Big Robots, Cool Starships ™

A MECHA/SF SUPPLEMENT FOR BIG EYES, SMALL MOUTH ™

Written By
David L. Pulver

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Dedicated to Timothy and Peggy Pulver, John Nowak and Mark MacKinnon, for your support, trust and friendship.

Foreword

I am proud to present the first supplement for *Big Eyes, Small Mouth!*

Guardians Of Order would like to extend a sincere "thank you" to everyone who has patiently waited for us to start supporting the *BESM* line. I hope you find that this book was worth the wait.

When I first published *BESM* in August 1997, I had only intended to commit myself to the company part-time. In fact, I had hoped to sell the entire first print run of 1000 copies over my lifetime. When the game premiered at GenCon 97, I discovered that I had a hit on my hands. We blew through 125 copies at the convention in three days, and the rest of the print run in less than six months. During that time, *BESM* also received a nomination for the Origins Award for "Best Role-Playing Game" of 1997 — an honour that I will treasure forever. The game's success prompted me to expand the company's operations, and in January of 1998 we acquired the RPG rights to the popular anime series, *Sailor Moon.* All throughout 1998, Karen (my VP) and I were forced to split our time between producing the *The Sailor Moon Role-Playing Game and Resource Book* and our university degrees. Consequently, we could not start directly supporting the *BESM* line as soon as we would have liked. This is now changed.

In November 1998, acclaimed industry writer, David L. Pulver, began work for the company as Associate Line Editor and Senior Staff Writer. David has worked on many GURPS books for Steve Jackson Games (including *GURPS Biotech, GURPS Mecha,* and *GURPS Vehicles)* as well as other game companies, including R. Talsorian Games and TSR. David's first task at Guardians Of Order was to develop the best and most complete mecha/vehicle/building multi-genre creation system the gaming industry has ever seen. David worked wonders with the Tri-Stat System, and *Big Robots, Cool Starships* was the result. I think that this is simply one of the best game supplements ever created. The flexible creation system allows players to design any organic or man-made structure that they can imagine — from the smallest robot to the largest planet-killer, from tenth-century pirate ships to thirtieth-century spaceships. Motorcycles, giant monsters, helicopters, multi-legged walkers, powered armour, steam-punk mecha-dragons, transforming cyborgs, deadly laser weapons, slick sport cars...it is all possible with this single book!

Once again, thank you for your support. This company was built by dedicated anime and role-playing fans such as yourself, and we will continue to earn your patronage by producing the best anime RPGs available. Next up: *Hot Rods and Gun Bunnies* in August 1999 by Jim Crocker — a supplement for the "guys-with-cars and girls-with-guns" anime and Hong Kong cinema genre!

Mark C. MacKinnon
June 1999

Table of Contents

INTRODUCTION

The Origins off Mecha

"Mecha" is the term used by animators and fans to refer to the mechanical designs that appear in Japanese anime and *manga.* A mecha often invokes images of giant robots, but it can actually refer to any mechanical device, including spaceships, normal automobiles, jet planes, or even motorcycles. This book provides a means to describe and design mecha within *Big Eyes, Small Mouth's* **Tri-Stat System,** with simple, playable mechanics for using them in anime-style role-playing adventures.

The use of mecha in anime can be traced back to 1963. Mushi Production's *Tetsuwan Atom,* (dubbed into English as *Astro Boy),* featured the adventures of a super-powered android boy. This series was not only the first robot-mecha, but also the very first Japanese animated television series. *Tetsuwan Atom* was followed by many other shows that featured high-tech vehicles and robots, including the famous *Mach Go Go Go!* (1967; dubbed into English as *Speed Racer)* with its super-powered race car, and *Iron Man 28* (1966; dubbed into English as *Gigantor),* whose boy hero operated a giant remote-control robot.

When people think of Japanese anime today, one of the most enduring images is the giant humanoid robot, inside which rides the heroic pilot. This idea originated with ace creator Go Nagai and his pioneering mecha television show *Mazinger Z* (1972; dubbed into English as *TranZor Z).* With a human in the cockpit, action could now take place on two levels: dynamic mecha battles, and dramatic soap operas involving their ordinary human pilots. Later series introduced combining and transforming robots that could shift forms, merge together, or do both. An entire anime genre was born — teams of agents using super-powered robots — which soon began a craze that even spread to North America with shows such as *Transformers* (1984). *Space Cruiser Yamato* (1974) was another seminal work. Dubbed into English as *Star Blazers,* it was a sprawling space opera in which a spacefaring battleship (and its fighter squadron) was sent on an epic quest to save a dying Earth from a hostile space empire. The series won dedicated fans for its complex continuing story arc and changing characters, a feature that has also garnered critical acclaim for American television shows such as *Babylon 5.*

Chapter 1
Introduction
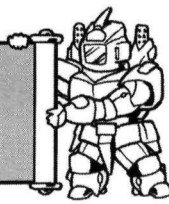
Mobile Suit Gundam (1979) was a different kind of big robot show: a realistic science fiction war story. Instead of robots that were unique inventions run by secret agencies, they were mass-produced combat machines, fighting in battle alongside tanks and jet fighters. While retaining the trappings of 20-metre tall robots and dramatic space battles, its core was a hard-edged SF story focusing on character development in the crucible of war. Although slow to find an audience, *Gundam* (like the original *Star Trek* series) became wildly popular once it was released in syndication; this created a surge in the popularity of media shows, including the very successful *Super-Dimensional Fortress Macross* (1982; dubbed into English as *Robotech).* More importantly, it opened up an untapped market for anime aimed at an older teenage audience, paving the way for the wide variety of action and drama series seen today, not to mention the many RPGs, novels, and computer games.

Of course, mecha anime need not focus on fantastic robots and science fiction vehicles. Anime shows such as *Area 88* (1985; mercenary fighter pilots in the Middle East), *801 TTS Airbats* (1994; more pilots, in the Japanese air force), *Riding Bean* (1989; cops, crooks, and car chases in modern-day Chicago), *Silent Service* (1995; Tom Clancy-esque submarine duels), and *Porco Rosso* (1992; the adventures of a flying boat pilot in 1920's Italy) demonstrate that anime offerings are not lacking in mecha action.

Using *Bid Robots, Cool Starships*

Big Robots, Cool Starships (BRCS) is a multi-genre anime supplement that adds mecha design and combat rules to the *Big Eyes, Small Mouth* role-playing game *(BESM)* and Guardians Of Order's Tri-Stat System. With these rules, the GM has more detailed mechanics to run a mecha-heavy campaign, featuring the exploits of angst-ridden robot pilots, sleek combat cyborgs, bold starship captains, and many other anime mecha archetypes. This supplement is not just for mecha battle campaigns, however. Nearly all anime settings include some form of vehicle action. *BRCS* is designed to be flexible enough to give the GM the freedom to create almost any vehicle's game Stats in a few minutes, and then help resolve car chases, starship crashes, or pirate attacks quickly and cinematically.

While *BRCS* adds some extra detail to *BESM,* it avoids complex war-game mechanics or formula-heavy mecha design rules. Instead, the system addition is a simple but very flexible mechanic that allows players and GMs to create just about any kind of mecha without sacrificing imagination in favour of realism or play balance. After all, no matter how awe-inspiring the mecha, it really only has one goal: to propel the character into the adventure, and make the action that much more dramatic!!

CHAPTER 2

MECHA CREATION

This chapter provides simple, yet comprehensive, rules to help you create big robots, cool starships and many other different types of mecha. New and expanded descriptions of mecha-related Character Attributes and Defects are also provided. These rules are designed to enhance the mecha or cybernetic body design process if you acquire the **Own** A **Big Robot or Cybernetic Body** Attributes for your character.
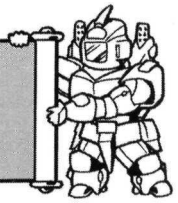
Approximate Conversion Notes: 1 metre=l yard=3.5 feet; 1 kilogram=2 pounds;
l Litre=0.25 US gallons; 1 tonne=2000 pounds;
1 kilometre=0.6 miles (kph=kilometres per hour)

Mecha-Related Attributes

Unlike the rules presented in *BESM,* the **Cybernetic Body and Own A Big Robot** Attributes now range from one to six Levels, and work somewhat differently. With GM approval, two new Character Attributes are also available to you during mecha creation **— More Powerful Robot** (or **More Powerful Cyborg) and Personal Gear.**

Cybernetic Body (2 Points/Level)

Type: BESM Attribute
Relevant Stat: None

If a character possesses the Cybernetic Body Attribute (see *BESM,* page 18) he or she can "Be a Big Robot" (with GM's permission), which involves building the robotic body as if it were a mecha. The character may be a true cyborg (having both organic and machine components) or an intelligent robot (all machine). Characters receive 10 Mecha Points per Level as outlined below, with the option to acquire Mecha Defects to get additional Mecha Bonus Points. Cybernetic bodies are designed after Step 5 but before Step 6 of Character Creation, using the Creating Mecha rules (page 13). This Attribute is only recommended in campaigns where the character will face suitably strong opponents, such as cyborgs, mecha or people with super powers.

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Level 1 Modest cyborg. 10 Mecha Points for Sub-Attributes.
Level 2 Somewhat powerful cyborg. 20 Mecha Points for Sub-Attributes.
Level 3 Moderately powerful cyborg. 30 Mecha Points for Sub-Attributes.
Level 4 Highly powerful cyborg. 40 Mecha Points for Sub-Attributes.
Level 5 Extremely powerful cyborg. 50 Mecha Points for Sub-Attributes.
Level 6 Super cyborg. 60 Mecha Points for Sub-Attributes.

Own a Big Robot (OBR) (4 points/Level)

Type: BESM Attribute
Relevant Stat: None

This Attribute (see *BESM,* page 28) allows the character to own a personalized robot or other mecha. The details of design, storage, and game impact are determined using the mecha creation rules in this chapter. Characters must possess at least one Level in this Attribute to possess a mecha.

Although titled "Own a Big Robot", you can use this Attribute to acquire any other type of vehicle or structure. Players may freely interpret the Attribute as Own A Cool Starship, Own a Fast Car, Own an Army Tank — even Own a Big House! Using the new creation system, each Attribute Level now gives the player 20 Mecha Points (MP, different from Character Points) to use in the construction of a balanced mecha design. Mecha Points are used to acquire various Sub-Attributes that give the mecha particular customized abilities. Mecha are designed after Step 5 but before Step 6 of Character Creation, using the Creating Mecha rules on page 13.

Multiple Mecha — A player may use Mecha Points from the Own a Big Robot Attribute to acquire more than one mecha for his or her character. For example, a player could spend the majority of points on a big starship, and the few remaining points on its shuttlecraft. Each mecha must require at least one Mecha Point, however.

Shared Mecha — With the GM's permission, two or more players can pool some or all of their character's Mecha Points to acquire a more powerful mecha, or a group of mecha they own and operate in common.

Level 1 Modest mecha. 20 Mecha Points for Sub-Attributes.
Level 2 Somewhat powerful mecha. 40 Mecha Points for Sub-Attributes.
Level 3 Moderately powerful mecha. 60 Mecha Points for Sub-Attributes.
Level 4 Highly powerful mecha. 80 Mecha Points for Sub-Attributes.
Level 5 Extremely powerful mecha. 100 Mecha Points for Sub-Attributes.
Level 6 Super mecha. 120 Mecha Points for Sub-Attributes.
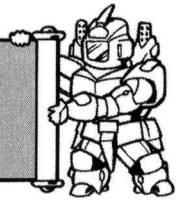
More Powerful Robot (1 point/Level)

Type: BESM Attribute
Relevant Stat: None

This Attribute adds to a character's Mecha Points, and is only available if he or she already has the Own a Big Robot Attribute at Level 1 or higher. Characters who possess the Cybernetic Body Attribute at Level 1 or higher can elect to take More Powerful Cyborg; it works the same way, but only applies to their Cybernetic Body.

Level 1   The character gains an additional 5 Mecha Points.
Level 2   The character gains an additional 10 Mecha Points.
Level 3   The character gains an additional 15 Mecha Points.
Level 4   The character gains an additional 20 Mecha Points.
Level 5   The character gains an additional 25 Mecha Points.
Level 6   The character gains an additional 30 Mecha Points.

Personal Gear (1 point/Level)

Type: BESM Attribute
Relevant Stat: None

Characters should never be required to sacrifice Character Points for items that are utterly mundane in the campaign setting (such as clothing, a flashlight, a television, a backpack, etc.) However, GMs may decide to require players to allot points in this Attribute if their characters will begin the game with numerous pieces of specialized non-mecha equipment.

The Personal Gear Attribute is used to acquire items to which the average person might not have easy access, such as weapons or specialized professional or adventuring equipment. These items differ from the Item of Power Attribute (see *BESM,* page 24) since the gear must be something the background culture commonly manufactures. For example, Personal Gear cannot include alien technology, secret prototypes, magic items, or super-artifacts. Thus, in a fantasy setting, a pistol or rifle is an Item of Power, while in a modern day setting they are Personal Gear. The GM always has the final say on whether or not an item is available to the characters.
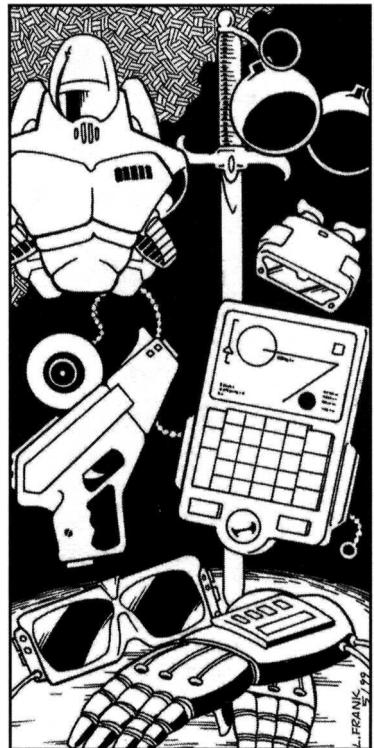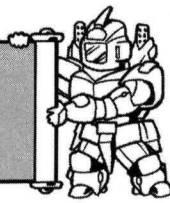
Each Level in this Attribute permits the character to take one major and four minor items. Alternatively, the character can replace one major item with an extra four minor items. Use the guidelines below to differentiate between major and minor items:

Minor — Something a bit hard to get, or rather expensive. In a modern-day setting, it is either available in a store but costs as much as an average person's monthly wage, or is cheaper but needs a license or black market contact to acquire. This may include something with which an average police detective might be issued. Modern-day examples of minor items include handguns, shotguns, grenades, phone taps, premium medical kits, night vision goggles, full camping gear, burglary tools, expensive tool kits, and personal computers.

Major — The gear is usually illegal for civilians, but is that with which an average soldier or government spy may be issued. Modern-day examples of major items include assault rifles, machine guns, rocket launchers, sniper rifles, and body armour. Major gear can also include quite expensive, but commercially available equipment, such as a science lab, workshop, car, motorbike, or (in a futuristic setting) a space suit, or holographic suite.

GMs should determine the Stats of personal gear and related equipment as appropriate. The GM may decide that vehicles and suits of body armour in the minor or major equipment category can be designed as mecha, using 1-2 (minor) or 4-6 (major) Mecha Points. Likewise, weapons can be designed with the rules for mecha weaponry: a minor weapon has the equivalent of one Level of the Weapon Mecha Sub-Attribute (page 37), while a major weapon would be designed with two or three Levels.

Level 1 The character possesses 1 major item and 4 minor items.
Level 2 The character possesses 2 major item and 8 minor items.
Level 3 The character possesses 3 major item and 12 minor items.
Level 4 The character possesses 4 major item and 16 minor items.
Level 5 The character possesses 5 major item and 20 minor items.
Level 6 The character possesses 6 major item and 24 minor items.

Example: Mecha-Usagi, an android detective, takes Personal Gear at Level 2 (2 points). She thus has eight minor and two major items. In consultation with the GM, the player decides that Usagi's minor items are a pistol, premium medical kit, disguise kit, cell phone, personal computer, phone tap, night vision goggles, and a tiny digital camera, while the major items are a submachine gun and a sleek motorbike.
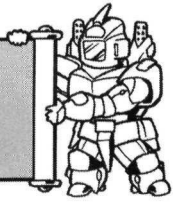
Mecha-Related Character Defects

These new Defects may be acquired in Step 5 of Character Creation (see *BESM,* page 36). They may only be taken by a character who already has the Own a Big Robot or Cybernetic Body Attribute.

Conditional Ownership

This Defect indicates that the character's mecha actually belongs to another organization: it is issued to the character, but the agency imposes "mild" or "strict" conditions on its use.

"Mild conditions" indicate that the character can use the mecha for some personal business (such as travelling), but if he or she is released from the organization or disobeys direct orders, the mecha can be taken away. The character can also be assigned a different mecha at any time. For example, a police detective might have conditional use of an unmarked police car (or police spaceship).

"Strict conditions" indicate that the character is only permitted to use the mecha for activities as ordered by the organization. This is the way most military mecha are issued. If the character is caught using the mecha for personal pleasure, he or she will receive a severe reprimand!

Characters with Cybernetic Body should not take this Defect. If a character's body is actually the property of an organization or individual, he or she should take the Owned by a Megacorp Defect (see *BESM,* page 40).

1 BP   Mild conditions are imposed on the mecha's ownership and usage.
2 BP   Strict conditions are imposed on the mecha's ownership and usage.
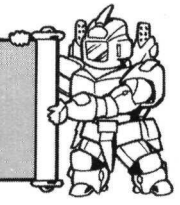
Less Powerful Robot

This Defect reduces the number of Mecha Points available to the character for acquiring Mecha Sub-Attributes (page 17). If a character has a Cybernetic Body, he or she can take a Less Powerful Cyborg Defect for a similar number of Bonus Points.

1 BP   Mecha Point total is reduced by 5 Points.
2 BP   Mecha Point total is reduced by 10 Points.

Creating Mecha

As a player, your character may acquire a mecha if he or she possesses the Own a Big Robot Attribute, or be a mecha with the Cybernetic Body Attribute. You should work with the GM as you progress through the six-step mecha design process, which is similar to the character creation system in *BESM* (see *BESM,* page 10). The steps include GM Discussion, Mecha Outline, Mecha Sub-Attributes, Mecha Defects, Mecha Derived Values, and Mecha Background (see the Mecha Design Flowchart, page 14). Note that the mecha you create do not normally possess Body, Mind, or Soul Stats, but instead use your character's Stats when relevant (whether it is a piloted machine or your character's cybernetic body). Throughout the design process, you can follow the progress of a player named Chris as he creates a mecha for his character. The examples are presented in italics following the main text of each step.

The GM has decided she will run a near-future space campaign set in the asteroid belt of our solar system. Using Chapter 2 of BESM, Chris creates Jack Scorpio, a space patrol officer who protects asteroid miners from pirates and sinister megacorps. One of Scorpio's Attributes is Own a Big Robot at Level 3, giving him 60 Mecha Points. Chris designs Scorpio's mecha using this book.
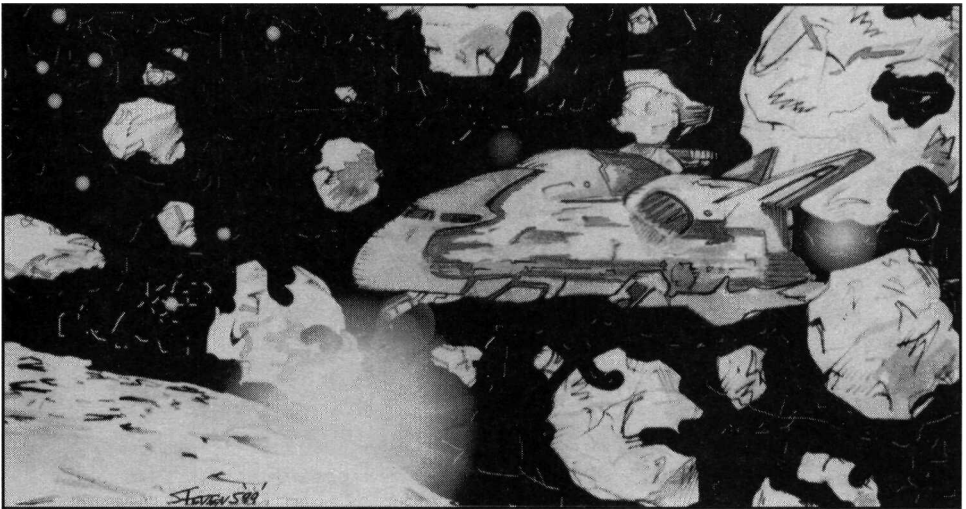
Big Robots, Cool Starships
Mecha Creation Flowchart

Step 5: *BESM* Character Defects

↓

Step 5A: GM Discussion
Talk to the GM about the nature of the upcoming game, to provide some boundaries to your mecha design. Be sure you understand any rule modifications. See page 15.

↓

Step 5B: Mecha Outline
Decide upon a basic mecha concept. Will it be an aircraft, armoured fighting vehicle, giant robot, powered armour, spaceship, android, or something else? See page 15.

↓

Step 5C: Mecha Sub-Attributes
Use the Mecha Points from the Own a Big Robot or Cybernetic Body Attributes to acquire abilities and powers for your mecha. See page 17.

↓

Step 5D: Mecha Defects
Assign one or more weaknesses or limitations to your mecha's capabilities. The Defects will return Mecha Bonus Points to your character that are used to acquire additional Mecha Sub-Attribute. Return to Step 5C. See page 46.

↓

Step 5E: Mecha Derived Values
Calculate your mecha's derived values — Armour, Health Points, Energy Points, Attack Combat Value and Defense Combat Value. See page 55.
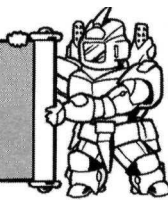
↓

Step 5F: Mecha Background
Once the numerical component of your mecha design is complete, you should record some background details to personalize your creation. See page 56.

↓

Step 6: *BESM* Derived Values

Step 5A: GM Discussion

The GM should specify what type of mecha is appropriate to your campaign's themes and settings. The GM may require or prohibit particular design concepts, Sub-Attributes or Mecha Defects. Ask for clarification concerning any rule modifications your GM plans to use.

> *The GM tells Chris that he envisions the asteroid patrol operating with space fighters, giant robots, or small scout ships. She suggests that Scorpio's mecha should be capable of Space Flight so he can fly around the asteroid belt, and have Life Support that is capable of protecting Scorpio in space. The GM also says that she has decided no faster-than-light drive exists, so Scorpion may not take a mecha that possess a Star Drive.*

Step 5B: Mecha Outline

During this step, you must decide upon the basic concept of the mecha for your character. If you plan to divide Mecha Points from Own a Big Robot and More Powerful Robot among several mecha, you should also decide how many Mecha Points you will allocate to each design. Some possible concepts for Own a Big Robot include:

Aircraft — Airplanes, helicopters, wind-powered sky-boats, or swift anti-gravity flyers.
Armoured Fighting Vehicles — Conventional battle tanks, troop-carrying APCs, or tiny mini-tanks for city fighting.
Giant Piloted Robots — The classic humanoid battle machine with the operator riding inside the cockpit.
Monsters — You can also use the mecha rules to design "giant-monsters-that-ate-Tokyo".
Organic Mecha — These living machines can be anything from a powered suit to a battleship.
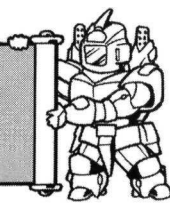**Powered Armour** — A form-fitting suit of strength-amplifying armour.
Robot Companion — A faithful, if soulless, robot friend. Some are humanoid, others distinctly not. Some may be more "cute pet" than bodyguard, but any can have unusual abilities.

Mecha Creation

Spaceship — Small scout ships, sleek space fighters, rusty tramp freighters, or giant space battleships and carriers.

Super-Car — It resembles an ordinary car (or racing car) but it may repel bullets, drive underwater or even fly.

Transforming Mecha — A motorcycle or other vehicle that may turn into powered armour, then into a big humanoid robot, and finally into a fighter plane.

Watercraft — How about a sleek and deadly submarine, a powerful battleship, or an ultra-fast hydrofoil?

Concepts for the Cybernetic Body Attribute include, but are not limited to:

Android — You are shaped like a human, but are actually a robot, golem, or other artificial construct. Some androids are indistinguishable from humans, while others appear more artificial.

Cyborg — You were once human (or animal, or alien) but some or most of your body has been replaced by mechanical parts. Some cyborgs are still mostly flesh; in others, the only organic part that remains is the brain. Maybe you are not humanoid at all, but a brain housed in a vehicle or spaceship.
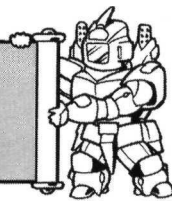
Mechabot — You are a thinking, self-aware robot, but you do not closely resemble a human, and look obviously mechanical. You might be anything from a cute robot cat to a lumbering war-bot.
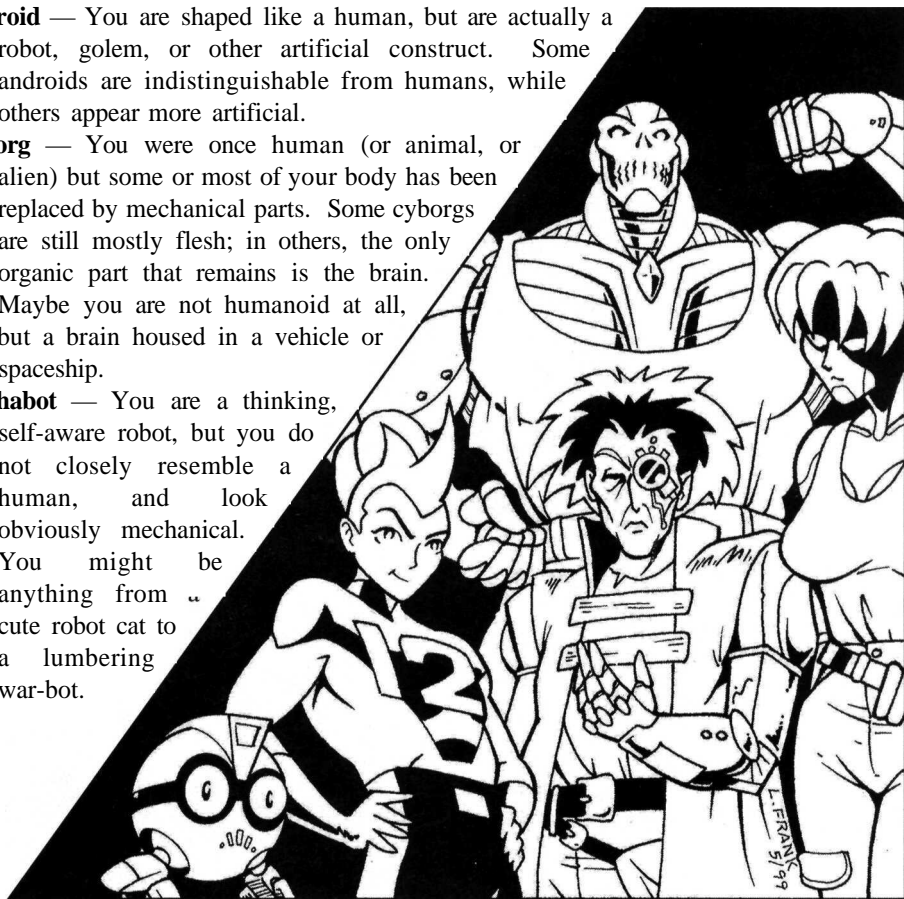
The Sample Mecha Designs section on page 57 offers additional examples of mecha for different campaigns.

Chris decides that Officer Jack Scorpio will use a small police patrol spacehip equipped with rocket engines for travel around the solar system.

Step 5C: Mecha Sub-Attributes

The Mecha Points assigned by the Own a Big Robot or Cybernetic Body Attributes are used to acquire a set of Mecha Sub-Attributes. These Sub-Attributes define your mecha's capabilities, much in the same way that your character's Attributes define his or her capabilities. Each Sub-Attribute represents a particular ability, measured in Levels ranging from 1 through 6. Each Sub-Attribute will have its own Mecha Point cost, ranging from 1-10 points/Level. If not enough Mecha Points are available to give your mecha the desired Sub-Attributes, the mecha can be assigned Mecha Defects (page 46). Mecha Defects limit the mecha in some way, but provide compensatory Mecha Bonus Points (MBP). These Mecha Bonus Points are equivalent to regular Mecha Points, and are used to acquire additional Mecha Sub-Attributes.

A mecha without any Sub-Attributes or Mecha Defects would have the same movement and manipulatory capabilities as an average human adult, and can usually transport one character (or *is* the character, for a Cybernetic Body). The Sub-Attributes and Defects given to the mecha change these parameters, enabling you to create any kind of cyborg, robot, monster, or vehicle...from an android to a space battleship.

Individual Sub-Attributes have been divided into four major categories:

Structural — What is the physical nature of the mecha, and how much can it carry?
Mobility — How does the mecha move?
**Other** — What additional capabilities does the mecha possess?
Weapon — How does the mecha attack and defend in combat?

The suggested maximum Level for Sub-Attributes is Level 6. However, the GM can choose to permit mecha designs (for NPCs or PCs) that extend to higher Levels. The GM should extrapolate additional capabilities based on the lower-level progression.

Chapter 2
Mecha Creation
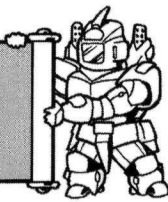
> *Scorpio has 60 Mecha Points (MP) to spend on his ship. Chris decides it needs a fast space drive to catch fleeing suspects: Space Flight Level 5 (10 MP). Chris wants it to be able to take off from a planet, so he chooses Flight (No Hover) at Level 5 (15 MP). He also wants it to be lightly armoured but rugged: Armour Level 2 (8 MP) and Toughness Level 3 (12 MP). It needs to operate in space, carry a few people, and stay on patrol for a day, so Chris gives the ship Life Support Level 2 (2 MP), Extra Capacity Level 2 (2 MP) and Extra Endurance Level 1 (1 MP). To combat his enemies, Chris selects one Level 3 Weapon (12 MP) and one Level 2 Weapon (1 MP). To finish his design, Chris takes Accessory Level 2 (ejection seat and radio; 2 MP) and Sensors Level 3 (3 MP). The total point cost adds up to 68 Mecha Points — 8 more than Scorpio has — so the ship will need to take some Mecha Defects as well.*

Structural Sub-Attributes

These Sub-Attributes define the basic physical form and durability of the mecha.

Armour (4 Mecha Points/Level)

Mecha Armour functions as Type B Armour (see *BESM,* page 59) except the Armour is rated at -10 damage points per Level. Alternatively, mecha can also be protected by Force Fields (page 29). For Armour that is lighter than the values listed below, the mecha could take the Less Armour Mecha Defect (page 48).

If a Cybernetic Body is given Armour, it is assumed to have an obvious metal or plastic exoskeleton. If a character does not want to appear protected, the Armour can be described as "hidden." Hidden Armour only stops 4 points of damage per Sub-Attribute Level, however.

Level 1   A light armoured vehicle, such as an APC. All damage reduced by 10 points.
Level 2   A light tank, or a suit of powered armour. All damage reduced by 20 points.
Level 3   A WWII medium tank, such as a Sherman. All damage reduced by 30 points.
Level 4   A typical modern tank, such as a *1-12*. All damage reduced by 40 points.
Level 5   A modern heavy tank, such as an Ml Abrams. All damage reduced by 50 points.
Level 6   An advanced super-mecha. All damage reduced by 60 points.
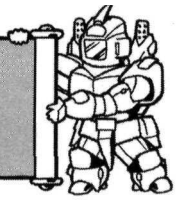
Extra Arms (1 Mecha Point/Level)

All mecha are assumed to possess two arms (or similar appendages) without requiring the expenditure of Mecha Points. By taking this Sub-Attribute, the mecha can acquire even more. Possessing only one arm or no arms is a Mecha Defect (page 49). An "arm" is defined loosely as something that can reach out and manipulate objects. A tractor beam or a tentacle is an arm; a limb that simply ends in a gun-barrel, melee weapon, or tool mount is not. Extra arms are useful for holding onto several things at once, but do not give extra attacks (for that ability, see the Multiple Mecha Attacks Sub-Attribute on page 33, or the Extra Attacks Attribute in *BESM* on page 21). A tractor beam is a specialized "arm", and requires the mecha to also posses the Special Equipment Sub-Attribute (page 35).

Level 1   The mecha possesses 1 extra arm.
Level 2   The mecha possesses 2-3 extra arms.
Level 3   The mecha possesses 4-8 extra arms.
Level 4   The mecha possesses 9-12 extra arms.
Level 5   The mecha possesses 13-20 extra arms.
Level 6   The mecha possesses 21-50 extra arms.

Extra Capacity (1 Mecha Point/Level)

Most mecha can comfortably carry a single pilot or passenger without requiring the expenditure of Mecha Points. To carry additional people, the mecha needs Extra Capacity; the Level determines how many people the mecha can carry. The mecha can also carry cargo instead of people. For each person not carried, the mecha can substitute one tonne cargo capacity (5 tonnes if the mecha also has two or more Extra Endurance Sub-Attribute Levels). This cargo-for-people substitution must be specified when the mecha is originally designed. Cargo capacity can be further specified as either a general cargo area, or as mecha-launching hangar bays.

A mecha must take at least as many Mecha Bonus Points of the Awkward Size Defect (page 46) as it has Levels of Extra Capacity.
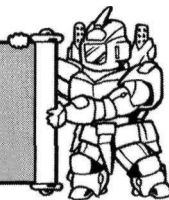
Level 1   The mecha can transport 1 extra person.
Level 2   The mecha can transport 2-5 extra people.
Level 3   The mecha can transport 6-10 extra people.
Level 4   The mecha can transport 11-50 extra people.
Level 5   The mecha can transport 51-500 extra people.
Level 6   The mecha can transport 501-5,000 extra people.

Extra Endurance (1 Mecha Point/Level)

An ordinary mecha can operate for a few hours at a time (like a typical automobile, tank, or airplane) before it runs out of fuel, energy, or life support. A mecha that has been given Extra Endurance is designed for lengthier operations. Extra Endurance at Level 2 or higher usually includes facilities for sleeping, cooking, and even recreation if the mecha is of sufficient size.

Level 1   The mecha can operate for a full day.
Level 2   The mecha can operate for several days.
Level 3   The mecha can operate for several weeks.
Level 4   The mecha can operate for several months.
Level 5   The mecha can operate for several years.
Level 6   The mecha can operate indefinitely.

Super-Strength (3 Mecha Points/Level)

With their hydraulic systems or robotic muscles, most mecha are much stronger than their pilot. A mecha can only acquire the Super-Strength Sub-Attribute if it has a way to lift or manipulate objects using arms, tentacles, or a tractor beam. An airplane, car, or spaceship without any means to lift objects would not need Super-Strength. Each Level of Super-Strength determines how much a mecha can lift with one appendage (it can lift 50% more if using more than half of its appendages), and also adds +10 close combat damage when using punches, kicks, body slams, or muscle-powered melee weapons (page 41).

Note: a character with Cybernetic Body (or an intelligent robot) may have an unremarkable Body Stat but still have Super-Strength. When a mecha has Super-Strength, its strength can move beyond the 1-12 Stat scale: the Body Stat now represents durability and agility rather than actual muscle. Thus, a player could create a cyborg with a Body Stat of 2, but high levels of Super-Strength (clumsy but powerful!)
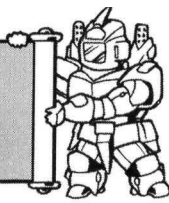
Level 1   The mecha can lift a motorcycle (about 1/2 tonne). Close combat damage +10.
Level 2   The mecha can lift a car (about 2 tonnes). Close combat damage +20.
Level 3   The mecha can lift a large truck (about 10 tonnes). Close combat damage +30.
Level 4   The mecha can lift a battle tank (about 50 tonnes). Close combat damage +40.
Level 5   The mecha can lift a small ship (about 250 tonnes). Close combat damage +50.
Level 6   The mecha can lift a large ship (over 1,000 tonnes). Close combat damage +60.

Toughness (4 Mecha Points/Level)

All mecha possess 40 Health Points as their base starting value — about as much as a motorcycle or high-tech space suit. Each Level of Toughness provides an additional 20 Health Points. The larger the mecha, the more Toughness it usually has, but Toughness can also represent ruggedness rather than size. Characters with the Cybernetic Body Attribute should not take this Sub-Attribute, but rather the Damn Healthy! Attribute (see *BESM,* page 20).

Level 1   The mecha possesses +20 Health Points. Example: a car or powered armour suit.
Level 2   The mecha possesses +40 Health Points. Example: a truck or a jet fighter.
Level 3   The mecha possesses +60 Health Points. Example: a battle tank.
Level 4   The mecha possesses +80 Health Points. Example: a small ship.
Level 5   The mecha possesses +100 Health Points. Example: a large ship.
Level 6   The mecha possesses +120 Health Points. Example: a gigantic ship.

Mobility Sub-Attributes

The Mobility Sub-Attributes answer the following questions:

- Where can the mecha go?
- How does the mecha propel itself?
- How fast can it get there?

All mecha are assumed to have the ability to move on the ground with the same speed and agility as an average human adult. The player should decide during the mecha's creation how it moves. Does it roll on wheels (which is typical of road-bound mecha), crawl on tracks, walk on legs, or utilize another method, such as slithering like a snake? Characters who want their mecha to move faster, fly, swim, or jump should acquire one or more Mobility Sub-Attributes. Conversely, several Mecha Defects (page 46) are available that restrict or eliminate mobility.
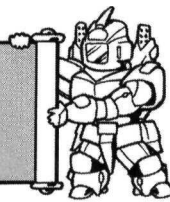
Flight (3 or 4 Mecha Points/Level)

A mecha with Flight can fly through the air, or a normal atmosphere. During mecha creation, the character must decide how the mecha flies — fixed wings with jets or propellers, rotors, rockets, anti-gravity, flapping wings, hot air, magic, or through some unique design. Flight costs 3 Mecha Points/Level if the mecha **cannot hover,** but instead flies like a normal airplane. Thus, the mecha needs a runway for landing and take off, and must maintain a minimum speed (at least 1/10 of its maximum speed) once airborne to avoid crashing. Flight costs 4 Mecha Points/Level if the mecha **can hover** and fly at variable speeds, take off and land vertically, or stop in mid-air.

If a mecha has Level 5 or 6 in the Flight Sub-Attribute, and at least 1 Level in the Space Flight Sub-Attribute, it can kick in its Space Drive to reach orbit once it can climbs beyond the stratosphere (several kilometres up). Alternatively, it can fly around the planet at hypersonic speeds (triple the listed speeds below) when beyond the stratosphere. The mecha must stay in the thin air of the upper atmosphere during these journeys, however.

Level 1   Very slow mecha flight, like a bird (up to 75 kph).
Level 2   Slow subsonic mecha flight, like a helicopter (up to 200 kph).
Level 3   Fast subsonic mecha flight, like a WWII fighter (to 600 kph).
Level 4   Transonic mecha flight, like a jetliner (up to 1,200 kph).
Level 5   Supersonic mecha flight, like a jet fighter (up to 2,500 kph).
Level 6   Triplesonic mecha flight, like an SR71 Blackbird (up to 5,000 kph).

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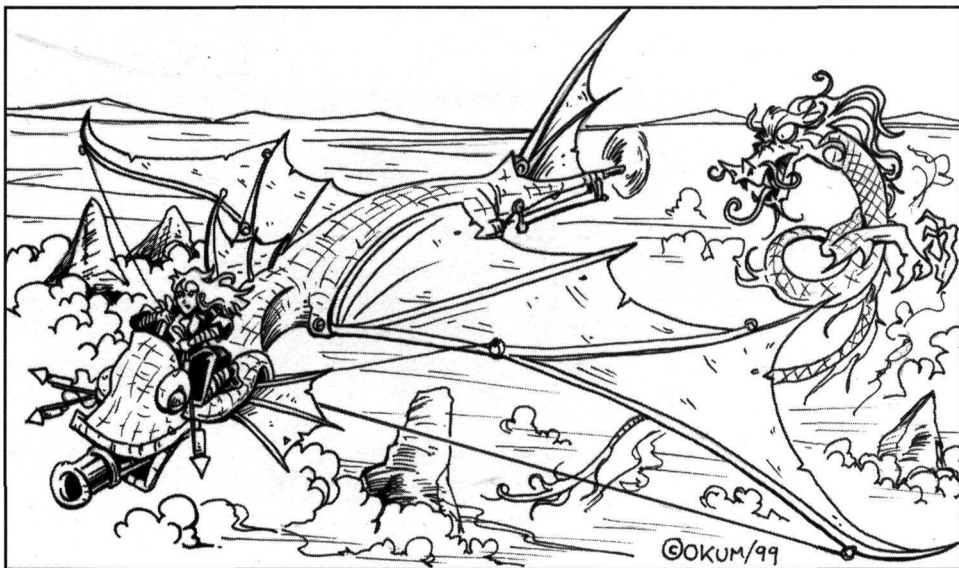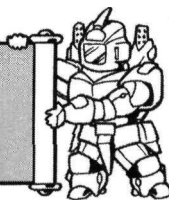
Ground Speed (2 Mecha Points/Level)

The Ground Speed Sub-Attribute allows a mecha to move faster than humans while it is on land. A flying mecha whose only high-speed ground movement is during its landing or take off does not have to acquire Ground Speed — this capability is subsumed in the Flight Sub-Attribute. The default speed for a mecha that does not possess the Ground Speed Sub-Attribute (but does not possess any ground mobility Defects) is 20 kph — roughly an average human running speed.

Level 1   Slow ground speed (up to 50 kph).
Level 2   Modest ground speed (up to 100 kph).
Level 3   Fast ground speed (up to 200 kph).
Level 4   Very fast ground speed (up to 300 kph).
Level 5   Super fast ground speed (up to 600 kph).
Level 6   The mecha can break the sound barrier during ground movement (up to 1,200 kph).

Jumping (1 Mecha Point/Level)

With this Sub-Attribute, the mecha can make very high unaided vertical jumps, but cannot actually fly. It may use jets, powerful leg muscles, or other means to launch itself. Mecha jumping distances are found in *Chapter 3: Mecha Combat* (page 65).

Level 1   The mecha can jump up to 5 times its normal jumping distance.
Level 2   The mecha can jump up to 10 times its normal jumping distance.
Level 3   The mecha can jump up to 25 times its normal jumping distance.
Level 4   The mecha can jump up to 50 times its normal jumping distance.
Level 5   The mecha can jump up to 100 times its normal jumping distance.
Level 6   The mecha can jump up to 500 times its normal jumping distance.

Manoeuvre Bonus (1 Mecha Point/Level)

A mecha with a Manoeuvre Bonus has superior handling characteristics that give it a bonus to Initiative rolls and (at higher Levels) to Defense Combat Value. The Manoeuvre Bonus does not equate with actual speed, however, since that is governed by different movement Sub-Attributes. For example, a space fighter may be a very fast interceptor, but not be very manoeuvrable; another fighter may be slow, but highly manoeuvrable in combat. Characters acquiring Mecha Sub-Attributes through Cybernetic Body may not take Manoeuvre Bonus. Instead, they should acquire the Character Attributes of Acrobatics, Combat Mastery or Speed (see *BESM,* pages 16, 18, or 34).

A Manoeuvre Bonus must be bought individually for each movement method to which it applies: ground, water, flight or space flight.
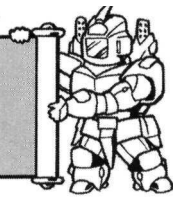
Level 1   The mecha gains +1 to Initiative.
Level 2   The mecha gains +1 to Initiative and +1 to Defense Combat Value.
Level 3   The mecha gains +2 to Initiative and +1 to Defense Combat Value.
Level 4   The mecha gains +2 to Initiative and +2 Defense Combat Value.
Level 5   The mecha gains +3 to Initiative and +2 to Defense Combat Value.
Level 6   The mecha gains +4 to Initiative and +2 to Defense Combat Value.

Space Flight (2 Mecha Points/Level)

Space Flight allows a mecha to propel itself in space. Any mecha with Space Flight can travel between ships, space stations, asteroids, or low-gravity planets or moons such as Luna, Mercury or Pluto. The mecha must also have Flight at Level 5 or 6 to provide sufficient thrust to lift off from a sizable planet such as Mars or Earth. The Level of Space Flight primarily indicates long-distance travel capabilities. An individual spacecraft's varying ability to accelerate quickly or manoeuvre in battle is dictated by the Manoeuvre Bonus Sub-Attribute, with a Space specialty (page 23).

Level 1   Primitive flight with chemical rockets. Travel from planetary orbit to moon(s) or LaGrange Points take a few days; a flight to a nearby planet (such as Mars) takes a year or more.
Level 2   Slow Interplanetary flight, such as an ion drive spacecraft. Trips from planetary orbit to its moon(s) or LaGrange Points take several hours; a flight to a nearby planet (such as Mars) takes months.
Level 3   Average Interplanetary flight,such as a nuclear pulse or fusion drive ship. A flight from the Earth to the Moon takes hours, while Earth to Mars only takes a few weeks.
Level 4   Fast interplanetary flight. The mecha can zip around the solar system in a few days, or fly to the nearest star in about ten years.
Level 5   Super interplanetary flight. The mecha can zip around the solar system in several hours, or visit other stars in a few years at near-light speeds.
Level 6   Faster-Than-Light flight. You can fly at "warp speeds" in normal space, travelling across a solar system in mere minutes, or reaching another star in weeks, days, or hours at the GM's discretion. The mecha must also acquire the Star Drive Sub-Attribute.

Star Drive (2 Mecha Points/Level)

Star Drive allows a mecha to travel between the stars at faster-than-light (FTL) speeds. Some Star Drives allow mecha to fly at impossible speeds, while others side-step normal space by travelling through some kind of hyperspace, or even permit instantaneous jumping from point to point. Most Star Drives have limitations that only allow interstellar trips, and consequently the mecha will require an ordinary drive (the Space Flight Sub-Attribute) to travel through normal space within a solar system. For example, a Star Drive
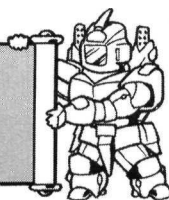
might not function close to the gravity of a planet, and thus a conventional sub-light drive may be required for part of the journey. Alternatively, the Star Drive might only permit travel through certain natural artificial "jump points" or "wormholes", requiring the mecha to reach the travel points with a standard Space Flight drive. In such cases, the mecha will need the Star Drive Sub-Attribute and the Space Flight Sub-Attribute.
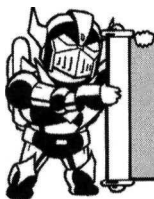
The GM should decide exactly how each Star Drive works, whether a trip is instantaneous, or whether it takes hours, weeks, or months. Other possible limitations, including range, also need to be addressed. There may be requirements that prevent a mecha from instantly escaping pursuit with the Star Drive, such as Star Drive engines that take a long time to recharge, or exhaust their fuel between trips. Navigation could also be tricky, requiring a Mind Stat roll to avoid being lost in space or travelling to an unintended destination. In some campaigns, only large spaceships have the room to mount a Star Drive. If so, the GM may require a minimum Level of the Awkward Size Defect (page 46) as a prerequisite for the Star Drive Sub-Attribute.

Level 1   The mecha possesses a slower-than-average Star Drive.
Level 2   The mecha possesses a modest Star Drive.
Level 3   The mecha possesses a fast Star Drive.
Level 4   The mecha possesses a very fast Star Drive.
Level 5   The mecha possesses a extremely fast Star Drive.
Level 6   The mecha possesses the fastest Star Drive, or one that "breaks the rules".

## Tunnelling (2 Mecha Points/Level)

The Tunnelling Sub-Attribute allows a mecha to move earth and/or burrow underground. Tunnelling assumes that the mecha is going through sand or packed earth; boring through solid rock is one Level slower. The tunnel the mecha leaves behind will either be permanent or will collapse immediately (this should be specified during mecha creation).
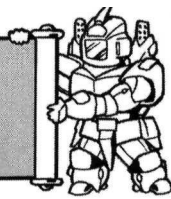
Level 1   The mecha tunnels very slowly, similar to the tunnelling speed of ten men with shovels.
Level 2   The mecha tunnels slowly, similar to the tunnelling speed of a bulldozer.
Level 3   The mecha tunnels at a snail's pace (up to 1 kph).
Level 4   The mecha tunnels at a walking speed (up to 10 kph).
Level 5   The mecha tunnels at slow vehicle speeds (up to 30 kph).
Level 6   The mecha tunnels at fast vehicle speeds (up to 100 kph).

Water Speed (2 or 3 Mecha Points/Level)

A mecha with Water Speed can float, and travel on, or under, water. The Mecha Point cost is 2 Points/Level if the mecha can only travel on the surface, or 3 Points/Level if it can travel *underwater* as well. The depth to which a submarine can dive depends on its Armour: a mecha with Level 0-2 Armour can dive a few hundred feet, one with Level 3-4 can dive a few thousand feet, one with Level 5-6 Armour can dive to the bottom of the deepest ocean trench.

Level 1   The mecha is as fast as a rowboat (up to 15 kph).
Level 2   The mecha is as fast as a yacht (up to 30 kph).
Level 3   The mecha is as fast as a modern steamship (up to 60 kph).
Level 4   The mecha is as fast as a speedboat (up to 120 kph).
Level 5   The mecha is as fast as a hydrofoil (up to 250 kph).
Level 6   The mecha is faster than any possible watercraft (to 500 kph)

Other Mecha Sub-Attributes

These Sub-Attributes represent miscellaneous capabilities that a mecha may possess.

Accessories (1 Mecha Point/Level)

Accessories are additional features that provide useful but mundane non-combat-related advantages to the mecha. Examples of features that are considered accessories include: airlock, burglar alarm, camera, cell phone, ejection seat, emergency lights and siren, global positioning system, luxurious decor, personal computer, radio, revolving license plate, search light, stereo system, tow cable, wet bar, and many others. A mecha need not acquire accessories that are implied by its other capabilities (a mecha with Space Travel can be assumed to have appropriate navigational systems) or which are fairly ubiquitous (like headlights or safety belts in a modern vehicle). The Sub-Attribute Level determines the number of accessories that a mecha can have.
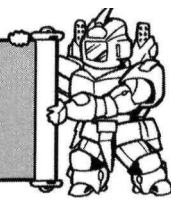
Level 1   The mecha possesses 1 minor accessory.
Level 2   The mecha possesses 2-3 minor accessories.
Level 3   The mecha possesses 4-6 minor accessories.
Level 4   The mecha possesses 7-12 minor accessories.
Level 5   The mecha possesses 13-20 minor accessories.
Level 6   The mecha possesses 21-50 minor accessories.

Artificial Intelligence (A.I.) (2 Mecha Points/Level)

A.I. provides a mecha with some form of control mechanism that enables it to operate by itself, or be operated via remote control. If a mecha is transformable, each form should possess the same level of A.I. A robot or cyborg character built with a Cybernetic Body should not select the A.I. Sub-Attribute, since he or she is assumed to be a fully intelligent being. The different Levels of A.I. are described in greater detail below:

Basic remote control — The mecha is controlled from outside the mecha by the owner, who will use a radio (or other) control system. Doing so requires the operator's full attention, and thus he or she cannot carry out any other activities. This also means the operator can only run one mecha at any time. The mecha uses the operator's Stats and Combat Values as if the operator was piloting from within a cockpit. The control system for the mecha must be specified to be located in another mecha, an operations base, or a hand-held unit. The GM should decide upon the limitations of the control system (range, ECM, etc.)

Advanced remote control — As above, but the mecha requires less supervision: the operator can also carry out other activities while commanding the mecha (including operating his or her own mecha, or controlling more than one advanced remote control mecha). If the operator divides concentration in this way, he or she suffers a cumulative +1 Stat check and Combat dice roll penalty on all actions for each mecha controlled simultaneously.

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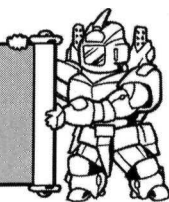
Semi-Autonomous — The mecha can operate without constant supervision, but has no self-initiative and lacks emotions and desires. It can be given orders or programmed with directives, but obeys in a slavish, unimaginative fashion. The mecha is assigned its own Body and Mind Stats, but does not have a Soul Stat.

Intelligent — The mecha is capable of exercising (or at least simulating) self-initiative and creativity, but remains loyal to the character who owns it. The mecha uses its own Body and Mind Stats. Levels 4 and 5 A.I.'s do not have Soul Stats, and are not "self aware". Level 6 provides the machine with its own Soul — the A.I. is a true NPC that behaves as a real person. The A.I. is assumed to be an ally of the character, but may have its own agenda as well.

If the mecha possesses the A.I. Sub-Attribute at Levels 3-5, the player should choose its Body and Mind Stats by dividing the point total listed below between them. For example, a Level 4 A.I. could have a Body 8 and Mind 4, or a Body 3 and Mind 9. If the mecha is a Level 6 A.I., the player should divide the points among all three Stats (Body, Mind and Soul).

Level 1 Basic Remote Control.
Level 2 Advanced Remote Control.
Level 3 Semi-Autonomous. Body and Mind Stats total 10.
Level 4 Intelligent. Body and Mind Stats total 12.
Level 5 Intelligent. Body and Mind Stats total 14.
Level 6 Intelligent. Body, Mind, and Soul Stats total 18.

Electronic Counter-Measures (ECM) (1 Mecha Point/Level)

This Sub-Attribute equips a mecha with an electronic counter-measures jamming suite. ECM must be specified to work against communications, homing weapons, or sensors. A mecha can buy one single type of ECM system at a cost of 1 Mecha Point/Level. Each additional ECM type only costs a single Mecha Point, and functions at the same Level as the primary ECM suite. The different ECM functions are detailed below:

Commo Jamming — This type of ECM can jam broadcast communications into or out of a particular area. The size of the area is dictated by the Sub-Attribute Level.

Missile Jamming — The mecha can jam an incoming attack made by a Homing weapon (see Weapon Sub-Attributes, page 37). Jamming is automatic and adds a +1 penalty per ECM Level to the Homing weapon's Attack roll. If the ECM modifies the attack roll to
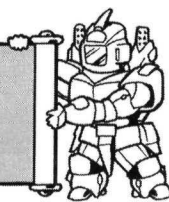
13 or higher, the incoming missile not only misses the intended target but can be decoyed to strike another target within its range, of the jamming mecha operator's choice! Under these circumstances, an Attack roll is not required, but the target does have the option of defending against the attack.

Sensor Jamming — This ECM device blankets an area with static that jams Sensors attempting to "see" into the area. Sensor jams have the same effect as a Stealth Sub-Attribute of the same Level, but affects everyone in the area — friendly, neutral, or enemy. If a mecha in the ECM area also has Stealth, the Sub-Attribute with the highest Level will take precedence if someone tries to detect it. The size of the area is dictated by the Sub-Attribute Level.

For commo or sensor ECM, mecha with the Sensors Sub-Attribute can detect the extent and general location of the "static" area, even if their sensors fail to detect the objects within it.

Level 1   Local jamming area (up to 0.5 KM radius).
Level 2   Small city-sized jamming area (up to 5 KM radius).
Level 3   County-sized jamming area (up to 50 KM radius).
Level 4   State-sized jamming area (up to 500 KM radius).
Level 5   Continental jamming area (up to 5,000 KM radius).
Level 6   Planetary jamming area (up to 50,000 KM radius).

Force Field (3 or 4 Mecha Points/Level)
A typical anime Force Field is different from Armour, since it can be battered down by a sufficiently powerful attack. A Force Field can be "up" or "down". When down, it does not stop any damage. When up, it is often invisible (GM's option), but sensors can usually detect it ("shields up" may be construed as hostile in some quarters). Force Field status must be determined at the start of the mecha operator's actions for the round and cannot be changed until it is the operator's turn to act again in the next round (initiative).

Attack damage is first applied to the Force Field, with any additional penetrating damage applied against the mecha's Armour. Thus, if a weapon hit successfully penetrates a Force Field, the Armour Sub-Attribute can still protect against it. A Force Field can be reduced, or knocked down by a sufficiently powerful attack. If an attack does more damage than the Force Field prevents (even if the rest of the damage is absorbed by the mecha's Armour), the Force Field temporarily loses one Sub-Attribute Level of effectiveness. The mecha can only regain Levels if the field is down and regenerating. A
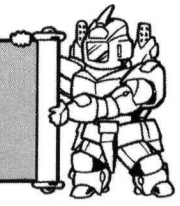
Chapter 2
Mecha Creation

Force Field recovers one Level every round it is turned off and not in operation ("down"). A Force Field that is knocked down to zero Levels automatically shuts off to regenerate.

The Sub-Attribute cost is 3 Mecha Points/Level if the Force Field only protects the mecha, or 4 Points/Level if it is an area Force Field that can be extended to protect other people or mecha nearby (within a radius up to the media's own longest dimension).

Level 1   The Force Field stops 15 damage points.
Level 2   The Force Field stops 30 damage points.
Level 3   The Force Field stops 45 damage points.
Level 4   The Force Field stops 60 damage points.
Level 5   The Force Field stops 75 damage points.
Level 6   The Force Field stops 90 damage points.

Life Support (1 Mecha Point/Level)

This Sub-Attribute indicates that the mecha is equipped to protect itself and its crew from hostile environments. Unlike most other Sub-Attributes, Life Support has only two Levels. All submarines and spaceships should have a minimum of Level 2 Life Support.

Level 1   The mecha can filter gasses, radioactive fallout, dust, and germs from external air, protecting its mechanisms and pilot in a similar manner as an environmental suit and gas mask.
Level 2   The mecha can operate in space (low external pressure), underwater (high external pressure), and on a world without a breathable oxygen atmosphere. All occupants will have their own oxygen supply that lasts as long as the mecha can operate (see the Extra Endurance Sub-Attribute, page 20).

## Mechanical Transformation (2 or 4 Mecha Points/Level)

Some mecha can drastically alter their shape or function. For example, one mecha might shift from a giant robot to an airplane, and then into a small starship. Each Sub-Attribute Level gives an extra "full-powered" form (costs 4 Mecha Points/Level) or "half-powered" form (costs 2 Mecha Points/Level). Each form is designed as if it were a different mecha with the same number of points as the primary mecha if "full-powered", or half as many points (round down) if "half-powered".

The following restrictions apply to the Sub-Attributes and Mecha Defects each form may take: First, each form must have the same number of Levels of Mechanical Transform Sub-Attribute. For example, if the mecha assumes three different full-strength forms, each must be given the Mechanical Transformation Level 3 for 12 Mecha Points. Additionally, each form must have identical Levels of Toughness and (if taken) Extra-
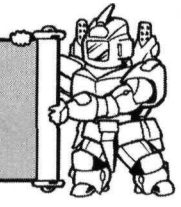
Capacity, Artificial Intelligence and Extra Endurance. Finally, each form must have identical Awkward Size, Crew Requirement, Hangar Queen, and Limited Endurance Defects. The Super Transformation Sub-Attribute (page 36) eliminates some of these transforming restrictions.

It requires one round for a mecha to transform from one form to another (or longer, at the GMs discretion), during which time its crew cannot take other actions. If a mecha has more than one form, the designer must name each form and specify a transform sequence. For example, if a mecha has a "walker," a "hybrid" and a "flyer" form, the sequence may be "walker-hybrid-flyer". The mecha can turn from hybrid into walker or flyer, but not from flyer to walker (or vice versa). A mecha with three or more forms can ignore this restriction and perform non-sequential transformation for a single extra Mecha Point. For an example, see Dragaon Armour Hyperion (page 58).

Level 1   The mecha has one additional form.
Level 2   The mecha has two additional forms.
Level 3   The mecha has three additional forms.
Level 4   The mecha has four additional forms.
Level 5   The mecha has five additional forms.
Level 6   The mecha has six additional forms.



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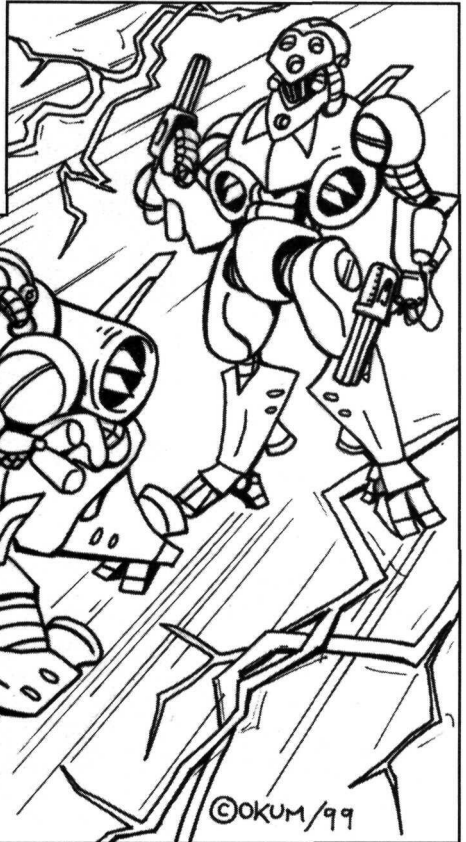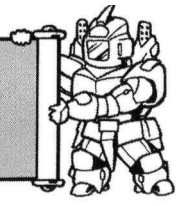
Merging (2 Mecha Points/Level)

Merging allows several mecha (each of which must have this Sub-Attribute at the appropriate Level) to combine into a single giant mecha. The Sub-Attribute Level determines how many mecha can combine together. Players and the GM should design the "merged mecha" as a new mecha with Mecha Points equal to the Mecha Point total of the highest-point mecha plus one-third (round up) of the undamaged point total of the other mecha. Three additional restrictions apply to the combined mecha: First, it must have sufficient levels of Extra Capacity to carry the combined crews and passengers of all individual mecha. Secondly, its Toughness must be at least equal to the Toughness Level of the mecha with the greatest Health Point total. Finally, it must take at least as many Awkward Size Defect Levels as the biggest individual mecha.

One character should be designated as the primary mecha pilot. Other crew members may fire individual weapons (if the mecha has more than one), or run other equipment; who operates what should ideally be specified when the mecha is designed. The mecha cannot merge if any one of them is reduced to 0 or fewer Health Points. If damaged mecha merge together, some damage carries over to the combined mecha. Determine the total Health Points of all the mecha if none were damaged. Divide the sum of the current (damaged) Health Points by the total. Multiply the combined mecha's normal Health Points by the result to find out how many Health Points it has left. When a merged mecha that was damaged while merged separates into individual mecha, divide the current (damaged) Health Points of the combined mecha by its normal undamaged Health Points and multiply this by each mecha's undamaged Health Points to find their uncombined status. Mecha that were damaged before merging cannot have more Health Points after separation than they did before the merging.

Example: A damaged jet (30 Health Points remaining from 60) and a damaged battleship (70 Health Points remaining from 140) merge into a battle-jet. The combined battle-jet was orginially constructed to have 160 Health Points. However, since both mecha were damaged, the merged mecha's Health Point total is actually 80 (30+70=100; 60+140=200; 1004/200=0.5; 0.5x160=80). After combat, the merged battle-jet is only at 40 Health Points. When the battle-jet separates, both separate mecha will only have 25% of their starting Health Point totals (40+160=0.25). Thus, the jet now has 15 Health Points (60x0.25=15) and the battleship now has 35 Health Points (140x0.25=35).

Level 1   Two mecha can merge together.
Level 2   3-4 mecha can merge together.
Level 3   5-8 mecha can merge together.
Level 4   9-12 mecha can merge together.
Level 5   13-20 mecha can merge together.
Level 6   21-50 mecha can merge together.
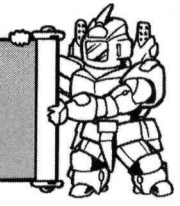
Chapter 2
Mecha Creation

Multiple Mecha Attacks (10 Mecha Points/Level)

This Sub-Attribute reflects the mecha's ability to wreak havoc in all combat situations. It is different from the Extra Attacks Character Attribute (see *BESM,* page 21), since the pilot's (or gunner's) skill in combat does not have any bearing on the number of attacks that the mecha can execute in a single round. Mecha possessing this Sub-Attribute usually have a larger number of gun ports, lasers, rocket launchers, or projectiles than a normal mecha. It could also represent a mecha that engages in melee combat with two or more weapons, rather than just one.

Each round, the pilot may use the mecha to take additional offensive and defensive actions, provided that the attacks and defenses are all similar in nature (for example, all hand-to-hand, all ranged, etc.) Also, unless two or more opponents are very close together, armed or unarmed hand-to-hand attacks must target the same person, mecha, or object. The attacks are usually carried out at the same time, during the same initiative number (see *BESM,* page 50). The Different Gunner Weapon Sub-Attribute does not increase the number of multiple attacks — only one weapon is given multiple attacks.

A mecha pilot that possesses the Extra Attacks Attribute multiplies his or her total number of attacks by the total number of attacks the mecha can execute. Thus, a pilot with Level 4 Extra Attacks (5 attacks total), flying a mecha with Level 3 Multiple Mecha Attacks (4 attacks total), can attack up to 20 times each round (5x4=20)!

Level 1   The mecha gains 1 extra attack and defense each round.
Level 2   The mecha gains 2 extra attacks and defenses each round.
Level 3   The mecha gains 3 extra attacks and defenses each round.
Level 4   The mecha gains 4 extra attacks and defenses each round.
Level 5   The mecha gains 5 extra attacks and defenses each round.
Level 6   The mecha gains 6 extra attacks and defenses each round.


Regeneration (4 Mecha Points/Level)

Regeneration allows a mecha to heal or repair itself up to its normal maximum number of Health Points. This can represent a self-healing bio-mechanical creature, an auto-repair system, or even an omnipresent first-rate repair crew. At high Sub-Attribute Levels, this ability is even useful in combat, since the mecha can repair damage almost instandy. A mecha cannot use regeneration if it is destroyed.

Level 1   The mecha can regenerate 1/20 of original Health Points per hour when shut down.
Level 2   As Level 1, but can be done while operating.
Level 3   The mecha can regenerate 1/20 of original Health Points every 5 minutes when shut down.
Level 4   As Level 3, but can be done while operating.
Level 5   The mecha can regenerate 1/10 of original Health Points per round when shut down.
Level 6   As Level 5, but can be done while operating.
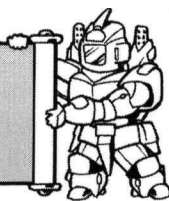
Sensors (1 Mecha Point/Level)

The mecha has sensors (such as radar or infrared) to see in the dark or detect distant targets (provided they are in line of sight). Earth's horizon limits line of sight to 4-6 kilometres unless the mecha or target is flying, very tall, or atop a hill or building. Thus, long-ranged sensors are mainly useful when mounted on an aircraft or spacecraft. Buildings, hills, big mecha, planets and other objects will block a sensor's line of sight.

A sensor's listed range is how far away it can detect a roughly man-sized object. Very large objects (or objects that emit a lot of energy) can be detected at much longer ranges. If a target object has Awkward Size Level 2 or more, multiply the range shown below by the Level of Awkward Size. GMs can also assign Levels of Awkward Size to non-mecha objects (such as buildings) for this purpose.

Ordinary sensor ranges assume the target object is within a planetary atmosphere. Objects in space are easier to spot, as they and their power emissions stand out against the cold and the blackness of space. For this reason, when a sensor is used to detect an object in space, the range is greatly increased.

Normal sensors do not work underwater. **Underwater Sensors** (like sonar) can be acquired separately, also for 1 Mecha Point/Level. They work in the same manner as ordinary sensors, but only detect objects in or under water, and have 1/10 range. For example, a Level 3 Underwater Sensor has a 5 km range. Sensors can also be given special abilities, such as analyzing power levels, detecting life signs, or whatever else the GM feels is reasonable. The cost for each such ability is one additional Mecha Point.

Level 1   Range to 10 kilometres (1,000 km in space).
Level 2   Range to 20 kilometres (10,000 km in space).
Level 3   Range to 50 kilometres (100,000 km in space).
Level 4   Range to 100 kilometres (1,000,000 km in space).
Level 5   Range to 200 kilometres (10 million km in space).
Level 6   Range to 500 kilometres (100 million km in space).

Shield (1 Mecha Point/Level)

A shield is a large hand-held barrier that a mecha can interpose to absorb damage from attacks. A mecha requires at least one available arm in order to use a shield; if the mecha only has one arm, it cannot use a hand-held weapon and a shield at the same time. A "ready" shield provides additional armour that works occasionally. If a mecha holding a shield attempts a defense roll, but just barely fails (by one), the shield successfully blocks the attack. The shield provides 15 points of Armour per Level of the Shield Sub-Attribute, which is cumulative with that of Force Fields and other Armour.
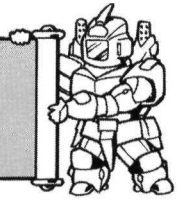
Level 1   The shield provides 15 additional points of Armor on some failed defense rolls.
Level 2   The shield provides 30 additional points of Armor on some failed defense rolls.
Level 3   The shield provides 45 additional points of Armor on some failed defense rolls.
Level 4   The shield provides 60 additional points of Armor on some failed defense rolls.
Level 5   The shield provides 75 additional points of Armor on some failed defense rolls.
Level 6   The shield provides 90 additional points of Armor on some failed defense rolls.

Special Equipment (2 Mecha Points/Level)

Some mecha have special equipment which provide useful non-combat advantages. Special Equipment differs from Accessories since the equipment is usually large, costly, or rare. The equipment is always built into the mecha and cannot be removed. A mecha can have several different items of special equipment, but each item must be acquired individually. Thus, having both a sound system and a sick bay would cost 4 Mecha Points; having a science lab and a sick bay would cost 6 Mecha Points. If the special equipment is very big (for example, a sickbay or science lab), the mecha requires an appropriate Awkward Size Defect (page 46).

Level 1   The equipment offers a small advantage, such as a sound surveillance system, a sick bay, extendible arms, or flare-proof sensors (-5 bonus to rolls to resist Flare attacks).
Level 2   The equipment offers a moderate advantage, such as a high-tech science lab.
Level 3   The equipment offers a good advantage, such as a tractor beam (replaces one of the mecha's arms, usable at a distance; if the mecha already has two arms, it must also buy the Extra Arms Sub-Attribute, page 19).
Level 4   The equipment offers a great advantage, such as an automated medical bay that doubles a patient's healing rate.
Level 5   The equipment offers a powerful advantage, such as a cloaking device that turns the mecha invisible, preventing it from being detected on any round it does not attack.
Level 6   The equipment offers an incredible advantage, such as a ship-to-surface teleportation system.
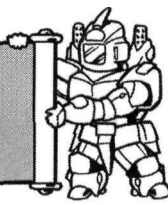
Stealth (1 Mecha Point/Level)

A Stealth mecha is designed to be more difficult to detect, utilizing shapes, materials or electronics to foil radar, sonar, and other sensors. If a mecha possesses the Stealth Sub-Attribute, someone using the Sensors Sub-Attribute requires a Mind Stat roll to detect the mecha when it comes into range, with a +1 dice roll penalty per Level of the Stealth. The sensor operator has a -1 bonus if the stealthy target mecha is within one-tenth of the maximum range at which the searching mecha's sensors can detect it, -2 if within 1/100 range, and -3 if within 1/1000 range.

Level 1   The sensor operator's Mind Stat check suffers a +1 penalty to the dice roll.
Level 2   The sensor operator's Mind Stat check suffers a +2 penalty to the dice roll.
Level 3   The sensor operator's Mind Stat check suffers a +3 penalty to the dice roll.
Level 4   The sensor operator's Mind Stat check suffers a +4 penalty to the dice roll.
Level 5   The sensor operator's Mind Stat check suffers a +5 penalty to the dice roll.
Level 6   The sensor operator's Mind Stat check suffers a +6 penalty to the dice roll.

Summonable (4 Mecha Points/Level)

A Summonable mecha is linked to one special owner and can appear or disappear on command. The player must decide whether the mecha simply appears beside the character or actually forms around the character (placing him or her within the mecha's cockpit). This Sub-Attribute is quite powerful, since it allows the character to bring a mecha into situations where dragging one along is normally unacceptable, such as a school, an embassy ball, or prison. The Sub-Attribute Level governs how quickly the mecha appears. This Sub-Attribute may be linked to the Summoning Object Mecha Defect (page 53). Unlike most other Sub-Attributes, Summonable has only two Levels.

Level 1   The mecha takes several rounds to summon (GM's option, or roll two dice). The character cannot carry out other activities during the summoning.
Level 2   The mecha takes only one round to summon.

Super-Transformation (3 or 5 Mecha Points/Level)

Super-Transformation is similar to the Mechanical Transform Sub-Attribute (page 30) but costs one point more per Level. The Sub-Attribute and Defect restrictions have been eased greatly — all mecha forms must possess the same Levels of the Super-Transformation Sub-Attribute as well as the Hangar Queen and Limited Endurance Defect (page 47 and 48). Thus, a man-sized mecha could transform into one the size of a building, or one the size of a walnut. If the individual mecha forms have different Health Point values, damage transfers proportionately.
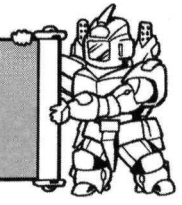
For example, if a 200 Health Point mecha is reduced to 80 Health Points (40% of its total Health Points) and transforms into a 40 Health Point mecha, that mecha will also be down to 40% of its total Health Points, and will thus drop to 16 Health Points.

Level 1   The mecha has one additional form.
Level 2   The mecha has two additional forms.
Level 3   The mecha has three additional forms.
Level 4   The mecha has four additional forms.
Level 5   The mecha has five additional forms.
Level 6   The mecha has six additional forms.

Weapon Sub-Attributes

Weapon Sub-Attributes provide mecha with armament and combat-related functions and abilities.

Mecha Weapon (4 Mecha Points/Level)

Almost all anime-styled mecha are equipped with some type of weapon. The first Level of the Mecha Weapon Sub-Attribute gives the mecha a ranged attack that delivers 15 points of damage. Subsequent Levels may be used to either increase the damage by 15 points or to take a special Weapon Ability (page 39) such as Auto-Fire, Explosive, or Homing. A weapon may have more than one Weapon Ability, and can also be assigned various Weapon Defects, such as Limited Shots or Slow. Each Weapon Defect chosen provides a single Weapon Bonus Point (WBP), which is used to either add 15 points of damage or assign an extra Weapon Ability.

Every weapon should have a brief name or description consistent with its Damage, Weapon Abilities, and Defects. Damage comparisons with today's real-world weapons are given below:

15 points — a light machine gun.
30 points — a heavy machine gun.
45 points — a grenade launcher or light auto-cannon.
60 points — a medium tank gun or an anti-tank rocket.
75 points — a heavy tank gun or a big anti-tank missile.
90 points — a battleship's gun or a standard cruise missile.
>90 points — an extremely powerful missile
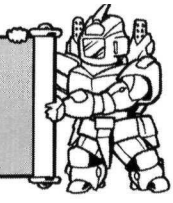
Alternate Weapons — Although a mecha often uses its most powerful "primary" weapon, it may also have access to less powerful ones. The Mecha Point cost of these additional "secondary" weapons are significantly lower than the cost of the primary weapon: 2 Mecha Points for each weapon at the same Level as the primary weapon, and 1 Mecha Point for each weapon at a Level lower than the primary weapon. The primary weapon is the only one that costs the standard 4 Mecha Points/Level. Secondary weapons may each possess different Damage, Weapon Abilities and Weapon Defects.

Different Gunners — Weapons are normally designed to be used by whomever is controlling the mecha (but only one attack each round). However, if the mecha carries multiple people (see Extra Capacity Sub-Attribute, page 19), other crew members — one for each separately operated weapon — may be given their own alternate weapons, allowing simultaneous attacks from the same mecha. If a weapon is created from this category, it should be noted as requiring a "Different Gunner", which increases the alternate weapon's cost by 5 additional points. Deciding which crew positions control which weapons must be specified when the mecha is designed; a particular weapon cannot be assigned to more than one gunner.

Hand-Held Weapons — Mecha weapons are assumed to be attached to the mecha, but may instead be designated as hand-held. A hand-held weapon can be lost or grabbed by an enemy, and the mecha must have at least one arm to hold it. However, mecha can (in theory) swap hand-held weapons with other mecha, provided both weapons are approximately the same size (so that handgrips are compatible).

If this weapon creation system is used to design human-sized Personal Gear (page 10), a weapon is usually hand-held and base damage is only *5* points per Level (or per Weapon Defect) instead of 15.
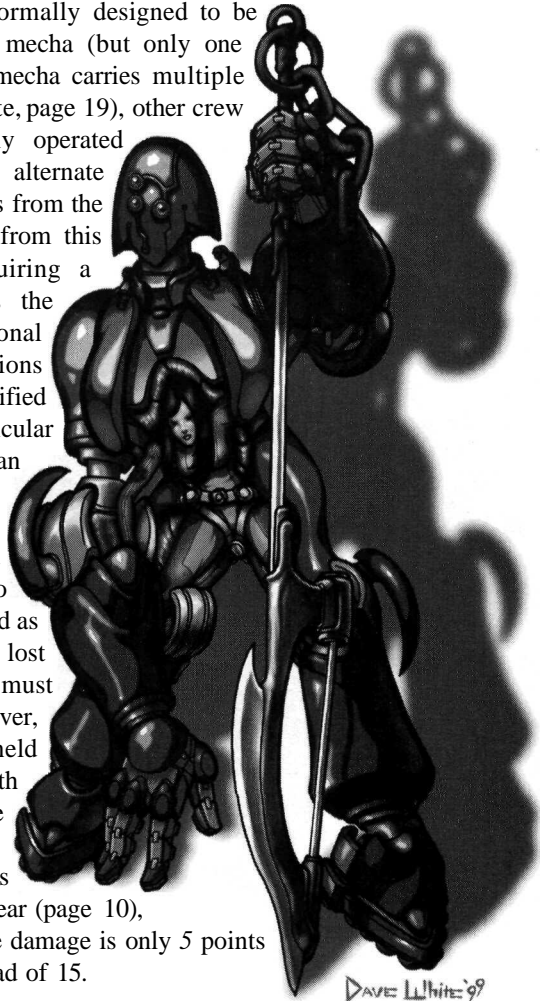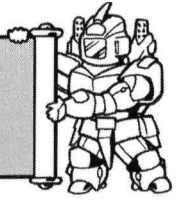
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Level 1   The Mecha weapon delivers 15 points of damage.
Level 2   A Level 1 weapon that delivers 15 additional points of damage, or one additional Ability,
Level 3   A Level 2 weapon that delivers 15 additional points of damage, or one additional Ability,
Level 4   A Level 3 weapon that delivers 15 additional points of damage, or one additional Ability,
Level 5   A Level 4 weapon that delivers 15 additional points of damage, or one additional Ability,
Level 6   A Level 5 weapon that delivers 15 additional points of damage, or one additional Ability.

Scorpio's patrol ship has two weapons. The primary weapon is rated at Level 3 (12 Mecha Points). Chris also chose a secondary weapon at Level 2, which consequently costs only 1 Mecha Point. Pilot Scorpio can fire only one weapon at a time. Even if the ship had a second crewmember aboard, he or she could not use the other weapon because it was not designated as a "Different Gunner" weapon (which would have increased the cost of the secondary weapon from 1 to 8 Mecha Points). Chris names the first weapon a "Gatling laser." Each Level either provides 15 points of damage or one weapon ability; Chris chooses 30 damage and the Auto-Fire Ability. He decides that his primary weapon is not powerful enough, so Chris selects the Unreliable Weapon Defect and uses the Weapon Bonus Point to increase the damage to 45 points. Chris names the secondary Level 2 weapon a "missile pod" and decides it can deliver 30 damage points. He then chooses two Weapon Defects for the secondary weapon — Limited Shots and Stoppable — and uses them to acquire the Long Range and Homing abilities. The mecha ship is now equipped with a powerful multi-shot gatling laser, and long-range guided missiles!

Weapon Abilities

Accurate — The weapon is unusually accurate (or fires a large number of shots) giving a -1 bonus to Attack rolls. This ability can be assigned two or three times for a -2 or -3 bonus.

Area Effect — The attack includes not only the direct target, but also anyone in the immediate area. Weapon examples include an explosive blast, a chemical cloud, or a biological plague. Individuals in nearby mecha with the Exposed Occupants Mecha Defect (page 47) are also affected. All affected characters are allowed a Defense roll (diving for cover, swerving out of the way), but a successful Defense is not enough to
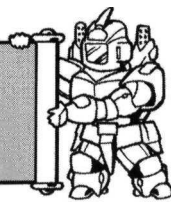
escape the weapon completely — the target still takes half damage from the attack (round down). Characters and mecha that can shield themselves with objects or terrain in the vicinity may avoid damage completely (GM's discretion). The GM will decide whether an object or person is within the area of effect, and may assume the area radius, in metres, is equivalent to one-third of the weapon's damage. Area Effect can be assigned multiple times: each ability doubles the area radius.

Auto-Fire — The weapon fires multiple times in a single combat round, in the same manner as a machine gun or a multiple rocket pod. Instead of scoring one hit when an attack is successful, the mecha scores hits equal to the difference between the attack roll and the character's Attack Combat Value (minimum of one, maximum of five). For example, if a character's attack Combat Value is 7 and the player rolled 5 (after all modifications), he or she would score two hits. However, the defender's chance to avoid the attack is derived in a similar way: a successful defense roll will defend against a number of hits equal to the difference between the defense roll and Defense Combat Value (with a minimum one hit avoided).

Burning — This represents flaming liquid, acid, hungry nanomachines, venom, or similar weapons that deliver continuing damage over several rounds. If the initial attack damage penetrated all Armour and Force Fields, the target will suffer an additional 1/10 of the basic weapon damage each round for the next 5 rounds, or until the weapon effect is somehow neutralized (GM's discretion; it should depend on the type of attack, and may require several rounds for full neutralization). The Armour and Force Field Sub-Attributes do not protect against the extra burning damage in subsequent rounds.

Concealable — Concealable weapons are usually hidden within the mecha. Alternatively, the weapon may be small enough to be used with one hand and concealed under clothing, if built as Personal Gear (page 10).

Flare — If the target is hit (or in the radius of an Area Effect weapon attack) the defending character may be blinded. Every target looking in the vicinity of the attack must roll a Body Stat check at a +1 penalty for every 15 points of weapon damage (ignoring Armour or Force Field Sub-Attribute effects). If a target character rolls greater than his or her Body Stat, he or she is blinded for a number of combat rounds equal to the difference between the Body Stat and the dice roll.

Flexible — This ability represents long, flexible, or extendible attacks such as a whip, energy-lash, razor-ribbon, or similar weapon. The target defends at a +1 penalty. If the attacker is strong enough to physically lift the target, a successful attack can trip or disarm
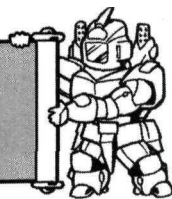
an opponent (snagging a hand-held weapon) in lieu of delivering damage. Such non-damaging attack stunts are made at a +2 penalty to the Attack roll, since they require tremendous skill to execute accurately. If this ability is chosen for a weapon, the Melee Weapon Defect (page 44) must also be assigned to that weapon.

Homing — The weapon fires a projectile or energy bolt that can track and follow its target. The character receives a -2 bonus to his or her Attack roll, and if the attack misses, or the target successfully defends, the weapon will return to try again (only one more time) in the next combat round. A Homing attack is vulnerable to ECM missile jamming, however (see Electronic Counter-Measures, page 28).

Indirect Fire — The weapon can fire shots in a high ballistic arc. Examples include grenade launchers and howitzers. This allows the mecha to shoot at targets hidden behind buildings, hills, or other obstacles (or even shoot over the horizon, if the Long Range Weapon Ability is also taken). Indirect Fire is tricky, however. A weapon with the Indirect Fire Weapon Ability can be used under normal mid-range conditions without any penalty. If it is used to make an indirect fire shot, the attacker must be able to "see" the target (sensors can be used), or someone else must spot the target and relay its position to the attacker. Indirect fire results in a +2 penalty to the Attack roll.

Long Range — An ordinary mecha weapon (such as a machine gun, rifle or light auto-cannon) is assumed to have an effective range of about 500 metres (10 km in space). This Weapon Ability extends the range to 5 km (100 km in space). Long Range weapons are typical of heavy cannon or beams mounted on ships, tanks or big robots, and of artillery and guided missiles. The ability can be assigned multiple times: each time it is taken after the first doubles the actual range. A mecha needs to see targets before it can shoot them, however, and the horizon limits line of sight to about 3-5 km. Thus, more than one Level of Long Range is really only useful for air or spacecraft with Sensors, or for weapons that also have the Indirect Fire Ability (such as artillery).

Muscle-Powered — The mecha may add any damage bonus from the Super-Strength Sub-Attribute (page 20) to the weapon's basic damage. The Melee Weapon Defect must also be taken. If the user does not possess the Super-Strength Sub-Attribute, the attacker's Body Stat is added to the delivered damage instead.

Penetrating — Either the Armour or Force Field Sub-Attributes only stops half as many damage points against a Penetrating attack. The penetration type must be specified during weapon creation. The Weapon Ability must be purchased twice to have an attack that penetrates both the Armour and Force Field Sub-Attributes.
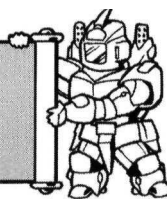
Spreading — This type of attack spreads from the weapon, like a shotgun blast or a wave of energy. The defender receives a +1 penalty to his or her Defense roll. Multiple adjacent targets in the attack path may also receive damage if they are in a line or in a dense formation, up to a maximum of one extra target for every 15 points of weapon damage. The Spreading Sub-Attribute can be acquired multiple times: each one further penalizes the target's Defense roll by +1 and doubles the number of possible adjacent targets.

Stun — The Stun attack only inflicts temporary damage, such as an electric shock that shorts out electronics and renders people unconscious. Lost Health Points are recovered or repaired at one point every minute, rather than the normal one per hour. Stun damage cannot kill.

Tangle — Weapons such as glue guns or nets deliver Tangle damage as well as ordinary damage, and thus need to be tracked separately. Armour does not protect against Tangle damage (although Force Fields do), and Tangle damage is not reduced by the No Damage Defect (page 44). If a mecha suffers more Tangle damage than it has remaining Health Points, it is trapped and unable to move, attack with hand-held weapons, or defend. Tangle damage can be "healed" by attacking the binding substance (net, glue, etc.) in melee or with an Area Effect weapon — the latter may also damage the entangled mecha, however (page 39). A mecha can attack the source of its own entanglement, or the entanglement of others. Either requires an Attack roll, with each point of damage that is inflicted "healing" one point of Tangle damage. An entangled mecha is set free once the Tangle damage is reduced to zero from "healing".
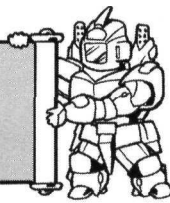
Trap — The weapon lays minefields, spikes or some other similar trapping device. The projectile "sits and waits" until someone triggers it. If someone unknowingly prepares to enter the trapped area, he or she should be allowed a Mind Stat check that, if successful, will reveal the trap's presence. The Trap Weapon Ability can be paired with the Melee Defect (page 44) to simulate a trap placed by hand or carefully planted by the mecha. Without the Melee Defect, the trap can be deployed at a range — a successful Attack roll indicates that the Trap was fired into the correct area.

Weapon Defects

Few weapons do everything equally well, and many have various disadvantages. Each Defect assigned to a weapon provides one Weapon Bonus Point (WBP), which the player can use to either increase the weapon damage by 15 points, or acquire an additional Weapon Ability (page 39).

Exposed — The gunner must expose him or herself outside the mecha's Armour on the round that the weapon fires (and stay exposed until his or her next action in the following round). An exposed character targeted for attack receives no protection from the mecha's Armour. An example of this Weapon Defect would be a machine gun mounted on a bracket atop a tank — the gunner must lean out of the hatch to use it. This Defect cannot be taken if the mecha has the Exposed Crew Defect, and is not normally usable with the Cybernetic Body Attribute or hand-held weapons.

Fixed — The weapon has a very limited arc of fire and must be aimed by turning the mecha, rather than the weapon. For example, the weapon could be a set of fixed forward-firing guns on a fighter plane, or a ramming prow on a galactic ship. In many battles, a manoeuvring enemy who has a higher Initiative score can move to a position that cannot be targetted by the fixed weapon. A hand-held weapon may not be fixed.

Inaccurate — The weapon is not as accurate as usual. Clumsy melee weapons (such as a ball-and-chain), guns with short barrels, or low velocity projectiles (including bombs) tend to be inaccurate. The weapon gives a +1 penalty to all Attack rolls. This ability can be taken two or three times for a +2 or +3 penalty.

Limited Shots — The weapon is only useable for a few combat rounds of fire, and then either runs out of ammunition or power, or simply burns out. Assigning this Defect once
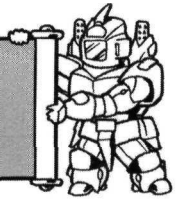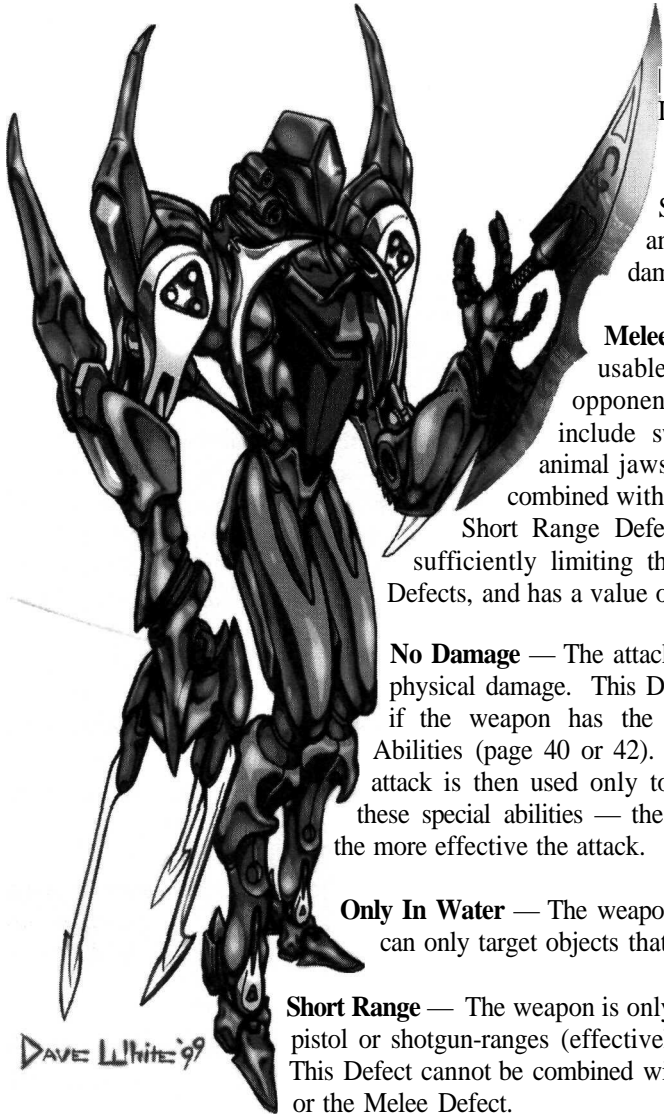
means the weapon can make up to six attacks; if taken twice, up to three attacks; if taken three times, only one attack. If the weapon also has the Auto-Fire Weapon Ability (page 40), one "attack" means a single auto-fire burst (one attack roll).
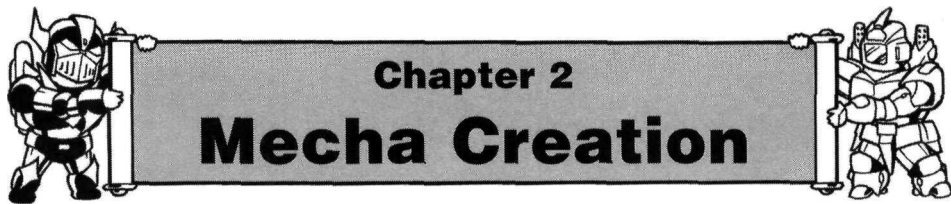
Low Penetration — The attack is easily deflected by Armour such as those from shotgun blasts, or hollow-point bullets. The Armour and Force Field Sub-Attributes (page 18 and 29) stop twice the usual damage.

Melee — The weapon is only usable against adjacent opponents (weapon examples include swords, limpet mines, and animal jaws). This Defect cannot be combined with the Long Range Ability or Short Range Defect. Note: This Defect is sufficiently limiting that it is equivalent to two Defects, and has a value of 2 WBP.

No Damage — The attack does not deliver ordinary physical damage. This Defect is usually only taken if the weapon has the Flare or Tangle Weapon Abilities (page 40 or 42). The damage value of the attack is then used only to rate the effectiveness of these special abilities — the greater the damage value, the more effective the attack.

Only In Water — The weapon (for example, a torpedo) can only target objects that are on or under water.

Short Range — The weapon is only usable at thrown grenade, pistol or shotgun-ranges (effectively up to 50 metres range). This Defect cannot be combined with the Long Range Ability or the Melee Defect.

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Slow — The gunner must use one combat action to aim, charge, or load the weapon before each attack. A gunner with the Extra Attacks Attribute (see *BESM,* page 21) can use one of his or her extra attacks to prepare the weapon rather than wasting the entire round.

Static — The weapon cannot be fired while the mecha is moving under its own power. This could result from the weapon being too bulky, requiring precise aim, or draining too much power. Alternatively, the mecha's fire control system may not be advanced enough to aim while the mecha is in motion. The mecha pilot may not even make Defense rolls on the round a Static weapon is fired; if he or she has already made a Defense roll, this weapon cannot fire until the following round.

Stoppable — The attack is quite massive, or slow enough to be shot down, and does not reach the target until Initiative zero. Consequently the attack can be stopped in mid-flight. A cannon shell would probably not qualify, but a missile or plasma-ball might. Anyone with an unused combat attack action during the same round may make a ranged attack against the projectile. To stop the attack or shoot it down, a successful hit (or hits) must deliver at least one-third as much damage as the damage delivered by the Stoppable attack. The Melee and Stoppable Defects may not be assigned to the same weapon.

Toxic — The attack is a gas, toxin, radiation, biological weapon, sound, or other harmful effect that only damages living species. Non-living material (such as most mecha) are immune to its effects, as is any person with appropriate protection (such as a gas mask, or inside a mecha or structure with life support). If this weapon is used against a mecha, the crew inside are unaffected unless the mecha has the Exposed Occupants or Mutual Damage Defects (pages 47 and 49).

Unique Weapon Defect — The weapon has some other unspecified limitation, subject to GM approval. Examples could include a weapon that fires in a random direction, one that is extremely costly to operate, one that drains Heath Points from the user, and many more.

Unreliable — Any time a mecha pilot makes an attack and rolls an unmodified (or "natural") 11 or 12, the weapon fails to fire and either jams, over heats, or otherwise malfunctions. The weapon will not work again until it is fully repaired. Repairing a mecha requires a skilled individual to make a successful Mind Stat check (one attempt each round); while the character is making repairs, he or she cannot carry out other activities.

Uses Energy — The weapon draws upon the personal energy of the gunner; each attack drains 5 Energy Points per Level of the weapon. Weapons that utilise Energy Points are usually partially magical or psionic in nature.
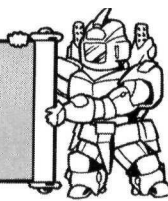
Step 5D; Mecha Defects

Mecha Defects are limitations in a mecha's capabilities, or weaknesses that they may suffer. By assigning a Defect to a mecha, the character gains 1 or 2 (or sometimes 1 to 6) Mecha Bonus Points (MBP). These points must be used to acquire additional Mecha Sub-Attributes, and cannot be used to purchase normal Character Attributes.

The Mecha Defect descriptions indicate the possible effect on game play and any adjustments made to the mecha's Sub-Attributes. When in doubt, consult the GM for details on how he or she plans to implement a particular Mecha Defect.

The Mecha Sub-Attributes for Scorpio's patrol ship's cost 68 Mecha Points. Since Scorpio has only 60 Mecha Points, his mecha requires 8 MBP of Mecha Defects. Chris assigns several Defects to Scorpio's mecha that define its limits as a spaceship: Awkward Size (3 MBP), No Arms (2 MBP), Restricted Ground Movement (None, 2 MBP) and a Weak Point (Small, 1 MBP).

Awkward Size

A mecha the size of an ordinary human (a form-fitting powered suit, for example) can go anywhere a person can (such as through a small doorway), and is easy to transport and conceal. Not all mecha are this handy, however. In fact, many mecha are extremely large, making it very awkward for them to be operated inside small buildings, transported in trucks, or concealed from detection. The larger the mecha, the more Mecha Bonus Points awarded for the Awkward Size Defect (see below).

A mecha that possesses arms, but has two or more MBP of Awkward Size is too big to use equipment designed for human hands. This Defect can be continued past six Levels for really huge vessels, typically used as a campaign setting base of operations rather than as a regular mecha.

1 MBP   Bulky mecha, such as motorbike or big powered suit. Masses 100 to 1,000 kilograms.
2 MBP   Large mecha, such as a car, van, light plane or speed boat. Masses 1-10 tonnes. Cannot pass through normal doors.
3 MBP   Very large mecha, such as a rig, tank or fighter plane. Masses 10 to 100 tonnes.
4 MBP   Huge mecha, such as a jet airliner or small ship. Masses 100 to 1,000 tonnes. Cannot fit on most city streets, and normal roads and bridges might collapse under the media's weight.
5 MBP   Gigantic mecha, such as a large ship. Masses 1,000 to 10,000 tonnes.
6 MBP   Titanic mecha. Masses 10,000 to 100,000 tonnes.

Chapter 2
Mecha Creation
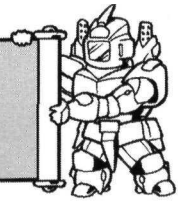
Crew Requirement

Some mecha require two or more people to operate them effectively. Note that the mecha must have sufficient Extra Capacity (page 19) to carry the necessary crew. If a mecha is operated with less than a full crew compliment, it still retains partial function (provided there is someone to pilot it), but it will not run smoothly. For every 20% a mecha is understaffed (round up), the GM can impose a +1 penalty on all mecha-related Stat checks or combat dice rolls, or pick a system (sensors, Force Fields, a weapon) that has gone unmanned and thus cannot be used. An understaffed, overworked crew is more likely to make mistakes, leading to equipment breakdowns.

1 MBP Mecha operation requires 2 crew members.
2 MBP Mecha operation requires 3-10 crew members.
3 MBP Mecha operation requires 11-40 crew members.
4 MBP Mecha operation requires 41-200 crew members.
5 MBP Mecha operation requires 201-1,000 crew members.
6 MBP Mecha operation requires 1,001-5,000 crew members.

Exposed Occupants

Sometimes the pilot (and other crew and passengers) are not situated completely inside the mecha. Riding a motorcycle is a good example of complete exposure. The exposed rider does not receive any benefits from the mecha's Armour when attacked. A convertible or open-cockpit airplane are good examples of partial exposure. Occupants are open to attacks from above, and do not receive mecha Armour benefits. They are fully shielded from attacks from below, however, and receive the normal mecha Armour benefits. Attacks from the side, front or back may be aimed at occupants at a +2 penalty to the Attack roll, to bypass any mecha Armour or other mecha-based physical protection. Area Effect attacks that hit the mecha also deliver full damage to the exposed occupants (page 39). Cybernetic Bodies may not take this Defect.

1 MBP The mecha occupants are partially exposed.
2 MBP The mecha occupants are completely exposed.

Hangar Queen

These troublesome mecha require extra careful maintenance to function properly. If this maintenance is not available, the GM should feel free to impose breakdowns of various systems whenever it seems dramatically appropriate. If a mecha is transformable, this Mecha Defect is only available if each form possesses the Defect at the same MBP.
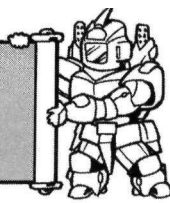
| 1 MBP | The mecha spends much of its time under repairs. For every hour it is in operation, it should be given at least an hour of maintenance. |
| 2 MBP | The mecha spends most of its time under repairs. For every hour it is in operation, it should be given two or more hours of maintenance. |

Less Armour

The mecha has less Armour than its Armour Sub-Attribute Level indicates (page 18). This Defect can only be taken by mecha with at least one Level of Armour.

| 1 MBP | Mecha Armour stops 2 fewer points (1 fewer if hidden Armour). |
| 2 MBP | Mecha Armour stops 5 fewer points (2 fewer if hidden Armour). |

Limited Endurance

A normal mecha operates for a few hours at a time (longer if it has the Extra Endurance Sub-Attribute), but a Limited Endurance mecha can only operate for a very limited duration before it must refuel or recharge, or be maintained. The mecha should require a minimum of 30-60 minutes of rest, which can be a critical weakness in a battle. The Limited Endurance Defect cannot be combined with Extra Endurance Sub-Attribute (page 20).

| 1 MBP | The mecha can only operate for one hour. |
| 2 MBP | The mecha can only operate for a few minutes. |

Limited Force Field

This Defect can only be acquired if the mecha has the Force Field Sub-Attribute (page 29), and assigns the Force Field a minor or major limitation. An example of a minor limitation would be a Force Field that is effective against ranged attacks but not against melee attacks, one that offers full-strength frontal and rear protection but only half-strength protection from above, or one that requires one minute to reach full strength. An example of a major limitation would be a Force Field that prevents the mecha from making any attacks during operation, one that is unstable in certain types of environments (such as sub-zero temperatures or near water), or one that only works against a very specific type of weapon (such as lasers).

| 1 MBP | The mecha's Force Field has a minor limitation. |
| 2 MBP | The mecha's Force Field has a major limitation. |
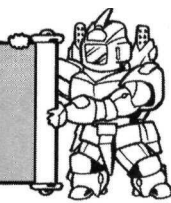
Mutual Damage

Some mecha are small enough that any damage it receives is likely to injure the wearer or pilot. Others have control systems (such as a neural interface) that have the side effect of causing the operator injury or pain proportionate to the damage the mecha sustains. A form-fitting powered Armour suit will usually exhibit the Mutual Damage Defect. Mutual Damage cannot be acquired for Cybernetic Bodies. Mecha Armour and Force Fields will reduce the damage delivered to both the mecha and the occupant (pages 18 and 29).

1 MBP   Partial Damage. For every 5 points of damage delivered to the mecha, the operator loses 1 Health Point.

2 MBP   Full Damage. The mecha operator receives the equivalent damage that the mecha sustains.

Noisy

The mecha generates plenty of noise while in operation. A mecha that is only useable in space (only type of movement is provided by the Space Flight or Star Drive Sub-Attributes) may not be Noisy. While on or under water, a noisy mecha is also detected by underwater sensors at double (1 MBP) or quadruple (2 MBP) normal range.

1 MBP   The mecha is slightly noisy, similar to a typical car engine.

2 MBP   The mecha is very noisy, similar to a typical airplane engine.

Not So Tough

The mecha is not as durable as it might be, and has fewer Health Points than its Toughness Sub-Attribute Level indicates.

1 MBP   The media's Health Points are decreased by 5 points.

2 MBP   The mecha's Health Points are decreased by 10 points.

One Arm/No Arms

A mecha with fewer than two arms (or appendages) has limitations in combat, as well as in many everyday situations.

1 MBP   The mecha only has one usable arm. It cannot hold onto objects while punching or using a hand-held weapon.

2 MBP   The mecha has no useable arms. It cannot carry hand-held weapons, grab or push objects, or punch enemies in combat.
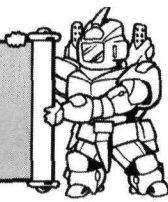
One-Way Transformation

This Defect can only be taken by a mecha with the Mechanical Transformation or Super Transformation Sub-Attributes (pages 30 and 36). The mecha cannot transform back to a prior form without considerable work by mechanics or lab technicians. For example, the original mecha might include a rocket booster to help project it into space, and then "transform" into its more agile form by ejecting the boosters. Another example would be a robot that sheds its human-like skin to bring forth various large weapon pods.

This Defect can be assigned separately to one or more affected mecha forms. Once the mecha changes into an affected form, it cannot transform back. For example, a mecha with two forms would take the Defect for the first form only, while a mecha with three forms could take it for the first one, or for the first and second form.

1 MBP It takes several hours of work to enable the mecha to transform back to an earlier form.
2 MBP As above, but the process requires expensive (or hard to find) replacement components.

Partial Armour

This Defect can only be assigned to a mecha with the Armour Sub-Attribute (page 18). The mecha's Armour does not provide complete coverage, and leaves the mecha partially vulnerable. A skilled opponent can aim attacks at these places, effectively bypassing the Armour. An example of a lightly armoured spot would be a tank's sides or rear, or perhaps a helmet faceplate on a suit of powered armour. An example of an unarmored area would be glass windows.

1 MBP The mecha has a lightly armoured spot. An opponent can choose to target the spot by taking a +2 penalty to his or her Attack roll. A successful hit results in the mecha's Armour only protecting at half value (round down).
2 MBP The mecha has an unarmoured spot. As above, but a successful hit bypasses all Armour protection.

Poor Manoeuvrability

The mecha lacks agility, resulting from its poor control interface, or its large size. This Defect is common for big trucks, tanks, trains, and ships. Poor Manoeuvrability applies to all modes of mecha movement. The penalty is cumulative with any bonuses that might be provided by a Manoeuvre Bonus Sub-Attribute (page 23) the mecha has for any particular type of movement. A character with a Cybernetic Body cannot acquire this Defect if he or she also possesses the Acrobatics Attribute (see *BESM,* page 16).
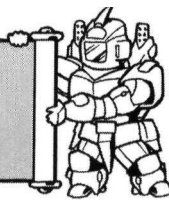
1 MBP   The mecha suffers a +1 dice roll penalty when making any complex manoeuvres or Defense rolls, and a -1 penalty to Initiative rolls.

2 MBP   The mecha suffers a +2 dice roll penalty when making any complex manoeuvres or Defense rolls, and a -2 penalty to Initiative rolls.

Reduced Capacity

The mecha has a shortage of room for the pilot and his or her supplies. This Defect is unavailable to mecha with the Extra Capacity Sub-Attribute, and to characters with the Cybernetic Body.

1 MBP   The pilot can only wear skin-tight (or no) clothing while in the mecha, and cannot bring along extra equipment. It takes at least two rounds to enter and exit the mecha due to cramped conditions.

2 MBP   No room for the pilot at all! This is only useful for mecha that possess the Artificial Intelligence Sub-Attribute (page 27).

Restricted Ground Movement

Most mecha are assumed to be as agile as an average human adult, and are able to traverse many different types of terrain. The mecha usually walk on legs, crawl on treads, or use thick off-road wheels. Taking Restricted Ground Movement reflects the mecha's ground movement limitations. An ordinary car, truck, or motorcycle would be "road-bound" (1 MBP) while mecha such as a boat, helicopter, or starship has "no ground movement" (2 MBP). By assigning the 2 MBP version of this Defect and no other form of movement, characters can create houses, buildings, and star bases.
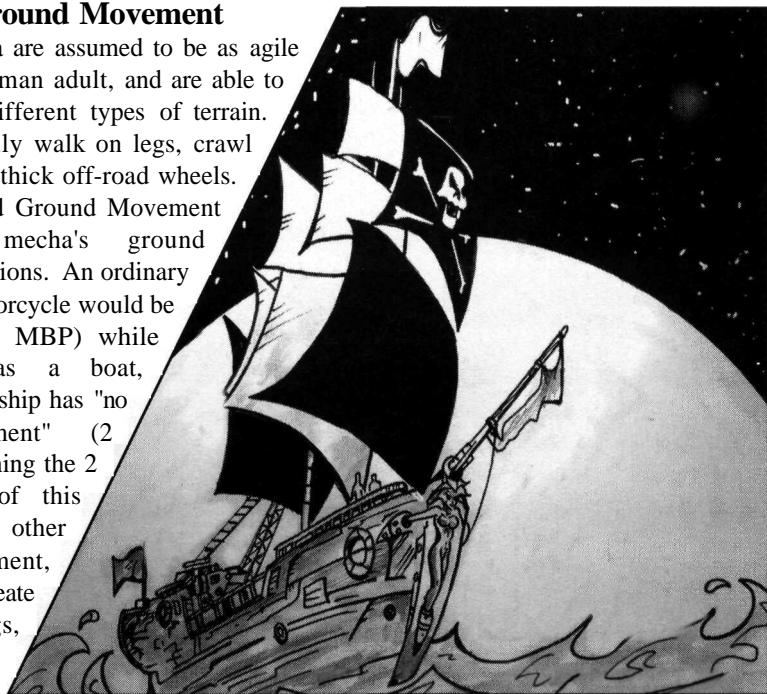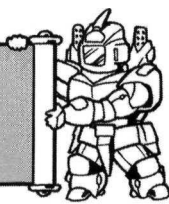
1 MBP Road-Bound. The mecha is designed to operate only on roads or similar smooth terrain. It travels at 1/2 (or less) of ground speed when travelling off-road, and gets stuck in very rough terrain.

2 MBP No Ground Movement. The mecha cannot move at all over normal ground. Exception: mecha with airplane-style movement may taxi on smooth runways during a landing or takeoff. This Defect Level cannot be acquired if the mecha has the Ground Speed Sub-Attribute.
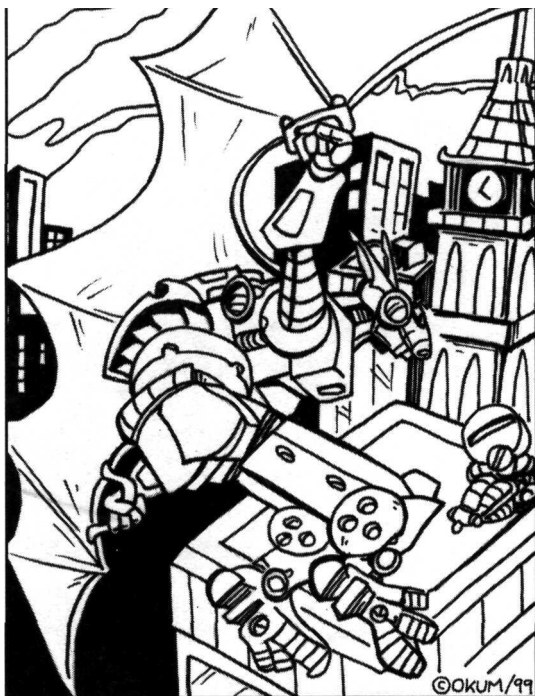
Restricted Flight

This Defect can only be acquired if the mecha also possesses the Flight Sub-Attribute. There are two kinds of restricted flight: Hovercraft and Glider.

Hovercraft — only applies to mecha that are capable of hovering (page 22). The mecha is limited to skimming no more than a metre or two off the ground or water.

Glider — applies to all flying mecha. The means the mecha can only become airborne if it is launched from a fast-moving vehicle or a high place. Additionally, it can only gain speed by diving, or gain altitude by riding thermals. A glider with 4-6 Levels in the Flight Sub-Attribute may glide down from orbit to a safe landing.

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1 MBP The mecha operates as a hovercraft.
2 MBP The mecha operates as a glider.

Restricted Path

For some reason, the mecha cannot leave a narrowly defined area. This may represent a robot that is programmed to follow a specific guard route, or a railway train, or cable car that cannot leave its track system. Alternatively, the mecha could be attached
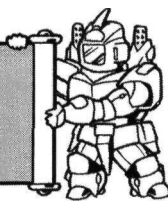
to a generator by a power cable. The mecha can operate normally unless the cable is unplugged, after which it only has a short supply of reserve power.

1 MBP   The mecha is restricted to a large path, such as a national railway line.
2 MBP   The mecha is restricted to a small path, such as a single building.

Start-Up Time

Whenever the mecha is shut down or otherwise disengaged, the pilot must wait for a period of time before it can be operated once again. For example, the mecha might be a complicated powered armour suit that requires a few minutes of adjusting to assure a proper fit, a power plant that requires time to warm up, or a space shuttle or battleship that requires several hours of complex preparation in order to be ready for launch. The Start-Up Time Defect should not be assigned to mecha with the Extra Endurance Sub-Attribute at Level 2 or higher, since the start-up time is trivial compared to the time they can continue running (page 20).

1 MBP   Starting-up the mecha requires several minutes.
2 MBP   Starting-up the mecha requires several hours.

Summoning Object

This Defect can only be assigned to a mecha with the Summonable Sub-Attribute (page 36). The character must possess a special item in order for the mecha to appear. Consequently, the mecha can be prevented from appearing if the item is ever lost, misplaced, or stolen. The item may in fact *be* the mecha in a more compact (but powerless) form, or a device that enables the mecha to be summoned from another dimension.

1 MBP   The required object is small, such as a medallion or compact.
2 MBP   The required object is bulky, such as a sword or suitcase.

Unique Mecha Defect

This section covers any Mecha Defects that are not detailed in the rules. The boundaries and limitations of the Mecha Defect should be discussed with the GM. Examples could include a mecha that "dislikes" the owner, a mecha design that is rather old and very "uncool", a mecha that can only operate during the evening, and many others.

1 MBP   The Mecha Defect occurs rarely, or has a small effect on the mecha.
2 MBP   The Mecha Defect occurs frequently, or has a large effect on the mecha.
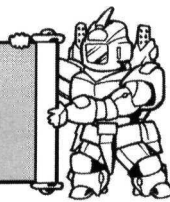
Volatile

The design of the mecha's power centre, fuel tank, or ammunition storage chamber is such that the mecha is prone to exploding when it is badly damaged. If a mecha with this Defect is reduced to 0 Health Points or lower, the players must roll one die to see if it explodes. If the mecha explodes, everyone inside it suffers 60 points of damage. An additional 15 points of damage is added for every MBP Level of the mecha's Awkward Size Defect (page 46). Any object or person nearby suffers blast damage as if the explosion was an Area Effect attack (page 39).

1 MBP   The mecha explodes on a roll of 1-2 on one die.
2 MBP   The mecha explodes on a roll of 1-4 on one die.

Weak Point

Due to a critical design flaw, the mecha possesses a weak point. If an attacker knows the location of the weakness (this may require study of enemy wreckage, espionage, or sensor scans), an attack aimed at that point is much more likely to cripple or destroy the mecha. If the weak point is ever hit in an attack, the result is an automatic critical hit. If an actual critical hit is scored against a weak point, the mecha is instantly destroyed no matter how large it is, or how many Health Points it has.

1 MBP   The mecha has a small weak point. Opponents suffer a +4 attack roll penalty when aiming for the weak point.
2 MBP   The mecha has a large weak point. Opponents suffer a +2 attack roll penalty when aiming for the weak point.

Wind-Powered

A Wind-Powered mecha depends on wind for all of its propulsion systems. Examples include a sailing vessel, a balloon, a sky-ship, and many others. A Wind-Powered vessel is vulnerable to becalming or being blown off course, or otherwise affected by bad weather.

1 MBP   Contrary winds will slow the mecha (reduce movement speeds at least one Level) but do not cripple its movement. An example would be a sailboat with oars or a small auxiliary motor.
2 MBP   The mecha is completely at the wind's mercy for all movement. An example would be a hang glider.

Chapter 2
Mecha Creation
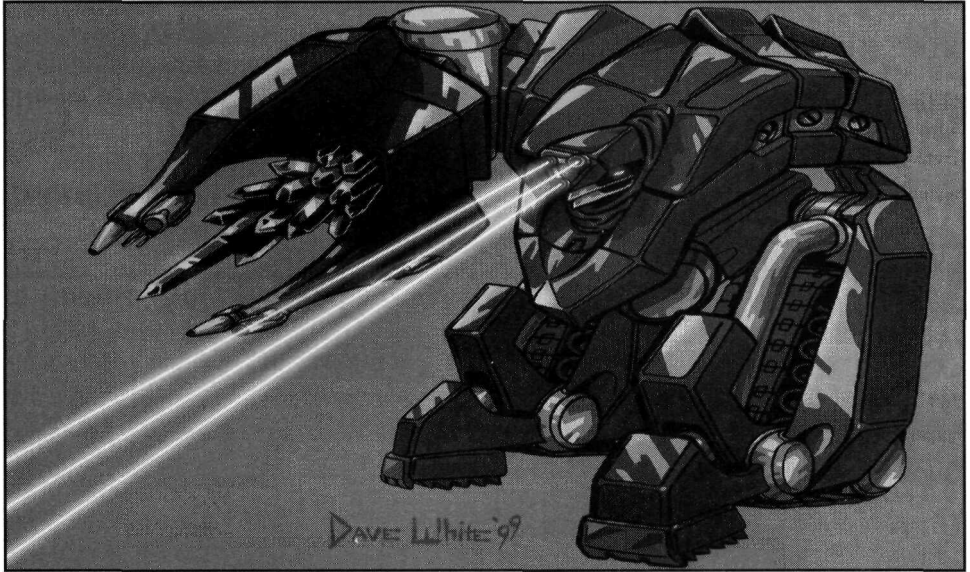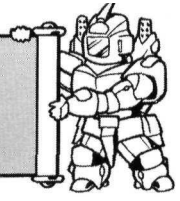
Step 5E: Mecha Derived Values

After you have selected the Mecha Sub-Attributes and Defects for your character's mecha, you can calculate the following derived values for the mecha:

Armour — Add the Armour values from the Armour Sub-Attribute and the Less Armour Mecha Defect.

Health Points — All mecha have a base Health Point value of 40 points. This base value is increased by 20 points for each Level of the Toughness Sub-Attribute and reduced by 5 points for each MBP of the Not So Tough Defect (pages 21 and 49).

Energy Points and Combat Value — Some mecha (notably A.I.'s) have their own set of Stats, and will thus have their own Energy Points and Combat Value. To calculate your mecha's Energy Points, add together the Mind and Soul Stats and multiply by 5 **[(Mind+Soul)x5]**. To calculate the Attack Combat Value, add together the Body, Mind, and Soul Stats and divide by three (round down) **[(Body+Mind+Soul)/3]**. The Defense Combat Value is two less than the Attack Combat Value. However, if an A.I. does not have a Soul Stat, its Attack Combat Value is the sum of its Body and Mind Stats divided by two (round down) **[(Body+Mind)/2]**.
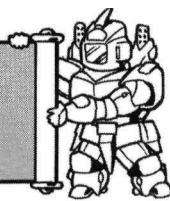
Mecha Creation

5F: Mecha Background

Once the numerical component of your mecha design is complete, you should record some background details to personalize your creation. Before game play begins, consider some of the following questions:

- How does your mecha look?
- Who built it, and why?
- How does it work? Feel free to make up details ("...the power plant is a Starcore 127-megawatt fusion reactor...").
- Is the technology used to build the mecha unusually advanced for the campaign? If so, how was it developed?
- Are there any other similar mecha in operation? Is your mecha a unique model, a prototype, or part of a production run?
- How did your character acquire the mecha?
- Where is it stored when not in use?
- Are there any organizations or individuals who wish to possess your mecha?

Chris develops a background for Scorpio's police cruiser. It is a Cossack-class gunboat, an ex-navy warship sold as surplus to the asteroid patrol when the navy purchased new ships. It is powered by a nuclear reactor and propelled by a fusion drive. The ship is something of an antique, but Scorpio is proud of her. Scorpio's father was a Cossack pilot during the last space war, and flew a gunboat called the Black Swan that was lost in space. Scorpio names his own ship the Black Swan II, in his father's memory.
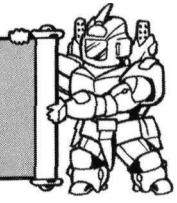
Sample Mecha Designs

Mecha can be designed for many different anime genres, sub-genres, and settings — from fantasy to hard science fiction to police drama to robot comedy. The following designs (with Mecha Point costs) demonstrate the flexibility and range of the *Big Robots, Cool Starships* mecha creation system.

Metal Angel Powered Armour (30 Mecha Points)

The Metal Angels are armoured vigilantes who defend Neo-Tokyo from alien demons. A character, Natsuki, has Own A Big Robot at Level 2, giving her 40 Mecha Points. The player creates a sleek and agile powered suit that is optimized for urban combat.

Structural Sub-Attributes — Armour Level 2 (8 MP). Super-Strength Level 1 (3 MP). Toughness Level 1 (4 MP).

Mobility Sub-Attributes — Ground Speed Level 1 (50 kph; 2 MP). Jumping (1 MP). Manoeuvre Bonus Level 5 (ground only; 5 MP).

Other Sub-Attributes — Accessories Level 1 (radio; 1 MP). Life Support Level 2 (2 MP). Sensors Level 1 (1 MP).

Weapon Sub-Attributes — Weapon Level 1: Harmonic Knife (Damage 30, Melee, 4 MP). Weapon Level 1: Auto-Laser (Damage 30, Auto-Fire, Limited Shots, Unreliable, 2 MP)

Mecha Defects — Partial Armour (1 MBP). Mutual Damage (2 MBP). Reduced Capacity (1 MBP).

Derived Values — Armour: 20. Health Points: 60.

Idol Star Racing Bike (10 Mecha Points)

After building the Metal Angel, Natsuki still had 10 unused Mecha Points. Rather than change the conception of Natsuki's powered armour, the player decides to use the points to acquire a second vehicle: a snazzy racing bike called the Idol Star.

Structural Sub-Attributes — Armour Level 1 (4 MP). Extra Capacity Level 1 (1 MP). Toughness Level 1 (4 MP).

Mobility Sub-Attributes — Ground Speed Level 4 (300 kph; 8 MP). Manoeuvre Bonus Level 3 (ground only; 3 MP).

Mecha Defects — Awkward Size (1 MBP). Exposed Crew (2 MBP). Less Armour (1 MBP). Noisy (1 MBP). No Arms (2 MBP). Not So Tough (2 MBP). Restricted Ground Movement (road-bound; 1 MBP).

Derived Values — Armour: 8. Health Points: 50.
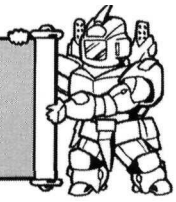
AH-1 Cobra (Helicopter. 25 Mecha Points)

The Cobra is an attack helicopter used by the Japanese Self-Defense Force (JSDF) and the U.S. Army and Marines. It is a common sight in contemporary mecha stories, often attacking invading alien spaceships or monsters and being shot out of the sky in droves.

Structural Sub-Attributes — Armour Level 1 (4 MP). Extra-Capacity Level 1 (1 MP). Toughness Level 2 (8 MP).

Mobility Sub-Attributes — Flight Level 2 (can hover, 200 kph; 8 MP). Manoeuvre Bonus Level 2 (flight only; 2 MP).

Other Sub-Attributes — Accessories (radio; 1 MP). Sensors Level 2 (2 MP).

Weapon Sub-Attributes — Weapon Level 2: 70mm Hydra rocket pods (Damage 45, Area, Auto-Fire, Spreading, Fixed, Inaccurate, Limited Shots x2, 8 MP). Weapon Level 2: 20mm Gatling cannon turret (Damage 30, Auto-Fire, Limited Shots, 2 MP). Weapon Level 2: TOW missile pods (Damage 60, Accurate, Area, Penetrating, Fixed, Limited Shots x2, Slow, Stoppable, 2 MP).

Mecha Defects — Awkward Size (2 MBP). Crew Requirement (2 crew; 1 MBP). Hangar Queen (1MBP). Noisy (2 MBP). No Arms (2 MBP). Restricted Ground Movement (no ground movement; 2 MBP). Partial Armour (1 MBP). Small Weak Point (1 MBP). Volatile (1 MBP).

Derived Values — Armour: 10. Health Points: 80.

Dragon Armour Hyperion (40 Mecha Points)

The seven Imperial Dragon Knights each possess a magical sword that, when grasped and a Word of Power is uttered, summons their own Dragon Armour. Each suit of armour is a six-metre tall magical iron golem, with a hatch in the chest that provides access to the inside. The Knights can see out through visors and control the suits with levers and pedals.

Structural Sub-Attributes — Armour Level 2 (8 MP). Toughness Level 2 (8 MP). Super-Strength Level 2 (6 MP).

Mobility Sub-Attributes — Ground Speed Level 1 (slow; 2 MP). Extra Endurance Level 6 (forever, 6 MP). Manoeuvre Bonus Level 2 (Ground only; 2 MP).

Other Sub-Attributes — Mechanical Transformation Level 1 (1 extra form; 4 MP). Summonable Level 2 (8 MP).

Weapon Sub-Attributes — Weapon Level 1: Sword (Damage 30 damage + 20 for strength, Muscle-Powered, Melee, hand-held, 4 MP).

Mecha Defects — Awkward Size Level 3 (3 MBP). Mutual Damage Level 1 (1 MBP). Partial Armour (1 MBP). Summoning Object (2 MBP). Weak Point (1 MBP).

Derived Values — Armour: 20. Health Points: 80.

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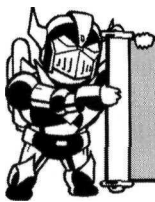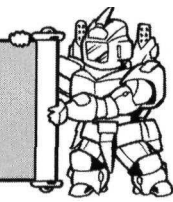
Second Form — Imperial Mecha-Dragon

The Imperial Knights can each transform their Dragon Armour into giant mechanical dragons. Instead of riding inside, the Knight (and one passenger) can ride on the dragon's back. The mecha armour can also take flight on its own in dragon form.

Structural Sub-Attributes — Armour Level 2 (8 MP). Extra Capacity Level 1 (1 MP). Extra Endurance Level 6 (forever, 6 MP). Toughness Level 2 (8 MP). Super-Strength Level 3 (9 MP).

Mobility Sub-Attributes — Flight Level 1 (can hover, 75 KPH, 4 MP). Manoeuvre Bonus Level 4 (flight, 4 MP).

Other Sub-Attributes — A.I. Level 3 (semi-autonomous; 6 MP). Mechanical Transformation Level 1 (4 MP).

Weapon Sub-Attributes — Weapon Level 1: Fiery breath (Damage 30, Burning, Spreading, Limited Shots x2, Short Range, Slow, 4 MP). Weapon Level 1: Claws and fangs (Damage 30 + 30 for strength, Muscle-Powered, Melee, 2 MP).

Mecha Defects — Awkward Size Level 3 (3 MBP). Exposed Crew (2 MBP). No Arms (2 MBP). Partial Armour (1 MBP). Weak Point (1 MBP).

Derived Values — Body: 10. Mind: 2. Soul: 0. Armour: 20. Health Points: 80. Attack Combat Value: 6. Defense Combat Value: 6.
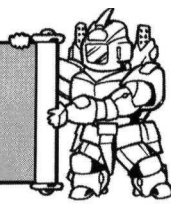
F-15 Eagle (45 Mecha Points)

If the military grunts cannot handle the problem, call for air support! The F-15 is the world's best jet fighter, used by the USA, Japan, Israel, and Saudi Arabia. The jets have starred in at least one anime show, and been blasted out of the sky by aliens in many others.

Structural Sub-Attributes — Armour Level 1 (4 MP). Toughness Level 2 (8 MP).

Mobility Sub-Attributes — Flight Level 5 (no hover, supersonic; 15 MP). Manoeuvre Bonus Level 4 (flight only; 4 MP).

Other Sub-Attributes — Accessories Level 2 (ejection seat; military radio; 2 MP). ECM Level 2 (versus missiles; 2 MP). Life Support Level 2 (2 MP). Sensors Level 3 (3 MP).

Weapon Sub-Attributes — Weapon Level 4: AMRAAM missile (Damage 60, Area Effect, Homing, Long Range x2, Fixed, Limited Shots x2, Stoppable, 16 MP). Weapon Level 3: Sidewinder missiles (Damage 60, Area Effect, Fixed, Homing, Long Range, Limited Shots x2, Stoppable, 1 MP). Weapon Level 3: 20mm Vulcan Gatling cannon (Damage 45, Accurate, Auto-Fire, Fixed, Limited Shots, 1 MP).

Mecha Defects — Awkward Size (3 MBP). Hangar Queen (2 MBP). Less Armour (1 MBP). No Arms (2 MBP). Noisy (2 MBP). Restricted Ground Movement (2 MBP, No Ground Movement). Volatile (1 MBP).

Derived Values — Armour: 8. Health Points: 80.

Ml Abrams (Main Battle Tank. 60 MP)

The iron fist of an army is its tanks, and the Abrams is the best in the world.

Structural Sub-Attributes — Armour Level 5 (20 MP). Extra Capacity Level 2 (three extra; 2 MP). Toughness Level 3 (12 MP). Ground Speed level 2 (100 kph; 4 MP).

Other Sub-Attributes — Accessories (military radio, smoke grenade launcher; 2 MP). Life Support Level 1 (1 MP). Sensors Level 1 (1 MP).

Weapon Sub-Attributes — Weapon Level 5: 120mm gun firing saboted shells (Damage 60, Long Range, Penetrating, Slow, 20 MP). Weapon Level 4: 120mm gun firing explosive shells (Damage 45, Area Effect, Long Range Slow, 1 MP). Weapon Level 4: Machine Guns (Damage 30, Accurate, Auto-Fire, 1 MP). Weapon Level 4 (Different Gunner): Heavy Machine Gun (Damage 30, Accurate, Auto-Fire, 6 MP).

Mecha Defects — Awkward Size (3 MBP). Crew Requirement (4 crew; 2 MBP). No Arms (2 MBP). Partial Armour (1 MBP). Poor Manoeuvrability (1 MBP), Weak Point (1 MBP).

Derived Values — Armour: 40. Health Points: 100.
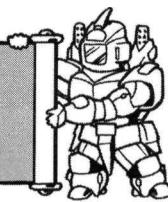
WT-34 Bogatyr (60 Mecha Points)

Tamara Sukorov is a lieutenant in the Russian Army's 8th Cosmic Guards Mecha Regiment. She has Own A Big Robot at Level 3, giving her 60 Mecha Points. The GM lets the player design the standard mecha used by the entire 8th Guard. The result is the Bogatyr Combat Walker, a 50-tonne humanoid war machine whose pilot sits in a cockpit in its torso. The Bogatyr eats ordinary tanks for breakfast! Note that the mecha's low-thrust rockets can propel it through space, but lack sufficient thrust to reach Earth's escape velocity.

Structural Sub-Attributes — Armour Level 3 (12 MP), Super-Strength Level 3 (9 MP), Toughness Level 3 (12 MP).

Mobility Sub-Attributes — Ground Speed Level 2 (100 kph; 4 MP). Manoeuvre Bonus Level 2 (ground only; 2 MP). Manoeuvre Bonus +2 (space only; 2 MP). Space Flight Level 1 (2 MP).

Other Sub-Attributes — Accessory Level 2 (ejection seats, radio, 2 MP). Life Support Level 2 (2 MP). Sensors Level 2 (2 MP).

Weapon Sub-Attributes — Weapon Level 3: particle beam rifle (Damage 45, Long Range, Unreliable, hand-held, 12 MP). Weapon Level 3: plasma sword (Damage 60, Melee, hand-held, 2 MP). Weapon Level 3: Gatling gun (Damage 30, Accurate, Auto-Fire, Limited Shots, 2 MP).

Mecha Defects — Awkward Size (3 MBP). Partial Armour (1 MBP). Volatile (1 MBP).

Derived Values — Armour: 30. Health Points: 100.
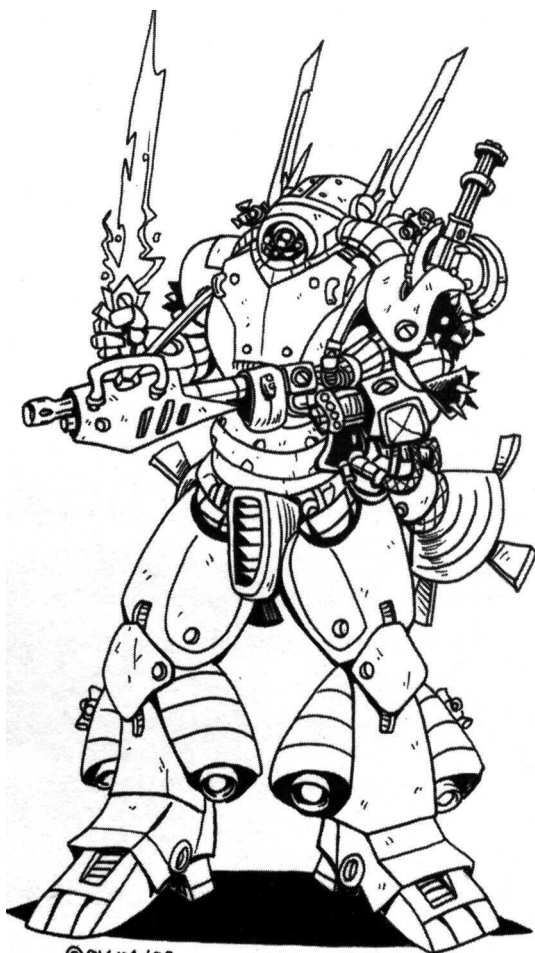
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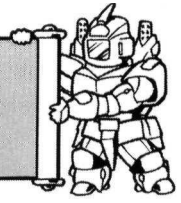
Star Cruiser Polaris (120 Mecha Points)

Captain Eric Bismark refused to surrender the space cruiser under his command when an evil dictator seized planetary power. His crew also remained loyal to the old republic, and together they have become privateers. Captain Bismark has Own a Big Robot Level 6, giving him 120 Mecha Points with which to create the Polaris, a 90-metre long starship resembling a sleek, space-going WWII battle cruiser.

Structural Sub-Attributes — Armour Level 5 (20 MP), Toughness Level 5 (20 MP), Extra Capacity Level 4 (40 people, 295 tonnes cargo; 4 MP), Extra Endurance Level 3 (3 MP).

Mobility Sub-Attributes — Flight Level 5 (no hover, 15 MP), Space Flight Level 4 (8 MP), Star Drive Level 3 (fast FTL drive; 6 MP).

Other Sub-Attributes — Accessories Level 2 (grand piano, radio; 2 MP). ECM Level 2 (commo and missiles; 3 MP). Life Support Level 2 (2 MP). Sensors Level 4 (4 MP). Special Equipment Level 1 (sick bay; 2 MP).

Weapon Sub-Attributes — Weapon Level 5: neutron cannon battery (Damage 60, Long Range x2, Unreliable, 20 MP). Weapon Level 5: plasma torpedoes (Damage 75, Area Effect, Homing, Long Range x2, Fixed, Limited Shots, Slow, Stoppable, 2 MP). The Star Cruiser Polaris has four identical laser turrets, each with identical statistics — Weapon Level 3 (Different Gunner): laser turrets #1-4 (Damage 45 each, Long Range, Slow, 6 MP each).

Mecha Defects — Awkward Size (size of a large ship; 5 MBP,). Crew Requirement (3 MBP). Restricted Ground Movement (None, 2 MBP). No Arms (2 MBP). Partial Armour (1 MBP). Start-Up Time (1 MBP). Weak Point (1 MBP).

Derived Values — Armour: 50. Health Points: 140.
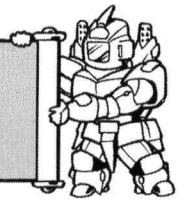
The Doom of Solomon (140 Mecha Points)

Mecha anime shows often feature huge mobile battle-fortresses that are used as a base of operations for the entire "good-guy" side, or as the villain's stronghold and ultimate super weapon. For such NPC-operated mecha, the GM should feel free to exceed the normal Level 6 limits for Attributes, Sub-Attributes and Defects.

The Doom of Solomon is one such example: an ancient planet-smashing starship invented by the long-vanished elder space gods. It resembles a giant sword-shaped space dreadnought several miles long. It is heavily automated, but its awesome power can only be controlled by the "Key of Solomon", an individual with the proper genetic coding to realize the ship's destructive force. The Doom is in the hands of the arch-villain, and now he must find the Key...

Structural Sub-Attributes — Armour Level 8 (32 MP). Extra Capacity Level 4 (4 MP). Extra Endurance Level 6 (forever; 6 MP). Toughness Level 10 (40 MP).

Mobility Sub-Attributes — Flight Level 5 (can hover, 20 MP). Space Flight Level 2 (4 MP). Star Drive Level 2 (4 MP).

Other Sub-Attributes — Life Support Level 2 (2 MP). Sensors Level 5 (5 MP). Special Equipment Level 1 (suspended animation chamber, 2 MP).

Weapon Sub-Attributes — Weapon Level 10: Antimatter Plasma Wave Cannon (Damage 120, Area Effect x2, Long Range x3, Spreading x2, Fixed, Limited Shots x2, Slow, Static, 40 MP). Weapon Level 9: Blaster Turret (Damage 60, Accurate x2, Long Range x2, Penetrating, 1 MP).

Mecha Defects — Awkward Size (100 million tonnes; 10 MBP). Partial Armour (1 MBP). Restricted Ground Movement (no movement; 2 MBP). No Arms (2 MBP). Poor Manoeuvrability (2 MBP). Small Weak Point (1 MBP). Volatile (2 MBP).

Derived Values — Armour: 80. Health Points: 240.

Ordinary Car (5 Mecha Points)

Not every mecha has to be a war machine. For comparison, the details are given below for construction of a normal automobile. This is also the kind of "mecha" a character can acquire through the Personal Gear Attribute (page 10).

Structural Sub-Attributes — Armour Level 1 (4 MP). Extra Capacity Level 2 (2 MP). Toughness Level 1 (4 MP).

Mobility Sub-Attributes — Ground Speed Level 3 (200 kph; 6 MP).

Mecha Defects — Awkward Size (2 MBP), Less Armour (2 MBP). No Arms (2 MBP). Noisy (1 MBP). Partial Armour (2 MBP). Restricted Ground Movement (road-bound; 1 MBP). Volatile (1 MBP).

Derived Values — Armour: 5. Health Points: 60.
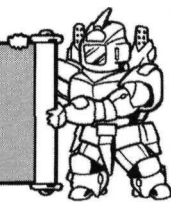
Space Suit (5 Mecha Points)

This sturdy vacuum-resistant suit can sustain its wearer for a few hours in space, and is equipped with a thruster pack. The space suite is another example of a "mecha" a character could acquire with the Personal Gear Sub-Attribute (page 10).

Structural Sub-Attributes — Armour Level 1 (4 MP).
Mobility Sub-Attributes — Space Flight Level 1 (2 MP).
Other Sub-Attributes — Accessories Level 2 (radio, magnetic boots, sun visor; 2 MP). Life Support Level 2 (2 MP).
Mecha Defects — Less Armour (1 MBP). Mutual Damage (2 MBP). Reduced Capacity (1 MBP). Partial Armour (1 MBP).
Derived Values — Armour: 8. Health Points: 40.

Mecha-Usagi

Mecha-Usagi is an example of a player character with the Cybernetic Body Attribute, created using the *Big Robots, Cool Starships* rules. She is a perky android girl with cute bunny ears and a super-strong robot body. Mecha-Usagi is designed for a near-future campaign with 18 Stat Points and 20 Character Points.

Stats — Body 7, Mind 4, Soul 7.
Attributes — Appearance Level 2 (2 points). Combat Mastery Level 2 (4 points). Cybernetic Body Level 2 (20 Mecha Points; 4 points). Damn Healthy! Level 4 (4 points). Extra Attacks Level 1 (4 points). Heightened Senses Level 2 (hearing 4 times as sharp, 2 points). Personal Gear Level 1 (1 point). Speed Level 3 (3 points).
Defects — Easily Distracted (carrots, 1 BP). Owned by a Megacorp (Space Police, 2 BP).
Mecha (Cybernetic Body) Sub-Attributes — Armour Level 1 (hidden; 4 MP). Super-Strength Level 2 (6 MP). Ground Speed Level 1 (run at 50 kph; 2 MP). Extra Endurance Level 2 (several days; 2 MP). Life Support Level 2 (2 MP). Sensors Level 1 (1 MP). Weapon Level 1: Rabbit Punch! (Damage 45, increased to 65 by strength, Muscle-Powered, Melee, Uses Energy, 4 MP).
Mecha (Cybernetic Body) Defects — Small Weak Point (base of spine; 1 MBP).
Derived Values — Armour: 4. Health Points: 110. Energy Points: 55. Attack Combat Value: 6. Defense Combat Value: 4.

Mecha action should be fast, exciting, fun, and similar to battles between human characters (but on a vaster and more dramatic scale). This chapter provides rules for situations that can occur when characters are piloting big robots, wearing power armour or zipping about in vehicles. Mecha use the normal action and combat rules from Chapter 3 of *BESM* (see *BESM,* page 48) unless exceptions are specifically mentioned.

Combat Ideology

BESM deliberately abstracts concepts such as movement, facing, and range, handling them through Initiative and combat rolls. The GM should concentrate on making the mecha battle as dynamic as possible. One way to accomplish this is to take a few moments to set the scene. For example, a fight may occur on a quiet suburban road, but mentioning the forest on the north end, the overhanging railway bridge, the nearby public school with a high clock tower, and the parked school bus not only adds colour but also more tactical choices. Want to escape? Set fire to the forest with your flamer and hide in the smoke! Is the villain losing the long-range fire-fight? Take cover behind that bus full of school children — make the hero rush up close and risk a melee attack.

Movement in Combat

These rules sometimes refer to the actions of the mecha pilot. This simply refers to the person controlling the mecha's movement, be it the pilot, wearer, driver, helmsman, or operator; for a cyborg or intelligent mecha, it refers to the mecha itself.

The mecha's movement options depend on the Sub-Attributes and Mecha Defects it possesses, as described in *Chapter 2: Mecha Creation* (page 7). Mecha can normally move and fire weapons or perform other actions during the same round.

Chapter 3
Mecha Combat
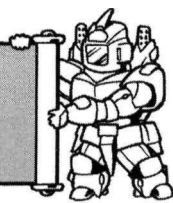
In most close-in combat situations, exact calculations of speed and distance are unnecessary. When it is important, assume a mecha moves, in metres, its speed in kilometres per hour (kph) each combat round. For example, an ordinary car with Ground Speed Level 3 (200 kph) moves approximately 200 metres in one round. In that same amount of time, an average human adult can run about 5 metres times his or her Body Stat. This guideline assumes about 3-5 seconds per round, but the GM should feel free to modify any exact speeds when dramatically appropriate.

Mecha with high Levels of Ground Speed, Flight, or Water Speed may require time to accelerate or slow down from their top speeds. A simple (if somewhat unrealistic) rule can require as many rounds as the mecha has Levels of the Speed Sub-Attribute to accelerate or decelerate fully. Thus, a mecha with Ground Speed Level 3 could reach Level 1 Speed on the first round, Level 2 Speed on the second and Level 3 Speed on the third round. Similarly, it would require three rounds to decelerate from Level 3 Speed to a relative stop. GMs and players should not develop preoccupations with details, however. In many anime shows, mecha often ignore physics if it is inconvenient, and thus characters should have the opportunity to perform all kinds of crazy stunts if they make successful Stat rolls!

Dramatic Manoeuvres

If a mecha is being pursued, a classic tactic is to execute a dangerous manoeuvre, such as flying through a subway tunnel in a helicopter, or weaving through a dense asteroid field. In game terms, the player describes the manoeuvre his or her character attempts, and makes an appropriate Stat roll with a penalty to reflect the move's outrageousness (see *BESM,* page 64). Failure usually results in a crash or accident with damage delivered to the mecha and perhaps the pilot (see Crashing and Falling, page 74). If the character succeeds, the pursuing mecha may also attempt the manoeuvre, or may break off the chase.

GMs can also use the same technique to help slower mecha catch faster ones during chases — if the pursuing character zips through a dangerous short cut, leaps from building to building, or otherwise attempts something clever, he or she can gain a considerable advantage with a successful Stat roll.

> GM: *"Okay, your friend is under attack. Based on your mecha-bike's speed and the traffic, you can get reach Sixth street in eight rounds if you drive normally..."*
> PC: *"I drive like a maniac, cutting corners and lights."*
> GM: *"Okay, but make a Body Stat check to avoid trouble. For every point under your Stat, you get there one round early."*

**Big Robots, Cool Starships**

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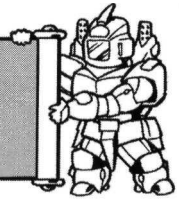
If a player fails the roll, the GM should describe some sort of hazard and allow him or her to make a second Stat check to avoid a complete disaster. For example, if a pedestrian steps into the street in front of the character's tank, a successful roll means that the driver swerves in time and crashes into a nearby fruit stand; failing can result in a dead pedestrian.

On a lengthier chase, a successful Mind Stat check could allow the character to think of a clever short cut, while a failure could trap the character in a traffic jam or similar delay. The GM can modify Mind Stat checks based on how well the character knows the area and how detailed the player describes the tactics his or her character is using.
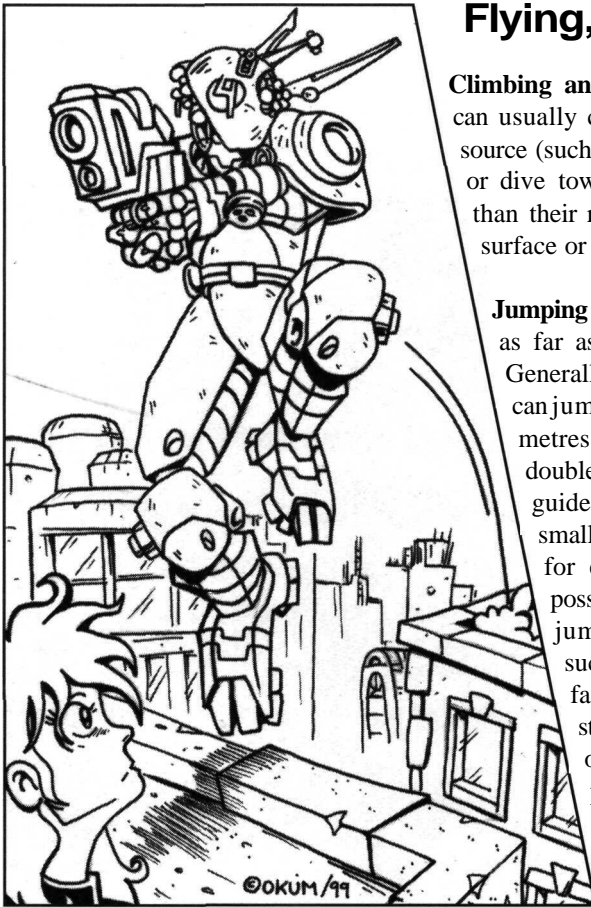
Flying, Jumping, Diving

Climbing and Diving — Mecha that can fly can usually climb away from a major gravity source (such as a planet) at half their top speed, or dive towards it at speeds slightly greater than their rated maximum. Submarines can surface or dive at one-fifth their top speed.

Jumping — GMs can allow mecha to jump as far as seems dramatically appropriate. Generally, a human-sized mecha with legs can jump as far as a human can (about two metres forward, or one up or back, doubled on a short running start). This guideline is adjusted proportionately for smaller or larger mecha, and doubled for every Level of Super-Strength it possesses. A legless mecha can only jump if it has a ramp or jump jets. A successful Body Stat check allows a fast moving mecha with a running start to jump, in metres, one-quarter of its current speed in kilometres per hour. Thus, a mecha running at 100 kph can jump 25 metres. A failed Stat check results in the mecha falling short.
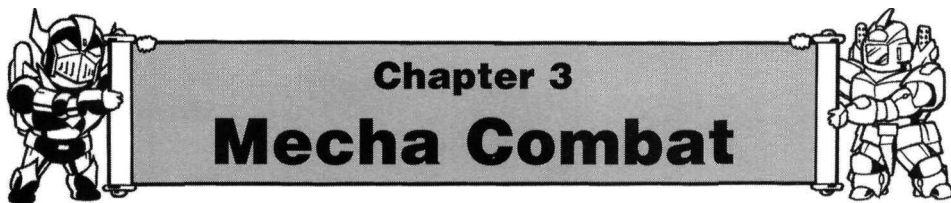
Combat Ranges

It is up to the GM to decide whether he or she wishes to keep a detailed track of ranges and distances. One useful technique involves the GM keeping a general mental note of relative distances (in metres) between combatants or important objectives. For example, if the encounter begins with two hostile mecha 300 metres apart, and in the first combat round one mecha charges forward 100 metres, then those two mecha are now 200 metres from each other. If one mecha is chasing another, and is 10 kph faster, it will close the distance by roughly 10 metres every round. GMs should not worry about exact speeds and distances — a general idea of the overall distances should be sufficient. Alternatively, GMs can measure ranges in a more abstract fashion: "you can reach him in three rounds, if you hurry" or "you can hit the robot with any medium or long range weapon."

The GM can judge how quickly range can be changed based on relative speeds and dramatic necessity. For example, in a chase between two opponents with equal speeds, the GM can let a pilot who keeps winning initiative gradually gain on his or her opponent.

A good way to resolve long distance chases is for the GM to establish a certain number of combat rounds to arrive at a destination, or, if one mecha is faster, to escape out of range. Then it becomes a simple matter of staying alive for that long...

Mecha are often armed with a variety of ranged weapons, so GMs will need to have a rough idea concerning how far they can shoot. For simplicity, weapon ranges are grouped into four categories:

Melee — The weapon is only usable against adjacent opponents within touching distance (usually 1-5 metres for human-sized mecha; greater for larger mecha). This is the range for swords, unarmed combat, etc., and for mecha weapons with the Melee Weapon Defect (page 44).

Short — The weapon has an effective range out to about 50 metres (10 km in space). Most pistols, shotguns, submachine guns, and archaic weapons such as javelins and crude bows are short-ranged, as are mecha weapons with the Short Range Weapon Defect (page 44).

Medium — The weapon has an effective range out to about 500 metres (100 km in space). Most rifles and machine guns are medium-ranged, as are most mecha weapons (by default) unless they have the Long Range Weapon Ability (page 41) or Melee or Short Range Weapon Defects (page 44).

Long — The weapon is effective out to considerable ranges: about 5 km (1,000 km in space), doubled each time the Long Range Weapon Ability was assigned (page 41).

Chapter 3
Mecha Combat
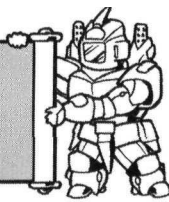
Many combats in cities or buildings begin at short or medium range, as an opponent pops out from around a corner, appears over a hill, or steps through a doorway. Combats at sea, in the air, or in space can often start out at Long Range, with the actual distance often determined by sensor range (see the Sensors Sub-Attribute, page 34).

Mecha Attacks

A mecha pilot can only fire one of the mecha's built-in or hand-held weapons each round, unless he or she possesses the Extra Attacks Attribute (see *BESM,* page 21), or the mecha was assigned the Multiple Mecha Attacks Sub-Attribute (page 33). Some mecha have weapons specifically designed to be used by additional crew members (see the Different Gunners Weapon Ability on page 38). If so, these crew members may use these weapons when it is their turn to act in the round (their Initiative).
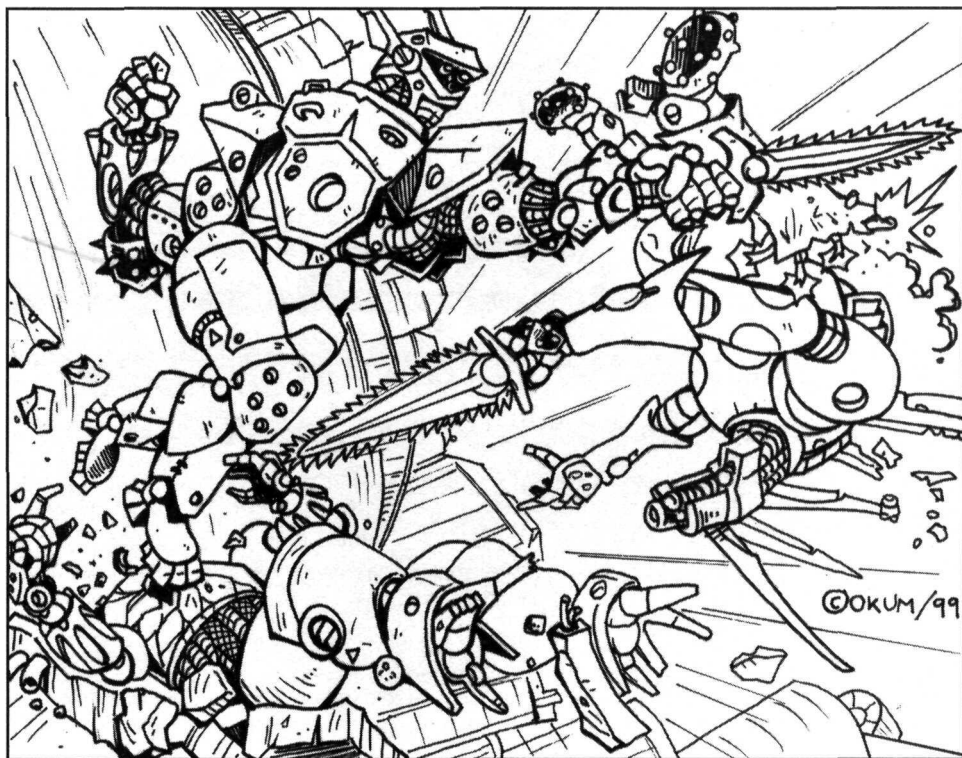
Chapter 3
Mecha Combat
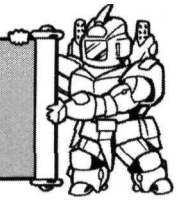
Firing Personal Weapons From Within The Mecha — If a mecha has the Exposed Occupants Defect (page 47), or has windows, doors or firing ports, characters that are inside can fire at nearby targets with their personal weapons. Firing personal weapons while a mecha is moving is usually difficult, however, and the GM should impose a +2 Attack roll penalty, or +4 penalty if a character is also piloting the mecha while firing.

Range Modifiers (Optional) — The distances given for weapon ranges (see Combat Ranges, page 69) are the effective ranges the weapon can shoot. Many weapons may be fired out to twice that range at +2 penalty, or five times the range at +4 penalty, although the GM may decide that the ranges given for some weapons cannot be exceeded.

A summary of range and other modifiers that may apply in mecha combat are presented in **Table 3-1: Attack Roll Modifications.** GMs may use additional modifiers, if they seem appropriate.

Table 3-1: Attack Roll Modifications

Attack Situation	Modifier
Homing Weapon Ability	-2
Accurate Weapon Ability	-1
Flexible Weapon Ability	+2
Inaccurate Weapon Defect	+1
Firing at a target concealed by trees or brush	+1
Firing at a target that is taking cover	+1 to +3
Firing a personal weapon from within a mecha	+2 to +4
Firing at an exposed occupant	+2
Firing at a target at twice normal range	+2
Firing at a target at five times normal range	+4
Firing in a snowstorm, smoke or fog	+2
Firing in the dark or smoke without Sensors	+2
Using indirect fire during combat	+2
Aiming at lightly armoured or unarmoured spot	+2
Aiming at a large weak point	+2
Aiming at a small weak point	+4
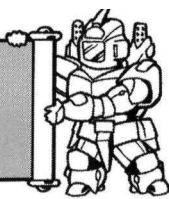
Delivering Damage in Mecha Combat

Unarmed Combat — Damage is equal to the attacking pilot's Attack Combat Value plus 10 points for each Level of the Super-Strength Sub-Attribute the mecha has possesses.

Most Mecha Weapons — Damage is equal to the attacking pilot's Attack Combat Value plus the weapon's damage value

Mecha Weapon with Muscle-Powered Ability — Damage is equal to the assailant's Attack Combat Value, plus the weapon's damage value, plus 10 points for each Level of Super-Strength Sub-Attribute the mecha possesses.

Effects of Damage to a Mecha

Mecha armour falls under the Type B category (see *BESM,* page 58). A media's Force Field, Shield (if any), and then Armour Sub-Attributes (in that order) can absorb damage from an opponent's successful attack. The penetrating damage is then subtracted from the mecha's remaining Health Points. If the mecha has the Mutual Damage Mecha Defect, some or all of the Health Points lost by the mecha is also lost by its occupants.

Crippled Mecha — If a mecha is reduced to zero or fewer Health Points, it is crippled. A crippled mecha is out of action, but can eventually be repaired. Until then, none of its equipment works (except emergency equipment, such as ejection seats) including weapons and Force Fields, although its Armour still offers some protection. The mecha is incapable of sustained powered movement or flight. Consequently, it will crash if it was moving along the ground, it will begin to fall out of the sky if it was flying, or it will start to sink beneath the surface of the water if it was floating. Crippled space mecha will just keep drifting along its last course unless it was already headed towards a large gravity source such as a planet, station or other celestial body. Additionally, a crippled mecha may explode if it has the Volatile Mecha Defect.

Destroyed Mecha — A mecha is completely destroyed when reduced as far below 0 Health Points as its starting Health Points total. For example, a mecha with 80 Health Points would be completely destroyed at -80 Health Points. The movement effects are the same as if it were crippled, except it cannot be repaired and may break up or fall apart at the GM's discretion.
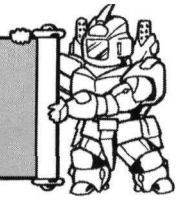
Occupant Injuries

If a mecha suffers damage past the crippling point, it is sufficiently impaired that crew and passengers may take ancillary damage as the mecha burns, explodes or collapses around them. For every two points of damage the mecha suffers, the occupants take one point of damage. This damage is in addition to any damage from the Mutual Damage Defect.

Example — Ariel's tank is hit by an enemy attack and takes 40 points of damage after armour. The already-damaged tank had only 30 Health Points left, so now it drops to -10 Health Points. Since it is 10 points below 0, Ariel suffers 5 points of damage (personal armour could still protect against this). Next round, as Ariel struggles to escape the crippled tank, a big robot steps on it! The tank takes another 20 points of damage after armour (now reduced to -30 Health Points), and Ariel takes a further 10 points of damage as her tank is squashed!

Major Systems Damage (Optional)

If a mecha loses one-quarter or more of its original Health Point total from a single attack, it may result in major system damage (i.e. something important breaks). For example, a weapon turret may blow up, an arm may fall off, or an engine may fail — the nature of the critical damage is at the discretion of the GM. Based on the type of damage, certain Sub-Attributes might stop working or be reduced by one or more Levels. "Engine damage" might cause a mecha to lose a Level or two of Ground Speed, or knock out a spaceship's Star Drive completely, while a different system failure could completely knock out a mecha's Force Field or Sensors. Alternatively, a transformable mecha's body-morphing mechanism might be put out of action (leaving it stuck in its current form), or a fuel tank rupture, which would force the mecha to make an emergency landing before it runs out of fuel. The GM should choose system damage that seems dramatically appropriate, which may even lead to further adventure. For example, the mecha might be forced to stop for repairs on an unexplored planet, or the crew may need to ask the country locals for directions.
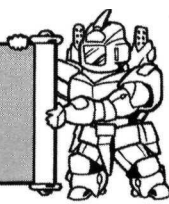
Crashing and Falling

A mecha that was racing along the ground when it was crippled or destroyed will swerve out of control and crash (or trip and fall for walking mecha). During the course of an adventure, a mecha may also accidentally (or deliberately) crash into objects along the road, in the sky, in or on water, or in space.

GMs are free to assess whatever damage they deem appropriate from a crashing mecha. Most Armour and Force Fields do protect against this damage, although Shields do not. Similar damage can be applied to a character who jumps or is pushed from a speeding mecha, or who is struck by one. Unprotected characters involved in crashes exceeding 100 kph will often not survive.

Table 3-2: Crash Damage can assist the GM in determining the damage for hitting the ground, water, a building or some other immovable object, based on how fast the mecha was moving during that round. If a speed falls between two damage values, use the greater of the two.

Table 3-2: Crash Damage

Speed	Damage
20 kph	20
30 kph	30
50 kph	40
75 kph	50
100 kph	60
150 kph	70
200 kph	80
300 kph	90
500 kph	100
1,000 kph	120
2,500 kph	140
5,000 kph	160
10,000 kph	180
25,000 kph	200
> 25000 kph	200+
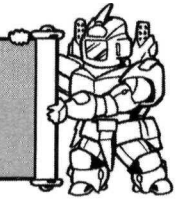
Crashing into a shock-absorbing surface, such as a foam mattress, a net, or a specialized "crash gel" can reduce damage by 20-50 points.

Controlled Crashes — If a mecha is about to crash, the pilot can make a Defense Combat Value check in an attempt to halve the damage. A +3 dice roll modifier is applied if the mecha has been crippled, but an attempt to control a crash is an automatic failure if the mecha has been destroyed.

Falling — A mecha that falls into a solid surface (such as the ground) will also suffer damage. If a flying mecha is crippled, the pilot must make a Body Stat check to gain some control. Success allows the pilot to bring the mecha down for a crash landing (see **Table 3-2: Crash Damage),** but failure results in both a fall and a crash. Fall damage is treated as crash damage at a speed that corresponds to the distance that the mecha fell (see **Table 3-3: Falling Damage).**

Table 3-3: Falling Damage

Falling Distance	Does Same Damage As
5 metres to 10 metres	30 kph crash
10 metres to 30 metres	50 kph crash
30 metres to 60 metres	100 kph crash
60 metres to 150 metres	150 kph crash
150 metres to 500 metres	200 kph crash
500 metres (or greater)	300 kph crash

When a mecha falls, add an additional 5 points of damage for each Level of the Awkward Size Defect; the bigger they are, the harder they fall...

The falling damage assumes an Earth-like gravity (1-G) — on alien worlds, multiply damage by the actual gravity. If the mecha both falls and crashes, add the derived "falling speed" to the crash speed. If speeds fall between two damage values, use the greater of the two. GMs can also use this chart when characters fall from great heights, although the character should be allowed to make an Acrobatics Attribute Level dice roll (rather than the normal Body Stat check dice roll) in an attempt to halve the damage.
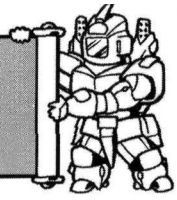
Example — A giant robot the size of a car (2 Levels of the Awkward Size Defect) is flying at 100 kph and an altitude of 150 metres when it is crippled by an enemy missile and plunges into the ground. The 150-metre fall counts as an additional 150 kph of "crash speed" giving a total speed of 250 kph — 90 points of damage. Since the mecha also fell, its two Levels of Awkward Size add an additional 10 damage points. All damage from the crash will be halved if the pilot makes a successful Defense Combat Value check at a +3 penalty.

Ramming

Deliberately ramming a person or object that is capable of moving out of the way (such as a human or a mecha) is resolved as an attack. A ram attempt requires a successful Attack roll by the mecha pilot to hit the target; likewise, the target can attempt a Defense roll or deliberately accept the collision. If the target succeeds with its Defense roll he or she avoids the attack.

A ram delivers damage to everyone involved, and is based on their relative crash speeds. If the collision was "head on", the speeds of those involved add together. If one mecha rammed the other from the side, the ramming mecha's speed would be used. If the ramming mecha came up behind the other, or side-swiped it, the differences in their speeds would be used.

If one participant is substantially bigger and has a higher Level of the Awkward Size Defect, it will inflict double the normal damage and suffer only half damage. While an average human does not possess the Awkward Size Defect, large animals might: one Level for a lion or horse, two for an elephant, and three for a whale, for example.

Example — A moving car rams a pedestrian standing at a busy street corner intersection. The car is travelling 50 kph and possesses the Awkward Size Defect at Level 2. A crash at 50 kph normally delivers 40 points of damage to everyone involved (see Crashes, page 74). Since the car is bigger than the pedestrian, however, it inflicts a total of 80 points of damage to the pedestrian and only suffers 20 points of damage (less any protection from armour or Force Fields). The car will probably be slightly damaged, but the pedestrian may not survive.
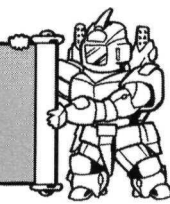
If a human or mecha suffers at least 50% of its starting Health Point total (before subtracting armour benefits), the character or mecha pilot must make a successful Body Stat roll to avoid being knocked aside. If the mecha deliberately initiated or accepted the collision and is braced for impact, the roll is modified by a -2 bonus,

If a mecha or character is knocked aside, they spend the next round tumbling, spinning, or swerving wildly off course. A person on foot, a flying mecha, or one in space will simply lose their next action (if it survives). However, a mecha that was moving quickly on the ground may be knocked off the road and crash, which can inflict additional damage (Crashing, page 74).

Example — A truck sideswipes a car and inflicts 50 points of damage before armour is subtracted. Since the car's base Health Point total was 80, and the 50 points of damage is more than 50%, the driver must make a successful Body Stat check to retain control. The driver fails the roll, and thus the car swerves off the road, and plunges off a cliff. Next round the car will crash, and suffer additional damage based on its speed and the distance fallen.

Throwing Heavy Things

A mecha with at least one arm or appendage, and the Super Strength Sub-Attribute (page 20), can lift heavy things, including other mecha, and throw them to deliver damage. It takes one action to grab and lift a large object, and another to throw it. Consequently, throwing objects is slower than firing most weapons.

Big things are harder to dodge than smaller ones. Defense Combat rolls suffer a penalty of +1 for each Level of the Awkward Size Defect of the object thrown (or equivalent). Damage delivered to both the target and the thrown object is equal to the mecha's close combat damage bonus from the Super-Strength Sub-Attribute, plus 5 points for each Awkward Size Defect Level (the MBP value) of the thrown object.
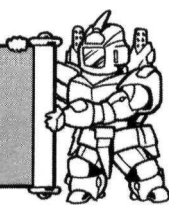
Fighting Inside a Mecha

Some mecha are big enough to permit combat scenes within their structures. Fighting inside a mecha is similar to fighting indoors, except that characters might damage critical components in the process.

Any ranged attack that misses its intended target will automatically count as a hit on the mecha, as will any Area Effect attack (whether it hits or misses). A mecha's external Force Field does not provide protection, and its Armour Sub-Attribute only provides half the normal protection (specifically representing internal bulkheads, blast doors, etc.)

Characters can also try to destroy crucial parts deliberately. If the character is situated in an important part of the area within the mecha (such as a cockpit or engine room) the GM may decide that attacks deliver damage as if the mecha had no armour, as well as the Weak Point Defect (page 54). GMs may also decide that targeting certain controls or other equipment can knock out specific mecha Sub-Attributes, even if the mecha is not destroyed.

If a character is trying to blow a hole in an internal wall or door, the GM can use the following guideline: most large mecha doors and walls have 10-20 Health Points each, with 10-20 points of Type B armour protection. A few vital sections of a really large mecha may have thicker armour, up to the Armour Sub-Attribute rating of the mecha's external armour.

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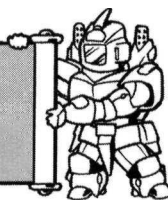
Destroying Buildings

Characters usually gain automatic successes when they target a building in a melee or ranged attack. Most brick or steel-frame buildings have about 10 points of Armour. One with very thick walls or solid metal construction can have 15 or more, while a light wooden shed might have only 5 points (see **Table 3-4: Buildings).**

Buildings should be given Health Point values consistent with their size and construction. If a building is reduced to 0 or fewer Health Points, it is considered "wrecked", and any powered systems within (such as electrical power and phone lines) stop working. At -20 Health Points, some parts of the building will collapse. Characters and mecha within or adjacent to a collapsing building may suffer damage equal to half the building's original Health Point total, unless they can reach safety (GM's discretion).

Weapons with the Area Effect or Spreading Abilities are much more effective against immobile structures such as buildings — any damage that penetrates the building's armour is doubled.

Table 3-4: Buildings

Type of Building	Awkward Size	Health Points
Phone Booth	1	20
Wood Shed	2	40
Outdoor Garage, Bungalow	3	60
Four-Bedroom House	4	80
Mid-Sized Office Building	5	100
Huge Skyscraper	6	120

Escaping a Destroyed Mecha

If a mecha is about to crash, sink, or explode, the GM can require successful Stat checks before the characters can escape, with modifiers depending on the type of mecha and the character's situation. If a mecha has an ejection seat, escaping is relatively easy. It is also quite simple for a character to jump off a motorbike, but someone inside a spaceship's engine room will not have much chance to escape without heroic measures.
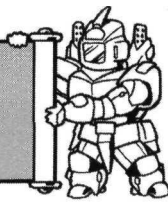
Example — Akira's robot mecha possesses the Volatile Defect and has just been crippled. The mecha does not have an ejection seat, but Akira does carry a grappling hook and rope. Seconds before his mecha blows up, Akira tosses the hook to catch his enemy's mecha, and swings away. Executing this manoeuvre would probably require the Acrobatics Attribute at Level 2 and a Body Stat check with a +3 penalty.

Mass Mecha Destruction

In some anime shows, mecha are capable of blasting away entire squadrons of the enemy in only a couple of shots. Players can create a characters capable of mimicking this by acquiring several Levels of the Extra Attacks Attribute (or Multiple Mecha Attacks Sub-Attribute), and by designing a mecha with a weapon that not only has a high damage value, but also has several Spreading Abilities.

GMs can make it easier for players with the right skills and weapons to create mass destruction by assigning the enemy mecha the Volatile Defect, low Armour, or Toughness Sub-Attributes, and by having them attack in tight formations that give advantages to weapons with the Area Effect and Spreading Abilities.

Mecha with Multiple Crew

The typical giant robot or space fighter only has one person inside, but many other vehicles have much larger crews. If a mecha carries more than one active crew member, the "mecha pilot" will be giving the orders that manoeuvre it. This character decides where the mecha will move, how fast it will move, and what it will do while moving. If other crew members are involved in combat action (for example, firing different weapons, fixing damage, or fighting to repel borders), each crew member should roll Initiative and take action separately.

The Manoeuvre Bonus Mecha Sub-Attribute and the Poor Manoeuvrability Mecha Defect will affect the Initiative rolls of the mecha pilot, but not those of the other crew members. Every crew member should roll Initiative individually.

Chapter 3
Mecha Combat
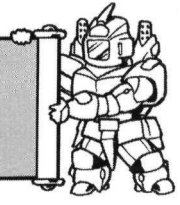
Game Mastering Big Battles

When a big battle has many NPC mecha engaged on both sides, the GM should not feel compelled to resolve the actions of every single soldier or vehicle involved. The GM may wish to have the course of the battle mirror the fortunes of the PCs.

Example — Assume that 6,300 mecha of the Salamander Empire are attacking 2,000 mecha serving with the Earth Republic. The Earth forces include three PCs and their two best friend NPCs. Since the Salamanders outnumber Earth three to one, The GM could stage a scene where 15 enemy mecha attack the PCs and their friends. If the PCs win, their side is also victorious, with the same proportion of casualties. Conversely, if the PCs are wiped out or flee, their side also loses.

The GM may also break a complex battle into multiple stages, with additional reinforcements arriving well into the combat, or sudden opportunities arising for heroic actions ("...through the explosions and burning wreckage, you see a clear route to the enemy command ship..."). During large engagements, the GM should strive to reduce his or her workload while affording opportunities for the player characters to shine!

Travelling In Space

In space, several conditions can affect characters and mecha operations, including the zero-gravity environment, vacuum, radiation, and extreme temperatures.

Zero-Gravity — Objects are weightless in space, but retain mass. They will "float" continuously, but once set in motion, they keep going until they hit something, or an external force is applied to redirect or stop them. The only way to actively change direction is to apply thrust, whether it is from a rocket engine or a kick off a wall (a really cool space drive may ignores these limits). Zero-G also makes some ordinary tasks tricky — turning an ordinary bolt or screw can spin a character out of control, while firing a gun may send the character tumbling and flying backwards (due to recoil). Fortunately, many beam weapons and rocket launchers are recoilless and do not have this drawback.
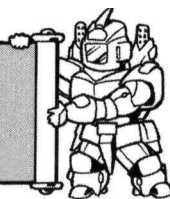
Vacuum — This is the absence of air. Characters will not explode if exposed to a vacuum but bodily fluids do boil away and blood vessels will rupture. For simplicity, characters suddenly exposed to vacuum will immediately suffer 10 points of damage, with another 5 points damage each round until dead or rescued.

If a hole is suddenly opened to a vacuum, the decompression will blow objects toward it. If the hole is big enough, characters may even be blown out into space. The GM can allow each character to attempt one or more Body Stat checks in order to save themselves and their comrades.

Radiation — Solar flares periodically emit dangerous radiation from the sun. On Earth, the thick atmosphere's ozone layer protects against them, but people in space ships, space stations, or on other planets may be vulnerable without shielding. Similarly, the space between a giant gas planet, such as Jupiter and its inner moons, are often filled with radiation. In game terms, radiation might inflict 5-40 points of Penetrating damage every few hours (page 41). Radiation may also interfere with radio communication and other starship systems.

Extreme Temperatures — Open space is usually extremely cold. Heat does not radiate quickly from a body in a vacuum, but transfers quite rapidly when a body contacts a cold surface (such as a starship's hull). A space suit will usually protect against the extreme temperature.

Space Movement

The speed at which a spaceship can travel and manoeuvre depends on its space drive and the nature of the technology in the game universe. With normal space drives such as rocket engines, there is no "maximum speed" (except the speed of light) — ships can accelerate as long as the rockets are blasting, although they will eventually run out of fuel.

Spaceship performance is a matter of acceleration and endurance, not maximum speed. GMs who desire precise figures should pick a base acceleration in metres or kilometres per round for a "Level 1" Spacedrive and multiply that by the ship's Space Flight Sub-Attribute Level.

Light Speed — This is approximately 300,000 kilometres per second, and is the only "absolute" speed limit without any kind of Star Drive Sub-Attribute.

Lifting Off — A spaceship blasting off at high acceleration may require 5-10 minutes to reach orbit from Earth, or less time from low-gravity worlds such as Mars.
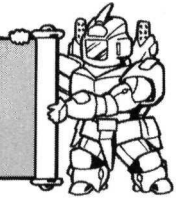
Landing — Any kind of spaceship can land on an effectively airless moon or planet such as Luna. Re-entry through an atmosphere without burning up also requires a spaceship to possess the Flight Sub-Attribute at Level 4 or higher. Travelling from orbit to Earth normally extends over a few minutes, with the mecha reaching screaming speeds up to 17,000 kph.

Mecha Repairs

Unless a mecha possesses the Regeneration Sub-Attribute, it cannot heal naturally, and thus requires repairs. A character with appropriate tools (GM's discretion) can restore one Health Point lost by a mecha for every hour he or she works on the repairs. The GM can double this rate if the mecha is in a fully-equipped repair facility appropriate for the mecha. An ordinary garage may be fine for a motorbike, but a high-tech star port dockyard would be needed for a giant space battleship. A crippled, but not destroyed, mecha can once again become operational by restoring it to a positive Health Point total.

A character can attempt emergency repairs when something needs to be fixed in a hurry. A successful Mind Stat check allows the character to repair extra Health Points during that hour, equal to the amount by which the roll was successful. A failed attempt does not restore any Health Points to the mecha in that hour, and may actually cause additional damage to the mecha (GM's discretion).

GMs can optionally require that spare parts be available in stock (or be purchased) in order for a given repair to be possible, especially if the mecha is crippled or a specific system was knocked out. Spares might also be available from cannibalizing other systems. GMs should apply Stat check penalties of +1 to +5 for jury-rigged repairs if the mechanic must improvise tools or parts.
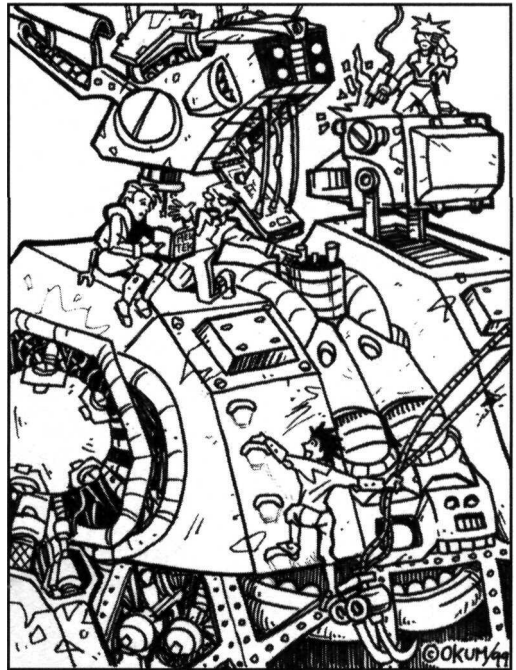
Dave White '99

CHAPTER 4

MECHA CAMPAIGNS

Mecha Campaign Settings

Ancient Japan

Mecha in Ancient Japan? Why not? What if the Gods gave a band of samurai warriors magical armour that boosted their strength, or if an advanced alien race invaded the land?

AnimeManga Example — *Raven Tengu Kabuto.*

High Fantasy

A mecha can simply be a combination of a knight's armour and mighty steed, a clockwork robot, or an iron golem searching for a soul.

AnimeManga Examples — *Landlock, Vision of Escaflowne, Orion.*

Recent History

In the late 19th century, steam power was the dominant technology and electricity was rather new. H.G. Wells's Martian tripod mecha invaded England in *The War of the Worlds,* while Jules Verne's mighty submarine Nautilus prowled the oceans. Bold inventors may be working in Britain, France, America, or Meiji-era Japan. The 1920s-30s or World War II is a perfect setting for a historical mecha adventure. GMs can tell a "realistic" war story about pilots or tank crews, or try an alternate world where the Axis or Allies develop robot weapons, or even combine forces to defend against invading aliens.

AnimeManga Examples — *Porco Rosso, Nadia, Kishin Corps, Sakura Wars.*

Modern Comedy

Teenage inventors have a lot of time on their hands. If an arch-rival kicks sand in their faces and steals their girlfriends, they do not take up body-building...they invent a mecha suit to stomp on them! Of course, they might also fight street crime, or confront alien invaders. Campaigns need not have an SF-oriented setting — how about a romantic comedy about young fighter pilots in the Air Force?

AnimeManga Examples — *You're Under Arrest, 801 TTS Airbats, Uratsei Yatsura, Tenchi Muyo.*

Modern Drama

A mecha campaign can resemble a modern crime drama or techno-thriller. Perhaps the characters are members of a highway patrol that stop crime in their souped up cars, a wild bunch of bikers battling rival gangs and corrupt cops, mercenary fighter pilots hired to fly in a Third World conflict, or the crew of a renegade nuclear submarine caught in a conspiracy against world peace. If the real world does not provide enough excitement, the GM can add fantasy, SF, or horror elements such as a new super-invention, psionics, giant monsters or hordes of mecha-equipped alien invaders.

Anime/Manga Examples — *Angel Cop, Area 88, Riding Bean, Silent Service, Outlanders.*

Near Future

Near future campaigns are usually set on Earth, before interstellar travel is developed. The classic near-future setting has a brilliant scientist or evil organization (or both) who develop mecha or robots, and then try to take over the world. The future may be "today with flying cars," or it may be a grimmer "cyberpunk" future with cyborgs and genetic engineering running rampant. Alien invasions are also popular, since a near-future setting gives the humans an excuse to develop a few super-mecha of their own to defend Earth. However, a "war in our solar system" in which Earth, the moon and rival space colonies are the battleground can provide a more visceral struggle than one between distant empires. The campaign may also be set on a post-apocalyptic Earth, after the war's desolation: the Wild West with dirt bikes, souped up cars, cyborgs and mutants. Player character bounty hunters with their bazooka and trusty hoverbikes may set out to stop the human scum and their transforming mecha bikes.

Anime/Manga Examples — *Bubblegum Crisis, Dominion Tank Police, Genesis Survivor Gaiarth, Ghost in the Shell, Mobile Suit Gundam, Neon Genesis Evangelion.*

Far Future

These campaigns are perhaps the most natural setting for mecha. In some campaigns, the mecha may be central to the story line, either because the heroes are mecha pilots in an interstellar war, or because the conflict in the story focuses on issues such as "are robots really human?" In others, mecha are simply pieces of equipment, and a means of travelling from one planet to another. Not all far future settings need to feature star-spanning epics, however. A GM can also establish a campaign on a detailed far future colony planet, rather than have the characters fly around the universe and encountering different worlds every session. Of course, a GM could always twist their "far future" settings into "a long time ago..." in a galactic empire that predates Earth.

AnimeManga Examples — *Macross Plus, Saber Marionette J, Gall Force.*
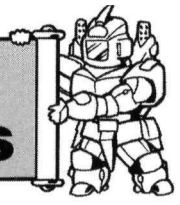
Game Seeds

This section suggests possible mecha-oriented game seeds for each of the settings detailed on pages 73-74 of *BESM*. GMs are encouraged to design their own themes and settings to suit the preferences of the players.

Ancient Japan

Every century, the mysterious Ghost Castle appears in the land. Great wars are fought for its possession, and the allegiance of the "mystic warriors" who guard the castle walls. Already, four powerful forces are gathering to capture it: two rival noble houses and their samurai, a ninja clan, and Buddhist monks with occult powers. When the Ghost Castle appears, however, it is not a castle, but a high school from modern Japan! The occupants are the PCs: a few students staying late after class, to work on a project for the Auto Club (a trio of racing bikes for the All-Japan Moto-Cross Race). Can the PCs survive in Ancient Japan and find a way back home? Luckily, the temporal passage has charged their bikes with magical energy, enabling them to morph into magical armour.
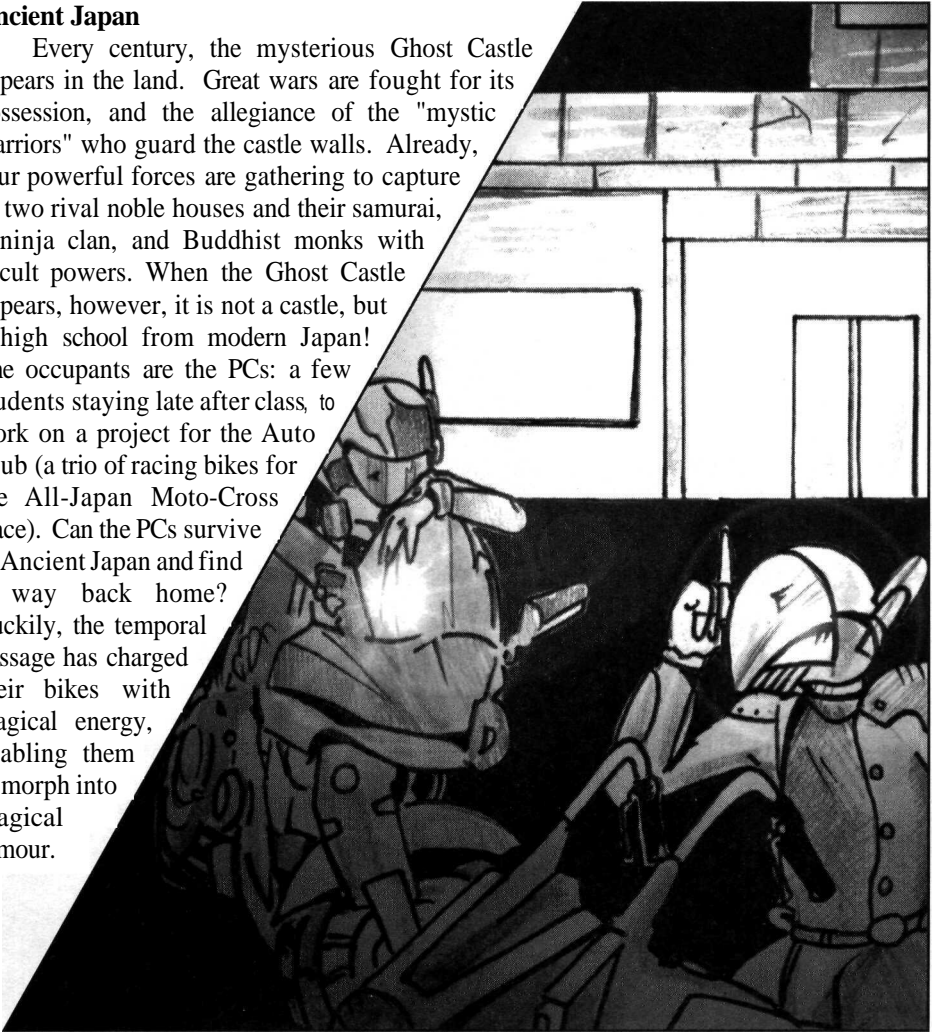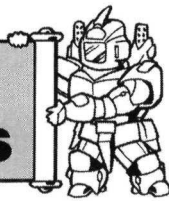
High Fantasy

For many generations the dwarves and the mountain goblins had fought for control of the Gold Mines. After much blood was spilled, the last king of the dwarves and the goblin warlord signed a peace treaty that divided the mines between them. Even after many years had passed, most dwarves feel the treaty was a betrayal, and that the mines should all be theirs. A rabble-rousing warlord has arisen and seized power in the dwarf kingdom. His proclamation calls for rearmament of the Dwarven Empire and a war to regain all the ancient mines. To feed their weapon forges, the dwarves resort to chopping down the Ancient Faerie Woods. When the Guardian Elves object, the dwarf king declares that the pointy-eared ones will be the first to feel the wrath of his new Steam Juggernauts and Clockwork Golems. Faced with invasion, the Faerie Queen sends out a call for brave warriors to defend her peaceful woodland realm.

Recent History

The PCs are Japanese and American fighter aces in a swirling aerial dogfight over Iwo Jima, when time suddenly stops. A monstrous face appears in mid air, belonging to King Enma, Bhuddist Lord of the Dead! He tells the PCs that in this battle, both sides are fated to kill each other, leaving no survivors. The Lord of the Dead is facing a demon uprising in his own realm, and requires some special mercenaries. The payment he offers is a second chance at life. Can the PC's planes stand against winged demons in a battle for Hell itself? Will the mixed group of American and Japanese pilots trust each other, with the horrors of World War II between them?

Modern Comedy or Drama

A time machine materializes in suburban Tokyo and a beautiful dragon-girl with horns and a reptilian tail emerges, riding a small dinosaur with cybernetic implants. She has come to Tokyo because her time-scope indicates that one of the teenage PCs is a brilliant inventor of powered armour, and she needs his (or her) help! Whoops...that's 20 years in the future, and the character is currently just an ordinary young teenager. Since her time machine's power source can only be used for one trip, the girl has to train him and his friends to be super soldiers. The stranger's name is Kola, and she is the Princess of the Troodon Empire — humanoid dinosaurs who mystically evolved 3 million years ago just before an asteroid strike wiped out most living creatures. The dinosaurs invented a time machine to escape into the future, but the evil warlord, Mashenomak, convinced Kola's emperor father not to jump a billion years into the future after the human race is gone, but to invade the 20th century. After all, the world would then be inhabited by odd monkey people who would make ideal slaves. Good thing the Princess stole a time machine to warn you. Good thing the time machines only allow Mashenomak to send through a small commando force of dino-warriors and mecha-saurs. If the warriors can
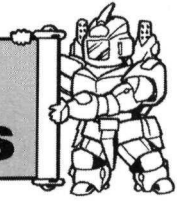
steal scientific gadgets and build another time machine in the 20th century, however, they can create a two-way gate and pour through their entire army! Good thing indeed...

Near Future

The PCs are U.S. Army combat engineers equipped with newly-designed battle mecha. When an asteroid is detected on a collision course for Earth, the PCs are sent up by space shuttle to land on it, plant nuclear bombs, and blast it off course so it misses Earth. When they actually set the charges, however, there is only a small conventional blast. The asteroid is actually a disguised alien spaceship, and a nuclear-damping force field inside neutralizes the charges. But the nuclear blast, or the proximity to Earth, has awakened something. A door opens. Within the asteroid, the PCs will find an entire city defended by robots and their alien commanders, who are now emerging from suspended animation. Are they alien invaders, or refugees fleeing a disaster on their own home world, or both?

Far Future

The PCs are captain and crew of the fastest independent courier ship in space. They are hired to make a cargo run of drugs to a plague-stricken frontier colony. Unfortunately, an ambush awaits them along the hyperspace route, sponsored by a rival corporation that wishes to exploit valuable minerals beneath the colony.
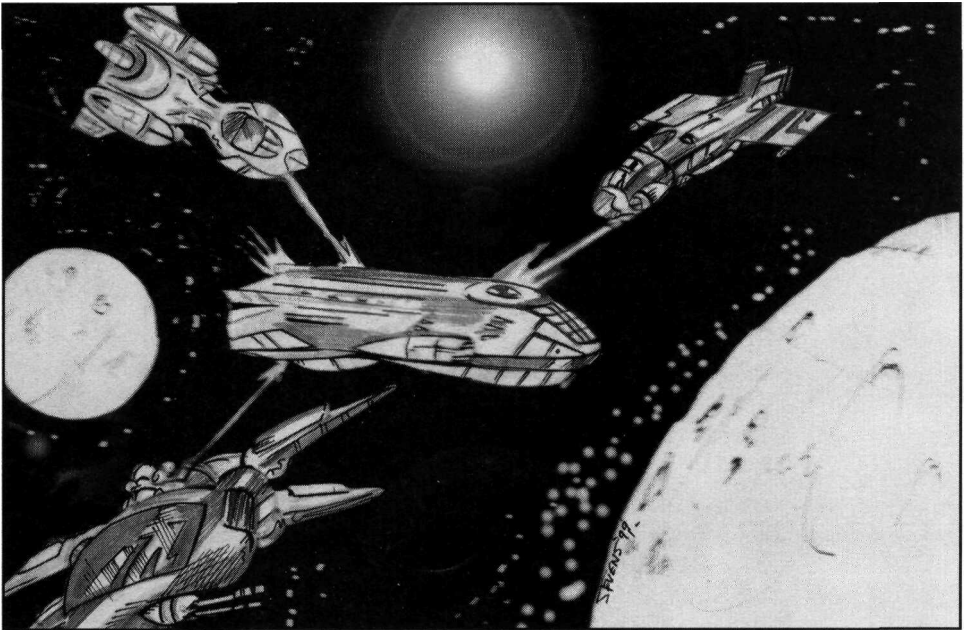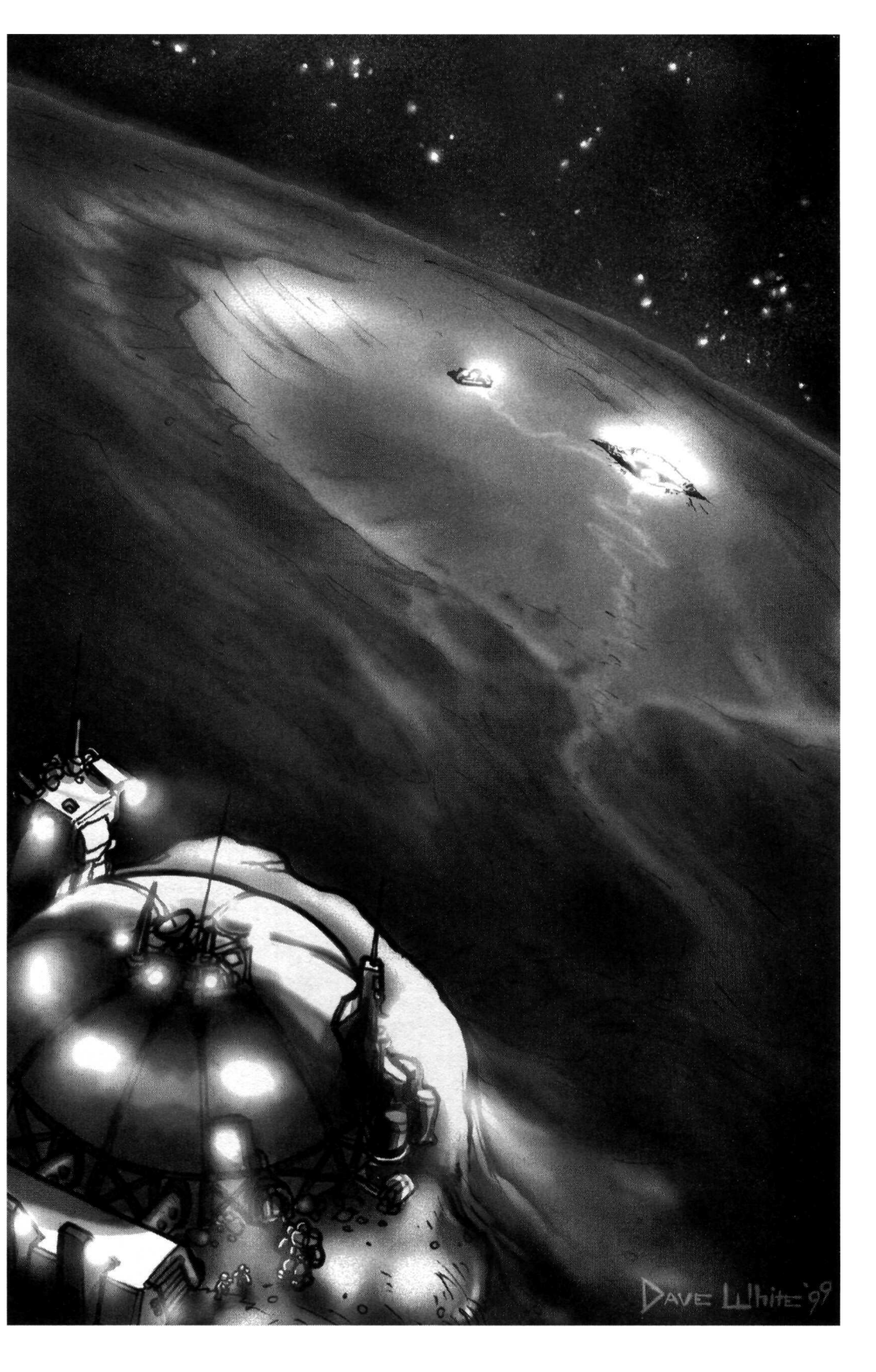
Dave White '99

CHAPTER 5

SAMPLE ADVENTURE

This section is for Game Masters (GMs) only! Do not read this chapter if you are a player!

This chapter outlines a single-session, mecha-based adventure for 3-6 players, entitled "Red Planet, Blue Helmets". The adventure is divided into several sections:

Setting — Where and when the adventure takes place.

Story Background — The important events that establish the conflicts presented in the story.

Characters — Suggestions about the type of characters that the players should create for the game.

Important NPCs — The list of important background characters and antagonists the PCs will meet.

Character Goals — Possible actions that can lead the PCs to a successful resolution of the adventure.

Plot Elements — Notable events that may occur during the adventure, places the PCs may visit, and challenges they may be forced to overcome.

Campaign Expansion — Suggestions for expanding the adventure into a campaign or mini-campaign.

The general information presented in the Setting, Story Background, and Characters, sections should be conveyed to the PCs before the adventure begins to assist in character creation. All other information is for the GM's eyes only.

Sample Adventure
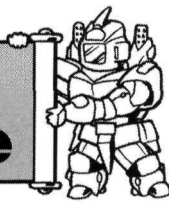
<u>Red Planet. Blue Helmets</u>

Setting

The Date: March 14, 2029. The Place: Mars. Technology has advanced rapidly from that available in the late 20th century, which has propelled humans deeper into our solar system.

Martian Conditions — Mars is the fourth planet from the sun. In 2029 AD, spaceships use solar-electric ion drives and a typical trip from Earth takes 260 days. Even a radio message has a 20-minute lag.

Environment — The Martian atmosphere is very thin (less than 1% of Earth's pressure) and mostly carbon dioxide. Near the Martian Base, the daytime temperature is -40 °C, dropping to -100 C and below after sundown. Anyone who does not have access to a mecha or building with the Life Support Sub-Attribute at Level 2 or higher loses 2 Health Points each round (3 points each round at night) when exposed to the Martian atmosphere.

Gravity — 38% of Earth's gravity. Halve damage from falls, and permit characters to jump 2.5 times as far as they could on Earth.

Story Background

In the year 2016, a NASA robotic probe found an artificial structure in a canyon in the Olympus Mons region of Mars. The news electrified the space program and plans for a manned expedition were revitalized. In 2020, humans walked on Mars. The first expedition lacked the capability to excavate the object, but confirmed it was indeed a constructed artifact...intact, with a power source.

The U.S. wanted to ship heavy equipment to Mars and start the excavation. Other nations feared what might be uncovered, however, and what a rival nation might do with it. Many richer nations had orbital or lunar facilities in space, along with armed spacecraft to protect them, and thus a conflict was a real possibility. To forestall a war, the U.S. agreed to a UN-sponsored multinational expedition, which included a small security force. On 2028, the UN team arrived on Mars.

Today, in 2029, Mars is home to 50 civilian scientists, and UNOFOM (United Nations Observer Force On Mars), which has a space warship in orbit and a platoon-sized ground force with humanoid "combat walkers." Its multi-national composition changes every few months as UN nations rotate contingents. The scientists grudgingly accept the arrangement — at least the combat walker-equipped "Blue Helmets" (the FV2021 Coleopteran) are useful for helping with construction and excavation.
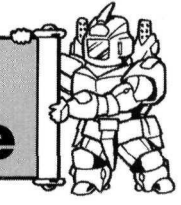
Meanwhile, things are not so pleasant on Earth. India and Pakistan are engaged in an arms race to build satellite weapons, while Russia is facing internal insurrection. Thanks to global warming, Siberia has become choice real estate, but its people no longer wish to be ruled as a colony of Moscow. Only last week, Russian troops fired on Siberian student demonstrators, killing hundreds. But despite the tension on Earth, scientists on Mars, regardless of nationality, are dedicated to solving the riddle of the alien ship. If they work together to achieve their goal, perhaps it will encourage a spirit of cooperation and help contribute to peace on Earth...

Alpha Base is the main UN base on Mars. It is located on a high mountain plateau, 10 km from the artifact site (just in case the artifact proved dangerous). It is a 20-metre wide pressurized dome with living quarters, sickbay, and labs for 50 people, as well as an adjoining mecha garage.

The Dig is the artifact site: a 90 metre-wide pit, 15 metres deep. Around the rim are posts upon which are mounted floodlights and cameras. An armoured bunker 100 metres away contains scientific instruments and living quarters for a dozen scientists to use when working. Just outside The Dig are mounds of excavated debris and a small garage. During Martian dust storms, The Dig is covered with plastic tarps.
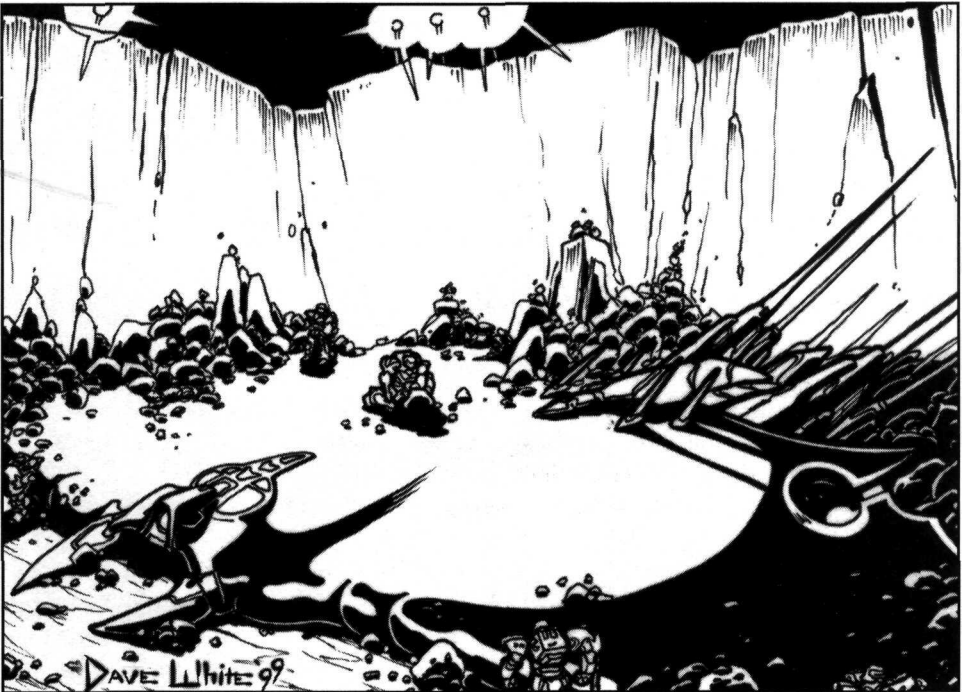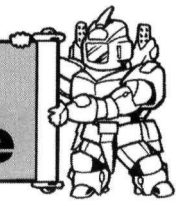
The present UNOFOM force consists of the German warship, *Max Planck* (in orbit) and the PCs' combat walker platoon (who are near the end of a quiet six month tour of duty). The Japanese cruiser, *Musashi,* is scheduled to arrive in Mars orbit at any time to relieve the *Max Planck* and transport a force of Russian Army troops to relieve the PCs. The *Musashi* is late: it was scheduled to arrive yesterday, but a fuel pump malfunction delayed it.

The Real Story — Unknown to anyone on Mars, the "fuel pump malfunction" is a cover story. Actually, the delay was caused by a mutiny! A cabal of pro-Siberian Russian Army troops, enraged at their government's own actions in Siberia, have seized the ship. Its crew and all loyalists have either been shot or locked in the brig. With the *Musashi* and its mecha, their goal is to capture the artifact, hoping to use its possession to blackmail the United Nations into recognizing the cause of Siberian Independence.

Characters

The player characters are highly-skilled UN ground forces assigned to Mars Base: 1st Troop, A Squadron, 2nd Battalion (Combat Walker), Royal Canadian Dragoons. They have 3-6 Coleopteran combat walkers (the "Blue Helmets") each operated by one pilot. The characters can be male or female, aged 18-40. One PC should be the lieutenant in command, the others sergeants. The players should build characters from 18 Stat Points and 15 Character Points. Every character should acquire the Own a Big Robot Attribute at Level 2 (8 points) with the Conditional Ownership Defect (Army ownership, 2 BP). "Weird" attributes (such as Magic or Psionics) are not appropriate.

FV2021 Coleopteran (40 Mecha Points)

A three-metre tall British-built humanoid combat walker used by the Canadians on Mars. They use a new "mind-interface" neuro-helmet that makes the mecha very agile. However, if a different pilot wants to use the mecha, the neuro-helmet must be "retuned" to their brain waves — this takes a full day; until then, halve the Manoeuvre Sub-Attribute Bonus. The mecha are painted standard colours: UN white, with sky-blue helmets.
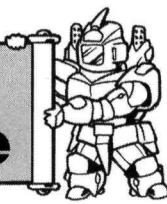
Structural Sub-Attributes — Armour Level 2 (8 MP). Super-Strength Level 1 (3 MP). Toughness Level 2 (8 MP).

Mobility Sub-Attributes — Ground Speed Level 1 (50 kph, 2 MP). Manoeuvre Bonus Level 4 (Ground, 4 MP).

Other Sub-Attributes — Accessories (radio, inertial navigation, 2 MP). Life Support Level 2 (2 MP), Sensors Level 1 (1 MP).

Weapons Sub-Attributes — Weapon Level 3: Railgun (Damage 45, Long-Range, Unreliable, 12 MP). Weapon Level 2: Plasma Fist (Damage 60, Melee, Limited Shots [6 shots], 1 MP). Weapon Level 2: Rocket Pod (Damage 45, Auto-Fire, Area Effect, Limited Shots x2 [3 shots], Stoppable, 1 MP).

Mecha Defects — Awkward Size (2 MBP). Hangar Queen (1 MBP). Partial Armour (1 MBP).

Derived Values — Armour 20, Health 80.

GMs can allow some of the PCs to have variant models; for example, a "Recon" model may have a lower Armour Sub-Attribute, but improve Ground Speed and Sensors.

Important NPCs

Dr. Deki Sayla

Age 25, Tibetan scientist. A brilliant mathematical prodigy, but clueless about human relations. Dyes her hair blue.

Stats — Body 3, Mind 10, Soul 6.
Attributes — Appearance Level 1, Powerful Mind Level 4.
Defects — Unique Defect: Awful Cook.
Derived Values — Attack Combat Value 6, Defense Combat Value 4, Health Points 45, Energy Points 80.

Dr. Koo Jin Soo

Age 30. A Korean cybernetics engineer. Expert in bio-computer interface, with some medical training. He is somewhat pessimistic, with a strong humanitarian streak.

Stats — Body 3, Mind 7, Soul 4.
Attributes — Powerful Mind Level 2.
Personal Gear — Space Suit (page 64).
Derived Values — ACV 5, DCV 3, Health Points 40 (now at 10), Energy Points 55.

Chapter 5
Sample Adventure
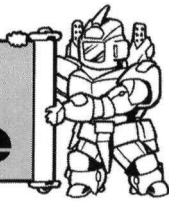
Captain Arkady Varenkov

Age 30. Leader of the Russian rebels. Has ice-blond hair and piercing eyes. Once a loyal Russian officer, he became a rebel after his sister Dasha, a student activist, was killed demonstrating for Free Siberia.

Stats — Body 8, Mind 5, Soul 5.

Attributes — Appearance Level 2, Combat Mastery Level 3, Extra Attacks Level 1, Flunkies Level 2, OBR Level 3 (WT-34 Bogatyr, page 61), Fortified Body Level 2.

Defects — Conditional Ownership (1 BP), Unique Defect: honourable but fanatical (1 **BP).**

Derived Values — Attack Combat Value 9, Defense Combat Value 7, Health Points 65, Energy Points 50.

Sergeant Nina Kaledin

Age 20. Second in command. Nina has short brown hair, sparkling green eyes and a streak of cruelty. Prefers hand-to-hand combat.

Stats — Body 6, Mind 3, Soul 6.

Attributes — Appearance Level 1, Combat Mastery Level 3, OBR Level 2 (KA-99 Archangel Power Suit; see Metal Angel on page 57), Damn Healthy Level 1.

Defects — Conditional Ownership (1 BP), Unique Defect: honourable but fanatical (1 BP).

Derived Values — Attack Combat Value 8, Defense Combat Value 6, Health Points 70, Energy Points 40.
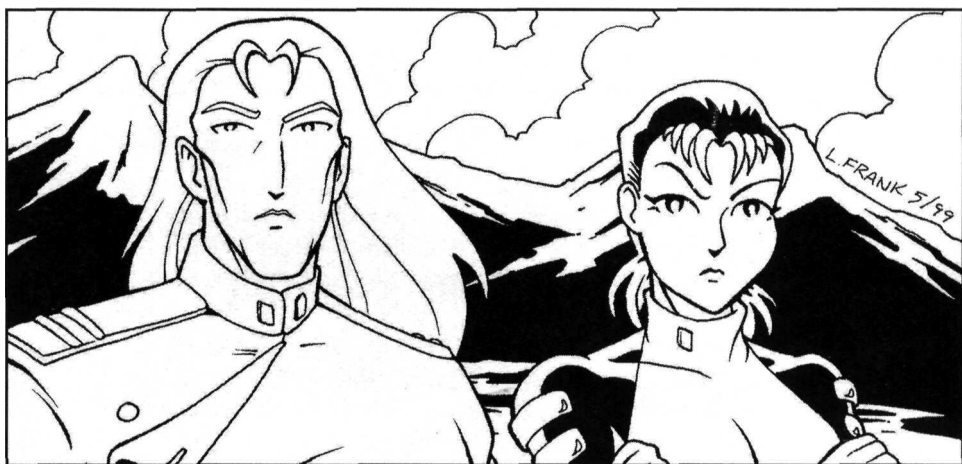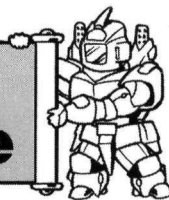
Siberian Rebels

Use these Stats, Attributes, and Defects for typical mecha pilots and crew.

Stats — Body 5, Mind 4, Soul 4.
Attributes — Combat Mastery Level 1, OBR Level 2 (KA-99 Archangel).
Defects — Conditional Ownership (1 BP).
Derived Values — ACV 5, DCV 3, Health 45, Energy 40.

Siberian Commandos — They wear "KA-99 Archangel" powered suits (use the statistics of the Metal Angel on page 57).

Character Goals

1. Make a tough call: should they perform rescue missions at Alpha Base or defend The Dig from both advancing troops and an out-of-control experiment? Should the PCs divide their forces between these goals?
2. Defend against a commando raid by powered armour troops.
3. Defeat the enemy, either by attacking the enemy during their build-up, or by neutralizing their assault.
4. Prevent the alien artifact from self-destructing.

Plot Elements

1. *The Artifact Revealed* — It is late afternoon, March 14, 2029. The 1st Troop is working at The Dig, using their mecha's super-strength to remove Martian dirt around the alien artifact to allow two scientists to attach probes. The scientists are Deki Sayla and Dr. Koo Jin Soo. The PCs are 10 km east of Alpha Base. The Dig is on the foothills of Olympus Mons, so Alpha Base's large residential dome is just visible on the western horizon.

   Thanks to the heavy work the PCs have done today, the artifact's full shape is visible for the first time to the naked eye as well as to instruments: it looks a bit like a giant blue-black manta-ray, about 70 metres across, with tall spines along its "tail." The hull itself appears completely seamless.

   Deki has instructed the PCs to attach sensor probes to the artifact's surface; they are attached to fibre-optic cables that run all the way back to Alpha Base, 10 km away. If asked, Deki will tell them the instruments on the end of the cables are SQUIDS — her team has been studying minute electric fields that persist in the artifact's surface using
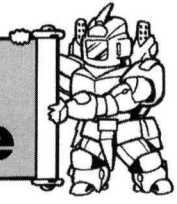
Super-Conducting Quantum Interface Detectors. She found similarities between these fields and brain waves produced during REM sleep. She theorized that the artifact is intelligent, perhaps a robot probe, but is damaged. For centuries it has been powered down...sleeping, and perhaps dreaming...

Deki has built a device to translate the SQUID data through a thought-interface helmet, using technology similar to that in the PCs mecha. The goal is to enable a human being to "see" the alien's dreams. Her partner, Dr. Saul Lawrence, is back at Alpha Base; after they hook up these cables, the experiment can begin. Dr. Lawrence will spend four hours unconscious as the neuro-helm translates the electrical feed into imagery he can perceive...if it works.

Dr. Soo has been shaking his head while Deki explains this. If asked, he admits to being nervous. The alien machine worries him, and the thought that it might be alive disturbs him. How did it come here? What has it been doing? How old is it? If it was an alien space probe, why is it here on Mars and not visiting Earth?

"I felt it was wrong to bring you soldiers here," he will say. "Now that I see what we have dug up, I am no longer sure."

Deki will check the last cable connection, then tell the PCs she is going to give the order to initiate "brain-dive" linkage.

Soo will suggest they move a few hundred metres back from the artifact. Deki will laugh, say he's silly, and run her hand over it. Soo will suggest the PCs over-rule her (it is their call).

After this minor tiff, Deki will contact Alpha Base on radio and tell them, "Alpha Base, this is Dr. Sayla. All systems are green. Saul, you are cleared to initiate brain-dive!"

A moment later, they get a response. It is Corporal Hilda Voss, Alpha Base's com technician. "Alpha Base to Dig, brain-dive initiated. Subject in REM sleep. His vital signs are looking good, nano-probes are in, he is receiving input. God only knows what."

2.   *The Surprise Assault* — As they monitor the experiment, the platoon get a message from Corporal Hilda Voss: "Troop, you have an advisory from *Max Planck*. The *Musashi* has moved into orbit, but she is not answering hails. They could be having some more problems, like that fuel pump malfunction. They're going to check it out. Over."

Only a moments later, another message comes in: "...signal from Max Plank! The *Musashi* has fired on her! She's not answering hails! She has launched a missile salvo! The *Planck* is returning fire..." and then overhead, the PCs can see a new sun flare briefly in the Martian sky. Simultaneously their sensor and radio readouts fill with static and they feel an ice-cold chill down their spines. The effect lasts only a second.

"... an electromagnetic pulse," Hilda will say. "*Max Planck* exploded. I'm tracking an incoming missile from *Musashi,* target *is...Gott in himmell"*
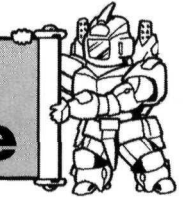
Chapter 5
Sample Adventure

A brilliant white line arcs down from the Martian sky and intersects with Alpha Base. The main dome vanishes in an explosion! When the dust settles, Alpha Base is in ruins. Deki and Soo are stunned, but recover quickly. Deki dashes over to check her instruments: "Damn, the EMP must have fried the chips. Or something. Some odd readings here."

But before the PCs can make much in the way of plans, they pick up something else: a broad-band radio transmission from *Musashi,* blanketing the planet:

"Any surviving UN scientists and soldiers! I am Captain Arkady Varenkov, of the 1st Assault Company, 3rd Russian Guards Regiment. My comrades and I have risen against the fascist officers of the reactionary Moscow government, proclaimed ourselves soldiers for Siberian Liberation, seized the warship *Musashi* and purged it of reactionary elements! Now we stand in solidarity with our Siberian brothers on Earth. Until the General Assembly votes to recognize Siberia's nationhood and condemn the brutality of the Kremlin, we feel the UN is unworthy to hold the artifact! I regret the loss of life, but such things happen in war. When my forces land to take possession of the artifact, surrender immediately. We can avoid further bloodshed."

The message is obviously on automatic play — it repeats itself.
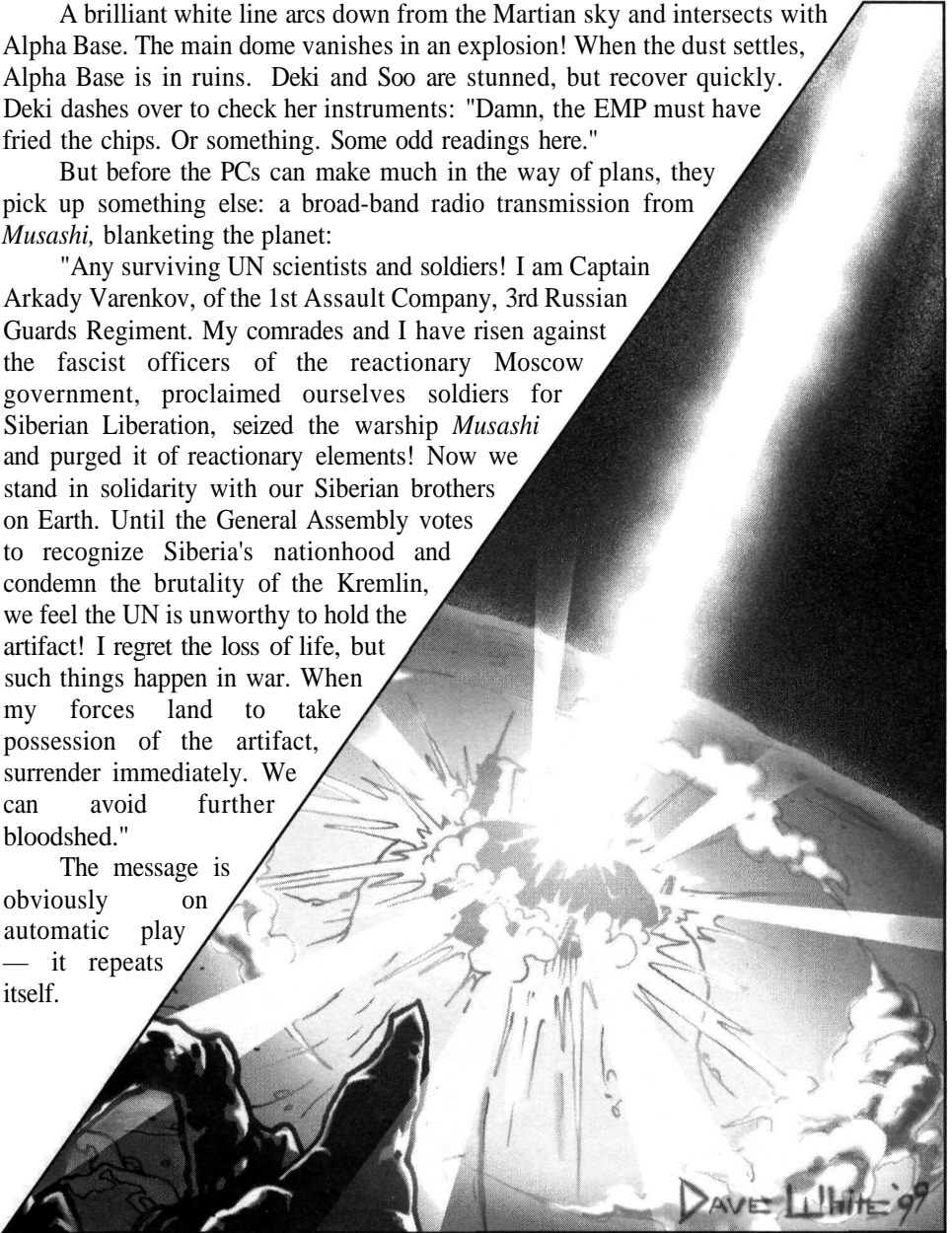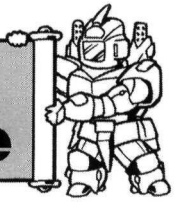
3. *First Response to the Attack* — Dr. Soo insists that the troops go to Alpha Base and help immediately. The base is underground; there could be survivors, and the PCs' mecha could dig them out. "Our first duty is help our colleagues!"

Deki Sayla insists that the troops' job is to remain and protect the artifact. "It is more valuable than anyone! *Musashi* was carrying troops. They could be landing here any minute — it's half an hour trip back to Alpha. You'd be fools to leave it undefended." Pause. "Of course, if you do go, please see if Saul's okay." Of course, the choice is up to the PCs. Maybe they should split up, maybe not. If they ask about the "odd readings" she will mention an increase in radiation from the artifact. "I need to analyze it."

4. *Alpha Base Survivors* — If the PCs decide to go to Alpha Base, they will be able to survey the damage. The missile destroyed the troop barracks and mecha garage, sending a shock wave that also caused the main residential dome to cave in and the main power generator to fail. But the warning from the initial attack on the *Max Planck* gave a few people time to get into space suits and take shelter in the basement. Even so, only one in six people survived. Once they get close to the base, PCs can communicate with survivors through their suit radios.

Bio-computer tech Evita Velasco and an unconscious Saul Lawrence survived in the SQUID lab, but are trapped under 30 tonnes of rubble. Saul is physically unhurt, but according to Velasco, he collapsed before the missile strike: the electromagnetic pulse of the nuclear detonation in space shut down the computer while he was "brain-diving" into the artifact, and his mind was...lost.

Five more — Chang, M'Benga, Dewey, Konaka, Sinclair — are in the basement shelter, now under 200 tonnes of rubble. Working with care, each combat walker can clear 1 tonne each minute (which will uncover many dead bodies). The survivors have six hours of air, but they are afraid Dr. Sinclair might not last that long — she has internal injuries and needs urgent medical attention. They will beg the PCs to hurry in order to save her.

The PCs should decide which group they will attempt to rescue (or split the effort). However, their rescue efforts may be interrupted by the machinations of their enemy.

5. *Siberian Landing* — *Musashi* is in low orbit about 150 km above Mars. Mecha sensors can see her, but their weapons have no way of reaching her.

Musashi fired all its missiles and is not designed to land on a planet. Its space shuttle (one pilot) is big enough to carry 20 men or one of the heavy Bogatyr-class mecha per trip. It takes about 5 minutes to fly down and 10 minutes to return.

Not all of the Russian troops joined the mutiny — some refused to join and were killed, and others were casualties in the space battle. Varenkov's force is 38 soldiers, half of whom are non-combatant technicians needed to run the ship. In the ship's hangar bay he has one shuttle, six heavy WT-34 Bogatyr combat walkers (page 61), and 12 KA-99 Archangel powered armour suits (see description of Metal Angel on page 57).
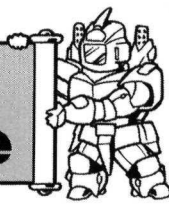
Arkady dispatches Nina Kaledin and 11 other KA-99 troopers in the shuttle. The PCs will see them land on a flat plateau, 10 km east of The Dig, outside the PCs' weapon range. The shuttle takes off again. Nina will make an armed recon of The Dig and engage any characters there, but will pull back to await reinforcement (see 7, page 102) if she encounters much resistance. It takes her team 15 minutes to reach The Dig. If Deki was left behind (see 2, page 98), assume she completed her analysis (see 6, below), radios them of the danger posed, then tries to escape on foot. If Deki and the PCs are at Alpha Base, Deki will urge retaking The Dig.

Space Shuttle (40 Mecha Points)
A wide-bodied delta-winged rocket plane.

Structural Sub-Attributes — Armour Level 2 (8 MP). Toughness Level 3 (12 MP).
Mobility Sub-Attributes — Flight Level 5 (No Hover, 15 MP), Spaceflight Level 1 (3 MP).
Other Sub-Attributes — Accessories (ejection seats, radio, 2 MP). Extra-Capacity Level 4 (+2 people, 48 tons cargo, 4 MP). Life Support Level 2 (2 MP). Sensors Level 2 (2 **MP).**
Mecha Defects — Awkward Size (4 MBP). Hangar Queen (1 MBP). Restricted Ground Movement (None, 2 BMP). Start-Up Time (1 BMP).
Derived Values — Armour 20, Health 100.

6.   *On the Verge of Destruction* — Dr. Soo will help organize treatment for the injured, but Deki Sayla wants to analyze the odd readings she noticed at the artifact. After about an hour she discovers something unpleasant. Magnetic fields inside the artifact are dropping and gamma-radiation levels are climbing. It started right after Saul's brain-dive was cut short by the EMP pulse. She will report this data to the PCs.

"Through analyzing the spin on the gamma-ray emissions, I've come to an important conclusion," Sayla says. "The artifact is anti-matter powered." A pause. "We couldn't tell before because the source was well-shielded. But now the containment field is collapsing, so I can get proper readings. It's amazing!"

PCs may point out a collapsing containment field does not sound good. Deki was just getting to that bit. "Oh, right. Based on the anti-matter in the ship, I estimate an explosive equivalent of 1,200 megatonnes. We have about five hours until then. If we keep monitoring the instruments though, I think we can beam the data back to Earth. The international physics lab at CERN would find it very helpful."

Can they stop it? "Maybe." She thinks Saul's aborted brain-dive could have upset the ship, perhaps triggered a destruct sequence. To fix the problem, Deki figures they need a second neural helmet to replace the one that was destroyed by the computer crash. Unfortunately, all the spares were wrecked in Alpha Base.
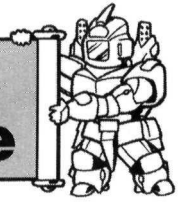
While Deki is stumped, the PCs may be able to devise a plan. They have neuro-helmets aboard their mecha; perhaps they could attach them to the SQUID cables and run Deki's program. In fact, this should work: the only hitch is that it will take about four hours to disassemble the helmet from the mecha and make the connection. If any of the PCs mecha have been damaged, they could use them — otherwise, it means taking apart a perfectly good mecha. There is one other problem: the helmet must be properly calibrated to the user's brain pattern, and this takes several hours. There is no time to attune one of the scientists — the brain-diver has to be the media's original pilot.

7.   *The Attack at Dawn* — Meanwhile, Captain Varenkov is preparing for his final assault. Each of his shuttles can carry one WT-34 heavy mecha; he will come down in the first one. With six mecha, he needs six trips. Varenkov will pick a spot 30 km north of the dig. His shuttle can load (4 minutes), land (15 minutes), unload (1 minute) and fly back to orbit (10 minutes) in half an hour, so building up his force will take three hours. From The Dig or Alpha Base, PCs will see the streak of the shuttles coming and going every half hour, but the landing site is too far out to spot. If they are wise, they will march out for a reconnaissance, and mount an attack before his force builds up. After the last mecha lands, just before dawn, Varenkov's force will be ready. He will strike to capture The Dig and then move against any other survivors.

His men are dedicated but not fanatics. If they lose most of their force without inflicting equivalent losses, they will try to retreat to make repairs. They may agree to cease-fire or surrender to terms, such as turning over the *Musashi* and releasing the captive Japanese crew in exchange for leniency.

8.   *The Brain Dive* — If the PCs have agreed to Deki's plan, the neuro-helmet will be ready in four hours as expected. (If Deki makes a successful Mind Stat roll, she can finish it in three...)

Brain-Diving — Treat as Mind Combat (see *BESM,* page 59). The character will find himself or herself in a vast starry void, with a sense of rushing through space while complex equations shift and change in the background: Deki is right, the probe is an intelligent robot, alive but sleeping; Saul is trapped in its dreams! The character must "break" into the alien mind to stop the sequence; the alien will counterattack: it has Mind 7, Soul 5, 60 Energy Points, and while not deliberately trying to fight, the alien-ness of its machine mind can overwhelm a human consciousness.

If a character fails, his or her mind is broken, and he or she becomes catatonic, eyes staring. If successful, he is able to "soothe" the alien and avert its destruction. The ship-mind is badly damaged, with only the equivalent of its "lower brain" surviving. However, the character comes away with certain images and sensations:
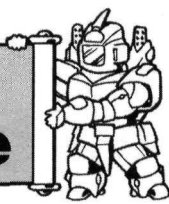
Home: image of a triple star-system with orange, red and yellow suns, and an inhabited asteroid belt.

Comradeship: other ships like it, mustering for a space battle against a remorseless foe.

Struggle: a hard-fought battle, but some enemy escape.

Pursuit: a long chase across the dark void.

Shock: another star system — but the enemy has found a life-bearing world, the blue third planet, ripe for conquest.

Resolve: to decoy the enemy away from it, to the lifeless fourth planet, and there end its threat forever.

Victory: destruction of the enemy vessels, but at great cost. Falling, crippled, to the planet below.

The nearest trinary system is Alpha Centauri, Earth's neighbour. Could it be from there? Centuries ago, did the alien vessel save Earth from some enemy from a distant star?

Campaign Expansion

If the PCs were instrumental in saving Alpha Base and the alien artifact, they will be decorated and promoted. If the destruction of the alien ship was aborted, mankind can study it under controlled conditions and learn to use its antimatter drive and A.I. technology. Will the possession of this technology lead to more wars and power struggles, or take man to the stars, and perhaps, a quest to find the alien probe's makers? Can the PCs be instrumental in shaping a new destiny for mankind?

In late 1999, Guardians Of Order will expand on the story presented in "Red Planet, Blue Helmets" in the mecha campaign adventure supplement, *Centauri Knights.* Play a character in the distant Alpha Centauri star system, as the Earth governments are embroiled in a struggle for power. Visit our web site (http://www.guardiansorder.on.ca) for updates.

Big Robots, Cool Starships
Index

Big Robots, Cool Starships
Index

David L. Pulver (Author and Associate Line Editor)

David was born (and now resides) in Kingston, Ontario, but also lived in England and New Zealand. A long-time science fiction fan, he began writing for role playing games in 1989 — the same year he discovered anime. David joined Guardians of Order as Senior Staff Writer and Associate Line Editor in November of 1998. His prior freelance credits include some 25 role-playing game books, two computer games, and one novella, among them the anime-themed works *Bubblegum Crisis: Before and After* (R. Talsorian Games) and *GURPS Mecha* (Steve Jackson Games). David has a B.A. (Honours) in History from Queen's University. *Big Robots, Cool Starships* is his first book for Guardians of Order. David can be reached at dlpulver@kos.net.

Mark C. MacKinnon (Tri-Stat System Creator and Company President)

Mark founded Guardians Of Order, Inc. in 1996 to publish anime role-playing games that stress playablity over complex rule mechanics. In addition to creating *Big Eyes, Small Mouth* and the Tri-Stat System, Mark wrote *The Sailor Moon Role-Playing Game and Resource Book* and *Toying With Destruction.* Mark is currently finishing his Master's degree in synthetic organic chemistry at the University of Guelph in Guelph, Ontario. Mark can be reached at mark@guardiansorder.on.ca or http://www.guardiansorder.on.ca.

Karen A. McLarney (Editor and Vice-President)

Karen was born and raised in Toronto, Ontario, and now resides in Guelph. She has played a crucial role in the company's growth since its inception, assuming such roles as VP, editor, assistant author, graphics designer, layout assistant, convention support, and morale booster. Karen has recently completed her second university degree (Social Work) at McMaster University in Hamilton; her first degree was a BA. (Honours) in Psychology. She is the proud owner and caretaker of four company cats — Mini, Nuala, Scamp and Toot.
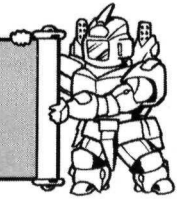
Louis Frank (Interior Artist)

Art: Banner, 10, 16, 27, 59, 78, 96.

Louis is an artist working out of Minneapolis who is trying desperately to not have to get a "real" job. His work has appeared in several game supplements and is currently trying to break into the lucritive field of comics. If you would like to see more samples of his work please visit http://www.wavefront.com/~wom-bat.

David Okum (Interior Artist)

Art: 22, 31, 35, 42, 52, 61, 68, 70, 77, 83, 108.

David is a high school an teacher and a freelance artist. He has had anime-related work published in *Girls of Ninja High School* by Antarctic Press, *Contraption* (a self-published comic) and *LaRoche,* a giant robot story in *Uncommon Works* by Pukka Comics. He has produced numerous T-shirts, novel covers, comic strips and book illustrations. David also creates paintings and displays his creations in semi-annual exhibitions. David can be reached at dokum@msn.com or http://www.angelfire.com/biz3/okumarts/index.html.

Theodore Serafica (Cover Artist)

Art: Front Cover.

Theodore "Totoro Sensei" Serafica, computer animator/illustrator/cartoonist etc., literally began drawing and taking art classes at the late age of 19 in college on a whim after failing downright miserably in Engineering. Eight years later, he has developed art and animation in the video game industry, worked on art commissions, has done web page design, and had his art appear on a few T-shirts here and there. Ted is currently existing in San Jose, CA doing 2-D animation and character designs. You can reach Theodore at serafica@best.com or http://www.best.com/~serafica.

Derek T. Stevens (Interior Artist)

Art: 13, 20, 25, 51, 56, 62, 87, 89.

Derek T. Stevens is a rogue artist, giving his pin to the highest bidder. He is now working while chained to his desk meeting many deadlines before him. Derek has worked for a handful of companies and with a little luck he will avoid the IRS and continue to do more *manga*!

David A. White (Cover and Interior Artist)

Art: Back Cover, 8, 38, 44, 55, 67, 84, 90, 93, 94, 99, 103.

David is an animator and character designer, working in the computer games field since 1995. David enjoys doing freelance work on the side to keep his skills sharp, as well as watching insane amounts of anime. David has a Bachelor of Fine Arts degree from the Columbus College of Art and Design. Visit his website, the Mecha Zone, to see more of his Mecha designs as well as tutorials for mecha creation. David can be reached at tobor@javanet.com or http://www.javanet.com/~tobor.

BIG EYES, SMALL MOUTH
Mecha Design Character Sheet

Mecha Name: _____

Owner(s): _____ Manufacturer: _____

Model Number: _____ Model Year: _____ Point Total: _____

Description: _____
_____
_____

Mecha Derived Values

Armour _____   Health Points _____   Energy Points _____   ACV/DCV _____/_____

Structural Sub-Attributes

❑ Armour Level ___ (___ Points)
   Notes: _____
❑ Extra Arms Level ___ (___ Points)
   Notes: _____
❑ Extra Capacity Level ___ (___ Points)
   Notes: _____
❑ Extra Endurance Level ___ (___ Points)
   Notes: _____
❑ Super-Strength Level ___ (___ Points)
   Notes: _____
❑ Toughness Level ___ (___ Points)
   Notes: _____

Mobility Sub-Attributes

❑ Flight Level ___ (___ Points)
   Notes: _____
❑ Ground Speed Level ___ (___ Points)
   Notes: _____
❑ Jumping Level ___ (___ Points)
   Notes: _____
❑ Manoeuvre Bonus Level ___ (___ Points)
   Notes: _____
❑ Space Flight Level ___ (___ Points)
   Notes: _____
❑ Star Drive Level ___ (___ Points)
   Notes: _____
❑ Tunnelling Level ___ (___ Points)
   Notes: _____
❑ Water Speed Level ___ (___ Points)
   Notes: _____

Other Sub-Attributes

❑ Accessories Level ___ (___ Points)
   Notes: _____
❑ Artificial Intelligence Level ___ (___ Points)
   Notes: _____
❑ ECM Level ___ (___ Points)
   Notes: _____
❑ Force Field Level ___ (___ Points)
   Notes: _____
❑ Life Support Level ___ (___ Points)
   Notes: _____
❑ Mechanical Transform Level ___ (___ Points)
   Notes: _____
❑ Merging Level ___ (___ Points)
   Notes: _____
❑ Multiple Mecha Attacks Level ___ (___ Points)
   Notes: _____
❑ Regeneration Level ___ (___ Points)
   Notes: _____
❑ Sensors Level ___ (___ Points)
   Notes: _____
❑ Special Equipment Level ___ (___ Points)
   Notes: _____
❑ Shield Level ___ (___ Points)
   Notes: _____
❑ Stealth Level ___ (___ Points)
   Notes: _____
❑ Summonable Level ___ (___ Points)
   Notes: _____
❑ Super-Transformable Level ___ (___ Points)
   Notes: _____
❑ _____ Level ___ (___ Points)
   Notes: _____
❑ _____ Level ___ (___ Points)
   Notes: _____

Weapon Abilities and Defects

Weapon 1 Name: _____ Level: _____ Points: _____ Damage: _____
  Notes: _____
Weapon 2 Name: _____ Level: _____ Points: _____ Damage: _____
  Notes: _____
Weapon 3 Name: _____ Level: _____ Points: _____ Damage: _____
  Notes: _____
Weapon 4 Name: _____ Level: _____ Points: _____ Damage: _____
  Notes: _____

	Weapon 1	Weapon 2	Weapon 3	Weapon 4
❑ Accurate	_____	_____	_____	_____
❑ Area Effect	_____	_____	_____	_____
❑ Auto-Fire	_____	_____	_____	_____
❑ Concealable	_____	_____	_____	_____
❑ Burning	_____	_____	_____	_____
❑ Flare	_____	_____	_____	_____
❑ Flexible	_____	_____	_____	_____
❑ Homing	_____	_____	_____	_____
❑ Indirect Fire	_____	_____	_____	_____
❑ Long Range	_____	_____	_____	_____
❑ Muscle-Powered	_____	_____	_____	_____
❑ Penetrating	_____	_____	_____	_____
❑ Spreading	_____	_____	_____	_____
❑ Stun	_____	_____	_____	_____
❑ Tangle	_____	_____	_____	_____
❑ Trap	_____	_____	_____	_____
❑ _____	_____	_____	_____	_____
❑ Exposed	_____	_____	_____	_____
❑ Fixed	_____	_____	_____	_____
❑ Inaccurate	_____	_____	_____	_____
❑ Limited Shots	_____	_____	_____	_____
❑ Low Penetration	_____	_____	_____	_____
❑ Melee	_____	_____	_____	_____
❑ No Damage	_____	_____	_____	_____
❑ Only In Water	_____	_____	_____	_____
❑ Short Range	_____	_____	_____	_____
❑ Slow	_____	_____	_____	_____
❑ Static	_____	_____	_____	_____
❑ Stoppable	_____	_____	_____	_____
❑ Toxic	_____	_____	_____	_____
❑ Unreliable	_____	_____	_____	_____
❑ Uses Energy	_____	_____	_____	_____
❑ _____	_____	_____	_____	_____

Mecha Defects

❑ Awkward Size Level ___ (___ MBP)   ❑ Crew Requirement Level ___ (___ MBP)
❑ Exposed Occupants Level ___ (___ MBP)   ❑ Hangar Queen Level ___ (___ MBP)
❑ Less Armour Level ___ (___ MBP)   ❑ Limited Endurance Level ___ (___ MBP)
❑ Limited Force Field Level ___ (___ MBP)   ❑ Mutual Damage Level ___ (___ MBP)
❑ Noisy Level ___ (___ MBP)   ❑ Not So Tough Level ___ (___ MBP)
❑ One Arm/No Arm Level ___ (___ MBP)   ❑ One-Way Transformation Level ___ (___ MBP)
❑ Partial Armour Level ___ (___ MBP)   ❑ Poor Manoeuvrability Level ___ (___ MBP)
❑ Reduced Capacity Level ___ (___ MBP)   ❑ Restricted Ground Move Level ___ (___ MBP)
❑ Restricted Flight Level ___ (___ MBP)   ❑ Restricted Path Level ___ (___ MBP)
❑ Start-Up Time Level ___ (___ MBP)   ❑ Summoning Object Level ___ (___ MBP)
❑ Volatile Level ___ (___ MBP)   ❑ Weak Point Level ___ (___ MBP)
❑ Wind-Powered Level ___ (___ MBP)   ❑ _____ Level ___ (___ MBP)

Mecha Defect Notes: _____
_____

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Big Eyes. Small Mouth (02-001)

Big Eyes, Small Mouth is a multi-genre RPG, inspired by the dynamic characters and stories found in Japanese Animation. Comedy or horror, fantasy or science fiction...if you can imagine it, you can play it! The game rules accurately reflect the "anime atmosphere" by emphasizing role-playing rather than numbers and charts. Additionally, character creation can take less than ten minutes, and is extensive enough to offer characters magic, mechs, psionics, heightened abilities, unique artifacts — the options are nearly limitless! *BESM* also features easy-to-follow flowcharts, a quick and elegant combat system, amazing artwork by talented fan artists, and much more. It's the anime RPG that started it all! By Mark C. MacKinnon.

Hot Rods and Gun Bunnies (02-003)

The ideal supplement for running *Big Eyes, Small Mouth* campaign adventures within the "guys-with-cars and girls-with-guns" Japanese anime and Hong Kong action film genre! Specific genre character types include police officers, army personnel, bounty hunters, skip tracers, drivers, pilots, government agents, hackers, private detectives, thieves, hitmen, and many others. The book also contains design mechanics for customizing character vehicles and weapons using an intuitive template system. Finally, *Hot Rods and Gun Bunnies* features a new and innovative skill system for the Tri-Stat System, which helps players design distinctive low- to mid-powered anime characters. A truly valuable resource for modern-day anime-based "cops and robbers" campaigns. By Jim Crocker.

The Sailor Moon Role-Playing Game and Resource Book (03-001)

The game focuses on the characters, plots, settings, and themes presented in the first two seasons of the hit anime TV series *Sailor Moon,* with rules and mechanics fully compatible with *Big Eyes, Small Mouth.* The North American English translations of the Japanese TV show serves as the primary source for the RPG background, although corresponding and related information from the original Japanese anime series is also presented. Additionally, the book offers a comprehensive *Sailor Moon* resource and reference section (containing information previously unpublished in North America), and a spectacular full-colour gallery. By Mark C. MacKinnon.

The Complete Book of Yoma. Vol. 1 (03-002)

A one-stop resource for dozens of *Sailor Moon* "monsters of the week". This book provides full background and magical power details, physical descriptions, and game stats for every yoma, cardian and droid from the first two seasons of *Sailor Moon.* Entries for yoma that were cut from the North American English translation are also included. Additionally, a 16-page colour character gallery highlights some of the most popular creatures. This is a complete game reference book for RPG and *Sailor Moon* fans alike! By Lindsey Ginou.

The Dominion Tank Police RPG and Resource Book (04-001)

Based on (he classic 1989 four-part anime series, from (he mind of Japan's prominent storyteller artist, Masamune Shirow! In the year 2010 A.D., the Earth is a very unfriendly place — the atmosphere is a poisonous bacterial soup, vicious underworld organizations have run of the cities, and the governments are virtually helpless. Leading the attack on society are the sexy and ruthless cat sisters, Annapuna and Unipuma, and the grotesque half-cyborg, Buaku. The last line of defense against utter chaos is Newport City's Tank Police: a team of trigger-happy officers with an affinity for demolition and disaster. The book offers a complete role-playing game (featuring Guardians Of Order's Tri-Stat System), an extensive resource and reference section about the OAV series, and a full-colour gallery of spectacular animation art. For gamers and Shirow fans alike! By David L. Pulver.

The Demon City Shinjuku RPG and Resource Book (05-001)

Based on the popular feature-length 1988 Japanese animated action-horror film! Tokyo...the very near future. One man, the tyrannical Levih Rah, has created a Demon City in Shinjuku, the heart of Tokyo. Tokyo's last hope lies in the hands of a team of brave teenagers, a cynical, aged mystic, and a mysterious spiritual healer. The book offers a complete role-playing game (featuring the Tri-Stat System), a detailed analysis and extensive resource section about the movie, and a full-colour gallery of spectacular animation art. Anime horror role-playing at its best! By David L. Pulver.

The Tenchi Muyo! RPG and Resource Book (07-001)

This RPG focuses on the characters, plots, and settings of the original two *Tenchi Muyo!* OAV series. As part of the Tri-Stat System, the RPG is fully compatible with all Guardians Of Order anime RPGs. The book also features extensive resource and reference sections that offer value to those who do not role-play, but are fans of the show. It is the ultimate English-language guide to one of the most popular anime series, and a book that no *Tenchi Muyo!* fan should be without! By David L. Pulver, Mark C. MacKinnon, Jeff Mackintosh, and Karen A. McLarney.

秩序 Guardians 護衛 Of Order PRODUCT ORDER FORM

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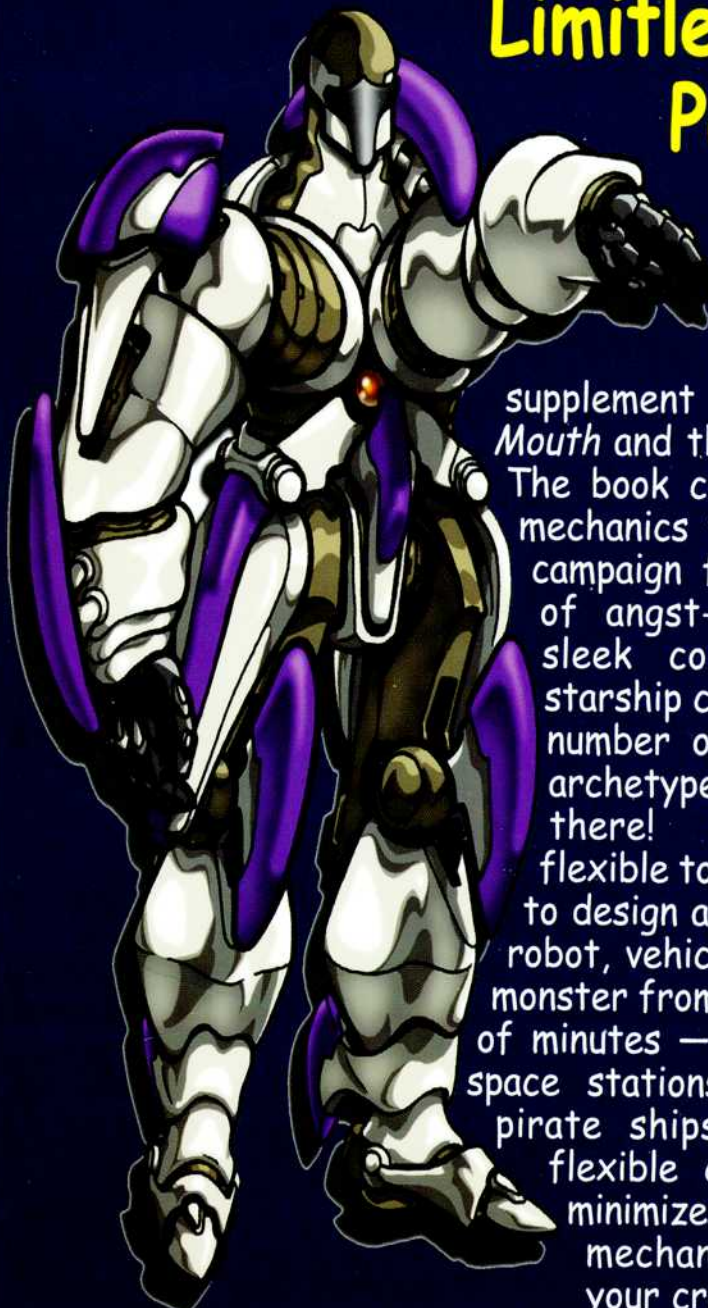
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