANCEMENTS

Do not scale.

OPTIONS

Storage Module: Volume becomes 100kg.
Slick and Bogg Spray: Covers a 10m area.
Micromanipulators: Do work too small for human hands.
Damage Control: Fire foam can handle 40m, glue bombs cover 20m, liferaft/bubble raft holds 2 people.

COMMAND ARMOR

Stopping Power: Kills x5 = Hits.
Damage Coefficient: Kills x5 = Hits.
Armor Ablation Rate: Loses 5 Hits per successful attack of 1 Kill (25 Hits) increments.
Spaces: Does not scale.
Balance Modifiers: Do not Scale.

BOOSTERPACKS

MA Points: Does not Scale.
Damage Capacity: Kills x5 = Hits.
Balance Modifiers: Do not Scale.
Max Boost: Does not Scale.

FUEL

Works the same as always.

PROPULSION SYSTEMS

Flight (or other) MA: Does not Scale, and is based on original (non-Scaled) Weight.

POWER PLANTS

Explosion Save: Does not Scale.

COCKPITS

At 1/5 Scale, a person takes up as many spaces as his BOD Stat (from 2-10, average of 6)—these spaces may be allocated among the assorted Servos without any Cost for Splitting. Thus, pilots are either going to take up a lot of Space (if they're just in the Torso), or they can wear the mecha like armor if so desired.

HYDRAULICS

Melee Damage bonuses: Kills x5 = +Hits.

ENVIRONMENTAL PROTECTION

Works the same as always.

MANEUVER VERNIERS

Works the same as always.

ACE

Works the same as always.

INTERNAL AUTOMATION

Works the same as always.

CLOAKING

Beam Refract beam protection: Reduces energy attacks by -5 Hits.

ESPER LENSES

Rank, Draw, Backlash, Portfolio: Don't Scale.
Only Scale *effects* of ESPer powers: Ranges are 10x normal, Weights are 100x normal, Damages are 3x normal.

SHADOW IMAGER

Works the same as always.

STEALTH

Works the same as always.

TELEPORTERS

Combat Teleport: Hexes x10 = Meters.
Global Teleport: Kilometers/3 = Kilometers.

TECHNO-ORGANICS

Healing Effects: Measured in 5-Hit steps.
MV bonus: Does not scale.
Regeneration: Works the same as always

THOUGHT CONTROL

Works the same as always.

TRANSFORMABLES

Work the same as always.

COMBINERS

Work the same as always.

SUPERCHARGER

Works the same as always.

LIGHTSPEED

Works the same as always.

WEIGHT

Scales down to 1/10 (not 1/5) original weight.

GROUND MOVEMENT

Land MA: Hexes x10 = Meters per turn; MPT/3 = equivalent character MA.
Jumping Range: Hexes x10 = Meters.

MANEUVER POOL

Does not Scale.

MANEUVER VALUE

Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

Corvette Scale △ コアベットのスケール

SCALE FACTOR: x10
(1 Kill = 10 Kills, 1 Hex = 10 Hexes);

COST FACTOR: x25
(1 CP = 25 CPs).

SERVOS

Damage capacity: Kills x10 = Kills.
Hand-to-hand Damage: Kills x10 = Kills.
Spaces: Does not scale.
Throwing Range: 1 Hex = 10 Hexes range

ARMOR

Stopping Power: Doesn't Scale unless "Scaled Armor" is bought; then Kills x10 = Kills.
Damage Coefficient: Kills x10 = Kills.
Armor Ablation Rate: Loses 1 Kill per successful attack of 1 Kill increments, unless "Scaled Armor" is bought; then it loses 1D10 Kills per successful attack of 10 Kill increments.
Absorption Coefficient: Does not Scale.

WEAPONS

Damage: Kills x10 = Kills.
Range (Combat, Maximum): Multiply by 10.
Range (Maximum): New Combat Range x New Combat Range.
Accuracy: Does not scale.
Shots, Turns in Use, Warm-Up, Wide Angle, Burst Value, Attack Factor: Do not scale.
Ranged Entangling Melee Weapons: Damage sacrificed for Hexes x 10 = Hexes.
Smart Missiles and Skill: Do not Scale.
Blast Radius: Hexes x 10 = Hexes.
Screen beam reduction: -Kills x10 = Kills.
Shock Weapons: The original Damage (in Kills) is subtracted from the target's consciousness roll—do not Scale this effect.
Nukes: Ranges Scale; Hexes x 10 = Hexes.

ENERGY POOLS

Weapons in Portfolios: Scale normally.
Power Requirements: Costs are Scaled by x10 (Scaling factor), not x25 (Cost factor).
Available Power and Maximum Power: Multiply by 10.
Portfolio Size: Does not scale.

WEAPON MOUNT

10 Kills is sufficient to destroy a Mount.

SHIELDS

Stopping Power: Kills x10 = Kills.
Damage Coefficient: Kills x10 = Kills.
Armor Ablation Rate: Loses 1 Kill per successful attack of 1 Kill or more, unless "Scaled Armor" is bought, in which it loses 1D10 Kills per successful attack of 10 Kills or more.
Defense Accuracy: Does not scale.
Binder Space: Does not scale.
Reset Time: Does not scale.

REFLECTOR SYSTEMS

Quality: Does not scale; calculations for Reflection should be done using the incoming beam's original Damage value (Kills before Scaling), rather than the new value.

SENSORS

Damage Capacity: Kills x10 = Kills.
Sensor Range: Multiply by 10.
Communication Range: Multiply by 10.

RECON SYSTEMS

Work the same as always.

ELECTRONIC WARFARE (ECM AND ECCM)

Value: Does not Scale.
Radius Effect: Hexes x 10 = Hexes.
Beaming Range: Hexes x 10 = Hexes.

REMOTE UNITS

Control Multiples: Does not scale.
Operation and Control: Hexes x10 = Hexes.

STATISTICAL ENHANCEMENTS

Do not scale.

OPTIONS

Storage Module: Volume becomes 5000 kilograms (5 tons). A Storage Module may also store a single Roadstriker or 1/10 the required space for a full mecha. In other words, 10 Storage Modules (in the same Servo location) are required to house a x1 Scale mecha.
Escape Pod: Life bubble (holds 10).
Slick and Bogg Spray: Covers a 10-hex area.
Micromanipulators: Can do the work of Mekton-size hands.
Damage Control: Fire foam can handle 40 Hexes, glue bombs cover 20 Hexes, liferaft/bubble raft holds 40 people.

COMMAND ARMOR

Stopping Power: Does not Scale unless "Scaled Armor" is bought; this doubles the cost of the Command Armor, in which case Kills x10 = Kills.
Damage Coefficient: Kills x10 = Kills.
Armor Ablation Rate: Loses 1 Kill per successful attack of 1 Kill or more, unless "Scaled Armor" is bought, in which it loses 1D10 Kills per successful attack of 10 Kill s or more.
Spaces: Does not scale.
Balance Modifiers: Do not Scale.

WHEELS AND TREADS

Damage Capacity: Kills x10 = Kills.
Wheel MA Bonus: Does not Scale, and is found from the original (non-Scaled) Weight.
Tread Terrain Bonus: As normal.

BOOSTERPACKS

MA Points: Does not Scale.
Damage Capacity: Kills x10 = Kills.
Balance Modifiers: Do not Scale.
Max Boost: Does not Scale.

FUEL

Works the same as always.

PROPULSION SYSTEMS

Flight (or other) MA: Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

POWER PLANTS

Explosion Save: Does not Scale.

COCKPITS

A 1-Space Cockpit is equivalent to a room-sized area (such as a bridge, a stateroom, etc.).

HYDRAULICS

Melee Damage bonuses: Kills x10 = +Kills.

ENVIRONMENTAL PROTECTION

Works the same as always.

MANEUVER VERNIERS

Works the same as always.

ACE

Works the same as always.

INTERNAL AUTOMATION

Works the same as always.

CLOAKING

Beam Refract beam protection: Reduces energy attacks by -10 Kills.

ESPER LENSES

Rank, Draw, Backlash, Portfolio: Don't Scale.
Only Scale *effects* of ESPer powers: Ranges are 250x normal, Weights are 10,000x normal, Damages are 150x normal.





x100 Scale Total Weights

Torso Class	Weight
Superlight	150+
Lightweight	2,400+
Striker	12,000+
Medium Striker	40,000+
Heavy Striker	95,000+
Mediumweight	200,400+
Light Heavy	350,000+
Medium Heavy	500,000+
Armored Heavy	1,000,000+
Super Heavy	1,500,000+
Mega Heavy	2,200,000+

x100 Scale Storage Module Capacities

Class	Tons	x1/5	x1	x10
SL	50	10	1	0.1
LW	200	40	4	0.4
STR	450	90	9	0.9
MS	800	160	16	1.6
HS	1250	250	25	2.5
MW	1800	360	36	3.6
LH	2450	490	49	4.9
MH	3200	640	64	6.4
AH	4050	810	81	8.1
SH	5000	1000	100	10
MgH	6050	1210	121	12.1

SHADOW IMAGER
Works the same as always.

STEALTH
Works the same as always.

TELEPORTERS
Combat Teleport: Hexes x10 = Hexes.
Global Teleport: Kilometers x10 = Kilometers.

TECHNO-ORGANICS
Healing Effects: Measured in 10-Kill steps.
MV bonus: Does not scale.
Regeneration: Works the same as always

THOUGHT CONTROL
Works the same as always.

TRANSFORMABLES
Work the same as always.

COMBINERS
Work the same as always.

SUPERCHARGER
Works the same as always.

LIGHTSPEED
Works the same as always.

WEIGHT
Scales up to 10x original tonnage (since this new number is only a special effect, the Weight Scaling factor can be whatever the Referee wishes, as long as it's consistent).

GROUND MOVEMENT
Land MA: Does not Scale up, and is based on the mecha's original (non-Scaled) Weight.
Jumping Range: Does not Scale up, and must be calculated based on the mecha's original (non-Scaled) Weight.

MANEUVER POOL
Does not Scale.

MANEUVER VALUE
Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

Starship Scale △ うちゅうせんかんのスケール

SCALE FACTOR: x100
(1 Kill = 100 Kills, 1 Hex = 100 Hexes);

COST FACTOR: x500
(1 CP = 500 CPs).

SERVOS
Damage capacity: Kills x100 = Kills.
Hand-to-hand Damage: Kills x100 = Kills.
Spaces: Does not scale.
Throwing Range: 1 Hex = 100 Hexes range

ARMOR
Stopping Power: Kills x 10 = Kills (unless "Scaled Armor" is bought; then Kills x100 = Kills).
Damage Coefficient: Kills x100 = Kills.
Armor Ablation Rate: Loses 1D10 Kills per successful attack of 10 Kill increments, unless "Scaled Armor" is bought; then it loses 1D10x10 Kills per successful attack of 100 Kill increments.
Absorption Coefficient: Does not Scale.

WEAPONS
Damage: Kills x100 = Kills.
Range (Combat and Maximum): Multiply by 100.
Range (Maximum): New Combat Range x New Combat Range.
Accuracy: Does not scale.
Shots, Turns in Use, Warm-Up, Wide Angle, Burst Value, Attack Factor: Do not scale.
Ranged Entangling Melee Weapons: Damage sacrificed for Hexes x 100 = Hexes.
Smart Missiles and Skill: Do not Scale.
Blast Radius: Hexes x 100 = Hexes.
Screen beam reduction: -Kills x100 = Kills.
Shock Weapons: The original Damage (in Kills) is subtracted from the target's consciousness roll—do not Scale this effect.
Nukes: Ranges Scale; Hexes x 100 = Hexes.

ENERGY POOLS
Weapons in Portfolios: Scale normally.
Power Requirements: Costs are Scaled by x100 (Scaling factor), not x500 (Cost factor).
Available Power and Maximum Power: Multiply by 100.
Portfolio Size: Does not scale.

WEAPON MOUNT
100 Kills is sufficient to destroy a Mount.

SHIELDS
Stopping Power: Kills x100 = Kills.
Damage Coefficient: Kills x100 = Kills.
Armor Ablation Rate: Loses 1D10 Kills per successful attack of 10 Kill increments, unless "Scaled Armor" is bought, in which it loses 1D10x10 Kills per successful attack of 100 Kill increments.
Defense Accuracy: Does not scale.
Binder Space: Does not scale.
Reset Time: Does not scale.

REFLECTOR SYSTEMS:
Quality: Does not scale; calculations for Reflection should be done using the incoming beam's original Damage value (Kills before Scaling), rather than the new value.

SENSORS:
Damage Capacity: Kills x100 = Kills.
Sensor Range: Multiply by 100.
Communication Range: Multiply by 100.

RECON SYSTEMS
Work the same as always.

ELECTRONIC WARFARE (ECM AND ECCM)
Value: Does not Scale.

Radius Effect: Hexes x100 = Hexes.
Beaming Range: Hexes x100 = Hexes.

REMOTE UNITS

Control Multiples: Does not scale.
Operation and Control: Hexes x100 = Hexes.

STATISTICAL ENHANCEMENTS

Do not scale.

OPTIONS

Storage Module: Volume and mecha storage depends on size of Torso Servo; see the sidebar on page 112.
Slick and Bogg Spray: Covers a 100-hex area.
Micromanipulators: Can do the work of Mekton-size hands.
Escape Module: Life bubble (holds 100).
Damage Control: Fire foam can handle 400 Hexes, glue bombs cover 200 Hexes, liferaft/bubble raft holds 400 people.

COMMAND ARMOR

Stopping Power: Kills x10 = Kills, unless "Scaled Armor" is bought; this doubles the cost of the Command Armor, in which case Kills x100 = Kills.
Damage Coefficient: Kills x100 = Kills.
Armor Ablation Rate: Loses 1D10 Kills per successful attack of 10 Kill increments, unless "Scaled Armor" is bought, in which it loses 1D10x10 Kills per successful attack of 100 Kill increments.
Spaces: Does not scale.
Balance Modifiers: Do not Scale.

WHEELS AND TREADS

Damage Capacity: Kills x100 = Kills.
Wheel MA Bonus: Does not Scale up, and must be calculated based on the mecha's original (non-Scaled) Weight.
Tread Terrain Bonus: As normal.

BOOSTERPACKS

MA Points: Does not Scale.
Damage Capacity: Kills x100 = Kills.
Balance Modifiers: Do not Scale.
Max Boost: Does not Scale.

FUEL

Works the same as always.

PROPULSION SYSTEMS

Flight (or other) MA: Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

POWER PLANTS

Explosion Save: Does not Scale.

COCKPITS

A 1-Space Cockpit is equivalent to a complete deck (such as a Command Deck, a Crew Deck, and Engineering Deck, etc.).

HYDRAULICS

Melee Damage bonuses: Kills x100 = +Kills.

ENVIRONMENTAL PROTECTION

Works the same as always.

MANEUVER VERNIERS

Works the same as always.

ACE

Works the same as always.

INTERNAL AUTOMATION

Works the same as always.

CLOAKING

Beam Refract beam protection: Reduces energy attacks by -100 Kills.

ESPER LENSES

Rank, Draw, Backlash, Portfolio: Do not Scale.
Only Scale *effects* of ESPer powers: Ranges are 2500x normal, Weights are 100,000x normal, Damages are 1500x normal.

SHADOW IMAGER

Works the same as always.

STEALTH:

Works the same as always.

TELEPORTERS:

Combat Teleport: Hexes x100 = Hexes.
Global Teleport: Kilometers x100 = Kilometers.

TECHNO-ORGANICS:

Healing Effects: Rate measured in 100-Kill increments.
MV bonus: Does not scale.
Regeneration: Works the same as always

THOUGHT CONTROL

Works the same as always.

TRANSFORMABLES:

Work the same as always.

COMBINERS

Work the same as always.

SUPERCHARGER

Works the same as always.

LIGHTSPEED

Works the same as always.

WEIGHT

A sliding Scale is used to cover the incredible broadness of this category. When designing a x100 Scale mecha, it is recommended that its rough Weight should be decided upon first—the Scaled Weight will match its Torso Servo's Class. As always, the mecha's *unscaled* Weight is used for determining Stats. See the sidebar on page 112 for the sliding scale.

GROUND MOVEMENT

Land MA: Does not Scale up, and must be calculated based on the mecha's original (non-Scaled) Weight.
Jumping Range: Does not Scale up, and must be calculated based on the mecha's original (non-Scaled) Weight.

MANEUVER POOL

Does not Scale.

MANEUVER VALUE

Does not Scale, and must be calculated based on the mecha's original (non-Scaled) Weight.

Excessive Scale Δ
あまりのスケール

This level does not have a Scale factor. That is because Excessive Scale does not represent any valid numerical values in Mekton Zeta—Excessive Scale is purely the domain of the Referee.

Why would anyone want a Scale with no numerical values? Simple: Have you ever tried to figure out how many Kills a planet has? Have you ever felt the need to translate the speed of light to a Movement Allowance value? One would hope not; why bother? However, every so often something crops up in Japanese animation which is just, well, excessive. Planet-size battle fortresses, galaxy-destroying beam cannons, machines which can rend time and space—such things are pretty common in anime, really.

These monstrous devices are the type of thing which Referees would never let their players build (or even have, usually). Excessive mecha will almost universally be created (and used) by NPCs or simply loom in the background. These mechanized superprops are Excessive Scale designs.

Since this Scale is for the Referee only, the capabilities of Excessive mecha are also up to him; how non-Excessive mecha affect Excessive ones is at the whim of—you guessed it—the Referee. Why then, would one even bother to build an Excessive mecha at all? There are two reasons: 1) it helps nail down exactly what the mecha is, how it is shaped, what it has and does not have, etc; 2) it helps determine what happens when two Excessive mecha clash!

Excessive mecha are built as standard 1/1 Scale mecha, but these stats are almost never used. Should a x100 starship attack an Excessive starship, it is up to the Referee to arbitrarily determine the outcome; however, should two Excessive starships clash, the battle can be played out as a normal combat (the only difference would be the scope of collateral damage from such a battle).

Excessive Scale. For when that galaxy absolutely, positively has to be destroyed overnight.

ADVANCED RULES



ADVANCED RULES FOR MEKTON ZETA

Okay—so you've stomped Tokyo into the ground, atomized whole fleets of invading alien warships, and generally taken your Mekton Zeta players' group about as far as the base rules will allow. Never fear, loyal Mekkie! In this section, you'll find new rules, new options, and new mechanized trivia which will allow you to *master* the art of armored robotic combat.

Let's Active! △ やりましょうよ

Mekton Zeta is faced with a difficult job—striking a balance between simulation of Anime, believability, and game playability. One of the most difficult issues to resolve along these lines is that of *how much you can do.* In the base *Mekton Z* rules, all mecha have two actions per turn—this baseline value was chosen to ensure ease/speed of play and balance. However, as we all know, Anime is seldom balanced; top-notch mechajocks can almost always fly circles around the hordes of "stormtroopers" thrown their way. To better simulate this skewing of mechapilot capability, this optional Actions system (which we call "Let's Active!") is offered.

When using the Let's Active! system, skilled mecha pilots will get additional actions above and beyond the basic two per turn; the number of actions which may be taken are determined by the mecha's Maneuver Pool. First, find the pilot's base Maneuver Pool (his Mecha Piloting Skill -5). Next, determine the total Maneuver Pool: add together all MP modifiers granted by the various systems in the pilot's mecha. This number will be a percentage, ranging from 0% to 334%. Multiply this number by the pilot's base MP, and then add it to the base MP. This is the total Maneuver Pool for the mecha when controlled by this pilot. See the sidebar for an example.

Once you have determined your total Maneuver Pool, check the table in the sidebar to determine your APT (Actions Per Turn—how many actions you may take per turn). **Important Note:** When using the Let's Active! system, the Maneuver Pool may not be used to add to die rolls at all—the Maneuver Pool is used only an index which determines how many actions you may take per turn. It is also very important to remember that no matter how many actions you may take per turn, these extra actions **absolutely may not** be used to move farther than your full MA in one turn.

Let's Active! is entirely optional; while it will certainly allow mecha with high Maneuver Pools to take more actions than those common stormtrooper types, it will also mean some more bookkeeping for both Referee and players. Should the Referee declare that he is not using Let's Active!, **all** mecha **always** get 2 actions per turn, and any mecha's **total** Maneuver Pool may be used to add to die rolls as if they were Luck points.

About Knockback △ ノックバックのこと

Okay, we know that this is necessary. Many Mekton Zeta players have asked us how you calculate Knockback, particularly when dealing with multiple hits (such as from Linked weapons, Missile Salvos or Autofire Bursts). We apologize for the vaguery in *Mekton Z,* but we'll explain now. First of all, Knockback is checked for every attack—do not calculate it based on the total damage delivered over a turn. However, the effects of Knockback only apply for one turn—the worst effect you can suffer from Knockback is the loss of one full turn. You may still make Evade Rolls, but you may take no Actions.

As for Knockback delivered by muliple-hit attacks, you do not add up all damage and treat it as one attack for Knockback purposes, nor should you compound the Knockback effects of each individual hit. Instead, you take the damage of one hit and multiply by the Knockback Modifier (KM); the KM is a number based on the **square root** of the number of hits scored. In game play you may either use a calculator to find the square root of the number of hits scored, or you may consult the table in the sidebar.

Maneuver Pool Example:

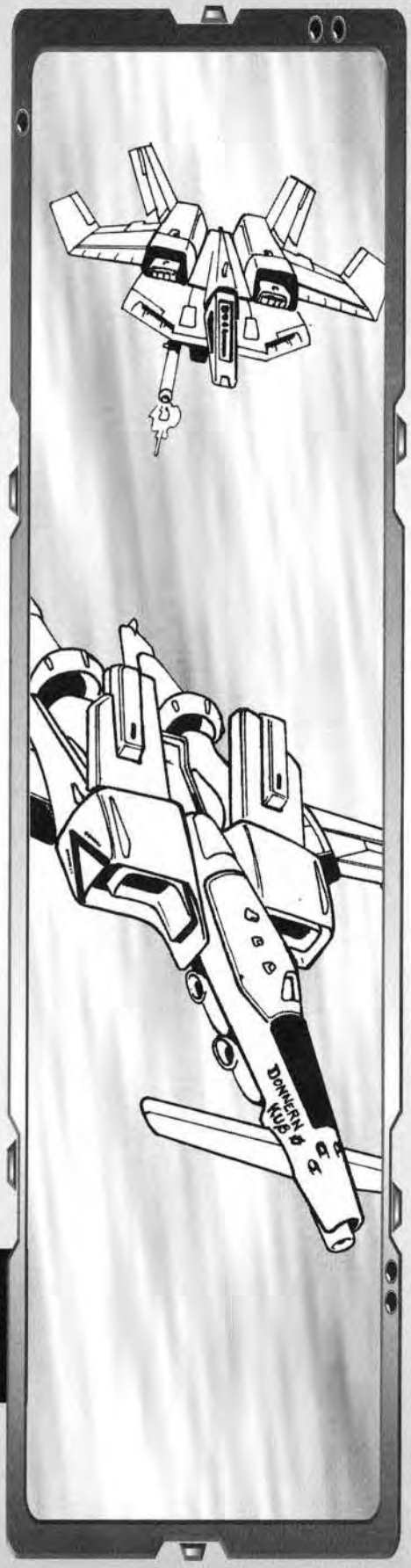
Rocket Russel, with a Mecha Piloting skill of +8, has a base Maneuver Pool of 3. However, the Rapier Sigma grants a bonus of +233% to MP; 3 x2.33 = 7, so Rocket adds 7 to his base MP of 3, for a total Maneuver Pool of 10.

APT

Maneuver Pool	Actions
0-1	2 actions
2-4	3 actions
5-8	4 actions
9-12	5 actions
13-16	6 actions
17-20	7 actions
21	8 actions

Multi-Hit Knockback

# of Hits	Knockback
1	x1.0
2	x1.4
3	x1.7
4	x2.0
5	x2.2
6	x2.4
7	x2.6
8	x2.8
9	x3.0
10	x3.2
11-12	x3.5
13-14	x3.7
15-16	x40
17-18	x4.2
19-20	x4.4
21-22	x4.7
23-24	x4.9
25-29	x5.0
30-34	x5.5
35-39	x6.0
40-44	x6.5
45-49	x7.0
50+	x7.5



Once you have found the KM, you multiply the base damage of one hit by the KM and use that number for determining knockback **only.** Damage is still determined normally (that is, per hit).

Example: *The Commando Rapier, facing a Gorgon-Beta, fires its 5K machinegun (BV=8) at the hulking enemy. The Commando Rapier beats the Gorgon-Beta's defense roll by 6, so the Gorgon-Beta will be hit by 6 5K shots. To calculate Knockback, we find the KM for a 6-hit attack (KM=2.4) and multiply it by 5 (for the 5K of damage); the result is 12, so the Gorgon-Beta takes Knockback as if it were hit by a 12-Kill attack. However, damage is still resolved normally, with each 5-Kill hit striking a randomly-rolled location and doing full damage.*

Tailing △ テールする

Dogfight—the very word conjures to mind images of sleek aircraft screaming across the sky, looping and weaving around each other in furious attempts to get behind the enemy. And with good reason—when you have established a successful tail, your target has a hard time keeping track of you, can't attack you, is sitting square in your sights, and hopefully is unable to shake your pursuit.

In Mekton Zeta, Tailing is possible in any type of movement—driving, flying or swimming—except walking, which is too slow and maneuverable to allow Tailing. To establish a Tail, the attempting mecha must first achieve a position directly behind the target (which grants the standard +2 bonus for attacking the target's rear arc). Once this attacker is behind the target, a Lock-On attempt can be made; if successful, the Tailing mecha can follow its target's every move and maneuver, thereby preventing the loss of the advantages of attacking from the rear.

There are three conditions required in order to make a Lock-On attempt:

1) The attacking mecha must be directly behind the target mecha.

2) The distance between the attacker and the target mecha must be 5 Hexes or less.

3) Both mecha must be moving at an MA of greater than 4; they do not have to be using the same method of movement (such as flight, driving, etc.).

Provided these requirements are fulfilled, the attacker can make a Lock-On attempt (which must be made during an action of movement, but takes no additional actions).

LOCK-ON ROLL:
MR +Piloting Skill +1D10
-vs-
MR +Piloting +1D10

If the attacker's roll exceeds that of the defender, then the Lock-On roll is successful and the attacker is now Tailing the target. While Tailing, the following conditions apply:

1) The Tailing mecha will always move with the target mecha, maintaining the same relative position as when the Lock-On occurred.

2) The Tailing mecha will move with the target **when the target moves** (i.e., during the target's Turn), regardless of Mecha Reflex and/or Initiative.

3) The Tailing mecha's movements must exactly duplicate the target mecha's movements in order to maintain the Tail.

4) The Tailing mecha must still expend the actions required for such movements, subtracting them from its own available actions when its Initiative comes up.

A Tailing situation is canceled if any of the following four events occur:

1) The Tailing mecha does not have enough actions to maintain pursuit.

2) The Tailing mecha is unable to duplicate a movement or maneuver performed by the target mecha (turning radius, like those of Mektons as compared to Fighters, and tricky Piloting skill rolls would apply here).

3) The Tailing mecha stops pursuing the target of its own volition.

4) The target mecha Reverses the Tail.

Reversing a Tail

A Tailed mecha may turn the tables on its pursuer by attempting to Reverse the Tail. In roleplaying terms this can be done by suddenly hitting the brakes so that the pursuer overshoots his target, by performing an inside loop, or by otherwise outmaneuvering the pursuing mecha.

Reversing a Tail may be attempted once per Turn (whether or not it is successful), and must be done during an Action of

movement (but the attempt takes no additional Actions).

REVERSE ROLL:
Tailed mecha rolls: MR +Piloting -3 +1D10
-vs-
Tailing mecha's roll: MR +Piloting +1D10

If the Tailed mecha's roll exceeds the Tailing mecha's roll, then the Tail has been Reversed; the Tailing mecha is moved 2 Hexes ahead of the Tailed mecha and they trade roles (Tailing mecha is now Tailed and vice-versa). A new Lock-On roll is not required. A failed Reverse roll has no ill effects on the still-Tailed mecha (or on the still-Tailing mecha, for that matter).

One last note: Don't forget that while you're busy trying to tail someone, another mecha may be trying to tail you. Check your six, Mekton boy!!!

Lifting Capacity Δ あげるのきりやう

Picking up cars, uprooting trees, tearing buildings from their foundations—mecha are credited with all sorts of feats of raw lifting power. How much can your mecha lift? It depends on the level of its servo (usually its arms, but sometimes beasts will lift things with a head); if two arm servos of different classification levels are being used, average their levels to determine lifting power. Remember that the type of Hydraulics bought will also affect your mecha's Lifting Capacity.

For any portion of its maximum lifting capacity that your mecha lifts, it will suffer a penalty to its MA (land and flight) and MV. This penalty is found by dividing the weight lifted by the mecha's Encumbrance Value (EV).

For example: *A x1 Mekton with Mediumweight Arm servos is lifting a 10-ton truck. Its EV is 3 (6 x0.5), so it will subtract 3 (10 ÷ 3) from its MA and MV while carrying the truck; in other words, every 3.33 tons it lifts will reduce its MA and MV by 1.*

Maximum Lifting Capacity

Servo Class (#)	1/10	1/5	x1	x10	x100
Superlight (1)	25kg	250kg	5 t	50 t	100 t
Lightweight (2)	50kg	500kg	10 t	100 t	1,200 t
Striker (3)	75kg	750kg	15 t	150 t	2,400 t
Medium Striker (4)	100kg	1,000kg	20 t	200 t	12,000 t
Heavy Striker (5)	125kg	1,250kg	25 t	250 t	40,000 t
Mediumweight (6)	150kg	1,500kg	30 t	300 t	95,000 t
Light Heavy (7)	175kg	2,750kg	35 t	350 t	200,400 t
Medium Heavy (8)	200kg	2,000kg	40 t	400 t	350,000 t
Armored Heavy (9)	225kg	2,250kg	45 t	450 t	500,000 t
Super Heavy (10)	250kg	2,500kg	50 t	500 t	1,000,000 t
MegaHeavy (11)	275kg	2,750kg	55 t	550 t	1,500,000 t

Encumbrance Values

Weight ÷ EV = Penalty to MA and MV

1/10 EV: (Servo # x 2.5).
1/5 EV: (Servo # x 25).
x1 EV: (Servo # x 0.5).
x10 EV: (Servo # x 5).
x100 EV: (Servo # x [Lift Capacity ÷ 10]).

Lifting Capacity & Hydraulics

Standard, Space and Underwater Type: EV and Lift x1.
Heavy Type: EV and Lift x1.5.
Superheavy Type: EV and Lift x2.

Nukes Δ はれつ・だま

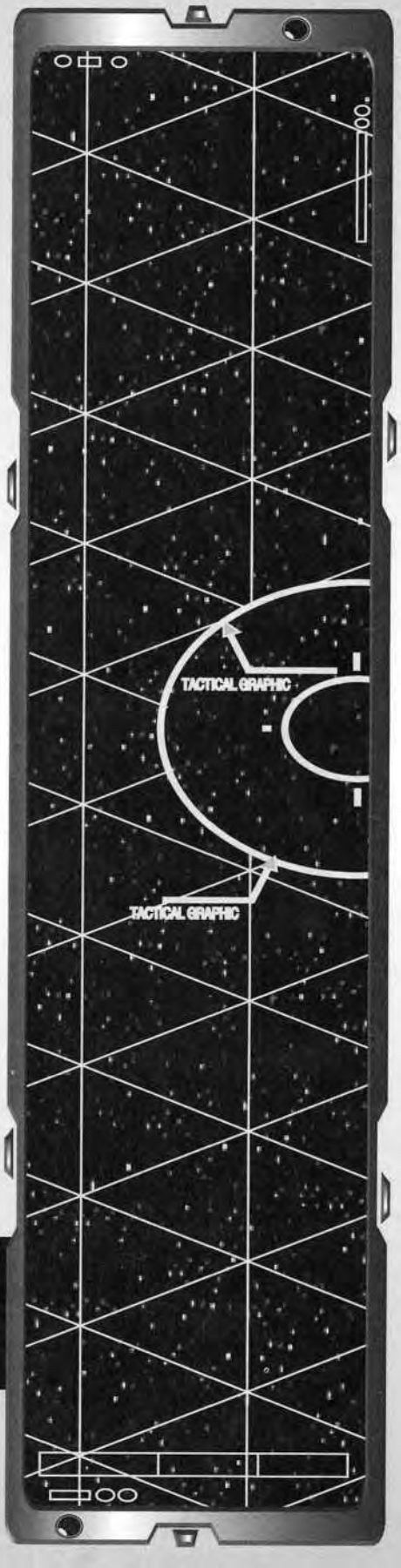
In reality, nuclear (or "nucleonic," on Algol) weapons are suicidal. In a game context, they are probably more so. But we feel compelled to offer the following guidelines if you feel you *must* use nukes:

1) One per game. Anything more in a 50-meter-per-Hex map is mega overkill.

2) Nukes should be exploded only as a means of *establishing* a scenario. This means units should enter the field moments before a drop, or immediately after. They should not be used to stop opposing forces (none of this "Well, you're winning, but I drop the Big One now" silliness. We warn you).

3) Drop it in the center of the battlefield. This is the best way to make it fair for all concerned, and avoids the unfortunate effects of ignoring Guideline #2.

When designing Nuclear weapons in MTS, first choose a Damage value and then select a Blast Radius. All Nuclear Weapons



must have a Blast Radius. Nuclear Weapons have the following effects:

1) All objects and units within the Blast Radius of the Missile are immediately destroyed (barring Referee intervention and maybe Excessive Scale mecha). Any mecha, terrain and other objects within 1.1-2x the Blast Radius take 10x **full** Damage to **every** location. Anything within 2.1-4x the Blast Radius takes normal Damage like any area-effect weapon (see *Mekton Z*, page 97). Note that if the target has Command Armor, only the Command Armor is directly hit. Hand-held Weapons take full Damage as well, but other Weapons and components are assumed to be more or less protected by the Servos in which they are housed (provided the Servos survive). Standard and Active Shields also take full Damage and can only protect one location from the blast; only Reactive Shields (force fields) provide any true protection.

2) Within 2-4x Blast Radius, all trees, wood structures and other flammables are set afire (those within 2x radius or less are gone). They will burn until they are either put out or become ashes, causing maximum visual obscurement in their Hexes; all Sensors suffer a -5 penalty to be used through these Hexes, Advanced Sensor Packages (see page 51) suffer a -2 penalty, and only Spotting Radar is unaffected. Within the same radius, all buildings and/or structures which were leveled are now considered Rough (x2 MA cost) terrain. All water within this radius is now obscured by steam (yes, it's boiling) and causes a -2 penalty to Sensor use through their Hexes. All *previously* burning fires are extinguished by the shockwave of the explosion.

3) Every person within 3x the Blast Radius, exposed or not, must make a Stun/Shock check. If they fail this roll, they will die in 1D10 turns of heat, radiation and shock effects. The only people exempt from this roll are those inside a Hardened Bunker or inside some kind of protective mecha, vehicle or other gear.

4) All machines, vehicles and mecha units immediately check for the effects of ElectroMagnetic Pulse (see below).

Electromagnetic Pulse

EMP is a disruptive energy front that overloads and destroys electronic hardware. It is generated by Nuclear detonations, or more rarely by supernovas. When encountering EMP, do the following:

1) Determine which multiple of the nuke's Blast Radius your unit is within. If the source is a supernova, act as if the source is in the same hex as you are and quit worrying—the impending destruction of the entire star system is going to make anything else seem meaningless by comparison. Luckily, supernovas are not a common game hazard—but you never know.

2) Find the average SP of your unit's Armor; that is, add together the SP values of all of your unit's Armor and divide by the number of locations armored. Determine this average *before* applying the nuclear explosion's damage.

3) Subtract the Damage value of the nuke from the averaged SP—this number is the unit's EMP Penalty. Double the EMP Penalty if your unit is within 1.1-2x Blast Radius, keep it the same if your unit is within 2.1-3x Blast Radius, and halve the EMP Penalty if your unit is within 3.1-4x Blast Radius. If your EMP Penalty is positive, your unit is safe from EMP effects, but if the EMP Penalty is negative, it represents the negative modifier applied to **all rolls** made with the mecha.

For example: *The Magna-Rapier GX has an average SP of 7, and is caught in a 10-Kill nuclear explosion. The nuke's Blast Radius is 8 Hexes, and the Magna-Rapier GX is 20 Hexes away; being within 2.1-3x Blast Radius, the Magna-Rapier GX's EMP Penalty is -3 (7 -10 = -3). It will now suffer -3 to all Attack, Defense and Sensor Rolls, as well as taking explosive damage: 5K to 2 random locations. Bad news.*

Mechapunk △ メカパノクか

MEKTON ZETA MEETS CYBERPUNK

"Giant robot suits in *Cyberpunk?*" we scoffed. "No way!" Face it—the logic of gigantic war robots duking it out in the mean streets of Night City seems to really push the boundaries of reality. However, logically, if you can build cybernetic interfaces, artificial limbs and electronic biofeedback systems, you should be able to build a Mekton.

Which brings us to the Japanese, who are nuts about combining the idea of mecha with the cyberpunk genre. From the extremely popular *Bubblegum Crisis* series through the successful *Megazone 2-3* series, there are dozens of instances where giant mecha and cyborgs meet. Before you laugh, we really do urge you to check out these excellent examples of the Anime-cyberpunk genre—they can offer a lot to any *Cyberpunk* campaign.

There are obviously a few catches here. While we've given you conversions that will allow you to build even the largest Mektons in a *Cyberpunk* campaign, we warn you that you're better off sticking to Roadstrikers—fifty-ton mecha loose on the streets will soon tip your game into the superhero zone. We also suggest that you make even the Roadstriker-class mecha very expensive and hard to locate—perhaps the focus of an entire adventure to gain a new weapon or tech source. For example, in *Megazone 2-3*, the hero's transforming mechabike is a secret prototype which was to be used in an upcoming military takeover. Sound cyberpunk enough for you?

Conversion: Range

1 Hex = 50 meters. To determine *Cyberpunk* Ranges from *Mekton Z* Weapons, assume the Maximum Range of the Weapon is Extreme Range in Cyberpunk; 1/2 this value is Long Range, 1/4 is Medium and 1/8 is Close. If a Weapon's Range is 1 Hex or less it is equal to 4 meters (about 13 feet). This conversion is provided because Mekton combat is somewhat stylized, while Cyberpunk combat requires a more realistic approach.

Conversion: Cost

1 Construction Point = 5,000 Eurodollars. As is mentioned in the Roleplaying Tech section (see page 8), this is a difficult issue. At 5,000eb per CP, a typical Roadstriker is going to cost around 250,000eb. This may or may not seem appropriate (considering the low cost of cyberware), but remember that cyberware is generally mass-produced, civilian-legal equipment. Milspec mecha are gonna cost a lot more. Besides, this conversion bears out the prices listed for a typical high-end Powered Armor suit from *Maximum Metal.*

Conversion: Kills

1 Kill = 40 SDP. While the 25 Hits-per-Kill formula as given in *Mekton Z* is entirely functional for *Cyberpunk,* an increased ratio of 40-to-1 interfaces much better with *Maximum Metal.* For those who would like to design Powered Armor by using MTS, this conversion is ideal—ACPA should be built at 1/5 (not 1/10) Scale, so that Armor and SDP go up in increments of 8.

Conversion: Damage

1 Kill of Damage = 5D10. The trickiest thing about translating *Mekton Z* weapons into *Cyberpunk* is that CP uses dice damage values, but MZ uses fixed damage values. To overcome this inherent incompatibility, one must assume that MZ damage values, being fixed, represent an average result of potential dice rolls. Because the amount of Damage that *Mekton Z* weapons can be designed to dish out is much higher than that of the most powerful weapons from *Maximum Metal,* MZ damages are assumed to be somewhere between the average and maximum results of a dice roll. *Cyberpunk* generally uses 6-sided dice to roll damage, but the heavier weapons (as might be seen on *Maximum Metal* ACPA and other mecha) generally roll damage with 10-sided dice. In keeping with the D10 measurements of Damage for big *Cyberpunk* guns, 1K = 5D10—it results in nice D10 increments at 1/5 Scale, and D6 increments at 1/10 Scale.

For example: *A Mekton's 6-Kill railgun would do 30D10 in Cyberpunk, making it a little more powerful than a 200mm Howitzer. That same Weapon, when designed as part of a 1/5-Scale Powered Armor suit, would do 6D10, which is the same damage as a .50-caliber machinegun or 15mm Mini-Rocket launcher. If this were a 1/10-Scale Weapon, it would do 6D6 damage, making it the equivalent of a 7.62mm battle rifle.*

Conversion: Others

Most of the rest of the numerical values in both *Cyberpunk* and *Mekton Z* are shared by the two, or can be easily reconciled. Stats and Skills work the same way, as do Difficulty numbers and other system mechanics. The only value that is at all tricky is MA (for mecha, not characters)—since *Mekton Z* uses a sliding scale to determine actual speed from MA, while *Cyberpunk* lists actual speeds for its vehicles, the MA stat of any mecha is not very useful in *Cyberpunk.* Therefore, when translating MA to *Cyberpunk* speeds, determine the mecha's speed by using the information listed under Speedlines on page 64 of *Mekton Z;* for Acceleration and Decceleration values, use the standard values per vehicle type listed on page 14 of *Maximum Metal.* Once that's done, congratulations—you're a mechapunk!



"Metal is better than Meat."

—Cyberpunk maxim



Psionics △ エスパー

Giant robots, galaxy-spanning battle fleets, sexy aliens—one would think that the people of planet Anime had it all. But don't forget that bastion of tried and true anime chaos: psychic powers.

Most often, Anime psychics (or "ESPers") are angst-ridden youths with the power to level cities. Sometimes, they are mysteriously "evolved" people with an inexplicable cosmic awareness. Occasionally, one finds a psionic-loner-space-patrol type who has not only power, but the skill and authority to back up that power with actual respect (but only occasionally).

The ESPer Lens system in MTS (see page 77) was designed with this Psionics system in mind. If this system does not suit you as a Referee, feel free to create one that does—after all, it's your game.

Creating a Psionic Character

To make your character a real live Anime ESPer, begin by creating a character as normal, using all the procedures described in *Mekton Z* (include Lifepath, skills and possessions).

How a character acquires Psi potential is up to the individual Referee—it might be randomly determined, it might be part of character concept, or it may be decided by the Ref and sprung upon the players during game play! In the case of random determination, we offer this method: In order to manifest Psionic potential, the character must have a Luck Stat greater than 7 and an Intelligence Stat greater than 5. If the character meets these requirements, the player must roll 1D10: If the character is male, he has Psionic potential on a 10; if female she has potential on a 9-10 (Anime demonstrates a greater frequency of ESP in female characters).

If the character has Psionic potential, the player then rolls another D10—this is the character's PSI Stat, which should be recorded with all the other Stats. If Psi potential can be set as part of character concept, the Stat must be bought out of existing character points; should characters normally get 65 points for their ten Stats (including Education), they must now spread that same amount out over eleven Stats (including PSI). Depending upon the preferences of the Referee, creating a new, entirely separate PSI Stat may seem artificial; if such is the case, either LUCK or EMP are recommended as a PSI stand-in, with a level of 5 or less representing no Psi potential.

The PSI Stat measures the level of psychic power your character is capable of wielding *with the proper training.* Even a character with a very high PSI will probably not be able to perform psychic feats without learning the appropriate skills. On the other hand, a character with lower Psi Potential may not be able to learn psionic skills at all, or will be able to learn them only up to level +1 or +2.

After the character's PSI Stat is recorded, the next step is to decide if the character is **Active** or **Latent.**

Active or Latent?

After the character has recorded his PSI Stat on his sheet, the Referee must decide if the character is an *Active Psionic* or a *Latent Psionic.* If Active, the character is assumed to have full knowledge and limited control of his power; add four years to the character's Lifepath (he spent that time training under conditions of the Referee's choice). All Active Psionics automatically start with two Psionic Skills at 1 and one at 3.

If the Character is a Latent, he may well spend the rest of his life without knowledge of his power. There are only four ways a Latent ESPer's powers will ever emerge:

1) Trauma: Any Latent character in a life-or-death situation may manifest Psionic power. In such a situation, the Referee may want to call for a Luck +1D10 roll: If the roll is greater than or equal to 15, the character's powers manifest in an attempt to save his life (or the life of a loved one).

2) Schooling: Almost all highly trained and powerful ESPers with the *Aura Reading* skill have the ability to recognize a person with Psionic ability. It's possible that an ESPer may take the character under his wing during the course of a game, and teach her how to use her powers. If this occurs, it is left to the Referee as to how quickly the character learns to master her abilities. All corporate/government/military teaching is a long and complicated process. If a character enters this type of schooling, it will likely put her out of the campaign for several years.

3) Bonding: This method of introducing a novice to his own Psionic abilities is often painful and rather abrupt. When two ESPers, Active or Latent, are within *Telepathic Sending* range, and one uses a power expending more than 4 Psi Points, they both run the risk of "Bonding" with the other. **Both must roll 1D10; if they both roll the same number,**

they are Bonded. This roll is made every time the situation calls for it (but only once for each ESPer met) until the ESPer has Bonded. No one is certain what the Bonding is, or why it occurs, but it is a documented fact. Once two ESPers have Bonded, there is no returning—they will be Bonded for life.

When two people are Bonded, they become completely obsessed with each other. There are several possible outcomes: The two may fall deeply in love, become bitter enemies, establish a lifelong friendship, or develop any other strong emotional connection. Bonding can occur even if the two ESPers have never seen each other face to face; even when a ESPer Lens is used, the roll is still made. Bonding can turn really ugly if the two ESPers are on different sides of a war. While ESPers with strong wills can deny the more physical aspects of Bonding, they will always be obsessed with their "other." If a character with Latent Psionic power has bonded with an Active Psionic, the Latent ESPer character will begin to show his own talents after bonding.

An ESPer can only Bond once in his life, and once bonded need never roll for Bonding again—even if the original Bonded partner is dead.

4) Wild Talent: A rare and mysterious occurrence. See the sidebar.

Psi Points

Once a character becomes an Active Psionic, that character will be assigned *Psi Points*. These points initially start at the same number as the character's PSI Stat, and are recorded on the character's Sheet. Psi Points is a flexible value, and will be expended and replenished over the course of games and campaigns.

How Psi Points are Spent

Every Psionic power has a listed **Cost.** This is the number of Psi Points that must be expended to activate a single level of that Psionic skill: A power with a Cost of 4 would require an expenditure of 4 Psi Points to activate one level of the power, 8 for two levels, etc. Psi Points, once used, are subtracted from the total and cannot be used again; Psi Points are regained with a full eight hours rest. This rest need not be sleep, but that character can undertake no strenuous activity during this time.

For example: *Kenty has a PSI Stat of 8, so she has 8 Psi Points. She has Telepathy at a skill level of +4. She wishes to activate the power. Telepathy has a Psi Cost of 1, so every skill level she wishes to activate will cost her 1 Psi Point; having more than 4 Psi Points, she can fully use her Telepathy. If she had the skill at +9, she could only use it at a skill level of +8 (which would use up all her Psi Points) instead of her full potential of 10.*

This means that many characters will have skills in powers that they can't fully use—for the moment.

Increasing Psi Points

Psi Points are earned just like IP—for each game in which the ESPer uses Psionic powers, the Referee should award from 0 to 3 Psi Points. These add to the total available.

Psi points work on a sliding scale. It is entirely up to the Referee to put a ceiling on Psi Points for his campaign; if the game world has powerful ESPers in it, the Ref should give out Psi Points relatively freely, and allow the villains to gain greater numbers of Psi Points. If powerful ESPers are not desired, never allow the characters to have more than their PSI Stat in Points—this will keep all Psionic activity to a minimum. In general, it is the Referee's duty to allow characters to advance only as far he feels is appropriate. It is also the Ref's call as to whether a character with a Wild Talent may increase in Psi Points, or whether that is fixed and unchangeable.

Power Level	Psi Points
Low	1-10
Normal	11-30
Medium	31-50
Medium-High	51-74
High	75-99
Very High	100+

Psionic Skills

Characters make practical use of their Psionic potential through the use of Psionic Skills. Most characters receive Psionic Skills through their Lifepath (as mentioned above), and may increase them with Education Points as determined by their Lifepath. A very few will possess Wild Talents that are inborn and ready to use from the time the character reaches maturity (see Wild Talents, below). As usual, you may not put more than 10 points into a single skill. Also, unlike other types of skill, a character may not raise any Psionic Skill to a level higher than his Psi Potential Stat.

All Psionic skills fall into four Categories: **Mind, Body, Force and Will.** These categories define how Psionic powers are resisted—the Stats used to resist each Psionic skill are listed below.

Mind: Intelligence
Body: Body Type
Force: Luck
Will: Cool

Wild Talents

Only a very few Latent Psionics possess a Wild Talent. With the Ref's OK, any character with a PSI Stat of 7+ may check for a Wild Talent; to do so, roll 3D10 and add the character's PSI Stat (or Luck, if more appropriate). A total of 30+ gets the PC a Wild Talent (Wild Talents are VERY rare). The Ref may choose to assign **one** Wild Talent to a PC if no one has any Psionic Skills already. A Ref may certainly decide to allow NO Wild Talent rolls at all.

Randomly determine which Psionic skill the Wild Talent is. Roll 1D6 and add 1 to determine the Wild Talent's skill level. A PC with a Wild Talent has a natural, inborn ability to use a specific type of psychic force. Wild Talent ESPers have no idea how their powers work—they just do! No matter what, a Wild Talent's skill level NEVER improves. Wild Talent ESPers may not learn any other Psionic Skills. All of the PC's Psi potential is bound up in this one ability.

It is possible for a Wild Talent to show up late in life, due to Bonding or Trauma. A Ref may allow a character who goes through Bonding or Trauma to roll again as above to try to discover a Wild Talent (the Referee is not obligated to allow a Wild Talent attempt—do it only if it fits in with the campaign you are running). Good excuses for a Wild Talent appearing are major head injuries, recovery from massive mental attacks, encounters with strange alien devices, or serious drug trips.

People who gain Wild Talents through accidents like this will lose any Psionic Skills they already possessed; one cannot possess both a Wild Talent and learned Psionic Skills. This sort of experience can change a character in other ways, too. There may be personality changes and even be physical changes, such as the character's hair turning white, minor facial paralysis (-1D6/2 to ATT), loss of physical strength and coordination (-1D6/2 to REF or MA), etc. The Ref should introduce such alterations to the character *only* after discussion with the player, keeping in mind play balance and role-playing possibilities.



Resisting Psi Skills

Any character who is attacked by an ESPer (ie, has a Psionic power used on him against his will) gets a chance to resist the attack. The roll is a contest of Stats between the two parties involved; if the attacker wins the power works as normal, and if the defender wins the Psionic skill has no effect, but the attacker still expends all the Psi Points he put into the attack (this includes the points he used to activate the skill as well as any he pumped into the attack as a bonus). If the Defender is also an ESPer then he has the option of adding his own PSI Stat and any extra Psi Points he wishes to put into the defense (in addition to getting the normal Stat defense).

The formulas for the opposing rolls are:

ATTACKER:
PSI Stat +Psionic Skill +extra Psi Points expended+1D10

-vs-

DEFENDER:
Appropriate Stat (see above) +PSI Stat (if any) +Psi Points (if any) +1D10

Situational Modifiers may also apply, and, as always, Luck may be expended to help defend against any form of Psi attack.

Using Psionic Skills

Most resistance rolls against use of Psionic Skills should be made by the Referee secretly. When the goal is to gain information from another mind or across time and space, the Referee should reveal more of the information desired on a very good roll (well over the Difficulty), less information on a roll that barely gets by, and no useful information on an unsuccessful roll. The user of the skill should not know for certain about the completeness of the information, but the Referee can give a hint when he describes the results: "Your visualization is hazy, but you think you see a burning mecha behind a blue building." Or, for a very good roll: "You see a green and white Mark IV Spitfire powered armor collapsed and burning behind a building marked 'Satellite Protective Services.' You can make out every detail of the damaged mecha, right down to the serial number VT4004 on the left shoulder."

When the goal is to affect another person or object (examples: an attack, an illusion, a use of telekinesis, or an attempt at healing), the character should learn only as much as he can observe about the **effects** of the attempt. When the Referee says, "your foe clutches his head and falls," it may be an indicator of a successful mental attack, or a ruse by a clever enemy who has deflected your attack. Likewise, a psychic healer may see a wound stop bleeding and begin to close, but she will never know the exact number of damage points that are removed by the effort. A telekinetic can see a book lift from the table across the room, but should not be told how solid a "hold" he has, except in very general terms. "You easily lift the book, and see it rise smoothly to the ceiling" indicates a good roll. "The book wobbles, then rises unsteadily a meter into the air, where it remains, trembling" indicates marginal success.

In some cases, such as Stat Boost, the player always knows how successful the attempt will be if it succeeds at all. Resistance rolls may be made freely by the player in such cases. But in most cases, keep the element of uncertainty in the use of Psionic Skills, to add role playing flavor to the game.

Concentration

The use of most Psionic Skills requires concentration. In general, a person using one of these skills must focus attention on the use of the skill. No other action may be taken by a person using such a skill. Some skills (such as Aura Viewing) require a bit of concentration, but allow the user to do other things at the same time. These skills still may be disrupted by distractions, however. Danger Sensing is the only Psionic Skill considered to be "on" at all times, and needs no concentration at all.

Distractions

A character who is injured or startled while using a Psionic Skill must make a COOL Stat roll (no skill applies) to avoid losing her concentration for a Turn. The difficulty level applied depends on the amount of distraction. An unexpected gunshot right behind you is about a Difficulty Level 10. Being hit in the face with a left hook is probably a Level 15 distraction. A major wound is at least a Level 20 distraction. A real emotional trauma, like seeing your best friend's mecha explode, should be worth a Level 25 or more. If the roll fails, the concentration is interrupted and the power stops operating for one turn. At the end of the next full Turn, concentration can be reestablished if the distraction is gone. In the case of a continuing distraction (such as painfully loud noise all around you or the pain of a severe wound left untreated), a COOL Stat roll is required each turn until the distraction goes away.

Psi Unpredictability

Psionics is still something of an inexact science, and psi abilities and skills have a tendency to act unpredictably from time to time. This allows the Referee to use Psionic Skills to further the plot of an adventure. For example, a Referee may give a character with Clairvoyance or Precognition a warning of something that is happening or about to happen as the "spark" for an adven-

ture situation ("Suddenly, your vision blurs and you can see Randal's mecha stuck up to its waist in mud, sinking fast!"). In turn, an ability can fail when it is important to the plot that a piece of vital information remain secret. That is why the Referee makes most die rolls for Psionic Skills. The Referee should not use this unpredictability as an excuse to frustrate the players. In fact, spontaneous, uncontrolled use of Psionic powers should help the characters as often as it hinders them. Psi unpredictability keeps Psionic Skills from unbalancing the game and making characters into supercharacters who know everything and can do anything.

Psi Skill List △ エスパー・スキル・リスト

Following is a list of Psionics powers. The list is not meant to be all-encompassing; the Referee is encouraged to alter, add or otherwise change the nature of Psionics to suit his own campaign. Advancement in Psionic skills is the same as for any other skill,—with one exception: All Psionic skills cost double the normal IP for advancement (i.e., 80 IP to go from level 4 to 5, etc.). An Asterisk (*) after a power's name means it can be magnified through the use of an ESPer Lens.

Astral Projection*

Cost to Activate: 2 Psi Points per skill level.
Category: Mind (resisted by INT)
Description: This is the power to have your mental image leave your body and move across space to some other place.

Level Effects:
1: ESPer's astral body can travel 100 meters from his body.
2: Travel 500 meters from his body.
3: Travel 1km from his body.
4: Travel 3km from his body.
5: Travel 10km from his body.
6: Travel 100km from his body.
7: Travel 1000km from his body.
8: Travel anywhere on the planet.
9: Travel anywhere in solar system.
10: ESPer's astral body can travel across star systems.

Range: See above.
Duration: Using this power requires complete quiet and absolute concentration. If this is interrupted, you will "snap back" to your physical body. A roll must be made each minute your astral projection is maintained. One failure ends the astral projection, and snaps you back to your body. Worse yet, if you snap back you must make 1D10 less than your PSI Stat to avoid being stunned for 1D10 Turns. If you decide to return on your own, you come back immediately and there is no danger of "snap-back."
Special Rules: You can see and hear through this mental image, but cannot touch anything, nor be detected by any physical means (though telepaths, clairvoyants, and other people with this power may be able to sense you). Flight is possible, since you are not restricted by gravity, physical barriers such as walls, or even by the speed of light. But the farther away from your body that you travel, the harder it is to maintain the projection. Resistance rules apply as normal—the ESPer must roll against his own INT, as he is breaking his mind free of its grip on "reality." While astrally projecting, your astral body can still be attacked by any other astral body you encounter (or by psychic attacks once you have been detected). You will take Damage from such attacks off your physical body. If your astral body is killed, you will die. In addition, your physical body is completely helpless while you are gone (although Danger Sensing may help you).

Aura Viewing*

Cost to Activate: 1 Psi Point per skill level.
Category: Will (resisted by COOL)
Description: The ability of the ESPer to identify other ESPers and learn about their capabilities. Aura Viewing can be used to receive basic information about the viewee (such as age, sex, physical condition, mental health, etc.).

Level Effects:
1: ESPer can tell if the target has Psionic potential.
2: If the target is Psionic, the Aura Viewing will tell if she is Active or Latent.
3: ESPer can tell roughly how powerful the target's Psionics are (Low, Medium or High).
4: ESPer can tell what the PSI Stat of the target is.
5: ESPer can tell roughly how many Psi Points target has (Low, Medium, High).
6: ESPer can tell exactly how many Psi Points the target has.
7: ESPer can tell what Psi Skills target has.
8: ESPer can tell levels of target's Psi Skills.
9: ESPer can read five people at once.
10: ESPer can read ten people at once.



Psionic Skills

Body (vs BOD)	Activation Cost
Healing	3 Psi per Level
Levitation*	1 Psi per Level
Regeneration	2 Psi per Level
Stat Boost	3 Psi per Level
Teleportation*	5 Psi per Level

Force (vs LUCK)	Activation Cost
Energy Manipulation*	4 Psi per Level
Psychometry	1 Psi per Level
Pyrokinesis*	3 Psi per Level
Retrocognition	3 Psi per Level
Telekinesis*	3 Psi per Level

Mind (vs INT)	Activation Cost
Astral Projection*	2 Psi per Level
Illusion	1 Psi per Level
Precognition	2 Psi per Level
Psi Blast	3 Psi per Level
Psi Block*	2 Psi per Level
Suggestion	3 Psi per Level
Telepathy*	1 Psi per Level

Will (vs COOL)	Activation Cost
Aura Viewing*	1 Psi per Level
Clairvoyance*	3 Psi per Level
Danger Sensing	-0-
Emotion Scan*	1 Psi per Level
Mind Lock	2 Psi per Level
Possession	4 Psi per Level

Range: 10 meters per level +10 meters per extra Psi Point expended.
Duration: See below.
Special Rules: The viewing takes an instant (1 Action), but once a person is viewed, the ESPer carries the image of the aura around with him for a month per level of viewing. The ESPer will instantly recognize that person if he runs across the target again in that time. The normal resistance rules apply.

Clairvoyance*

Cost to Activate: 3 Psi Points per skill level.
Category: Will (resisted by COOL)
Description: The ability for a ESPer to see with his "mind's eye" events that are happening in a known location, or near a known person. This is visual only, and the ESPer will not have any other sensory input. For the Effects below, "known" means a close or intimate knowledge, while "familiar" means an acquaintance or association.

Level Effects:
1: Events of a known person or location (1km distant).
2: Known person or location (to 2km).
3: Known person or location (to 4km), familiar person or location (to 1km).
4: Known person or location (to 7km), familiar person or location (to 2km).
5: Known person or location (to 11km), familiar (to 4km), unknown (to 1km).
6: Known person or location (to 16km), familiar (to 7km), unknown (2km distant).
7: Known person or location (to 22km), familiar (to 11km), unknown (to 4km).
8: Known person or location (to 29km), familiar (to 16km), unknown (to 7km).
9: Known person or location (to 37km), familiar (to 22km), unknown (to 11km).
10: Known person or location (to 46km), familiar (to 29km), unknown (to 16km).

Range: As above, +2 Km per extra Psi point expended.
Duration: The ESPer sees one Round's worth of sight per skill level. This can be extended by one Round per extra Psi Point expended (above and beyond extra range Psi Points).
Special Rules: The ESPer will generally see 5 meters per level around the target. If the ESPer expends an extra Psi Point per skill level (i.e., increases the Cost to 4), he will also be able to hear what is transpiring.

Danger Sensing

Cost to Activate: 0
Category: Will (resisted by COOL)
Description: This is a special power because it works differently than any other; whenever the ESPer is in life-threatening danger (ambush, explosion about to happen, etc.), the Referee rolls 1D10. If the result is equal to or **lower** than the Danger Sensing skill level, the ESPer gets a flash warning. Warnings should be something like "Explosion," or "Sniper," or "Behind You." All ESPers—Active **and** Latent—automatically get this ability at level 1 (but only Active Psionics will be able to advance the skill).

Emotion Scan*

Cost to Activate: 1 Psi Point per skill level.
Category: Will (resisted by COOL)
Description: The ability to "read" the emotional state of targets, and at higher levels influence them.

Level Effects:
1: The ESPer gets basic feeling and emotional patterns from target (love, hate, joy, sadness).
2: ESPer receives more detailed feelings (hate Kargans, love Nancy, jealous of Jim, etc.).
3: Complex emotional patterns and their reasons (I am nervous because I planted a bomb in the airport and I hope no one finds out.)
4: Slight modifications on existing emotions (mellow intense hatred, suppress homicidal rage, etc.).
5: Moderate modifications onthe target's existing emotions (mellow hatred to neutrality, increase like to a moderate love, etc.)
6: Massive modification to existing emotions (like to passionate love, dislike to intense hatred, etc.).
7: Implant simple emotions (like, dislike, discomfort, etc.).
8: Implant moderate emotions (attraction, distrust, fear, etc.).
9: Implant intense emotions (passionate love, suicidal depression, complete panic, etc.).
10: Affect multiple targets at once; Diff = 15 +(5 per added target).

Range: 10 meters per skill level, +100 meters per extra Psi Point expended.
Duration: The active modification or reading of a person's emotions is instantaneous. The after-effects (if any) last one day per skill level used. If the changes are massive, or harmful to the character, he receives a COOL roll vs Diff 15 (per day) to break the effects.
Special Rules: Any Emotion Scan skill usage on a person is considered an attack, so the target gets the normal chance to resist.

Energy Manipulation*

Cost to Activate: 4 Psi Points per skill level.
Category: Force (resisted by LUCK)
Description: The ability to move or "deflect" energy in large concentrations. This applies only to energy (Beam Weapons, EMWs, explosions, fire, etc.)—projectiles and other physical attacks cannot be stopped.

Level Effects:
1: 1 Hit of energy deflection.
2: 2 Hits of energy deflection.
3: 4 Hits of energy deflection.
4: 7 Hits of energy deflection.
5: 11 Hits of energy deflection.
6: 16 Hits of energy deflection.
7: 22 Hits of energy deflection.
8: 29 Hits of energy deflection.
9: 37 Hits of energy deflection.
10: 46 Hits of energy deflection.

Range: Five meters per level radius centered from the ESPer.
Duration: One Action per level, +1 Round per extra Psi point invested.
Special Rules: This power may be activated at any time during a Turn, at the cost of the ESPer's next Action. If the incoming attack is greater that the stopping power of the Psi, then the number of Hits that could be stopped is simply subtracted from the attack. To redirect the deflected attack requires an attack roll (as if firing a gun) of **PSI Stat +Energy Manipulation skill -5 +1D10** vs the defender's regular REF-based dodge roll.

Healing

Cost to Activate: 3 Psi Points per skill level.
Category: Body (resisted by BOD)
Description: This power allows the ESPer to heal injuries on others. One use of the skill affects all parts of the body, up to the amount that the skill can handle; if the patient had taken 10 hits to the torso, 5 to the right arm and 6 to the left leg, the total to be healed is 21 hits.

Level	Effects
1	1 Hit regained.
2	2 Hits regained.
3	4 Hits regained.
4	7 Hits regained.
5	11 Hits regained.
6	16 Hits regained.
7	22 Hits regained.
8	29 Hits regained.
9	37 Hits regained.
10	46 Hits regained.

Range: Touch.
Duration: For each Hit healed, the ESPer must spend an Action concentrating on the victim (in other words, 2 Hits per Turn, or 1 Hit per 5 seconds).
Special Rules: All normal resistance rules apply; the ESPer must overcome the patient's resistance roll in order to successfully heal him.

Illusion

Cost to Activate: 1 Psi Point per skill level.
Category: Mind (resisted by INT)
Description: The ability to create sight and sound (but not taste, touch, or smell) images that can be mistaken for real. Resistance rolls are made whenever the Ref deems appropriate; generally, the more mundane and contextually appropriate the illusion is, the less likely anyone is to question its veracity.

Level Effects:
1: Image is Diff 12 vs (INT + Awareness +1D10) to detect it's false.
2: Image is Diff 14 vs (INT + Awareness +1D10) to detect it's false.
3: Image is Diff 16 vs (INT + Awareness +1D10) to detect it's false.
4: Image is Diff 18 vs (INT + Awareness +1D10) to detect it's false.
5: Image is Diff 20 vs (INT + Awareness +1D10) to detect it's false.
6: Image is Diff 22 vs (INT + Awareness +1D10) to detect it's false.
7: Image is Diff 24 vs (INT + Awareness +1D10) to detect it's false.
8: Image is Diff 26 vs (INT + Awareness +1D10) to detect it's false.
9: Image is Diff 28 vs (INT + Awareness +1D10) to detect it's false.
10: Image is Diff 30 vs (INT + Awareness +1D10) to detect it's false.

Range: The target of a telepathic Illusion must be in visual sight or in telepathic contact. For another 2 Points per person, the ESPer may affect more than one target.
Duration: 1 Round per skill level. This may be increased by 2 Rounds per extra Psi Point expended.
Special Rules: Illusions can move and make sounds as if real, but physical objects pass through them (then the unreality of the illusion is immediately detected by anyone who noticed). Cameras, mechanical detectors, and machines are unaffected by illusions.

Levitation*

Cost to Activate: 1 Psi Point per skill level.
Category: Body (resisted by BOD)
Description: With this power a person can lift himself telekinetically and fly.

Level Effects:
1: Movement Allowance = 1.
2: MA = 1/2 character's MA.
3: MA = 1x character's MA.
4: MA = 1.5x character's MA.
5: MA = 2x character's MA.
6: MA = 3x character's MA.
7: MA = 4x character's MA.
8: MA = 5x character's MA.
9: MA = 7.5x character's MA.
10: MA = 10x character's MA.

Range: Self.
Duration: 1 Round per skill level. This may be increased by 2 Rounds per extra Psi Point expended.
Special Rules: A flying person can lift his own weight and remain in the air, and can continue to take other actions while flying as long as he remains conscious.

Mind Lock

Cost to Activate: 2 Psi Points per skill level.
Category: Will (resisted by COOL)
Description: The ability to "freeze" another's mind and keep him from acting.

Level Effects:
1: Target frozen for 1 Action per skill roll.
2: Target frozen for 1 Round per roll.
3: Target frozen for 2 Rounds per roll.
4: Target frozen for 3 Rounds per roll.
5: Target frozen for 4 Rounds per roll.
6: Target frozen for 5 Rounds per roll.
7: Target frozen for 6 Rounds per roll.
8: Target frozen for 8 Rounds per roll.
9: Target frozen for 10 Rounds per roll.
10: Target frozen for as long as ESPer concentrates.

Range: 20 meters per skill level. For another 2 Points per person, the ESPer may affect more than one target.
Duration: As above.
Special Rules: While a target is frozen, the ESPer using this power must concentrate on him for the duration of the effect, so the ESPer suffers a -4 to all other Actions. If the ESPer's concentration is broken, the target is no longer frozen.

Possession

Cost to Activate: 4 Psi Points per skill level.
Category: Will (resisted by COOL)
Description: This Psionic power allows the ESPer to take control of another person's body for a limited amount of time. At higher levels it can be even used to transfer minds between bodies.

Level Effects:
1: The user can see through the victim's eyes.
2: User can sense all sensations (sight, hearing, smell) that the target experiences.
3: ESPer can take control of target's voice, making him say whatever the ESPer wants him to.
4: The ESPer can take total control of the target, but the body moves jerkily, like a zombie.
5: User may move in to the target's body and can act normally. The victim is forced into the sub-conscious mind.
6: ESPer may possess the victim with enough control to act and sound like him. On a second successful skill roll, the ESPer may gain access to the victim's memories.
7: ESPer may force a mind transferral between his body and the target's. The target will be in the ESPer's body, and the ESPer will be in the target's body.
8: Above transferral can become permanent if the ESPer so chooses.
9: The ESPer may effect mind transfer between two other targets (he can switch the minds of others).
10: Permanent transferral between two people other than the ESPer.

Range: Touch. Range may be increased by 1 meter per extra Psi Point expended.
Duration: One day per level of PSI Stat the ESPer has. The ESPer may stop at any time.
Special Rules: The ESPer retains personality, skills, Psi powers and mental Stats (INT, TECH, LUCK, COOL, EMP) while in the host body; the ESPer gets the victim's ATT, REF, BOD and MA, and none of the victim's skills or powers.

Precognition

Cost to Activate: 2 Psi Points per skill level.
Category: Mind (resisted by INT)
Description: This power reveals to the user flashes of possible future events. Note that precognition does not predict the future as it *must* be, but as it *might* be if action is not taken to change the way things will happen. Generally, no one can **try** to bring on a precognitive "flash." Most of the time they just "happen" without warning. Usually predictions will be mere hints of what is to come, though some are more specific than others.

Level Effects:
1: 1 very vague and difficult to interpret (obscure symbolism, etc.) precognitive flash per adventure.
2: 1 rather vague precognitive flash (with more than one possible interpretation) per adventure.
3: 1 simple precognitive flash (with one likely interpretation) per adventure.
4: 1 (relatively easy to interpret) precognitive flash per adventure.
5: 1 clear precognitive flash per adventure.
6: 1 very obvious precognitive flash per adventure.
7: 2 precognitive flashes per adventure (one obvious, one vague).
8: 3 precognitive flashes per adventure (one obvious, two vague).
9: 2 obvious precognitive flashes per adventure.
10: Numerous precognitive flashes (as desired by the Ref).

Range: Not applicable.
Duration: Precognitive flashes occur instantly, jarring the ESPer for 1 Turn. If a character *tries* to bring on a precognitive flash, however, it is *certain* not to work!
Special Rules: A roll should be made at least once per adventure, whenever a precognitive flash might be helpful to the Referee. Referees should feel free to ignore the dice altogether with this power and simply hand out precognitive flashes whenever they are appropriate, and to withhold them whenever knowledge of the future would spoil the adventure.

Psi Blast

Cost to Activate: 3 Psi Points per skill level.
Category: Mind (resisted by INT)
Description: The ability to direct a bolt of psionic force at a psionic foe. The attack is useless against a non-ESPer. The target must be within visual sight for the power to work.

Level Effects:
1: Headache; -3 to target's next Action.
2: Major headache; target loses 1 Action.
3: Serious migraine; target loses his next Turn.
4: Brain tickle! Target loses two Turns.
5: Major feedback in the ol' noggin; target loses three Turns.
6: Brain twists in its little pan; target's head takes 1 Hit; target loses three Turns.
7: All synapses fire at once—ow! Target's head takes 2 Hits; lose three Turns.
8: Neural pathways randomly reroute; target suffers 1D6 Hits to the head; lose three Turns.
9: Psionic overload shorts out most brain functions, 1D6+2 to head; lose 3 Turns.
10: Massive brain damage; 2D6 to the head—if he's not dead, a Stun Save roll is required to avoid going into a coma.

Range: 5 meters per Psi level.
Duration: As above.
Special Rules: During lost Actions or Turns, the target may not act except to use Psionic powers or perform dodges at a -7 penalty.

Psi Block*

Cost to Activate: 2 Psi Points per skill level.
Category: Mind (resisted by INT)
Description: The ability to use your own powers to negate the effect of another's ESPer ability.

Level Effects:
1: Blocks level 1 Psi.
2: Blocks level 2 Psi.
3: Blocks level 3 Psi.
4: Blocks level 4 Psi.
5: Blocks level 5 Psi. Can use ability to negate attack directed at others.
6: Blocks level 6 Psi. Can use ability to negate attack directed at others.
7: Blocks level 7 Psi Can use ability to negate attack directed at others.
8: Blocks level 8 Psi. Can use ability to negate attack directed at others.
9: Blocks level 9 Psi. Can use ability to negate attack directed at others.
10: Blocks level 10 Psi. Can use ability to negate attack directed at others.

Range: Self, or another within 25 meters. Range may be extended by 5 meters per Psi Point expended.
Duration: As long as the blocker concentrates. Cancels only one Psionic skill per use.
Special Rules: Any ESPer may, instead of resisting an incoming Psionic attack, use Psi Block to cancel it. If the attacking ESPer used his power at a higher level than the defending ESPer can block, the power is reduced by the level of Psi Block used (a level 6 power, when blocked by a level 3 Psi Block, acts as a level 3 power). Psi Block may also be used to break an attack or ongoing power during its duration.

Psychometry

Cost to Activate: 1 Psi Point per skill level.
Category: Force (resisted by LUCK)
Description: This skill involves the reading of psychic impressions from a non-living object; the ESPer may touch an object and immediately gain some sort of knowledge about where that item has been and who owns it.

Level Effects:
1: Simple sensory impression (a color pattern, a sound, even a smell or taste).
2: Multiple sensory impressions (a sound, a smell and a taste perhaps).
3: Simple emotional association (a locket may bring forth the impression of love and value by its owner).
4: Complex emotional association (a beloved locket might bring forward the image of its owner).
5: Simple conceptual association (image of the cat which wore the collar).
6: Complex conceptual association (a murder weapon might "remember" the scream of the victim).
7: Simple history behind the object (a ring was bought at a store, given by someone to his/her beloved).
8: Involved history behind the object (a ring was bought at the Pandora Jewelry Store, given by John to his beloved).
9: Complex biographical information about the object (a ring was bought at the Pandora Jewelry Store at such-and-such location, given by John Smith, an American mechajock, to his beloved wife Angela, who is a housewife).
10: Complete information about the object and its associations.

Range: Touch.
Duration: If an object reveals nothing the first time it is handled by an individual using this power, it will never do so.
Special Rules: An object with little contact or emotional attachment might bring forward no image at all, however—even to the most gifted psychic. Thus, all Stat Rolls when trying this ability should be made secretly by the Referee. Resistance rolls are made only if the ESPer is attempting to learn something about a person; in such a case, that person's LUCK is used.

Pyrokinesis*

Cost to Activate: 3 Psi Points per skill level.
Category: Force (resisted by LUCK)
Description: The ESPer can cause fires and keep them burning without fuel.

Level Effects:
1: Can start small fires in easily flammable objects (kindling, loose paper, flammable gas), doing 1 point of Damage to those touching the objects.
2: Can ignite easily flammable objects (kindling, loose paper, flammable gas), doing 1D6/2 Damage to those touching the objects.
3: Can burn easily flammable objects (kindling, loose paper, flammable gas), doing 1D6 Damage to those touching the objects.
4: Can ignite flammable objects (cardboard boxes, books, dry wood, clothing), doing 1D6 to those touching the objects.
5: Can burn flammable objects (cardboard boxes, books, dry wood, clothing), doing 1D6+2 Damage to those touching the objects.
6: Can ignite less flammable objects (wet wood, large heavy logs, plastics, and other marginally flammable items—such as living flesh), doing 1D6+2 to those touching the objects.
7: Can burn less flammable objects (wet wood, large heavy logs, plastics, and other marginally flammable items—such as living flesh), doing 2D6 Damage to those touching the objects.
8: Can heat up nonflammable objects (brick, stone and metal), doing 2D6 Damage to those touching the objects.
9: Can melt nonflammable objects (brick, stone and metal), doing 2D6+2 Damage to those touching the objects.
10: Can incinerate nonflammable objects (brick, stone and metal), doing 3D6 to those touching the objects.

Range: 20 meters per level used. The size of the initial fire is a single point at skill level 1, +1 meter area per level of skill over 1. For each extra Psi Point spent, the range may be increased by 5 meters or the area can be increased by 1 square meter.
Duration: All fires will burn naturally once set. If there is no fuel to sustain the fire, the ESPer may maintain the fire for as many turns as the fire's equivalent Psionic skill level (at the cost of one Action per turn).
Special Rules: Resistance rolls for Pyrokinesis only apply if that which is being burned is on, in the hands of, or *is* a person. If someone is in a Hex that is on fire and his first action is to leave that Hex, he will sustain 1/2 Damage; each Round that he remains in a burning Hex, he takes full Damage.

Regeneration

Cost to Activate: 2 Psi Points per skill level. This cost is paid only once; the ESPer then gets the healing as long as he concentrates.
Category: Body (resisted by BOD)
Description: This ability allows the ESPer to use the power of his mind to heal damage to his body.

Level Effects:
1: The ESPer can heal 1 Hit of Damage for every 4 Turns of concentration.
2: The ESPer can heal 1 Hit of Damage for every 3 Turns of concentration.
3: The ESPer can heal 1 Hit of Damage for every 2 Turns of concentration.
4: The ESPer can heal 1 Hit of Damage for every Turn of concentration.
5: The ESPer can heal 2 Hits of Damage for every Action of concentration.
6: The ESPer can heal 3 Hits of Damage for every Action of concentration.
7: The ESPer can heal 4 Hits of Damage for every Action of concentration.
8: The ESPer can heal 5 Hits of Damage for every Action of concentration.
9: The ESPer can heal 6 Hits of Damage for every Action of concentration.
10: The ESPer can heal all Hits of Damage in one Action of concentration.

Range: Self.
Duration: Permanent.
Special Rules: The ESPer chooses which location to remove Damage from. Multiple locations require multiple attempts.

Retrocognition

Cost to Activate: 3 Psi Points per skill level.
Category: Force (resisted by LUCK)
Description: This is the ability to sense past events in the area where the sensitive individual is located. Looking back with this power usually gives vague images, not complete, easy-to-read information. Referees should be careful to use this power to reveal clues, not give away the entire secret behind a game adventure.
Range: The ESPer's location. The time in the past may be pushed back 1 increment per extra Psi Point expended (i.e., at level 2, 1 extra Psi Point would allow the ESPer to see back 2 days, while at level 5 he could see back 2 years, etc.).

Level Effects:
1: ESPer can see 6 hours back in time.
2: ESPer can see 1 day back in time.
3: ESPer can see 1 week back in time.
4: ESPer can see 1 month back in time.
5: ESPer can see 1 year back in time.
6: ESPer can see 3 years back in time.
7: ESPer can see 10 years back in time.
8: ESPer can see 33 years back in time.
9: ESPer can see 100 years back in time.
10: ESPer can see 1000 years back in time.

Duration: The ESPer sees past events transpire only as long as he maintains concentration. The impressions end if this concentration is broken by distractions.
Special Rules: A place where one person spent a great deal of time leaves a stronger impression. A place where an emotional or psychic confrontation took place at the time being viewed improves the "reception" even more. Places and times where great psychic events took place (like a psi battle or a simple murder) are much easier to find than mundane events.

Stat Boost

Cost to Activate: 3 Psi Points per skill level.
Category: Body (resisted by BOD)
Description: With this power the ESPer may increase his Stats for a limited amount of time. The Stats that may be altered are Reflexes, Movement Allowance and Body Type.

Level Effects:
1: One Stat may gain +1 for one Action.
2: One Stat may gain +1 for one Turn.
3: One Stat may gain +1 for PSI Stat in Turns.
4: One Stat may gain +2, or two Stats may gain +1, for one Action.
5: One Stat may gain +2, or two Stats may gain +1, for one Turns.
6: One Stat may gain +2, or two Stats may gain +1, for PSI Stat in Turns.
7: One Stat may gain +3, or +2/+1, or +1/+1/+1, for one Action.
8: One Stat may gain +3, or +2/+1, or +1/+1/+1, for one Turn.
9: One Stat may gain +3, or +2/+1, or +1/+1/+1, for PSI Stat in Turns.
10: All Stats may gain +3 for PSI Stat in Turns.

Range: Touch or Self.
Duration: As above. Per extra Psi Point expended, the duration will last for 1 additional Action.
Special Rules: This power may be used on others if the ESPer so wishes. All normal resistance rules apply.

Suggestion

Cost to Activate: 3 Psi Points per skill level.
Category: Mind (resisted by INT)
Description: The ability to implant memories and/or change memories and ideas in other people's minds.

Level Effects:
1: Modify a minor memory (change of a number in an address or phone number, etc.).
2: Modify larger memory (a person's name, an entire street address, etc.).
3: Minor modifications to an important or often-used memory (forget one digit in a security code or own phone number, etc.).
4: Major modifications to an important memory (lover's last name, your own address, etc.).
5: Slight implanted memory (seeing someone on the street, receiving a non-vital phone call, etc.).
6: Sizable added memory (I just gave you a ¥100 bill, you didn't really have a date with your lover, etc.).
7: Massive modification of important memories (you already checked the fuel level in your mecha, your orders were ..., etc.).
8: Able to place small thoughts that go against basic ideas in the target (you should leave your front door unlocked tonight, etc.).
9: Large or important false memories in the target (your lover ran off with someone else, your next door neighbor is a enemy spy, etc.).
10: The ability to put any memory or idea into another's head (you want to kill yourself, you want to defect, etc.).

Range: 10 meters per Psi level. Range can be increased 10 meters per extra Psi Point used.
Duration: The false memories or ideas will last one day per skill level used. Duration can be increased one extra day per extra Psi Point spent.
Special Rules: If actions taken on a false memory are going to have permanent effects on a character's life (suicide, defection, murder, etc.), they get a COOL roll vs 15 to break the false memory.

Telekinesis*

Cost to Activate: 3 Psi Points per skill level.
Category: Force (resisted by LUCK)
Description: This ability allows the ESPer to manipulate physical objects with the power of his mind.

Level Effects:
1: Move 10kg or deliver a 1-Hit impact or generate a 1-Hit shield.
2: Move 20kg, 1D6/3 Hits, 2-Hit shield.
3: Move 40kg, 1D6/2 Hits, 3-Hit shield.
4: Move 70kg, 1D6 Hits, 6-Hit shield.
5: Move 110kg, 1D6+2 Hits, 9-Hit shield.
6: Move 160kg, 2D6, 12-Hit shield.
7: Move 220kg, 2D6+2, 15-Hit shield.
8: Move 290kg, 3D6, 18-Hit shield.
9: Move 370kg, 3D6+2, 21-Hit shield.
10: Move 460kg, 4D6, 24-Hit shield.

Range: 20 meters per level used. Range can be increased 10m per extra Psi Point used.
Duration: Objects can move at a speed equal to the ESPer's own MA, and movement lasts one Turn per skill level. Impacts and shields last one Action, and only attack or protect 1 target.
Special Rules: A TK attack must first be resisted by the target's LUCK roll—if the resistance fails, the TK Damage is applied against Armor in the normal fashion.

Telepathy*

Cost to Activate: 1 Psi Point per skill level.
Category: Mind (resisted by INT)
Description: Telepathy is the basis for all mind-to-mind communication. With it, two individuals may communicate over distances, even if they cannot see each other.

Level Effects:
1: ESPer may send simple thoughts or ideas (Run!, Look Out!, A Bomb!, etc.).
2: The ESPer may send or receive simple thoughts (as above).
3: The ESPer may send and receive simple thoughts (as above).
4: Send complex patterns (normal speech). Can *send* to 2people at once.
5: Send *and* receive complex patterns (normal speech). Can *send* to 4 people at once.
6: Conversations with up to ten people. Can send to six people at once.
7: The ESPer is capable of transmitting large amounts of data (ten minutes' worth of speech in one Action). Can send to ten people at once.
8: The ESPer is capable of receiving large amounts of data (as above). Can send to twnety people at once.
9: The ESPer is capable of sending and receiving huge amounts of information (a good hour's worth of information exchange can take place instantly). Can send to thrity people at once
10: Can send to forty people at once.

Range: 100 meters per skill level, +1km per extra Psi Point expended.
Duration: The mind-to-mind contact lasts up to ten minutes per skill level, and may be severed by the ESPer at will (or by the recipient on a successful resistance roll).
Special Rules: A telepathic communication has a certain feel to it, so the recipient will always know it's a communication (rather than an attack).

Teleportation*

Cost to Activate: 5 Psi Points per skill level.
Category: Body (resisted by BOD)
Description: The ability to instantly transport yourself and possibly others to another spot. Teleportation is the most expensive and rare Psionic power. It is advised that the Referee maintain strict control of its use and availability during the game.

Level Effects:
1: ESPer may teleport himself up to 1 kilometer, to a well known location.
2: ESPer may teleport himself up to 2 kilometers, to a well known location.
3: ESPer may teleport himself and 1 other up to 4 kilometers, to a well known location.
4: ESPer may teleport himself and 2 others up to 7 kilometers, to a well known location.
5: ESPer may teleport himself and 4 others up to 11 kilometers, to a well known location.
6: ESPer may teleport himself and 7 others up to 16 kilometers, to a well known location.
7: ESPer may teleport himself and 11 others, up to 22 kilometers, to a well known location.
8: ESPer may teleport himself and 16 others up to 30 kilometers, to a well known location.
9: ESPer may teleport himself and up to 22 others up to 60 kilometers, to a well known location.
10: ESPer may teleport himself and 30 others up to 100 kilometers, to a well known location.

Range: As above.
Duration: Instantaneous.
Special Rules: It take the ESPer one Turn of concentration to prepare for every level of teleportation. So to activate a level 4 teleport, he would need to spend 4 Turns in preparation. This time can be reduced by expending 2 extra Psi Points per Turn reduced.

Roleplaying Psionics Δ エスパーのロールプレー

Great powers of the mind are a staple of many Japanese Anime situations, and they can add even more flavor to a Mekton Zeta campaign. The Referee should be very careful, however, that Psionic powers do not take over a game. They should be used to add spice to a campaign, not as a substitute for good roleplaying and mecha adventure.

Referees should feel free to limit Psionic Skills as much as they and their players desire, or to eliminate them altogether for player characters. Any character with Psionic powers should have something in his background that explains how he gained that power. In most instances this can be a connection with some organization—who may "call in the debt" on the player character in a later part of the campaign. Other explanations are possible, but in all cases there should be a connection the Referee can use in roleplaying situations. Perhaps the character's old teacher had an enemy who is still hunting the character, or the character got into trouble in her youth because of her power and now keeps it a secret, unknown to any but her closest friends.

Except in very special campaigns (where the player characters are a Psionic investigations team, perhaps), there should be no more than one or two player characters who have any psychic powers at all—Referees should remember that psychic powers are rare in most cases.

Referees should not send lots of psychic villains against player characters unless the characters are in a business that would naturally have them cross paths with lots of hostile psychics (like the Psionic investigations team noted above). Psychics of limited ability and only one or two skills are always in demand as hirelings among those with less than honest intentions. A highly skilled psychic with multiple abilities, on the other hand, would best be used as a major villain whose minions and hired thugs trouble the characters endlessly while the psychic villain remains a shadowy, dangerous figure in the background ... until (after many adventures of course) the player characters hunt their foe down and confront him in the grand style of the blockbuster Anime finale ...

Powerful Psionics

Anime is famous for well-developed characters and mature plots, but it's also famous for its excesses. This goes for Psionics as well. Many Anime ESPers have the power to collapse buildings, rend mountains and level cities.

This system was not designed for that.

Such monstrous power levels wander away from the realm of psionics and into that of superpowers. This Psionic system is provided to give Mekton Zeta players access to the uncharted expanses of the human mind—godlike powers stand among those Referee-only gimmicks which belong in the Excessive Scale. However...

Should the Referee wish to allow such psychic supernovas into his campaign, it is recommended that he refer to the ESPer Lens section. The Referee should decide what power level (Scale) he wants the ESPers to be able to achieve, and then determine a method of allowing them to Scale-up their powers to that level. Possible methods include COOL-based rolls reflecting "fury," psychotropic/psionics-enhancing drugs, special martial arts training, or whatever else the Ref can come up with. But beware—messing around with powerful psionics is an easy way to unbalance your campaign. If you're not careful, you find yourself playing a superheroes game rather than an Anime mecha game. You Are Warned.



B³ Δ ビースリー

Building the Better Beast

As a general rule, most of your combat encounters will be with other humans, aliens or Mektons. However, there are will be times when you'll be forced to deal with animal life as well; your Mekton might be shot down in the jungle, requiring a long and dangerous walk back to safety. Perhaps the guards of a certain installation are using sentry dogs while on patrol. Maybe an evil mad scientist has mutated the local fauna into hideous monsters and is using them to destroy the city. All of these situations require a working knowledge of animals and animal combat. Read on, and beware.

Animal Temperament Table

Value	Temperament
1	Cowardly
2	Very Timid
3	Timid
4	Quiet
5	Neutral
6	Active
7	Aggressive
8	Dangerous
9	Very Dangerous
10	Vicious

Animal MA Table

MA	Meter per Turn
1	1m
2	5m
3	15m
4	22m
5	30m
6	50m
7	75m
8	100m
9	200m
10	300m

Animal Stats

Creating animals for Mekton Zeta is a relatively simple process—even easier than creating a character. Each animal is built on a base of 4 to 40 points, similar to the 55 to 100 point base of a player character. The animal's Stats may either be rolled (4D10) and divided between the different Stats, or they can simply be picked to fit what the Referee desires. Either way, it is important to note that this is not a point-based design system—therefore, this system is recommended for Referees only. Don't try to use this system to build beasts on a point-to-cost basis as if they were Mektons—if that's what you're after, build a Techno-Organic Mekton and call it a "monster."

The four Stats needed for an animal are Size, Temperament, Reflexes and MA. Animals have two other attributes: Abilities and Scale. These two may be chosen by the Referee or rolled for randomly.

SIZE: The animal's Size not only determines how many hits it can take in its body, head or limbs (including wings and tails), but will also give to-hit modifiers for combat. Obviously, it is easier to hit an animal the size of an elephant than it is to shoot a mouse. Note: An animal's Stun/Shock number is equal to its Size.

All animals have a Primary attack and a Secondary attack (and a Ram attack): These may be either Bite or Claw, with the Secondary attack automatically being whatever the Primary attack is not. This selection is not changeable once the animal is created: The Animal Size Table gives an approximate Damage value for the size of the animal. When creating the animal, use this only as a starting point. Consider the design of the animal. A relatively small animal might have very sharp claws that do a lot of damage, and a relatively large creature might have only its hooves, which do only a little damage. Be creative, but also be logical when arming animals.

TEMPERAMENT: This is the amount of aggressiveness an animal possesses, measuring just how dangerous the animal is. It will tell how likely it is that the animal will attack or run, and helps determine how effective the animal is in combat.

REFLEXES: This tells how fast the animal can react in a given situation. This Stat is primarily used for the animal's Attack and Defense rolls.

MOVEMENT ALLOWANCE: This gives the number of meters the animal may move in one turn, and how far it can jump. To translate the movement allowance into Mekton scale for Huge and Monstrous creatures, divide the MA by 50 (round up all fractions).

SCALE: Much like the Scaling system in MTS, this is used for determining whether this animal is a house pet or a city-smasher. The animal's Scale number represents the number by which all values on the Animal Size table are multiplied. Animals are normally built at Human Scale (1/10), so all values are listed in Hits and meters. However, you may Scale up your animal, making it the size of a bus, building, or even mountain! Don't forget that 25 Hits = 1 Kill, and note that there is no point value associated with Scale—this aspect of animal creation is entirely up to the designer. If you want to roll Scale randomly, a roll of 10 on 1D10 means it is scaled up. Roll another D10 and check the **"Roll"** column of the table at the bottom of this page.

ABILITIES: These are various "special powers" that animals may have. Once again, no point values are assigned, and all the Abilities are left deliberately vague. The designer of the animal should feel free to shape the style of the Abilities to suit his particular type of animal. If you wish to roll Abilities randomly, roll 1D6-2; this is how many abilities the animal has. For each Ability, roll 1D6: 1-2, roll 1D10 to see which "A" Ability it is; 3-4, roll 1D10 to see

Animal Size Table

Size	Head	Limb	Body	SP	Damage	Hit Mod	Lift/Weight
1	1	1	1	0	1	-2	0
2	1	2	3	0	1D6/3	-1	3kg
3	2	3	5	0	1D6/2	0	10kg
4	5	7	10	0	1D6	0	40kg
5	7	11	15	1	1D6+2	0	120kg
6	10	15	20	3	2D6	0	250kg
7	13	19	25	6	3D6	+1	500kg
8	15	23	30	9	4D6	+1	666kg
9	17	27	35	12	5D6	+2	825kg
10	20	30	40	15	6D6	+2	1000kg

Animal Scale Table

Scale	Hits	SP	Damage	Hit Mod	Lift/Wt	Roll
Human	x1	x1	x1	+0	x1	1-9
Roadstriker	x4	x4	(Max) x4	+3	x4	10; 1-4
Mekton	x10	x10	(Max) x10	+6	x10	10; 5-7
Corvette	x100	x20	(Max) x100	+9	x100	10; 8-9
Starship	x1000	x50	(Max) x1000	+12	x1000	10; 10
Excessive	—Just make it up—					

which "B" Ability it is; 5-6, roll 1D6 to see which "C" Ability it is.

A1—ACIDIC: The animal somehow secretes an acid which does 1/3 the animal's Damage rating (as determined by its Size). This damage is applied once per round for three rounds.

A2—ARMORED: The animal has an extra-tough hide; add 10 to its SP value.

A3—ARMOR-PIERCING: The creature's Damage rating (as determined by its Size) treats any armor as having only 1/2 SP.

A4—CAMOUFLAGED: The animal can make itself very hard to detect. Subtract the creature's Reflexes from any *Awareness* rolls to spot it.

A5—ELECTROMAGNETIC: The animal can generate a field which acts like a powerful ECM signal; treat the field as having 4 Defensive ECM points (vs Missiles, Radar and Sensors).

A6—ENTANGLE: The creature can perform an entangling attack (such as a grapple, pin, bearhug or strangulation); successful Entangles do 1/2 damage every Action *automatically* until the victim escapes.

A7—FLYING: The animal may fly at twice the speed determined by its MA.

A8—HIVEMIND: Animals with this Ability operate in groups, and can perfectly synchronize their actions; this adds +2 to their Initiative rolls.

A9—HYPNOTIC: The animal can hypnotize victims of its own size or smaller, requiring a COOL or Temperament roll vs 15 to resist.

A10—KEEN SENSES: The animal has exceptional senses; Difficulty 25 to avoid being detected by it.

B1—MORPHABLE: The animal can change its shape; maybe it's gelatinous, maybe it's the living version of a Transformable Mekton, whatever. The animal can morph every (10-Reflexes) Turns.

B2—PARASITIC/INFECTIOUS: Taking damage which was done by this animal causes the victim to be infected with some kind of disease or become a host to some kind of spore or egg.

B3—PHASING: The animal can change its density (or is simply so low density) so that it can pass through solid objects, and solid objects can pass through it. The animal can phase every (10-Reflexes) Turns.

B4—POISONOUS: The animal somehow delivers a poison which requires the victim to make a Stun/Shock roll. If the check is failed, the victim falls sick (effectively stunned, for how long depending on Referee preference); if the check is failed by 5 or more, the character dies.

B5—PSIONIC: The creature has a Psionic skill at a level equal to its Temperament.

B6—RANGED ATTACK: This Ability combines with other offense-type Abilities, allowing them to be projected a distance equal to the distance indicated by the animal's MA (WA +0). Getting this Ability twice simply delivers the animal's Damage rating (as determined by its Size) at range.

B7—REGENERATION: The creature can heal damage at a rate of 1 hit per (12-Reflexes) turns.

B8—SHOCKING: The animal can deliver a Shock attack (like a Melee Weapon) at a Shock Value of 5.

B9—SLICK: The animal has a slippery surface, with a Difficulty of (Reflexes x2)+10 to hold onto.

B10—SMART: The animal can be considered to have a human Intelligence Stat of 1.

C1—SPINED: Merely touching the animal causes damage to the toucher; he takes 1/2 the animal's Damage rating (as determined by its Size).

C2—STICKY: The animal has a gluey, gummy surface; if you touch it, you must beat a Difficulty of (Reflexes x2)+10 to get off of it.

C3—STRONG: The animal's Lift and Damage values (as determined by Size) are increased by +50%.

C4—STUNNING: The animal can cause its victims to make a Stun/Shock roll; if they fail, they are unconscious for as many rounds as the creature's Temperament.

C5—TELEPORTATION: The animal can teleport as many meters as the distance indicated by its MA.

C6—WEAK: The animal's Lift and Damage values (as determined by Size) are decreased by 50%.

Animal Combat

Animal Combat is similar to man-to-man or mecha-to-mecha combat; Animals roll Initiative based on their Temperament, and they get 2 Actions just like anybody else. The animal's Attack and Defense rolls are made by totaling its:

Animal Reflexes + Temperament + Combat Modifiers + 1D10

As for men and mecha, if the attack total for the animal is higher than its opponent's defense roll, it hits its opponent. If its opponent's roll is higher, it misses.

Every Animal has a Primary attack, a Secondary attack, and a Ram attack. Primary attacks do full damage and can be performed once per action; Secondary attacks do half damage, but may be performed twice per action (remember that these definitions are subject to alteration according to the animal designer's plans). Rams are done by adding the creature's

Anime-to-English

For those of you who like "genuine" anime-style characters, but may not be farmiliar with a great deal of anime, here are some sample anime-style names.

FIRST NAMES (MALE):
Ryo, Kei, Hiro, Ken, Ryu, Hayato, Eiji, Toshiro, Rei, Alan, Joe.

FIRST NAMES (FEMALE):
• Many Japanese girls' names end with "ko."
Ryoko, Keiko, Sara, Ami, Yoko, Jun (Junko), Kei (Keiko), Mari (Mariko), Yuki, Yui.

LAST NAMES:
• NOTE: Many Animes feature names which all follow a common theme. Themes:
Numerals (Prime, Trio, Zwei, etc.), Guns (Colt, Mauser, etc.), Countries (Francais, Deutsch, etc.), Japanese (Yamato, Kanzaki, Fujimoto, etc.)

Anime-to-English II

For those of you who are shooting for "genuine" anime-style roleplaying, but may not be farmiliar with a great deal of anime, here are some Japanese phrases commonly used in anime.

- **(NAME) NO BAKA** (— *noh bah-kah*): "(person's name) is a fool" or "I hate (person's name)". Usually shouted by little girls about their boyfriends.
- **ABUNAI** (*ah-boo-nigh*): "Look out!" (literally "Danger").
- **AISHITEIRU** (*i-shee-tay-roo*): "I love you".
- **DAIJYOBU** (*dy-joh-boo*): "Are you OK?"
- **DOOSHITE** (*doh-sh'tay*): "Why?"
- **GANBATTE** (*gahn-bah-teh*): "hold on" or "stand tall" or "go for it"
- **GATTAI** (*gah-tigh*): "Combine" (sometimes shouted when combining).
- **HENSHIN** (*hen-sheen*): "Change" (can be shouted when transforming).
- **HASSHA** (*hah-shah*): "Fire" or "Launch" (used for BIG things).
- **HASSHIN** (*hah-sheen*): "Launch" (given as an order).
- **IKIMAS** (*ee-kee-mahss*): "I'm going" or "I'm off" (often said when launching your mecha from the carrier).
- **KOITSU** (*koyt-soo*): "Bastard" (used when addressing soemone you hate, or someone who is slick or sly).
- **KONO YARO** (*koh-noh yah-roh*): "You bastard" or "You scum" (strong).
- **MORATTA** (*moh-rah-tah*): "I have you now".
- **OMAE WA MOO SHINDERU** (*oh-my wah moh sheen-deh-roo*): "You are already dead".
- **NANDA** (*nahn-dah*): "What's that?"
- **NANTE PAWAA DA** (*nahn-teh pah-wah dah*): "What power!"
- **SAYOONARA** (*sah-yoh-nah-rah*): "Farewell."
- **SHINE** (*shee-nay*): "Die!"
- **SUGEE** (*soo-gay*): "Awesome!"
- **SUKEBE** (*skay-bay*): "Pervert" (usually followed by a slap).
- **TEKI DA** (*teh-kee dah*): "It's the enemy" (as in "here they come").
- **UTTEE** (*oo-tay*): "Fire" (given as an order).
- **YATTA** (*yah-tah*): "Got it!" or "Did it!" or "Alright!" or "Yes!"
- **YATTE-YARUZE** (*yah-tay yah-roo-zay*): "We gotta do it" or "Let's do it".

MA to its base damage (it must run at you first). Only creatures which have the Entangling ability may make an Entangling attack, but successful Entangles do 1/2 damage every Action *automatically* until the victim escapes.

Most animal listings will give the amount of damage the animal causes depending on the type of attack it makes. This will usually be a die roll, resulting in the number of hits of damage the animal does for that attack. Some animals may have an especially tough hide, shells or some other form of natural protection. In this case, the animal listings will give an armor value. This is the stopping power of the animal's protection, and is subtracted from the damage done to the animal. Any excess then gets through and is subtracted from the animal's hits. Animal armor does not use Staged Penetration (i.e., its armor does not ablate).

Hurting Animals

Whenever an animal takes damage (i.e., damage penetrates any natural armor it might have), the damage is taken off the location hit. **When an animal gets down to half its remaining hits in a single location, it must roll 1D10 equal to or lower than its Size to remain up and moving.** A failed check means that the creature is stunned for a number of rounds equal to the amount it failed its check by. Such a Stun Shock check will also be called for whenever any kind of stunning or knock-out-effect attack is made against the animal.

HEAD: When an animal's head reaches 0 hits, it is unconscious. At -2 hits, it's dead.

LIMB: When an animal's limb reaches 0 hits, that limb is useless. When it reaches -2 hits, the limb has been severed.

BODY: When an animal's body reaches 0 hits, it is unconscious. When it's body reaches -2 hits, the animal is dead.

Remember to Scale these values as appropriate for the Scale of your animal.

Fight or Flight

In some cases, the Referee may need to determine the animal's reaction. In any general situation, simply roll 1D10 and compare to the animal's Temperament Stat. If the roll is higher than the Stat, the animal runs away. If it is lower or equal, the animal will stay and fight. Roll when the animal is first confronted, then again on every turn of combat where the animal is injured.

Certain types of situations may cause the Referee to modify the roll. For instance, if the animal is a mother protecting her young, the Referee might apply a -5 modifier to the roll. If the attacker is much larger than the animal, he might apply a +1 to +5 (depending on just how much bigger the opponent is). Likewise, if the animal is larger than its opponent, apply a -1 to -5 modifier.

Of course, if the roleplaying scenario calls for the animal to attack, don't bother with Temperament rolls. These are meant as guidelines for use in random encounters or spontaneous situations. Remember: The plot of the adventure is always more important than random die rolls.

Sample Animals

Below you will find an assortment of beasties created with this system. All of these nasty creatures can be found on the planet Algol, and are described on page 145 of *Mekton Z*.

Sample Algolian Animals

Animal	Size	Scale	Temper.	REF	MA	Abilities
Beachmaster	2	Human	8	4	2	Hivemind
Deathgrass	NA	Human	5	1	NA	Infectious
Fenris	5	Human	9	9	6	-
Floater	4	Mekton	6	3	6	Hivemind, Flight, Camouflaged, Acidic, Entangling
Fog Hunter	7	Mekton	6	7	7	Armor-Piercing
Grey Hunter	6	Human	8	6	5	Camouflaged
Gunfark	9	Mekton	5	6	3	Armored, Ranged/Acidic
Kicklizard	7	Roadstriker	6	9	5	Strong
Kregor Dragon	10	Mekton	10	4	7	Entangling, Electromagnetic, Ranged/Stunning, Ranged/Shocking
Razor	6	Human	8	10	6	Smart, Hivemind
Screamer	5	Human	7	8	8	Teleportation
Uru Killer	9	Mekton	10	2	2	Armored

The Series △ ザ・シリーズ

If you're just planning to use *Mekton Z and Zeta Plus* to run a few Mekton slugouts, you won't need to read this section, although you may want to skim it to add some color to your combat games. However, if you're planning to run a roleplaying campaign with Mekton Zeta... if you've been running to the video store every day to rent the latest anime tapes... if you're a serious roleplayer who wants to really get into the anime mecha genre, then this section is for you.

Mekton Z was written with the intention of allowing you to re-create the true feel of a mecha adventure show. This means that you, the Referee, must transfer that exciting anime feel to your own Mekton Zeta adventures. So step aside from all the "build 'em and bash 'em" stuff for a second and think about how to make a giant robot roleplaying game really come alive...

The Series and Its Premise

The series is a continuing sequence of games, linked together by a number of characters and events. Such a campaign is called a series because it closely resembles the format of a real anime TV show. And like a real anime TV show, your series must have a premise.

The series premise is the backbone of the series—a basic idea around which the entire series is built. Each week, the main plotline of the game will somehow revolve around the premise of the series. There are a number of "stock" premises to anime mecha fiction, some of which are outlined in the sidebar.

The Series Synopsis Sheet

Once you have chosen your premise, you have the beginnings of a series. Now is the time to fill out a Series Synopsis sheet (a blank one can be found at the back of this book)—this sheet will help you organize your thoughts about the series, and will also provide your prospective players with information on what to expect from your game.

The Series Synopsis Sheet gives you a way to present all the vital information which your players will need to play in your game. As such, it begins with a space for the name, genre and premise of your series, as well as information on the series voice (as discussed on page 127-28 of *Mekton Z*), amount of realism, Tech Level and the year in which the series will start.

After the basics have been covered, the sheet has a section covering the role of the player-characters; this includes the method of character generation, Stat and skill requirements, and special exceptions or additions in the area of Professions and Templates. The presence (or lack thereof) and the role of ESPers and aliens are also covered in this section.

The Series Synopsis Sheet follows the character section with a section on government and culture. The nations (or other major entities) which will be important and their governmental styles are covered, and there are also spaces for living conditions and langauges.

Being the major focus of Mekton Zeta, Mecha technology gets its own section. A space is provided to declare whether the mecha are going to be Military or Superheroic (see page 53 of *Mekton Z*) in nature, and the accessability of giant robots also gets a spot on the sheet. Notes about Scale, weaponry and other system exceptions and/or restrictions are covered, and Efficiency limitations gets their own space. Propulsion, powerplants and cockpits also get their own spaces in which you can discuss what the standards of your series are.

Mecha technology is followed by Space technology on the sheet. The capabilities of starships (in terms of speeds, operational distance and accessability) are covered, and there is also space to discuss space environments and habitats.

The Series Synopsis Sheet has a final section in which there is space provided to discuss other important notes, such as the technologies of medicine and communications. The use of certain rules variants (such as G-Factor and Let's Active!) also gets a space.

Once the Series Synopsis Sheet has been filled out, your players can, at a glance, know all the important information about your series that they will need in order to generate characters and mecha. Then comes the really fun part—you get to play!

Sample Series Data: ALGOL 1530

On the following pages you'll find a completed Series Synopsis Sheet and stats for three sample mecha from Algol 1530, an example campaign set in the Algol universe (see *Mekton Z* pages 138-147). The first Mekton is fully written up on a Z+ Playsheet and 2-page Z+ Buildsheet, while the other two are on standard MZ Mechasheets. Scan over these pages and then try it yourself.

Stock Premises of Anime Mecha Series

ADVENTURE: Wander from place to place, righting wrongs and saving lives.

EXPLORERS: Go where none have been before, discovering new mysteries as you go.

CLANS: You are members of one of many opposing houses, clans, families or other such group.

INTRIGUE: Try to overthrow an empire or regain the throne, which is rightly yours!

INVASION: Bravely defend your home against hordes of hostile invaders.

MERCENARIES: You'll take any job, no matter how dangerous, as long as the price is right.

POLICE: Enforce law and order in the face of mechanized crime and high-tech chaos.

POST-APOCALYPSE: Survive in a bleak, dangerous world filled with marauders.

REBELLION: Wage an underground war to free your home from the cruel, occupying forces.

RESCUE: Be ready to respond to any crisis, any emergency, any catastrophe, anywhere.

SENTAI: Use your superheroic weapons to defeat the monsters constantly being thrown at you.

COUNTERTERRORISM: Your elite team must find and eliminate an evil secret organization.

WAR: It's Us versus Them, and each side is sure they're right. This could get ugly.

SERIES NAME	ALGOL 1530
REFEREE	Mike MacDonald



BASIC SERIES INFORMATION

PREMISE	Invasion
GENRE	Mecha Sci-Fi
LIGHT, MEDIUM OR SERIOUS?	Medium
REALISM	Realistic
TECH LEVEL	7
STARTING YEAR	AY 1530

IMPORTANT NOTES

MEDICAL TECHNOLOGY	Algol is just developing cloning technologies.
NEW TECHNOLOGIES	ESPer warfare equipment.
SPECIAL RULES	No Let's Activel, will use G-Factor.

PLAYER CHARACTER INFORMATION

ROLE OF THE PCS	Military or civilian mecha pilots.
RANDOM, CONCEPT OR CINERMATIC?	Cinematic. — PCs are Primary Characters.
REQUIREMENTS	Must have combat skills of at least +5.
LIMITS	None.
PROS & TEMPLATES	All from Zeta are available.
ESPERS	Yes.
ESPER PCS?	Only 1 ESPer PC will be allowed.
ESPER POWER LEVEL	No skill greater than +5 allowed.
FREQUENCY OF ESPERS	Rare.
ALIENS	Only one race: the Aggendi.
HOW COMMON?	Not currently present on Algol.
ALIEN PCS?	No.

GOVERNMENT & CULTURE INFORMATION

GOVERNMENT	Monarchy/Empire/Republic.
CULTURE	Psuedo-Medieval.
PLANETS	Algol, 4 Moons, Minar, Persephone, Syberia.
SYSTEMS	One system: Algol.
LANGUAGES	Kargan, Elaran, "Trade" (common) — One at +8 free, must have another at +4.

MECHA TECHNOLOGY

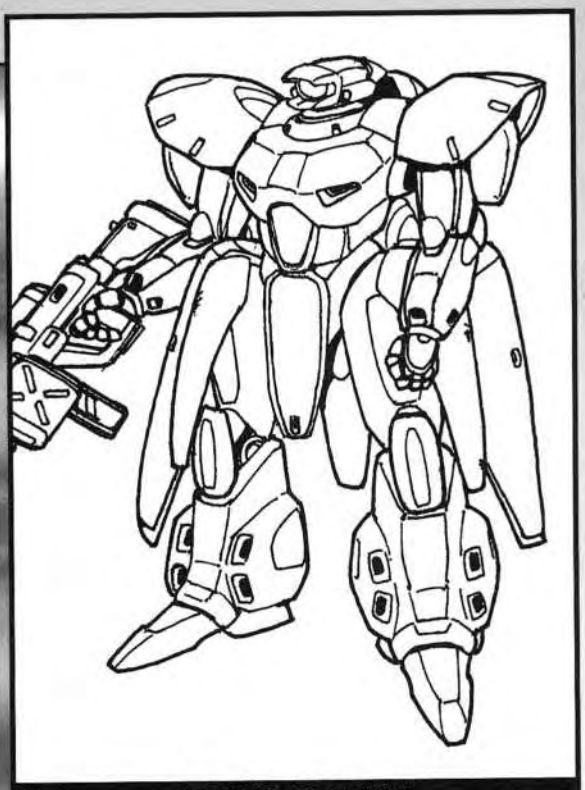
SUPERHEROIC OR MILITARY?	Military. Custom mecha rare, but not unheard of.
ROLE OF MECHA	Fighting machines, civilian Roadstrikers, work mecha.
AVAILABILITY	Common; mecha used in all walks of life.
REQUIREMENTS	Hot Powerplants, Virtual Control Systems. See samples provided.
WEAPONRY	Beams most common, projectile 2nd, all mecha have Melee Weapons or EMWs.
MTS SYSTEMS NOT AVAILABLE	No Cloaking, Techno-Organics for Aggendi only, no Lightspeed, no Teleportation, no Stupid Mekton Tricks.
WEIGHT EFFICIENCY LIMIT	20% max.
SPACE EFFICIENCY LIMIT	10 CP (-20 Spaces) max.
STANDARDS	Mediumweight frames and armor; 6-10K main weapons; see samples provided.

SPACE TECHNOLOGY

STARSHIP AVAILABILITY	Military or government only.
SPACE TRAVEL AVAILABILITY	Shuttle service to Algol's moons.
SUBLIGHT DRIVE	Yes; TL7 level.
HYPERDRIVE	Bare minimum.
SPACE ENVIRONMENTS	Colonies and bases both common.

多次元機甲戦士道

メクトン



MECHA PLAY STATS

Configuration	MV	MR	Land MA	Flight MA
Mekton	-5		4 Hexes	10 Hexes

Maneuver Pool +66%

MECHA COMBAT SKILLS

Mecha Piloting	+ MR=	
Mecha Fighting	+ MR=	
Mecha Melee	+ MR=	
Mecha Gunnery	+ MR=	
Mecha Missiles	+ MR=	

MAIN SYSTEMS

Powerplant XS:	5
Space Protection	
+1 MV Verniers	

MECHA PROFILE

Name	Weight	Cost
IMK-28X D-Stalker	75.35t	246

COMMAND ARMOR, ARMOR & SERVOS

Servomodule	CA-SP	CA-DC	CA-ABC	SP	DC	ABC	Kills	Add+
Head	-	-	-	6	2	-	5	-
Torso	-	-	-	6	2	-	12	-
Right Arm	-	-	-	6	2	-	7	+1K
Left Arm	-	-	-	6	2	-	7	+1K
Right Leg	-	-	-	6	2	-	8	+3K
Left Leg	-	-	-	6	2	-	8	+3K
Right Wing	-	-	-	6	2	-	6	-
Left Wing	-	-	-	6	2	-	6	

SUBASSEMBLIES

Cockpit	# Crew	Type	Enc.	Options
Torso	1	VR	Armored	E-Pod

Subassemblies	Loc	K
1000km Fuel	T	-

MOVEMENT SYSTEMS

Movement System	Loc	Kills
Thrusters (2MA)	RW	0
Thrusters (2MA)	LW	0
Thrusters (6MA)	T	0

SENSORS

Sensors	Main	Backup	
Loc	Head	Head	
Range	7km	1km	
Comm	1000km	300km	
Kills	1	2	
Notes	Target Analyzer		

SHIELDING

Shield	DA	SP	DC	ABC	Loc	Notes
-						

ARMAMENT

Weapon	WA	Range	Damage	Shots	Kills	Loc	Notes
Right Hand	+0	M	1K+	-	1	RA	Quick, Handy.
Left Hand	+0	M	1K+	-	1	LA	Quick, Handy.
Head Laser	-1	3	2K	∞	2	H	All-Purpose
Rastas	+0	M, 4	4K-AP	-	4	1-H	AP, Returning
Autocannon	↓	6	4K	↓	4	2-H	BV=5
Autocannon Ammo	+1	-	-	10 B	1	↑	Tracer
Grenade Launcher	-2	13 Max	5K	↓	5	↑	Long Range
Grenade Ammo	↑	-	-	4	1	↑	B 1, Scatter
4 Ammo Clips	+1	-	4K	10 x4	1 x4	Legs	Inside Leg
2 Grenade Clips	-	-	5K	4 x2	1 x4	Legs	Inside Leg

REMOTE INFORMATION

Control Multiple	Control	Operation
-		

Servos & Armor	Weapons

Other Systems

Weight	MV	MR	Skill	L-MA	F-MA	MP

SERIES



MECHA NAME	IMK-28X "D-Stalker"		
COST	246 CP	WEIGHT	75.35 tons
APT		MANEUVER POOL	+66%

CONFIGURATION	MV	MR	LAND MA	FLIGHT MA
Mekton	-5		4 Hexes	10 Hexes

0	COST MULTIPLIERS	x1.35

POWERPLANT	SOURCE	XS	MV	MA	MP	COST
Over, Hot.	Fusion	5	+1	+1	+33%	x0.15

CONTROL SYSTEM	M-POOL	COST
Virtual	+33%	x0.05

HYDRAULICS	SPACE	MELEE	LIFT	COST
Standard	+/-0	+0	x1	x0.0

SYSTEM	NOTES	SPC	EFF	COST
Verniers	+1 MV (2RL, 2LL, 1T)	5	0	x0.1
Enviro	Space Protection	0	0	x0.05

11.5	SENSOR SYSTEMS	1.5t

SENSOR	LOC	RANGE	COMM	KILLS	CP	EFF	SPACE	COST
Medium Striker	H	7km	1000km	1	4	0	1	4
Target Analyzer	H	7km	-	0	5	0.5	0	5.5
Backups	H	1km	300km	2	2	0	2	2

32	MOVEMENT SYSTEMS	0

SYSTEM	MA	LOC	KILLS	CP	EFF	SPACE	COST
Sub-Thruster	2	R. Wing	0	6	0	6	6
Sub-Thruster	2	L. Wing	0	6	0	6	6
Main Thruster	6	Torso	0	16.3	3.7	9	20

119	SERVOS & ARMOR	53.5t

SP	DC	KILLS
6	2	5
6	2	12
6	2	7
6	2	7
6	2	8
6	2	8
6	2	6
6	2	6

LOCATION	CLASS	MELEE+	SPACE	COST
Head	HS	-	5/0	5
Torso	MW	-	12/0	12
Right Arm	MW	+1	7/6	7
Left Arm	MW	+1	7/6	7
Right Leg	LH	+3	8/3.8	8
Left Leg	LH	+3	8/3.8	8
Right Wing	MW	-	6/0	6
Left Wing	MW	-	6/0	6

ARMOR	TYPE	ABSORPTION	COST
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5
MW	Alpha	-	7.5

63.2	WEAPONS	13.5t

WEAPON	WA	RANGE	DAMAGE	SHOTS	KILLS	LOC	CP	EFF	SPACE	COST	NOTES
Right Hand	+0	Melee	1K+	-	1	RA	1.5	0.5	1	2	Quick, Handy
Left Hand	+0	Melee	1K+	-	1	LA	1.5	0.5	1	2	Quick, Handy
Head Laser	-1	3	2K	∞	2	H	4.7	1.4	2	6.1	All-Purpose
Rastas (short broadsword)	+0	Melee, 4	4K-AP	-	4	1-H	6	0	6	6	A-P, Thrown-Returning.
Autocannon	↓	6	4K	↓	4	2-H	9.6	0	(9.6)*	9.6	Mated to GL, BV=5.
Autocannon's Ammo Clip	+1	-	4K	10 Bursts	1	↑	2.9	0	(1)*	2.9	Tracer ammo, in AC.
Grenade Launcher	-2	13 Max	5K	↓	5	2-H	5	0	(5)*	5	Mated to AC, Long Range.
Autocannon's Grenade Clip	↑	-	5K	4 Shots	1	↑	6	0	(0.2)*	6	Blast=1, Scatter, in GL.
											*Mated Weapon Space: 12.2.
4 Spare Ammo Clips	+1	-	-	10-B x4	1 x4	R, LL	11.6	0	2/2	11.6	Stored inside right Leg.
2 Spare Grenade Clips	0	-	-	4 x4	1 x4	R, LL	12	0	0.2/0.2	12	Stored inside left Leg.

SERIES



MECHA NAME	IMK-28X "D-Stalker"		
COST	246 CP	WEIGHT	75.35 tons

1. Base Weight (All Kills / 2)	68.5t
2. Fuel Weight	6.85t
3. New Weight (1 + 2)	75.35t
4. Base Cost (All CPs)	182.2 CP
5. Cost Multiplier (All, +x1.0)	x1.35
6. Multiplied Cost (4 x 5)	246 CP
7. Weight Efficiency (- Tons)	-0t
8. Weight Eff Cost (7 x2)	0 CP
9. Efficient Weight (3 - 7)	75.35t
10. Efficient Cost (6 + 8)	246 CP
COMMAND ARMOR, BOOSTERPACKS, ETC	
11. Base Weight (Kills / 2)	-
12. Base Cost (All CPs)	-
13. Cost Multipliers (All, +x1.0)	-
14. Multiplied Cost (12 x 13)	-
15. Weight Efficiency (- Tons)	-
16. Weight Efficiency Cost (15 x2)	-
17. Efficient Weight (11 - 15)	-
18. Efficient Cost (14 + 16)	-
REMOTE UNITS	
19. Base Weight (All Kills / 2)	-
20. Fuel Weight	-
21. New Weight (19 + 20)	-
22. Base Cost (All CPs)	-
23. Cost Multiplier (All, +x1.0)	-
24. Multiplied Cost (22 x 23)	-
25. Weight Efficiency (- Tons)	-
26. Weight Eff Cost (25 x2)	-
27. Efficient Weight (21 - 25)	-
28. Efficient Cost (24 + 26)	-
30. Number of Remotes	-
31. Remotes Cost (28 x 30)	-
32. Remotes Weight (27 x 30)	-
TOTAL VALUES	
32. Total Cost (10 + 18 + 31)	246 CP
33. Total Weight (9 + 17 + 32*)	75.35t
SCALING	
34. Scale	x1
35. Cost Scale Factor	x1
36. Weight Scale Factor	x1
37. Final Cost (32 x 35)	246 CP
38. Final Weight (33 x 36)	75.35t

ADDITIVE SYSTEMS

2 CP — 75.35t

Crew	Loc	Enclosure	Notes	CP	Eff	Spc	Cost
One	T	Armored	Virtual Control	0	0	1	0

System	Loc	Notes	K	CP	Eff	Spc	Cost
Escape Pod	T	Standard Type.	0	2	0	1	2
Fuel	T	1000km = 6.85t	0	0	0	0	0

REMOTE BUILD INFORMATION

0 CP — Tools

CM	MV	MR	APT	MP	Land MA	Flight MA
None.						

SP	DC	K	Servo	Spc	CP	Armor	CP	System	Notes	Spc	K	CP

Weapon	WA	RNG	DMG	#SH	K	Loc	CP	Eff	Spc	Cost	Notes

SHIELDS

0 CP — Tools

Location	Class	Type	DA	SP	DC	Absorption	Space	Loc	Cost	Notes (Binder Space, Reset, etc)
None.										

COMMAND ARMOR, BOOSTERPACKS & DROP TANKS

0 CP — Tools

Location	Class	Type	SP	DC	Absorb	Space	B.Mod	Cost	Equipment
None.									

SERIES

多次元機甲戦士道

メクトン

MEKTON STATS

Configuration	MV	MR	Land MA	Flight MA
Mekton	-5		3 hexes	11 hexes

MANEUVER POOL +33%

MECHA COMBAT SKILLS

Mecha Piloting	+ MR=	
Mecha Fighting	+ MR=	
Mecha Melee	+ MR=	
Mecha Gunnery	+ MR=	
Mecha Missiles	+ MR=	

COST MULTIPLIERS x0.15

Multiplier System	CP x ?
Powerplant XS: 5	-x0.1
Virtual Control (+33%MP)	x0.05
Desert & Arctic	x0.1
+1 MV Verniers (2.5/Leg)	x0.1

SERVOS & ARMOR 106.4 — 42t

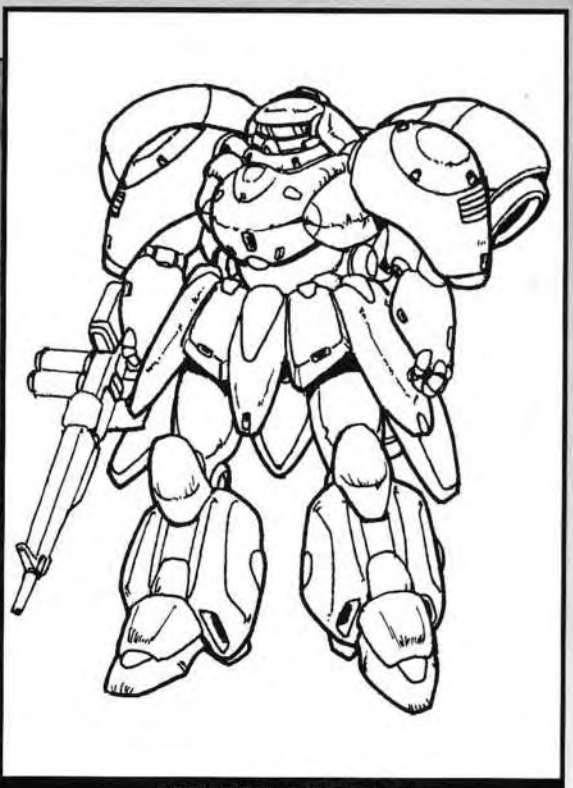
SP	Kills	Servo	Level	Space	Cost	Armor	Cost
5	4	Head	MS	4/0	4	HS-a	6.3
5	12	Torso	MW	12/9	12	HS-a	6.3
5	6	Right Arm	HS	6/4	6	HS-a	6.3
5	6	Left Arm	HS	6/3	6	HS-a	6.3
5	8	Right Leg	LH	8/3.5	8	HS-a	6.3
5	8	Left Leg	LH	8/3.5	8	HS-a	6.3
5	0	Right Pod	MW	12	6	HS-a	6.3
5	0	Left Pod	MW	12	6	HS-a	6.3

MOVEMENT SYSTEMS 26.8 — Tons

Movement System	Loc	Spc	CP	K
Main Thruster (6MA)	R Pod	12	13.4	0
Main Thruster (5MA)	L Pod	12	13.4	0

SENSORS 6 — 1.5t

Sensors	Main	Backup	
Loc	Head	Head	
Range	7km	1km	
Comm	1000km	300km	
Kills	2	2	
Cost	4	2	
Space	1	2	



MEKTON PROFILE

Name	Weight	Cost
EMA-125A Vigilante	62.7t	261.4 CP

SUBASSEMBLIES 15.5 — 5.7t

Cockpit	# Crew	Options	Space	CP
Torso	One	E-Pod	2	2

Subassemblies	Loc	Space	CP	K
Target Analyzer	H	1	5	0
Liftwire, Codelock	T	0	0.7	0
4 Spotlights	H	0	0.8	0
2x 1000kg Storage	R, LL	2 each	2	0
2 Micromanipulators	R, LA	1 each	2	0
Damage Control	T	1	1	0
Linkage for Missiles.	R, LA	0	2	0
1000km Fuel: +5.7t	T	0	0	0

SHIELDS 12.5 — 5t

Shield	DA	SP	Loc	Space	Cost
MW-a	-2	10	LA	1	12.5

ARMAMENT 60.1 — 8.5t

Weapon	WA	Range	Damage	Shots	Kills	Loc	Cost	Space	Notes
Right Hand	+0	Melee	1K+1	-	1	RA	2	1	Quick, Handy
Left Hand	+0	Melee	1K+1	-	1	LA	2	1	Quick, Handy
Micromissile Launcher	-1	5	3K	12	2	RA	16.5	3	Smart-1; Skill 15+; Linked.
Micromissile Launcher	-1	5	3K	12	2	LA	16.5	3	Smart-1; Skill 15+; Linked.
Variable Beam Rifle	-	-	-	-	7	2H	16.5	12	Handheld Portfolio-2 E-Pool
(Standard Bolt)	+1	9	5K	∞	-	-	(7.5)	-	Folio-1
(Heavy Blast)	+1	6	10K	WU=2	-	-	(7.9)	-	Folio-2; Warm-Up = 2 Turns.
Beam Machete	+1	Melee	6k	TIU=3	2	1H	3.3	3.3	Handheld; Rechargeable.
Beam Machete	+1	Melee	6k	TIU=3	2	1H	3.3	3.3	Handheld; Rechargeable.

SERIES

多次元機甲戦士道

メクトン MEKTON

MEKTON STATS

Configuration	MV	MR	Land MA	Flight MA
Mekton	-6		3 hexes	6 hex jump
(Underwater movement)				4 hexes

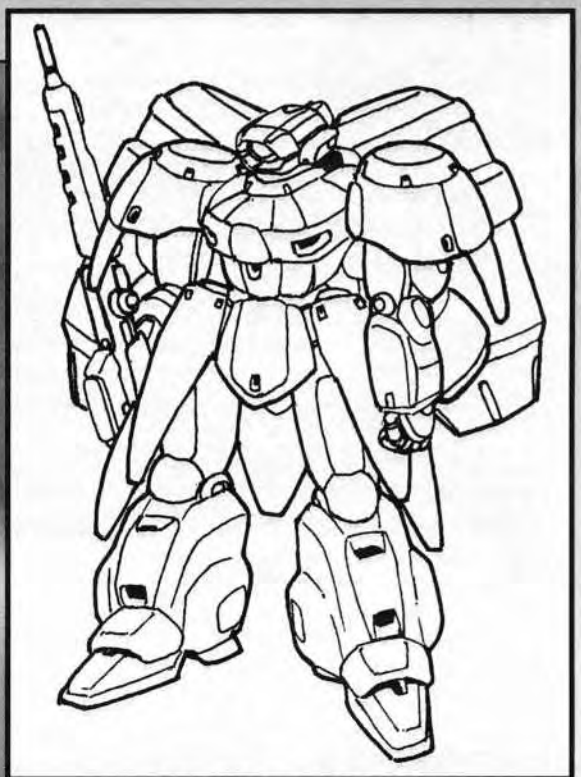
MANEUVER POOL +33%

COST MULTIPLIERS x1.4T

Multiplier System	CP x ?
Powerplant XS: 5	x0.15
Virtual Control (+33%MP)	x0.05
Arctic & Underwater	x0.1
+1 MV Verniers (2/Leg, 1T)	x0.1

MECHA COMBAT SKILLS

Mecha Piloting	+ MR=	
Mecha Fighting	+ MR=	
Mecha Melee	+ MR=	
Mecha Gunnery	+ MR=	
Mecha Missiles	+ MR=	



MEKTON PROFILE

Name	Weight	Cost
EMA-125M Rampant	80.85t	368.8 CP

122 SERVOS & ARMOR 54.5t

SP	Kills	Servo	Level	Space	Cost	Armor	Cost
6	6	Head	MW	6/2	6	MW-a	7.5
6	12	Torso	MW	12/7	12	MW-a	7.5
6	7	Right Arm	HS	7/5	7	MW-a	7.5
6	7	Left Arm	HS	7/5	7	MW-a	7.5
6	8	Right Leg	LH	8/2	8	MW-a	7.5
6	8	Left Leg	LH	8/2	8	MW-a	7.5
6	6	Right Wing	LH	9/0	7	MW-a	7.5
6	6	Left Wing	LH	9/0	7	MW-a	7.5

12.4 SUBASSEMBLIES 7.35t

Cockpit	# Crew	Options	Space	CP
Torso	One	M-Pod	2	4

Subassemblies	Loc	Space	CP	K
Marine Suite	H	1	2	0
2 Spotlights	R, LA	0	0.4	0
1500kg Storage	T	3	3	0
Micromanipulators	RA	1	2	0
Damage Control	T	1	1	0
1000km Fuel: +7.35 t	T	0	0	0

45.6 MOVEMENT SYSTEMS Tons 0

Movement System	Loc	Spc	CP	K
Hydro-Jump Jets (5)	RW	6	19.7	0
Hydro-Jump Jets (5)	LW	6	19.7	0
Hydro-Jump Jets (1)	RL	3.1	3.1	0
Hydro-Jump Jets (1)	LL	3.1	3.1	0

6 SENSORS 1.5t

Sensors	Main	Backup	
Loc	Head	Head	
Range	7km	1km	
Comm	1000km	300km	
Kills	2	2	
Cost	4	2	
Space	1	2	

11 SHIELDS 5.5t

Shield	DA	SP	Loc	Space	Cost
LH-a	-3	11	LA	1	11

66.4 ARMAMENT 12t

Weapon	WA	Range	Damage	Shots	Kills	Loc	Cost	Space	Notes
Right Hand	+0	Melee	1K+1	-	1	RA	2	1	Quick, Handy
Left Hand	+0	Melee	1K+1	-	1	LA	2	1	Quick, Handy
Subroc Launcher	-1	25 max	8K	5	3	RW	6	3	Long Range
Subroc Launcher	-1	25 max	8K	5	3	LW	6	3	Long Range
Rastas	+0	M, 4	4K-AP	-	4	1-H	6	6	Handheld; Thrown-Returning.
Rocket Rifle	+1	11	5K	↓	5	2-H	9.4	9.4	Handheld
Rocket Rifle Ammo	-	-	-	3	1	↑	5	0.3	In gun; Kinetic, Blast 1.
3 Spare Rocket Rifle Clips	-	-	-	3 x3	3	RL	15	0.9	In R. Leg; Kinetic, Blast 1.
3 Spare Rocket Rifle Clips	-	-	-	3 x3	3	LL	15	0.9	In L. Leg; Kinetic, Blast 1.

SERIES NAME	
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多次元機甲戦士道

MEKTON

メクトン

MECHA PLAY STATS

Configuration	MV	MR	Land MA	Flight MA

MANEUVER POOL

MECHA COMBAT SKILLS

Mecha Piloting	+ MR=	
Mecha Fighting	+ MR=	
Mecha Melee	+ MR=	
Mecha Gunnery	+ MR=	
Mecha Missiles	+ MR=	

MAIN SYSTEMS

Powerplant XS:	

COMMAND ARMOR, ARMOR & SERVOS

Servomodule	CA-SP	CA-DC	CA-ABC	SP	DC	ABC	Kills	Add+

MECHA PROFILE

Name	Weight	Cost

SUBASSEMBLIES

Cockpit	# Crew	Type	Enc.	Options

Subassemblies	Loc	K

MOVEMENT SYSTEMS

Movement System	Loc	Kills

SENSORS

Sensors			
Loc			
Range			
Comm			
Kills			
Notes			

SHIELDING

Shield	DA	SP	DC	ABC	Loc	Notes

ARMAMENT

Weapon	WA	Range	Damage	Shots	Kills	Loc	Notes

REMOTE INFORMATION

Control Multiple	Control	Operation

Servos & Armor	Weapons

Other Systems

Weight	MV	MR	Skill	L-MA	F-MA	MP

多次元機甲戦士道

MEKTON

メクトン

MECHA NAME			
COST		WEIGHT	
APT		MANEUVER POOL	

CONFIGURATION	MV	MR	LAND MA	FLIGHT MA

CP	COST MULTIPLERS	+x1.0

POWERPLANT	SOURCE	XS	MV	MA	MP	COST

CONTROL SYSTEM	M-POOL	COST

HYDRAULICS	SPACE	MELEE	LIFT	COST

SYSTEM	NOTES	SPC	EFF	COST

CP — **SENSOR SYSTEMS** — Tons

SENSOR	LOC	RANGE	COMM	KILLS	CP	EFF	SPACE	COST

CP — **MOVEMENT SYSTEMS** — Tons

SYSTEM	MA	LOC	KILLS	CP	EFF	SPACE	COST

CP — **SERVOS & ARMOR** — Tons

SP	DC	KILLS

LOCATION	CLASS	MELEE+	SPACE	COST

ARMOR	TYPE	ABSORPTION	COST

CP — **WEAPONS** — Tons

WEAPON	WA	RANGE	DAMAGE	SHOTS	KILLS	LOC	CP	EFF	SPACE	COST	NOTES

多次元機甲戦士道

MEKTON

メクトン

MECHA NAME		
COST CPs	WEIGHT Tons	
1. Base Weight (All Kills / 2)		
2. Fuel Weight		
3. New Weight (1 + 2)		
4. Base Cost (All CPs)		
5. Cost Multiplier (All, +x1.0)		
6. Multiplied Cost (4 x 5)		
7. Weight Efficiency (- Tons)		
8. Weight Eff Cost (7 x2)		
9. Efficient Weight (3 - 7)		
10. Efficient Cost (6 + 8)		
COMMAND ARMOR, BOOSTERPACKS, ETC		
11. Base Weight (Kills / 2)		
12. Base Cost (All CPs)		
13. Cost Multipliers (All, +x1.0)		
14. Multiplied Cost (12 x 13)		
15. Weight Efficiency (- Tons)		
16. Weight Efficiency Cost (15 x2)		
17. Efficient Weight (11 - 15)		
18. Efficient Cost (14 + 16)		
REMOTE UNITS		
19. Base Weight (All Kills / 2)		
20. Fuel Weight		
21. New Weight (19 + 20)		
22. Base Cost (All CPs)		
23. Cost Multiplier (All, +x1.0)		
24. Multiplied Cost (22 x 23)		
25. Weight Efficiency (- Tons)		
26. Weight Eff Cost (25 x2)		
27. Efficient Weight (21 - 25)		
28. Efficient Cost (24 + 26)		
30. Number of Remotes		
31. Remotes Cost (28 x 30)		
32. Remotes Weight (27 x 30)		
TOTAL VALUES		
32. Total Cost (10 + 18 + 31)		
33. Total Weight (9 + 17 + 32*)		
SCALING		
34. Scale		
35. Cost Scale Factor		
36. Weight Scale Factor		
37. Final Cost (32 x 35)		
38. Final Weight (33 x 36)		

ADDITIVE SYSTEMS

CP Tons

Crew	Loc	Enclosure	Notes	CP	Eff	Spc	Cost

System	Loc	Notes	K	CP	Eff	Spc	Cost

REMOTE BUILD INFORMATION

CP Tons

CM	MV	MR	APT	MP	Land MA	Flight MA

SP	DC	K	Servo	Spc	CP	Armor	CP	System	Notes	Spc	K	CP

Weapon	WA	RNG	DMG	#SH	K	Loc	CP	Eff	Spc	Cost	Notes

SHIELDS

CP Tons

Location	Class	Type	DA	SP	DC	Absorption	Space	Loc	Cost	Notes (Binder Space, Reset, etc)

COMMAND ARMOR, BOOSTERPACKS & DROP TANKS

CP Tons

Location	Class	Type	SP	DC	Absorb	Space	B.Mod	Cost	Equipment

GOMEN NASAI....
("PLEASE FORGIVE US")

Well, it happens.

All of us here at RTG are very proud of Mekton Z, and we've gotten a lot of flattering responses about the game (thanks very much).

However, nobody's perfect and we've found the proof; there are a few goofs in Mekton Z. We wouldn't want to leave our loyal fans in the dark, so here's the errata.

If it is needed, we will continue to produce errata as necessary, usually on the last page of the newest release. Any new rules changes will be there.

Errata List △ エラッタのリスト

PAGES 41-42: A combat knife cannot be thrown accurately, but a dagger can.

PAGE 41-42: Personal Energy Swords get the EMW "hot knife through butter" effect; they treat personal armor as being 10SP less.

PAGE 45-46: The cost of the Personal Powered Armor is off by a power of 10; it's actual Cost should be 10,560¥.

PAGE 53: Mechatank Form mecha all have an additional -1 MV.

PAGE 55: Sensors need to be placed in the head to offset a -3 *Awareness* penalty ONLY for Humanoids (Mektons), Beasts and Avians.

PAGE 55: Legs: "Leg servos must be at least one level below the Torso to be able to walk" should read "Leg servos can be no smaller than one Classification Level lower than the Torso".

Page 59, 82: Medium Shield has a -2DA, and Small Shield has a -1DA. This is NOT a typo; the smaller Shield has a better DA because it is light and can be brought to bear quicker than the Medium Shield.

Page 59-60, 82: It should be stated that all EMWs get the "hot knife through butter" effect; they treat armor as being -4SP less.

Page 60, 82: All Mekton weapons listed have NO areas of effect (see the sidebar on page 11 of this book); see the Missiles section (pages 31-35) to build Mekton hand grenades, etc.

Page 64: The Aquamecha description should read that it "ignores the x3 MA penalty."

Pages 67-72: The sample mecha are controlled by the following factions: Rapier, Gunther, Talos, and Hermes are PDF units, while the Gorgon and Kraken are Imperial.

PAGE 78: The Starships' MA listing is just for maneuvering; their Sublight drives are used for determining interplanetary travel times.

PAGE 77: If you do the math, you'll find that CIDS systems listed in the Ship Weapons and Subassemblies table are cheaper than they should be (they're built as 1/1 Scale Beam Weapons with a 360° Wide Angle Effect and an Infinite Burst value). Let's just say that the CIDS systems in the book are "on sale."

PAGE 88: Initiative can be deferred. If the person who goes first wants to wait, he can let the next person go, and then act.

PAGE 89: MZ can be played without minis by calculating all mechas' Speedlines and using real-world values for hexes (1 Hex = 50m).

PAGE 94: The sidebar refers to advanced space movement rules in Z+. Our mistake—as you now know, there are none.

PAGE 101: Out-of-Scale combat: To damage a target of Mekton (1/1) Scale or larger, your weapon's average damage must be at least 1 Kill (25 Hits). A 5D6 autorifle cannot hurt a Mekton, becuase its average damage is 17.5. Human-Scale weapons must be able to do at least 7D6+1 in order to damage Mektons. Roadstrikers can be hurt by any weapon with an average of 5 points or more (1D6+2 or 1D10 or more).

PAGE 95-102: Called Shots: you may aim at Special or Cinematic locations at -6.

PAGE 95-96: Autofire: you may fire any weapon once per Action, and may do so consecutively; you could indeed fire an autofire rifle on every one of your actions in a turn.

PAGE 97: On the deviation chart, replace "The number rolled on the unsuccessful attack," with "The number by which the attack is failed".

PAGE 98: Armor-Piercing Attacks: "axes" should not be listed as AP.

PAGE 98: For Shock attacks, the rules say the pilot lose turns, but the example indicates actions. It's TURNS.

PAGE 99: Bite is WA +1 in the chart and WA +0 in the text. +0 is correct. Attacking with head-mounted weapons is possible for humanoids; putting a Melee Weapon in your Head Servo can be very helful if you are Pinned. This could also simulate jaws for Humanoid "monster" mecha; it's all WA +0.

PAGE 99: Dismemberment: damage is the same whether you have 1 arm, 2 arms, 4 arms, whatever. If you do not do enough damage to rip the limb off, the limb still takes the listed damage.

PAGE 101: Out of Scale Mods chart contradicts the Ship-building section where it's said Ships have -8 vs Mektons and Mektons have +8 vs Ships. In fact, the difference is NOT 8, but 6 in both directions.

PAGE 102: Crits & Megacrits when caused by Autofire Weapons and Missile Salvos: refer to the top of page 32 of this book.

PAGE 102: When applying Cinematic Damage, unless you beat your target's defense roll by 10+, he still gets armor protection.

PAGE 103: Because a Stun Roll is an attempt to roll under your Stun Save (rather than over), the listed modifiers for Drugs or Sleep Gas should be positive, not negative.

PAGE 106: The Driving Roll Failure table should not use a random D10 roll, but rather be determined by the amount the roll is missed by (see the example).

PAGE 114: Under So They Didn't Get Shot..., the phrase in the example which says "That shifts the damage down to 8..." should read "That shift the damage down by 3 levels...".

PAGE 117: Anime Leap is alternately listed as 1x MA and 2x MA; it is actually 1x MA.



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