GAMMA WOLVES

A GAME OF POST-APOCALYPTIC MECHA WARFARE

ASH BARKER

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First published in Great Britain in 2020

This electronic edition published in 2020 by Bloomsbury Publishing Plc

A catalogue record for this book is available from the British Library.

ISBN: HB 9781472837745; eBook 9781472837738; ePDF 9781472837752; XML 9781472837721

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Ash discovered miniatures in 1988 in the back of the classic Fighting Fantasy adventure books. These tiny, perfect worlds and their heroic inhabitants would capture his imagination for the next 30 years. Since 2001 he has worked in the wargames industry. In June 2015 he founded Guerrilla Miniature Games, a YouTube channel that specializes in bringing a spotlight to all miniature games, great and small.

Artist
Jan Buragay is a freelance illustrator and concept artist based in Cagayan de Oro, Philippines. As a self-taught artist with a passion for science fiction and mechanical illustrations, he has worked with a number of clients in the movie, video game, comic, and tabletop gaming industries. Citing both Japanese and European science fiction artists as his main inspirations, he aims to create detailed and surreal illustrations of mecha, vehicles, and characters.

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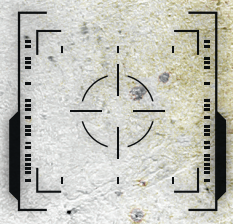


WHAT IS *GAMMA WOLVES*?

Gamma Wolves is a game for mecha-modelling and miniature wargaming enthusiasts. First, you use simple design rules to assemble a Crew of 3–5 Single-Pilot fighting machines – called Frames – from your favourite models. Then, you battle for the few remaining resources in the wastes of an Earth destroyed by humanity. The game focuses on two aspects: the process of designing your mecha and taking on an opponent in a head-to-head fight between Crews. The design system uses a footprint format of standardised bases that you simply fill-in with your favourite robots. You can adapt the game scale to whatever best fits your model collection. Standardised base-sizes allow the game to work fluidly, regardless of the model types on which you end up basing your Frames.

EARTH – 2291

Mankind has been constant in its abuse of the earth since the first steam engines rumbled to life at the dawn of the industrial age. Centuries later, the planet's surface is destroyed – void of most forms of life that nurtured thousands of species for millions of years.

Wars, plagues (both natural and man-made), and simple neglect stripped the atmosphere away, exposing the surface to the cruel and uncaring sun. Other areas are locked in seemingly endless nuclear winter, as particulate from past conflicts lingers over them.

Across the globe, there is radiation. The planet's surface is bombarded from within and without, able to support only the hardiest of lifeforms. The seas are black, crusted with pollution and heavy minerals and devoid of living things. Sediment bridges link once distant continents – one can now walk the world from one end to the other.

The only safety is found in the Arcologies. These large, cobbled-together hives are where the survivors of past nations live on in a shadowy imitation of their former glories.

The outriders of these societies roam the wastelands between these beacons of life. Teams, gangs, squads, and warbands – each Arcology's culture colours the traditions and fighting styles of the men and women who venture outside the safety of their sealed environments. They are sent to hunt for salvageable tech, power sources, or anything else that can help them continue to eke out their lives at the edge of oblivion.

Colourful slang provides these roving packs of brave and desperate souls many names – the most popular of which is *Gamma Wolves*, both for the tactics they employ under an unforgiving, nuclear sun.

FRAME TECHNOLOGY

As always, mankind's technological reach excelled in the realm of warfare. The final End-Wars between the East and West and the North and South pushed this even further, as manpower became limited and machines began to outnumber people.

This led to the development of single-pilot combat vehicles in increasingly varied designs. Each nation had its own name and specialty when it came to the science behind building these vehicles, but their accepted contemporary description is simply *Frames*.

Today's Frames bear little resemblance to the Old World's organised militaries. Instead, they are patched together and maintained via whatever can be found or manufactured in this age, reflecting the personalities of their Arcologies – or Pilots – more than their original design.

A Frame allows a Pilot to survive in the radiation-soaked ruins, fight, and seize the resources of the past that are scattered around this wasteland. Adaptable hardpoints allow a Pilot to quickly swap Loadouts, meaning they can hit the ground with whatever is needed to accomplish the mission ahead. A typical Crew of Frame Pilots are sent into the wastes in a Support Crawler of some type. These moving workshops allow the Pilots to resupply their nimbler frames, which they use to enter remote locations the Crawler itself is too vulnerable, or ponderous, to explore. Both the Pilots and their crew chiefs may find themselves living aboard the Crawler for months on end during these missions; they must rely on what they can find and maintain on their mobile base.

All Frames are roughly classed into three distinct sizes: *Light*, *Medium*, and *Heavy*.

Light Frames tend to closely resemble large suits of powered armour. They enclose the Pilot in a hard case with fully functioning life-support systems. They can range from two to three meters in height (approximately 8–12') and are usually bipedal or jet-propelled.

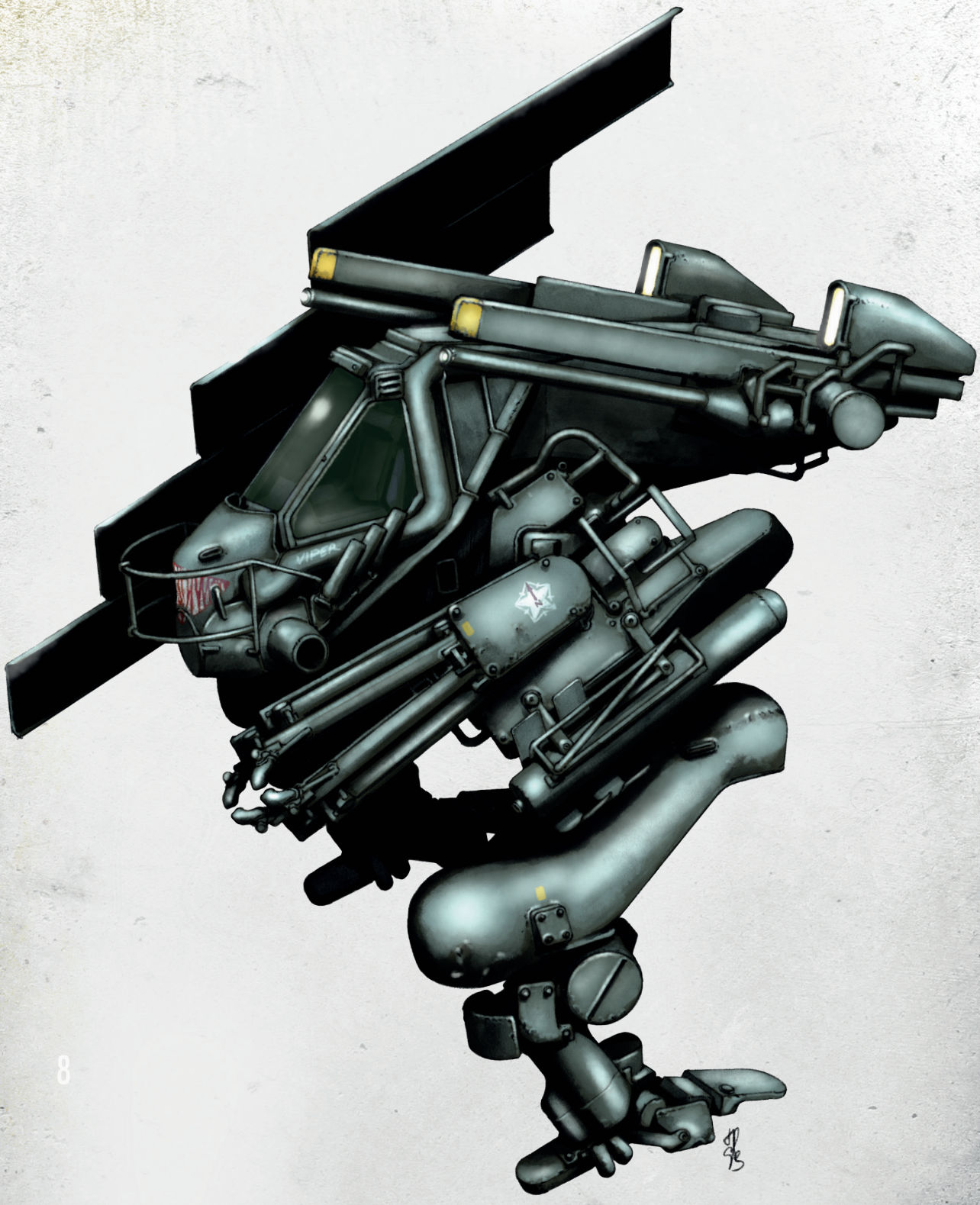
Medium Frames range from large exoskeletal suits to full-cockpit vehicles in which the Pilot is seated or mounted into a control station. They have a variety of propulsion systems and their shapes range from tracked war-machines, to multi-limbed crab- or spider-like walkers, to toad-like bipeds with heavy upper bodies arrayed with guns. They typically range from three to four meters in height (approximately 12–16').

Heavy Frames take on a variety of forms and are not necessarily the tallest assets on the battlefield. Often, multi-limbed or tracked Heavy Frames are wide and squat. They sport a variety of weapons systems and with thick, all-around armour, they trade manoeuvrability for durability. They range in height from that of a Medium Frame to much taller – more than 6 meters (approximately 20') when bipedal or jet-propelled.

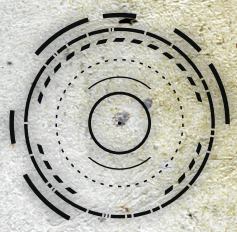
FREE STATIONS

Even in the lawlessness of an earth abandoned by humanity, outposts of civilisation exist. Many Crews are thankful to see a Free Station emerge on the Crawler's sensors when they run low on supplies like water, food, or power.

Free Stations act as neutral zones for Crews of all different Arcologies. While this means Pilots do not mount their Frames and openly go to war, they do often compete in other ways, such as pit-fighting, races, and other forms of frontier-sport. Pilots from even the most hard-line Arcologies often sneak into such areas for a bit of rest and relaxation. Busy beacons of life in the grim Sea of Destruction that covers most of the Earth, these stations often have their own Gamma Wolves, called Ronin, who operate as local security or salvage operators. It takes a hard and fearless Pilot to face life as a Ronin; these Crews are quite often made up of renegades who put aside their former allegiances for a life on their own terms.


VIPER

WHAT YOU NEED TO PLAY



FRAMES

Gamma Wolves is all about giant robots and the enjoyment you get from modelling them. The intent of this rulebook is to help you put your collection of cool mecha on the battlefield and play a game with them. Thus, the game relies primarily on base-size to determine the class of your Frame; how you model it is entirely up to you. There are three key components to remember when creating Frames for your *Gamma Wolves* Crew:

- Your Propulsion method should be obvious to your opponent. For example, if your Frame has legs, use Bipedal Propulsion. If it is Multi-Limbed or Tracked; use that to determine its Propulsion. The way your Frame moves determines much about how it behaves on the battlefield; therefore, it is helpful for your opponent to be able to visualize what they are up against.
- Likewise, any Loadouts (a mechs weapons and equipment, these are explained later, see page 37) should be obvious to your opponent; if they are not, make the effort to point out what's what when your Frame gets into Lock, so your opponent knows what they're facing. Remember, you don't need to explain a Frame's Loadouts until it is revealed, but do make sure you answer any questions your opponent has once his sensors lock-on to your Frame.
- Frames should always have a name. Names don't have to be super interesting, but they help differentiate one Frame from another of the same size in your Crew and enhance a Frame's coolness factor by ten thousand.

This Heavy Frame has Multi-Limbed Propulsion. Model designed by FilipTurz

CARDS

Gamma Wolves uses two types of Cards, Frame Cards and Pilot Cards, both of which are available in the back of this book for photocopying and are also available for download in the Game Resources section of the Osprey Games website.

Frame Cards are used to track damage and consult your Reactor, Weight Limit, Perks, and Loadouts during a game.

Pilot Cards detail the Pilot's Name, Endurance, Skill Levels, and other Talents Pilots may have acquired in a Campaign.

If you cut out and laminate several of each Frame Card, or simply cover the Damage Box area with some clear tape, you can then use dry-wipe markers to quickly change information you need to track during a game.

Filling out Pilot Cards in pencil also allows you to adjust any values you need to track during a Campaign.

It is highly likely intrepid hobbyists may create flashier or more functional cards in the future, so you may want to look through community sites or check social media for what else is available!

CONTACT MARKERS

At the beginning of an Engagement, if a Frame is not yet visible to the enemy it is instead deployed as a Contact Marker. A Contact Marker is simply a base of the same size as the Frame being deployed to the battlefield and is marked with Vectors in the same way (see *Arcs* in the *Game Definitions* section, page 13). This Marker's volume is considered the same width as the base itself and the same height as the model it represents. When the enemy later sights the Frame, either during deployment or during a game, immediately replace the Contact Marker with the appropriate model, in the same orientation as the Contact Marker that was revealed. It is easiest to just place the model on top of the Contact Marker and remove the Marker from the battlefield later when the Frame subsequently moves away.

DICE

Games of *Gamma Wolves* use six-sided dice (D6) to resolve tests and other effects both during and after a game. Each player needs about a dozen six-sided dice.

PLAY AREA

An engagement in *Gamma Wolves* takes place in a relatively close environment. Crews do not have resources for a long-range engagement and the Crawler is far too valuable to risk firing weapons at a distance, revealing its location on enemy sensors. Thus, in order to mask their operations, Crews tend to keep a low profile; conflicts typically erupt in the Sea of Destruction when two Crews encounter each other abruptly.

Games of *Gamma Wolves* use a recommended play area of 4' x 4' (120cm x 120cm). Those intrepid players who wish to create their own Missions or run large participation games can scale down or increase the battlefield, as desired. Simply scale down or increase deployment conditions appropriately for the mission being played.

A pile of six-sided dice, something to measure in inches, suitable tokens, and your Frame models and Contact Markers are all you need to get started.

TOKENS

Tokens are useful for tracking battlefield information during a game. *Gamma Wolves* uses three types of tokens – two track information about the status of your Frames and the other represents Salvage or other Mission items on the battlefield.

Pilot Stress tokens track how far a Pilot is pushed during a turn. For most games, you should not need more than 12 Pilot Stress tokens per player. Pilot Endurance parallels Pilot Value, which is the main commodity used to determine the Crew size for a game. You can use any tokens to track Pilot Stress, but it is a good idea to keep to cool colours like green or blue to differentiate Pilot Stress from the second type of token.

Reactor Stress tokens track how hard a Frame is pushed in combat and how much it can Manoeuvre during a turn (the faster it moves, the more power it consumes). Some Loadouts also stress a Frame's Reactor, which also limits how often they may be used. The larger a Frame, the more robust a Reactor it tends to have.

Mission tokens represent everything from valuable Salvage to allied Crew members lost in the Sea of Destruction. It can be extremely rewarding to model Mission-specific tokens for each game type, but you can just as easily use simple acrylic tokens or bases. Regardless, Mission tokens should be represented by 40mm (roughly 1.5") circular tokens.

GAME DEFINITIONS

ACTIVE AND REACTIVE PLAYERS

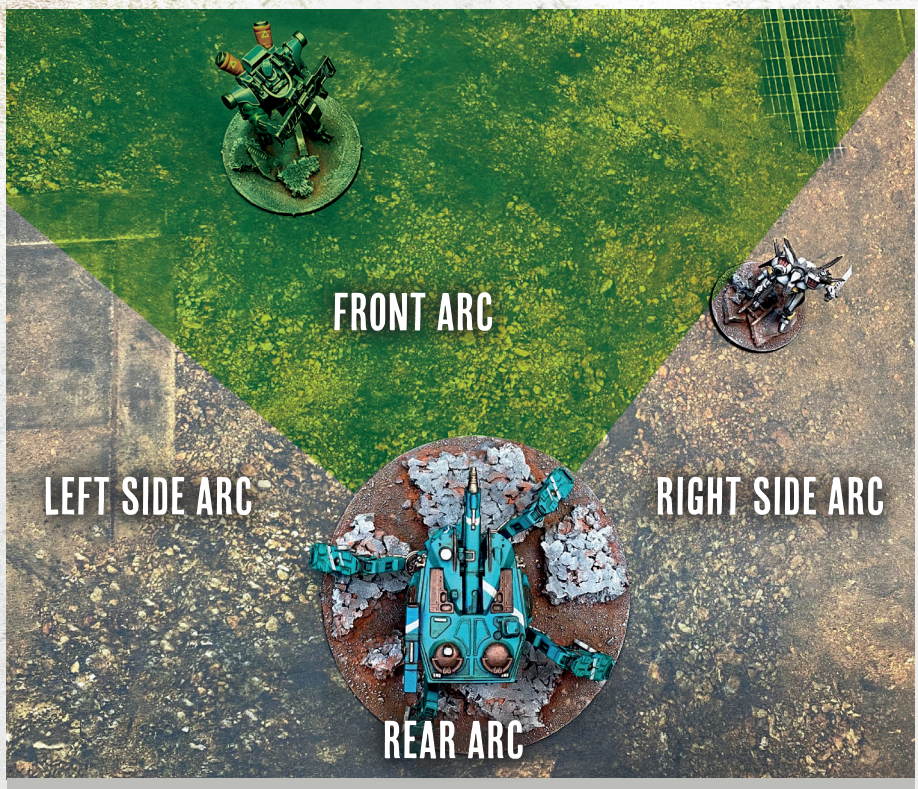
The *active* player in a game of *Gamma Wolves* is the player currently activating a model and performing an action. The *reactive* player refers to any player not currently active.

ARCS

Even Light Frames are much larger and less agile than the pilots inside them. The facing of a Frame on the battlefield determines how easy it is to move in a particular direction and how Offensive Loadouts can be targeted. The base of every Frame should be marked with 4 cardinal points, called *Vectors*.

These are Front, Rear, Left, and Right. Each mark is used as the centre of a 90-degree quadrant (see the diagram on page 14). Vectors are also used to determine movement in a given direction, as well as how vulnerable to attack a Frame is by other Pilots whose Frames are targeting them from that angle.

Adding cardinal points to a Frame's base allows you to quickly determine whether it has Lock by checking its 180-degree Front Arc and also where other Frames are in relation to its Front, Rear, and Sides.



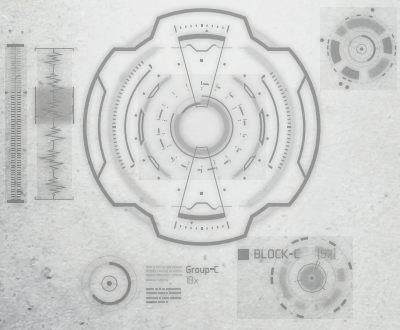
Most of the Light Frame's base is in the Heavy Frame's Side Arc; it gains certain bonuses because of this. The majority of the Medium Frame's base is in the Heavy Frame's Front Arc, meaning it gains no particular advantage.

Lock is determined by the Frame's Front and Back facings (see diagram on page 15). The base's Front 180-degrees, projected forward, determines what a Frame can typically *see*, and affects its ability to Lock onto another Frame.

All Rear Arcs are considered the Rear Facing of a Frame. The base's Back 180-degrees is typically a Frame's *Blind Spot*, and they are more vulnerable to attack from this direction.

ARC MARKINGS

These Arc markings are used to determine movement of a Frame when it Manoeuvres and Evades. They are also used to determine how vulnerable the Frame is to attack when targeted from the Side or Back, as well as where their Loadouts can target the enemy in response.



A Frame is in Lock if an imaginary line can be drawn from anywhere in the Front 180-degrees of its base to anywhere on another Frame or Contact Marker. These Arc markings are used to determine movement of a Frame when it Manoeuvres and Evades. They are also used to determine how vulnerable the Frame is to attack when targeted from the Side or Back, as well as where their Loadouts can target the enemy in response.

ATTRIBUTES

Attributes are fixed values on a Frame or Pilot's Card which govern their abilities in a given area. The most common Attributes used in *Gamma Wolves* are Endurance (Pilots) and Reactor (Frames).

CONTACTS

A *Contact* is a Frame whose exact nature has yet to be determined by the enemy Crew. When a Frame is deployed to the battlefield and no enemy Frames currently deployed in the Area of Operations (see page 63 for more on Area of Operations) can draw Line of Sight to it, place a Contact Marker instead of the Frame.

As soon as an enemy Frame has Line of Sight to a Contact Marker, immediately reveal it for the Frame it represents (whether during a game or during Deployment).

If a Contact Marker ever performs a Gunnery or Evade action, enemy sensors can immediately pick up its full profile as its reactor spikes and weapons systems light-up. Replace the Contact Marker with the Frame it represents.

Contact Markers may Manoeuvre without revealing their nature, but are immediately revealed if they ever enter an enemy Frame's Line of Sight.

D6

Gamma Wolves uses the shorthand D6 to describe rolling one six-sided die. In cases where more than one die is rolled, you may see a number indicating how many D6 to roll (2D6, 3D6, etc). This number may also include a positive or negative modifier (+1D6 or -3D6) to indicate whether you should add to or subtract from the number of dice you roll.

In rare cases, you may need to roll a D3. To do so, simply roll 1D6 and halve the result, rounding up (a result of 1–2 = 1; a result of 3–4 = 2; and a result of 5–6 = 3).

FRAME SIZE

Today's combat and survival Frames are a far-cry from the original designs that existed before the world fell. Where once, a hundred years ago, you saw the same Frame mass-produced by a nation for military service or various industries, today they are unique and motley mutts. A Frame's general aesthetic and Propulsion preferences are typically based on the Arcology that deploys it.

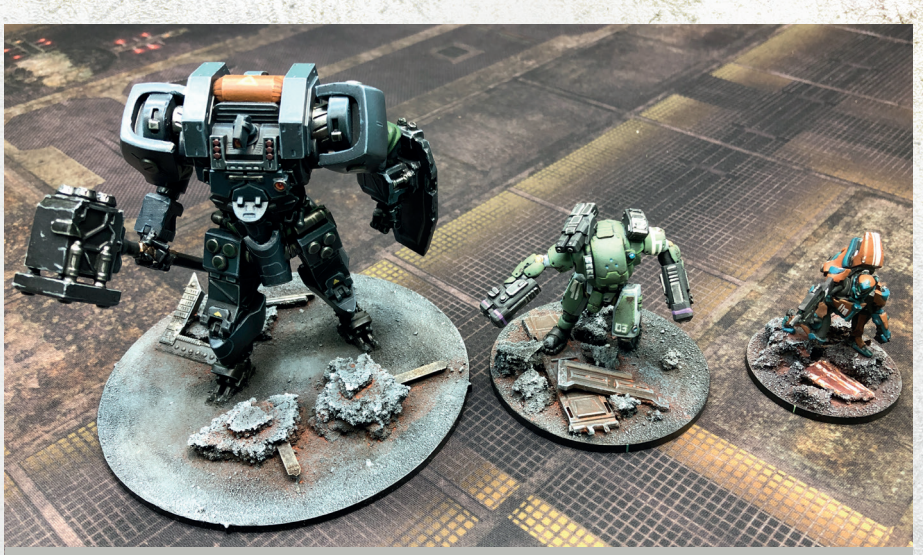
A Frame's most important defining feature is its size, which determines its displacement on the battlefield (base size), as well as how far it can Manoeuvre or Evade, how much damage it can take and the weight it can bear in Loadouts. Base size is a spectrum and should fit with most model collections. The best advice is to discuss with your group exactly what you'd like to use in terms of scale to be consistent inside your own Campaign. Larger (1/144) mecha models look great on the battlefield against models in the same scale but may look odd when facing Wargaming miniatures. For reference, Wargaming Scale refers to 28mm Miniatures and Model Toy Scale refers to the larger toy kits popular around the world. Just be consistent within your own group and the game will function fine.

Light Frames are mounted on 1.5" to 2" (roughly 40mm to 50mm) bases. They are highly manoeuvrable and have the unique benefit of always being able to Evade, as they are powered in part by the motions of the Pilot inside them. While they are quick and agile, they are also proportionally fragile and cannot bear many Loadouts.

Medium Frames are mounted on 3" to 4" (roughly 75mm to 100mm) bases. This standard Frame size offers a good balance between protection, mobility, and the ability to mount a robust selection of Offensive Loadouts. Medium Frames have powerful Reactors and can support more weight than Light Frames.

Heavy Frames are mounted on 5" to 6" (roughly 125mm to 150mm) bases. These Frames sacrifice mobility and evasion for the ability to soak up damage and carry a deadly array of offensive and defensive Loadouts. Heave Frames have heavy Reactors, which are necessary to power some of their more energy-hungry weapons.

Each Frame type offers advantages and disadvantages; some Arcologies prefer certain ones over others.



Choosing the appropriately-sized base for your Frame allows it to be easily identified during missions. From Left to Right are examples of Light, Medium, and Heavy Frames.

LINE OF SIGHT

Frames in *Gamma Wolves* use sophisticated Sensor systems to detect enemy targets on the battlefield; even if they cannot exactly identify the Contact, they know something is present and manoeuvring around the battlefield.

Frames are considered to occupy a volume the same size as their base, up to the height of the model being used.

Line of Sight in *Gamma Wolves* refers to whether a Frame can draw an imaginary line from anywhere on its volume to the volume of another Frame on the battlefield. This is done by drawing an imaginary line from any part of one Frame's base or model to any part of another Frame's base or model.

If this line can be drawn, both Frames have Line of Sight to each other. This is not the same as having Lock, which is explained later (see page 18).

Gamma Wolves uses Line of Sight to determine sighting Contacts, Lock, and Vulnerability.

LOADOUTS

The term *Loadout* represents anything attached to a Frame to enhance its Offensive and Technical battlefield presence. In simple terms, Loadouts are the weapons, armour, technical systems, and other attachments the Pilots and Crew chiefs mount to a Frame for it to employ in combat during Missions.

A Frame's size determines how many Loadouts it can hold and how much Materiel the Loadouts cost to deploy.

LOCK

Lock is a term that represents whether an Offensive Loadout can track and engage an enemy Frame on the battlefield. A Frame has Lock on an enemy if it is within its 180-degree Front Facing and Line of Sight (see diagram on page 15).

MATERIEL

Materiel represents the available assets a Crew has within their Crawler. In game terms, it is the resource with which you purchase Offensive and Technical Loadouts for your Frames. A typical game of *Gamma Wolves* operates on a budget of 500 Materiel. Frames themselves have no Materiel cost, but the cost of Loadouts increases depending on the size of the Frame to which they are being equipped.

MEASURING

All measurements in *Gamma Wolves* are in inches (though millimetres are sometimes given as a reference for model or base size). Due to the Frames' sophisticated Sensor systems, any distance can be measured by either player at any time.

PILOT EXPERIENCE LEVELS

Pilot Experience Levels indicate just how seasoned or skilled a Pilot is at operating their Frame. They also have an inherent Value based on their Level.

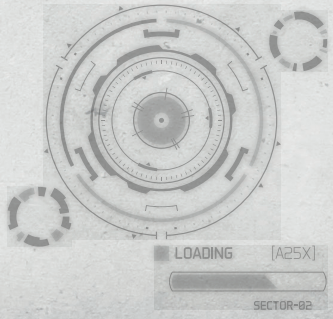
Rookie Pilots are the most inexperienced members of a Crew. They are often given Light Frames to pilot, as the risk and cost to repair them is far less than that of larger Frames. They have a Value of 2.

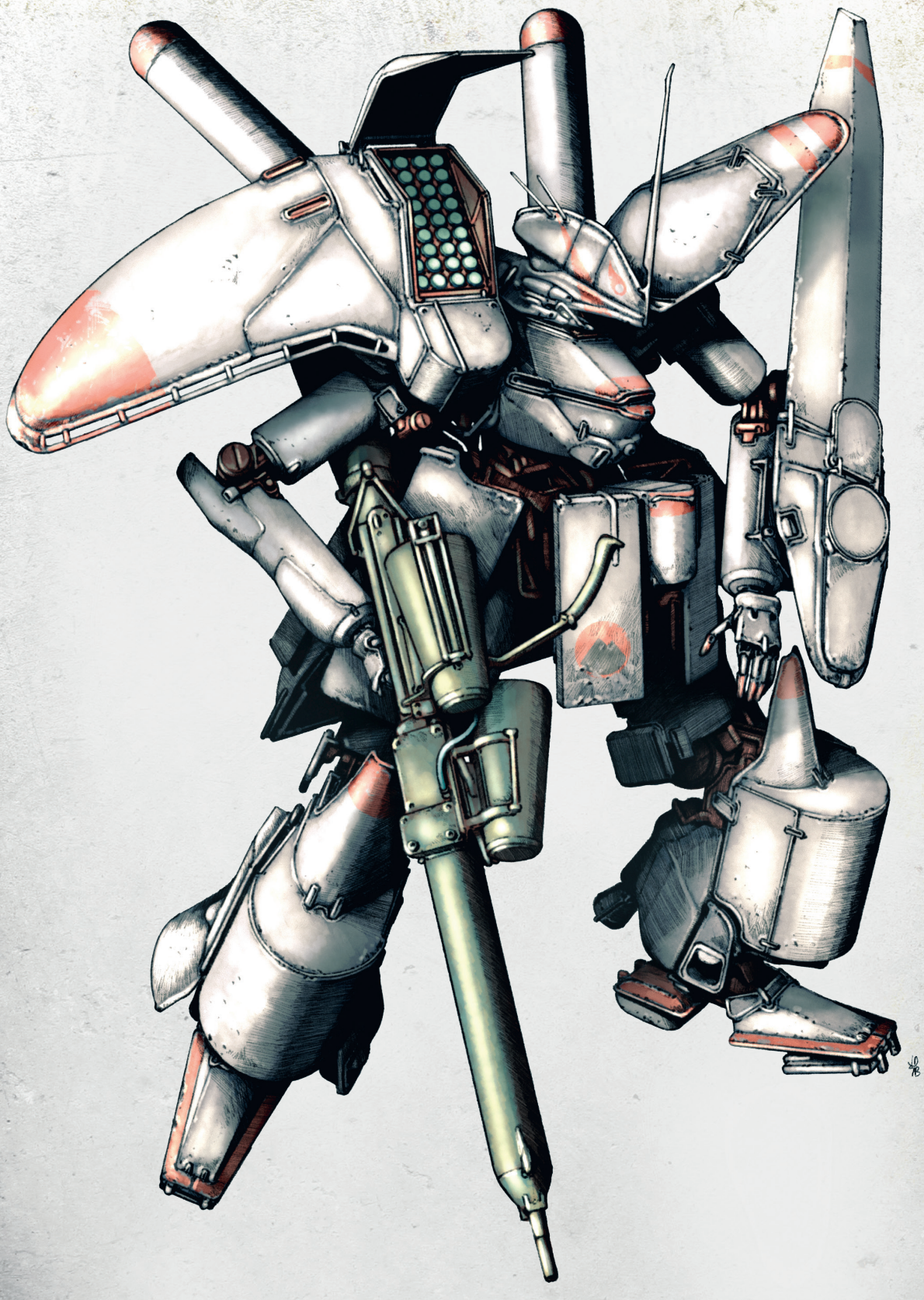
Trained Pilots are the most common members of any Crew. Their experience allows them to manage almost any size Frame to good effect, and they often form the spearhead for a given Mission. They have a Value of 3.

Veteran Pilots are the experienced old hands in the Sea of Destruction. These Pilots are often the leaders of a Crew, and their abilities allow them to effectively pilot any size Frame to good effect. They have a Value of 4.

Pilot Value is used to determine how many Pilots a Crew can deploy on a Mission. The usual Crew size for a game of *Gamma Wolves* is 12 Pilot Value (PV).

A player may also nominate a Pilot of any Experience Level as an *Ace*. An Ace receives a bonus to their Endurance as well as to a single Skill of the players choosing, as detailed later. They also increase their Pilot Value by 1. Typically, a *Gamma Wolves* Crew may only ever contain a single Ace.





REROLLS

If the game specifies you may reroll dice as part of a Test, you must do so **after** determining the results of the initial roll, but **before** determining the overall results. The specified dice are rerolled and the new result is now applied. A die that is rerolled may not be rerolled again by the same player. In a situation where an opponent forces a player to reroll Successes, the player rerolls them after they reroll any Failures.

ROLL-OFF

This is a simple method for determining which player should perform a task during a game. Both players roll 1D6, rerolling any ties. Whichever player rolls higher wins the roll-off and performs the action as described.

SKILLS

Skills make up a Pilot's various competencies and are initially determined by their Level when they are recruited to a Crew. The lower the Skill value, the better it is. Whenever a Pilot takes a Test, they compare their dice results to their various Skill Values on their Pilot Card.

Certain conditions, such as a Target being in Lock to their Side or Rear Arc or being Injured, can modify a Pilot's Skill Test for the duration of an engagement or Test. Whenever this is the case, modify the dice results, not the Skill itself.

SKILL EXAMPLE

A Rookie Pilot has a Gunnery Skill of 5+. This means they need to roll a 5 or 6 to generate a Success during a Gunnery Test. A Veteran Pilot has a Gunnery Skill of 3+, meaning they are significantly more likely to generate a Success when engaging in a Gunnery Test.

STRESS

Piloting a Frame in the most favourable of conditions is a highly technical task. During combat, it is an intense and high-pressure assault on the senses that can quickly stretch both Pilot and Frame to their limits, as the action heats up and multiple engagements take their toll on the Crews' various Frames.

Stress is a catch-all term for the pressure put on both Pilots and Reactors. As discussed earlier in the section about *Tokens*, Stress is tracked visually on the battlefield, so all players are aware of the current Stress levels of the various units participating in the engagement.

Pilot Stress accrues whenever a Frame's Pilot attempts to deploy an Offensive Loadout, Evade, or Manage the Reactor on their Frame. A Pilot may accumulate as much Stress as their Endurance attribute, which is based on their Pilot Level.

Reactor Stress accrues whenever a Frame Manoeuvres or deploys certain Loadouts that draw energy directly from the Frame, rather than carrying their own, separate, ammunition. Damage to the Frame itself and damage from certain types of incoming ordinances deployed

by enemy Frames can also cause Reactor Stress. A Frame may accumulate as much Reactor Stress as its Reactor attribute.

When a Frame or Pilot reaches maximum Stress on their Reactor or Endurance, they are either Redlined or Exhausted and may no longer do anything that requires those two resources for the remainder of the turn.

As discussed previously, mark the accrual of these conditions with differently-coloured tokens, placed next to the Frame during a game.

TESTS

Tests are the standard method used in *Gamma Wolves* to determine success or failure of an action, whether opposed or not. Regardless of the type of Test, they are all performed the same way.

The Pilot engaging in the Test starts with 3D6, then adds or subtracts any positive or negative modifiers to create their dice pool. They then roll the dice pool and consult the appropriate Skill to determine how many Successes they receive.

EXAMPLE

A Pilot makes a Gunnery Test during a game to shoot at another Frame. They build a dice pool of 3D6 plus any bonus dice available to the Loadout they are firing. In this case, the Loadout is an Autocannon (+3D6). They roll 6D6, resulting in 1, 1, 3, 4, 5, and 5. The Pilot's Gunnery Skill requires a 4+ to succeed, so they generate 3 Successes.

Certain conditions may apply modifiers to a Test. Such modifiers apply to the **dice results**, not the Pilot's Skill.

Regardless of any modifiers to the Test, a natural roll of 1 is always a Failure and a natural roll of 6 is always a Success.

EXAMPLE

An Injured Pilot suffers a -1 Penalty to all Tests. When rolling a Gunnery Test, their results are 5, 4, and 2. These rolls are modified to 4, 3, and 1 because of their injury. Their Gunnery Skill is 4+, so they generate a single Success.

In the case of an Unopposed Test, apply the effects for the number of Successes as described by the rules. These Successes become *Net Successes*, which are used to determine what happens next.

Some Tests are Opposed. Most often, this occurs when another Pilot attempts to prevent or evade the acting Pilot's action.

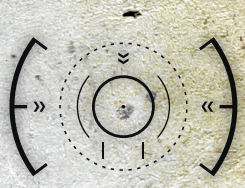
When a test is Opposed, the Target of an action also performs the appropriate Test to attempt to cancel or offset some of the Successes the acting Pilot generates. For each Success the opposing Pilot generates, reduce the acting Pilot's Success level by one. If they achieve zero Successes, the action typically fails.

EXAMPLE

The acting Pilot in our previous example generated 3 Successes in their Gunnery Test while targeting an enemy Frame. However, when they declared an Active Lock on the opposing Pilot, that Pilot declared an attempt to Evade. After the Gunnery Test, the opposing Pilot may now make a Manoeuvring Test to try to reduce the impact of the attack. They start with 3D6 and add or subtract any modifiers appropriate to their situation (in this case, there are none). They then roll their dice pool, which results in a 2, 3, and 6. Their Manoeuvre Skill is 3+, so they generate two Successes. This reduces the acting Pilot's number of Successes to 1. The acting Pilot then determines the location and level of damage, based on this Net Success.

Remember, the important details about Tests are the rules for natural rolls of 1 and 6 and that you always start with 3D6 and then modify the dice pool based on what type of Test the Pilot is performing.

ASSEMBLING YOUR CREW



Whether you are playing your first game of *Gamma Wolves* or you and your Gaming Group are about to embark on a Campaign in the Sea of Destruction, you assemble your *Gamma Wolves* Crew following the same basic process.

SELECT AN ARCOLOGY

In *Gamma Wolves*, every Crew belongs to one of the few remaining Arcologies, those islands of hope in the Sea of Destruction. These last bastions of humanity shape how the Crews operate, and each one has preferences for how it enlists and deploys Pilots and the Frames in which they fight. An Arcology's unique technologies and jealously guarded secrets may also provide certain tactical advantages players can exploit when purchasing Loadouts or embarking on a Mission.

The allegiance your Crew holds determines a great deal going forward, so consider your Arcology carefully before proceeding to the next step.

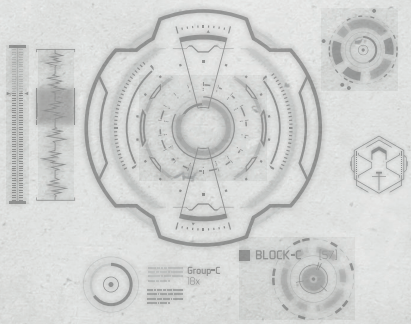
An Arcology's cultural biases extend into Pilot Recruitment and Frame Design. Each has its own values and preferences for its militaries and the manufacturing and design of its fighting machines.

Each Arcology has three key features: Initial Pilot Availability, Frame Preference, and Propulsion Types. Additionally, each Arcology has a Quirk which may give additional Attributes, restrictions, or other special rules for Crew composition.

Initial Pilot Availability details the minimum and maximum number of Pilots from any given Experience Level that the Crew may recruit when it is initially being formed. Values may be limited or required as indicated for each Arcology. Remember that a Crawler can house a maximum of eight Pilots at any given time during a Campaign. Once a Campaign is underway, these restrictions on Pilot Availability are ignored unless a Crew is forced to disband and reform.

Frame Preference specifies the minimum and maximum number of Frames in any given size that a Crew may deploy for a Mission. It is worth noting that each Crawler may house a maximum of six Frames at any given time during a Campaign, though these Frames may be piloted by different individuals during each Mission. These restrictions apply to all Frames in a Crew's Crawler and when deploying Frames to the battlefield.

Propulsion Types dictate the different locomotive and load-bearing systems and technologies available to a given Arcology. Some systems provide better manoeuvrability than others, while some are better able to bear the weight of Loadouts. Some Arcologies simply do not have access to certain types of technology, so bear this in mind when selecting the affiliation of your Crew.



Bolschev (*Bowl-shev*)

Strength during adversity has long been the creed of the people of eastern Europe and Asia; it helped them survive for as long as they have. The Bolschev Arcology is more of a warren, stretching for hundreds of miles beneath major cities that once crowned what is now a wasteland of crumbling towers and rotting housing blocks. Practical and dependable, if fatalistic, their technology focuses on reliability rather than finesse. The Bolschev armed-forces are volunteers with a set term of service; most of the population considers it an honour to fight for the greater-good of the Arcology.

BOLSCHEV CREWS			
Initial Pilot Availability	0+ Veteran Pilots	2+ Trained Pilots	0+ Rookie Pilots
Frame Preferences	1+ Heavy Frames	1+ Medium Frames	0–1 Light Frames
Propulsion Types	Tracked, Multi-Limbed, Bipedal		

Arcology Quirk

Overloading: Once per game Round, during either the Manoeuvring or Gunnery Phase, a Bolshev Pilot may Stress their Reactor even if it is already at maximum Stress. If they do so, the Frame takes a single point of Damage to the body as its cooling systems fail and internal components suffer damage.

A Burg Frame Crew musters to defend their Old-Tech discovery. Models from Immortal Kings.

The Burg

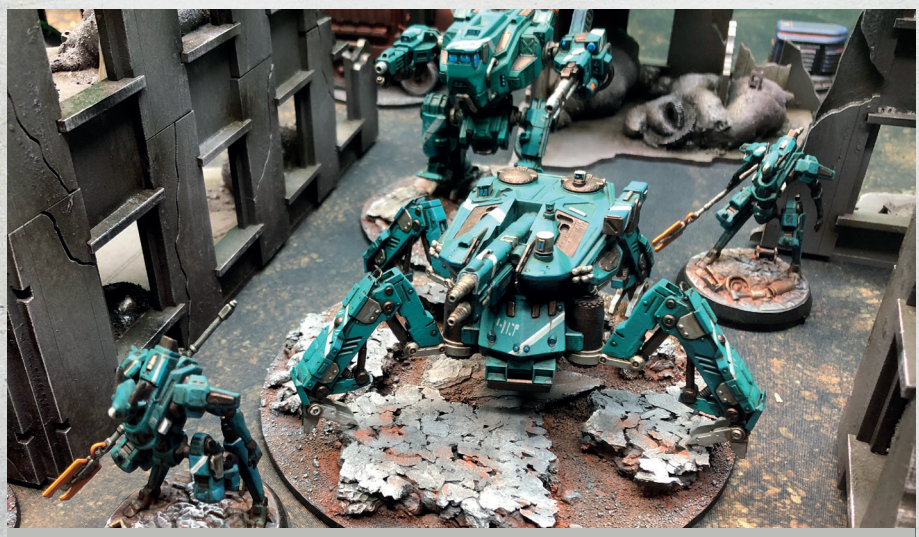
The Burg was once a sprawling mass of people, divided by race and class. The atrocities of the End-Wars brought the birthplace of mankind to near extinction. Enclaves of fleeing scientists from dozens of former nations found sanctuary in this most southern portion of the African continent to attempt to save mankind from itself.

What was once considered extremely illegal was now feverishly researched, as the unshielded population withered and died on the poisoned ground. Genetic manipulation, cloning, and artificial birthing techniques allowed The Burg to rise from the ashes of the Old World. More resistant to radiation and able to process toxins that would kill the average person, the people of The Burg seem almost alien to outsiders. Their Arcology's only real issue is that they were engineered with a built-in lifespan of only twenty years, which means Veteran Pilots in their ranks are rare. Without this betrayal at the hands of their ancient engineers, they would likely be the dominant society on this new Earth.

THE BURG CREWS			
Initial Pilot Availability	0–1 Veteran Pilots	0+ Trained Pilots	0–1 Rookie Pilots
Frame Preferences	0–2 Heavy Frames	0–4 Medium Frames	0–2 Light Frames
Propulsion Types	Any		

Arcology Quirk

Humanity 2.0: The enhanced physiology of The Burg's Pilots allows them to easily process the toxic soup that makes up the atmosphere in the Sea of Destruction. They do not take Damage during the Cool-Down Phase when their Frame is Critically Damaged in the body location, but they do suffer Injuries from additional Damage to their Frame during an Engagement.



The Ghosts of Tiamat's Pilotless Frames stalk a ruined industrial centre. 3D Designs by Philip Turz on Thingiverse.

Ghosts of Tiamat (*Tee-Ah-Mat*)

The Tiamat Array was created to save humanity from itself. An orbiting ring of small, solar-powered, networked hives housed a host of nano-robotic workers whose sole purpose was to restore the atmosphere of the planet to pre-industrial conditions, while automatically reproducing themselves by salvaging orbital detritus. This hopeful pre-war project did not account for the insanity that humanity unleashed in the coming centuries. Entirely overwhelmed by damage from nuclear EMPs, volcanic eruptions that caused mass-extinction, and other catastrophic planetary events, the Array's protocols were subverted from their original intent and evolved to encompass the new world.

Having consumed all available Salvage in the atmosphere to enlarge and enhance the Array, the nano-machines began to descend to the surface. Their networked intelligence and ability to interface with technology they encounter on the surface has led these *Ghost Crews* to silently activate abandoned vehicles on the same scale as Crawlers and fill them with Old-Tech and Frames they can use to collect more Materiel. While these Ghosts of technology are not an Arcology or Pilots in a living sense, they nonetheless roam the Sea of Destruction with the same common goal as any other Crew: salvage what they can and bring it home.

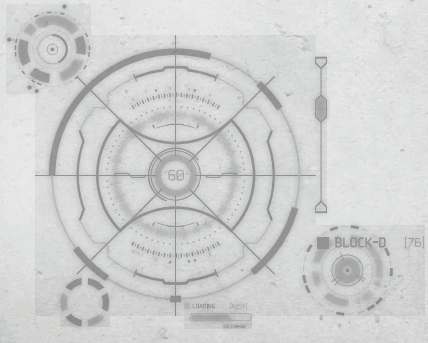
GHOSTS OF TIAMAT CREWS			
Initial Pilot Availability	0 Veteran Pilots	4+ Trained Pilots	0 Rookie Pilots
Frame Preferences	0–2 Heavy Frames	0–4 Medium Frames	0–2 Light Frames
Propulsion Types	Any		

Arcology Quirk

Deus Ex Machina: Pilots in a Ghosts of Tiamat Crew may not be Aces. They always deploy Trained Pilots. They do not take Damage during the Cool-Down Phase when their Frame is Critically Damaged in the body location, but they do suffer Injuries from additional Damage to their Frame.

When Injured, their Pilots do not suffer any penalties to Tests. They recover Injuries as usual between Missions. During the Cool-Down Phase, they receive +1 die roll modifier to all Technical Tests.

During a Campaign, their Pilots may never earn Experience or change Experience Level. They do not roll for Injuries when their Frame is disabled. The Crew may not visit Free Stations. They automatically identify and repair Old-Tech, which is immediately available for the next Mission without any additional Cost. Parts must be used to repair Frames as usual.



Hinode (*Hih-noe-day*)

Powered by the geo-thermal energy of Mt. Fujii's molten core, Hinode (Sunrise) is the smallest of the major Arcologies, but possibly the most progressive. Though locked for the last decade under the crawling movement of a huge, nuclear ash cloud, their ready access to heat allowed Hinode to build vast agricultural bays into the mountain's sides. This gave them massive trade advantages, as the ability to produce food on this cursed-earth is priceless. The raging winter that surrounds them is both a blessing and a curse, as it protects them from those wishing to steal what they have. Their name stems from their belief in a better tomorrow – when ultimately the raging and remorseless sun once again shines on their people.

HINODE CREWS			
Initial Pilot Availability	1+ Veteran Pilots	0+ Trained Pilots	1+ Rookie Pilots
Frame Preferences	0–2 Heavy Frames	0–6 Medium Frames	0–2 Light Frames
Propulsion Types	Multi-Limbed, Bipedal, Jet		

Arcology Quirk

Masters and Apprentices: A Hinode Crew must include one Rookie Pilot for each Veteran and Trained Pilot in the Crew when it is created. Further, each Rookie Pilot must be associated with a Veteran or Trained Pilot – their Master. Both must pilot the same size Frame, though they need not have the same Loadouts. Whenever the Rookie Pilot performs a Gunnery, Evasion, or Manoeuvre Test while their Master has Lock to them, they receive +1 to the results of their Test roll. This bonus is lost during a Campaign if the Rookie Pilot achieves the same Training Level as their Master, at which time the relationship ends.

Outcasts from their Arcologies of birth, a Ronin Frame Crew bands Pilots together as security forces for a Free Station. Models from Immortal Kings and WHISPER.

North-Star

Built on the remnants of the last American/Canadian government installation, North-Star proclaims itself a bastion of freedom in a world on the edge of extinction. The reality is the Arcology is little better than a slave-state of haves and have-nots. Many youths jump at the chance to escape, even if that means only the illusion of freedom by piloting one of the many Frames in the Arcology's military. The rookie mortality rate is quite high, and this large Arcology sees few Pilots live long enough to become Veterans. Those who do become Veterans are often bitter and disillusioned; many eventually choose the life of a Freelancer after they have had their fill of death.

NORTH-STAR CREWS			
Initial Pilot Availability	0–1 Veteran Pilot	0–2 Trained Pilots	1+ Rookie Pilots
Frame Preferences	0–1 Heavy Frames	0–6 Medium Frames	0–2 Light Frames
Propulsion Types	Any		

Arcology Quirk

Meat for the Grinder: A North-Star Crew may never contain more Veteran or Trained Pilots than Rookie Pilots when it is first created. Whenever a Veteran or Trained Pilot in a North-Star Crew performs an Evasion Test and a Rookie Pilot from the same Crew also has Lock with the active Frame, they receive +1 to the Evasion Roll. The Rookie Pilot's Frame automatically takes a single point of Damage to a random Location, as they are used as a distraction.

Ronin

As security forces for a Free Station, a Ronin Crew must make do without the full resources of an Arcology at their disposal. That being said, Ronin are hardened killers accustomed to a frontier life and often on the run. While they are almost always outnumbered, they are rarely outgunned or outsmarted. Some of the most legendary *Gamma Wolves* now call outposts like *Machu Pichu*, *Alert Station*, *Pripyat Carnival*, and *The Mogh* home.

RONIN CREWS			
Initial Pilot Availability	2+ Veteran Pilots	0–2 Trained Pilots	0–2 Rookie Pilots
Frame Preferences	0–2 Heavy Frames	0–4 Medium Frames	0–2 Light Frames
Propulsion Types	Any		

Arcology Quirk

Smokin' Aces: Due to their Experience Level and previous time spent with other Crews, any number of Pilots in a Ronin Crew may be Aces, instead of the usual limit of one.

During Campaigns, they may recruit Aces of any Level when they return to their *Home* Free Station, either by choice or necessity.

SELECT PILOTS AND ACES

With your Arcology selected, you may now decide how many Pilots you wish to deploy into the Area of Operations from the Crew's Crawler. A *Gamma Wolves* Crew never risks their entire operational strength on a single Mission, so the maximum number of Pilot Levels that may be enlisted is the same for each side.

In a standard game of *Gamma Wolves*, each player can deploy 12 PV (Pilot Value) worth of Pilots on a Mission.

A Pilot's PV depends on their Experience Level:

- **Rookie Pilots** have a PV of 2.
- **Trained Pilots** have a PV of 3.
- **Veteran Pilots** have a PV of 4.

Each Crew may also, if the player wishes, nominate a single Pilot as an *Ace*. An Ace Pilot can be any Experience Level and may represent everything from a grizzled Veteran to an up-and-coming hotshot Rookie. The player should note on the Pilot's Card that they are an Ace and add +1 to the Pilot's Endurance and improve one other Skill of their choice. The Pilot's PV is also increased by 1.

A Rookie Ace, therefore, has a PV of 3, a Trained Ace has a PV of 4, and a Veteran Ace has a PV of 5.

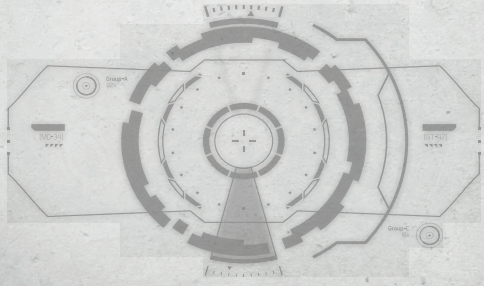
Each time you select a Pilot, give them a name and copy their Attributes and Skills to their Pilot Card. If their Arcology provides any unique Quirks, it is useful to note these, as well. Talents and Injuries are accumulated during a Campaign.

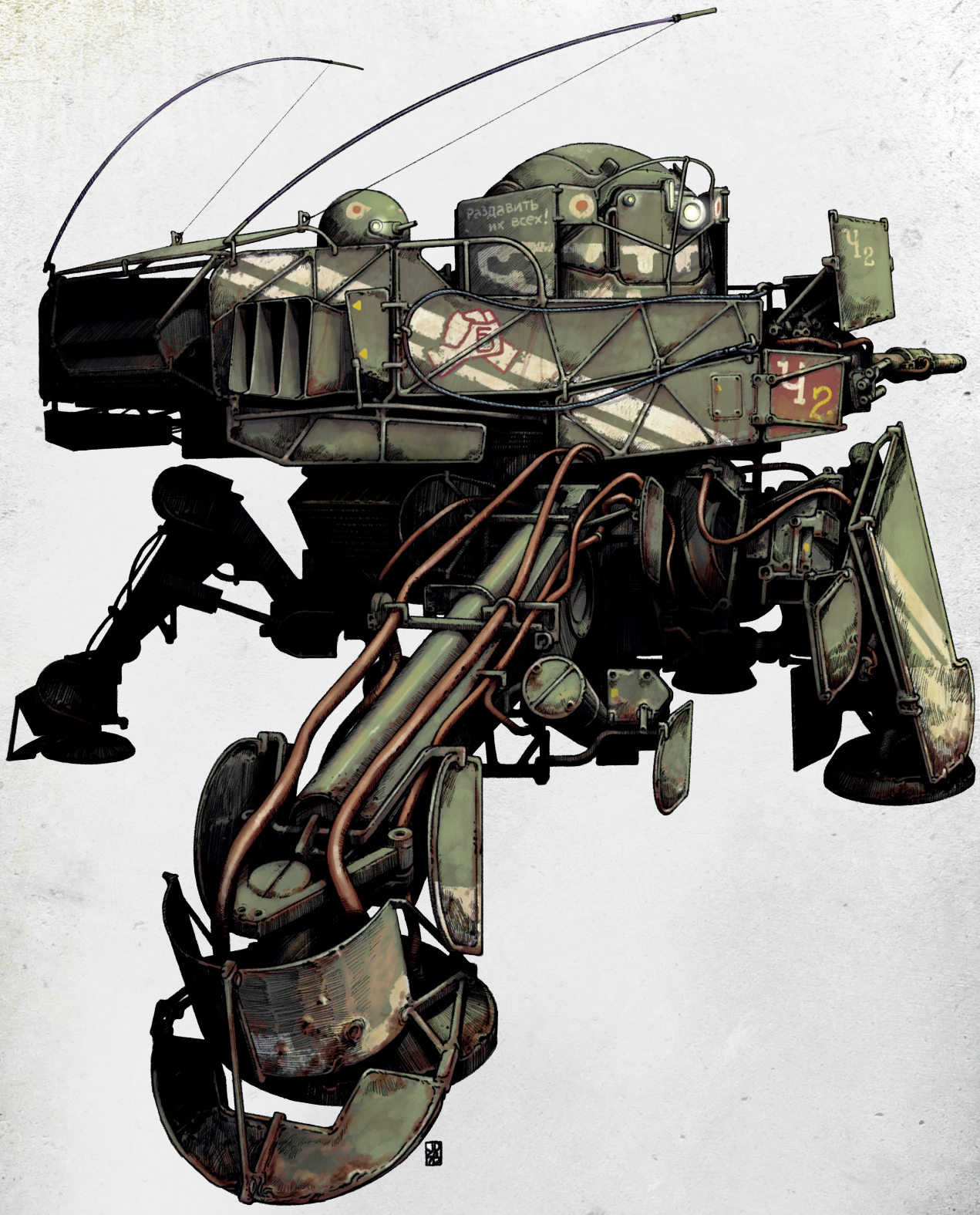
Advances indicates the number of times a Pilot must Advance during a Campaign before they reach a new Experience Level.

Pilot Name					
Arcology			**Experience**		
Experience	**Endurance**	**Manoeuvre Skill**	**Gunnery Skill**	**Technical Skill**	**Pilot Value**
Rookie	2	5+	5+	5+	2
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					

Pilot Name					
Arcology			Experience		
Experience	Endurance	Manoeuvre Skill	Gunnery Skill	Technical Skill	Pilot Value
Trained	3	4+	4+	4+	3
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					

Pilot Name					
Arcology			Experience		
Experience	Endurance	Manoeuvre Skill	Gunnery Skill	Technical Skill	Pilot Value
Veteran	4	3+	3+	3+	4
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					




Раздавить их всех!

SELECT FRAMES AND PROPULSION METHOD

Frame technology allows humanity to survive outside the Arcologies and salvage the necessary Old-Tech that allows their societies to function and prosper. Each of your Pilots must now be assigned to a Frame.

In a one-off game of *Gamma Wolves*, you must select a single Frame for each Pilot in your 12 PV Crew, no more and no less! These must follow the restrictions and requirements for your Arcology.

At the outset of a Campaign, a Crawler can house six Frames. You must select these now, and you will most likely have more Frames than Pilots. This is perfectly acceptable, as Frames become damaged during a Campaign and must be re-fitted and repaired between Missions. You may decide to leave a damaged Frame back at the Crawler and deploy an undamaged one, instead.

Frames of different sizes do not have any additional costs, except as required for special types of Propulsion, and you may freely select any Frames allowed or required by your home Arcology.

Name			**Materiel Cost**	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Light	8" ( )	2	1 x Prim, 1 x Sec.	15
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
	Prim. Sec.			
Primary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Secondary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	Light Frames receive +1 to Evade Test results and may Evade one additional time, even after a Pilot is fully Stressed.			

Name			Materiel Cost	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Medium	6" ( )	4	2 x Prim (L & R), 1 x Sec.	25
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
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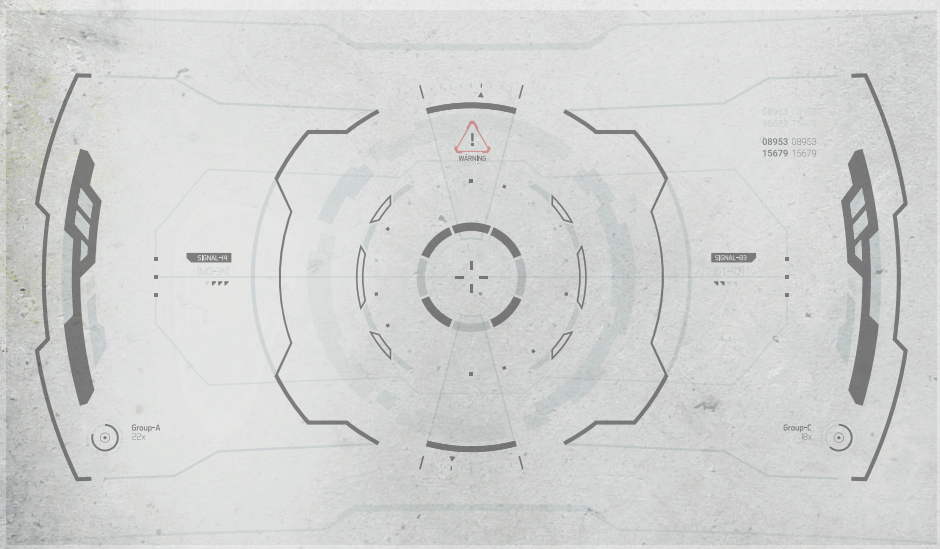
Primary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Secondary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	None.			



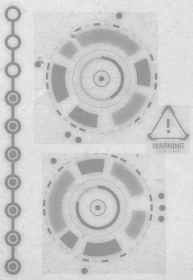
Name			Materiel Cost	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Heavy	4" ( )	6	2 x Prim (L & R), 2 x Sec (L & R)	30
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
	Left Right Left Sec. Right Sec.			
Primary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Secondary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	Heavy Frames suffer -1 to Evade Test results.			

When you a select a Frame, you must also determine its Propulsion Type. Some Propulsion Types provide various additional abilities, but they also have an additional Materiel Cost, which represents the additional maintenance these Propulsion Types require in the field and comes from your budget of 500 Materiel for Loadouts.

For your first *Gamma Wolves* Crew, it is highly recommended you let the models do the work of selecting size, Propulsion, and Loadouts. If you have a cool model you are excited to build, paint, and put on the battlefield, you are going to be much more satisfied with the experience. After you spend some time playing the game, you can start kit-bashing your perfect, elite Crew. To start, it can be much easier to simply let the models you like determine what you bring to the game. Remember the general rules for selecting models to represent your Frames. The Propulsion and Loadouts on a given model should be obvious to you and your opponent.

PROPULSION TYPE TABLE		
Propulsion Type	**Special Rules**	**Materiel Cost**
Bipedal	None.	None
Jet	This Frame does not halve the distance travelled when Manoeuvring or Evading in its Side or Rear Arcs. It also ignores Movement reductions for Broken Terrain, unless its Propulsion is Critically Damaged. During a Manoeuvre, the Pilot of a Frame with Jet Propulsion may burn additional reserves to move Vertically or Horizontally. Stress their Reactor an additional time for this Manoeuvre immediately and reduce the War-Clock by one. When moving, this Frame may move up to its Speed both Horizontally and Vertically, and may end its Manoeuvre on top of otherwise Impassable Terrain, provided its base fits in that new position. A Frame with operational Jet Propulsion takes no Damage from Drops.	Light 20 Medium 30 Heavy 50
Multi-Limbed	A Frame with Multi-Limbed Propulsion provides an extremely stable firing platform and is excellent at remaining upright in Difficult Terrain. This Frame always counts as having remained stationary for the purposes of the Gunnery Phase and does not reduce its movement for Manoeuvring through Broken Terrain. Increase the total number of Damage Boxes on this Frame's Propulsion by 1.	Light 20 Medium 30 Heavy 40
Tracked	A Frame with Tracked Propulsion is exceptionally good at moving forward or in reverse through Difficult Terrain, though it is more limited when Evading to the Sides. A Tracked Frame gains +2" of movement in the Manoeuvre Phase when it Manoeuvres only in its Front or Rear 90-degree Arc in a single, straight line. However, it may only Manoeuvre or Evade at a quarter Speed in its Side Arcs (so 1" of movement spent = 0.25" of movement). Tracked Frames ignore the movement reduction for Broken Ground. Add +5 to the Weight Tolerance of any Tracked Frame.	Light 15 Medium 25 Heavy 30

Once you've selected a Frame for each Pilot or fully loaded all six bays in your Crawler, you are ready to begin attaching Loadouts to your Frames.



LOADOUT FRAMES

Frame Loadouts are both offensive weapon systems and defensive or technical equipment that give the Pilots inside the ability to react to and combat enemy assets on the battlefield. How you equip each Frame after selecting its size and Propulsion Type impacts how it performs on the battlefield. For your first few games, it is easiest to allow your model collection to determine how your Frames are equipped. Once you are comfortable with the game, you can dive deeper into designing the perfect elite fighting machines with which to dominate your foes.

You have a budget of 500 Materiel for any given Mission with which to purchase your Frames and their Loadouts. You may want to upgrade or downgrade certain Technical Loadouts between Missions or purchase items like Ablative Armour to fill in your last few points of Materiel. This is perfectly acceptable. Your Materiel budget represents the Crawler's limited resources and your Crew Chief's demands for a certain level of restraint in deploying assets to each Mission. The propulsion cost of all Frames also comes from this budget.

You are not required to spend all 500 Materiel; often, trying to do so results in overloaded Frames. However, you may not spend more!

There is one additional consideration to make when adding Loadouts to your Frames and that is their Weight Tolerance. Each Frame size is designed to carry only so much additional equipment.

This Light Frame has Jet Propulsion. Miniature by WHISPER.

Weight Tolerance is the measure of weight the Frame can carry and still perform optimally. At or below this value, it can move its normal Speed and without placing additional Stress on its Reactor. You can purchase more weight in Loadouts on a Frame if you wish, but there are additional penalties when you double or even triple the Weight Tolerance of a Frame.

If the Total Weight of a Frame's Loadouts **equal to or below** its Weight Tolerance, there is no additional impact.

If the Total Weight of a Frame's Loadouts is **more than** its Weight Tolerance, but **less than twice** its Weight Tolerance, it is Encumbered and suffers a -2" reduction to its Speed Skill. Note that there is an important distinction between this and a movement reduction, as a reduction to a Frame's Speed Skill also impacts how far the Frame can Evade.

If the Total Weight of a Frame's Loadouts is **at least twice** its Weight Tolerance, but **less than triple** its Weight Tolerance, in addition to being Encumbered, increase the Frame's Reactor Stress by 1 at the start of each Manoeuvre Phase before either player nominates a Frame to activate. If the Reactor is already at full Stress when this happens, apply 1 Damage to the Frame's Body.

A Frame may never carry **more than triple** its Weight Tolerance in Loadouts. Any action that would cause it to do so automatically fails.

Each Frame size has its own Loadout Chart. This Chart provides all the information you need to deploy a Loadout to a given Frame. Once you select a Loadout for a Frame, copy its information on that Frame's Card. Offensive Loadouts may be mounted a number of times equal to the number of Hardpoints on a Frame. Remember, only Loadouts with the Secondary System Trait can be mounted on Secondary Hardpoints.

LOADOUT POSITIONS

You may notice that some Loadouts, particularly Primary and Secondary Weapon Systems, have a Left (L) or Right (R) tag. While this may not be strictly represented by the model deploying this Loadout, it is simply a handy way to differentiate systems for the purposes of Damage during a Mission. If a Frame is modelled in some way that Left or Right does not accurately describe, simply explain to your opponent where each system is located before each Mission.

OFFENSIVE LOADOUTS

Every Frame is equipped with a variety of Weapon Systems with which to defend itself while on Missions. The Hardpoint systems on Frames allow Pilots to freely switch Loadouts to adapt to new conditions and enemies; so, a Frame's Loadouts can be different every time a Pilot deploys in it.

Every Frame must be equipped with at least one Offensive Loadout with which to defend itself.

Each Offensive Loadout provides the following information:

- **Bonus Dice:** This is the number of D6s added to a Gunnery Test when using this Loadout.

- **Damage:** This is the amount of Damage each Success causes to a Target when this Loadout successfully attacks and the Target does not Evade. Half and quarter values can exist, and only cause damage when enough Successes are achieved to create a whole number.
- **Effective Range:** This is the range, in inches, at which the Loadout is most effective. This is always described in two separate values: a minimum range, followed by a maximum range. If a Frame is outside of this stated range, all Bonus Dice are halved when employing the Loadout.
- **Weight:** This value is added to the Total Weight of a Frame for every time this Loadout is mounted to the Frame.
- **Traits:** These special rules govern the unique properties a Weapon System may have and should be read carefully before you decide to mount a Loadout to any given Frame.
- **Materiel Cost:** The Materiel Cost this Loadout adds to a Frame each time it is mounted. Be sure to write this on the Frame's Card.

LIGHT FRAME OFFENSIVE LOADOUT TABLE

Loadout Name	Bonus Dice	Damage	Effective Range	Weight	Traits	Materiel Cost
Anti-Tank Missile	1	3	12–36"	5	Limited (1), Secondary System	10
Autocannon	3	0.5	0–18"	5	Assault	20
Ballistic Shield	-	-	-	5	Barrier (6)	15
Laser	1	4	0–18"	7	Beam, Energy, Slow, Stressful	30
Rapid Fire Energy Weapon	2	1	0–18"	7	Assault, Stressful, Energy	25
Rifle	2	1	6–30"	5	Accurate	25
Rocket Pack	4	1	12–24"	5	Blast (6"), Indirect, Frag, Limited (1), Secondary System	10
Rotary Cannon	4	0.5	0–12"	5	Assault, Secondary System	15
Shot Cannon	4	0.5	0–8"	5	Frag	25
Thermal Spear	1	0.5	0–8"	5	Blast (1"), Energy, Melee, Secondary System	20
Melee Weapon	2	1	0–1"	2	Melee, Secondary System	10
Energy Melee Weapon	2	3	0–1"	3	Melee, Beam, Stressful, Secondary System	15

MEDIUM FRAME OFFENSIVE LOADOUT TABLE

Loadout Name	Bonus Dice	Damage	Effective Range	Weight	Traits	Materiel Cost
Anti-Tank Missile	1	3	12–36”	10	Limited (2), Secondary System	20
Autocannon	3	1	0–18”	6	Assault	40
Ballistic Shield	-	-	-	6	Barrier (8)	25
Laser	1	5	0–18”	8	Beam, Energy, Slow, Stressful	45
Rapid Fire Energy Weapon	2	1.5	0–18”	8	Assault, Stressful, Energy	45
Rifle	2	1.5	6–30”	7	Accurate	40
Rocket Pack	4	1	12–30”	10	Blast (6”), Indirect, Frag, Limited (2), Secondary System	20
Rotary Cannon	5	0.5	0–14”	6	Assault, Secondary System	20
Shot Cannon	4	1	0–10”	6	Frag	45
Thermal Spear	1	0.5	0–10”	6	Blast (2”), Energy, Melee, Secondary System	30
Melee Weapon	2	2	0–2”	2	Melee, Secondary System	15
Energy Melee Weapon	2	4	0–2”	3	Melee, Beam, Stressful, Secondary System	20

HEAVY FRAME OFFENSIVE LOADOUT TABLE						
Loadout Name	**Bonus Dice**	**Damage**	**Effective Range**	**Weight**	**Traits**	**Materiel Cost**
Anti-Tank Missile	1	3	12–36”	15	Limited (3), Secondary System	30
Autocannon	3	1.5	0–18”	7	Assault	50
Ballistic Shield	-	-	-	7	Barrier (10)	35
Howitzer	1	4	12–36”	10	Artillery, Blast (3”), Indirect, Slow,	60
Laser	1	6	0–24”	9	Beam, Energy, Slow, Stressful,	60
Rapid Fire Energy Weapon	2	2	0–18”	9	Assault, Stressful, Energy	55
Rifle	2	2	6–30”	8	Accurate	50
Rocket Pack	4	1	12–24”	15	Blast (6”), Indirect, Frag, Limited (3), Secondary System	30
Rotary Cannon	6	0.5	0–16”	7	Assault, Secondary System	25
Shot Cannon	4	1.5	0–12”	7	Frag	55
Thermal Spear	1	0.5	0–12”	7	Blast (3”), Energy, Melee, Secondary System	35
Melee Weapon	2	3	0–3”	6	Melee, Secondary System	20
Energy Melee Weapon	2	5	0–3”	3	Melee, Beam, Stressful, Secondary System	25

Offensive Loadout Traits

Every Weapon System loaded to a Frame offers unique Offensive potential on the battlefield. Familiarise yourself with the potential of these weapons to better equip your Frames for combat.

Accurate

Reroll failed Gunnery Tests if this Frame did not Manoeuvre or Evade this turn.

Assault

Unmodified results of 6 for Gunnery Tests count as 2 Successes instead of 1.

Artillery

This Loadout may only be mounted on Heavy Frames and may not be activated if the Frame moved during the Manoeuvre Phase or Evaded during this Gunnery Phase.

Barrier (x)

This Loadout usually takes the form of a massive shield or other mobile cover which the Frame deploys to ward off incoming attacks. When A Frame is attacked in its Front or the Side (Left or Right, or either side in the case of a Light Frame that does not have a Left or Right Loadout) in which this Loadout is mounted, this Loadout absorbs Damage up to the value of (x). Draw additional Damage circles equal to (x) on the Frame Card next to the name of this Loadout. Do not roll for Location when attacking this Frame in the Front or Side upon which this Loadout is mounted until after (x) Damage is done. This Loadout may also be activated as a Melee Weapon, unless it is disabled from taking (x) Damage. If this Loadout is loaded to a Frame twice, do not double the extra Damage. Instead, increase the amount of Damage the Loadout with the Barrier Trait can absorb to 1.5 times (x), rounded down (for example, a Large Frame with a Ballistic Shield: Barrier (10) could absorb 15 Damage to the Front or either Side).

Beam

Beam weapons inflict a spear of incredible damage with pinpoint accuracy. During a Gunnery Test, after you determine Hit Location and spend any Successes to adjust aim, but before you total the Damage, reduce the number of Net Successes to a maximum of one per Loadout participating in the action. This means that for a linked action, you would reduce the number of Net Successes to a maximum of two.

Blast (x")

When this weapon inflicts Damage, inflict 1 additional Damage to the Body of the Damaged Frame and any other Frames (friendly or enemy) within the (x") value of the original target (measured from base to base).

Energy

This Loadout causes additional Stress to the target's Reactor by drastically increasing the temperature of the Frame or causing an electromagnetic assault on the target's internal systems. If this Loadout causes Damage to its target, also Stress the Frame's Reactor by one. If its Reactor is already at maximum Stress, apply an additional point of Damage to the Frame's Body after the Damage from the attack itself is resolved.

Frag

This Loadout projects a huge cloud of shrapnel in an expanding cone, making it incredibly hard to Dodge at Effective range. While each individual projectile is relatively harmless, thousands of these fragments pummelling the target creates a massive kinetic impact. When you attack with this Loadout at Effective range, the target suffers -1 to all Evade rolls. Outside Effective Range, this weapon takes a -0.5 modifier to its base Damage.

Indirect

This Loadout may be activated to attack a target inside the Frame's Front Arc, but not within Line of Sight. The target must be a Frame, not a Contact Marker. When you make the Gunnery Test for an Indirect Loadout, it is always considered outside Effective range. Indirect Loadouts may only select targets in the Frame's 90-degree Front Arc, instead of the usual 180-degree Front Arc.

Limited (x)

During each Engagement, this Loadout may only be activated a limited number of times (x), which is determined by the Frame size. Each time this Loadout is activated, reduce the Total Weight of the Frame by 5 for the rest of the Mission.

Melee

When using this Loadout to attack an enemy Frame, use the Pilot's Manoeuvring Skill instead of the Gunnery Skill for its Test. This Loadout may not be activated outside of its Effective Range. A Frame with a Loadout that has the Melee Trait may determine Snap Fire from either the starting or ending position of an enemy Frame's Manoeuvre. If the Target Frame does not declare an Evade and the Frame with the Melee Trait is not Snap Firing, the attacking Player may select the Hit Location instead of rolling.

Secondary System

This Loadout may be mounted to a frame's Secondary Hardpoint. Only Loadouts with this Trait may be mounted to a Secondary Hardpoint; however, they may still be mounted to a Primary Hardpoint, if desired.

Slow

This Loadout requires time to acquire its target and is difficult to bring to bear quickly. It may not Snap Fire.

Stressful

Each time you use this Loadout in a Gunnery action, add 1 point of Stress to the Frame's Reactor. If the Reactor is already at maximum Stress, inflict 1 Damage to the Body of the Frame activating this Loadout, instead.

TECHNICAL LOADOUTS

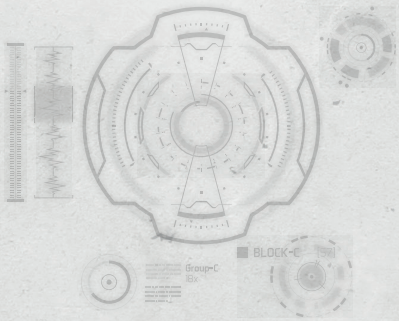
Technical Loadouts are a catch-all term for anything mounted to a Frame that does not require a Hardpoint. These additional systems, armour, or other pieces of equipment are typically how a player spends the remainder of their Materiel budget after they fully equip their Frames with Offensive Loadouts. Some players like to use the same Technical Loadouts from Mission to Mission, but some prefer to tinker with these Loadouts every time they play.

Your Crawler has an ample supply of normal Technical Loadouts; the Crew Chief can manufacture or repair them quickly enough that they are always available for each Mission. They add Weight to your Frames and cost additional Materiel, just like Offensive Loadouts. It can be useful to first add all the Offensive Loadouts to the Frames in your Crew and then see what Materiel Budget remains for additional Technical Loadouts.

Unless noted in its description, each Technical Loadout may be purchased only once per Frame.

OLD-TECH LOADOUTS

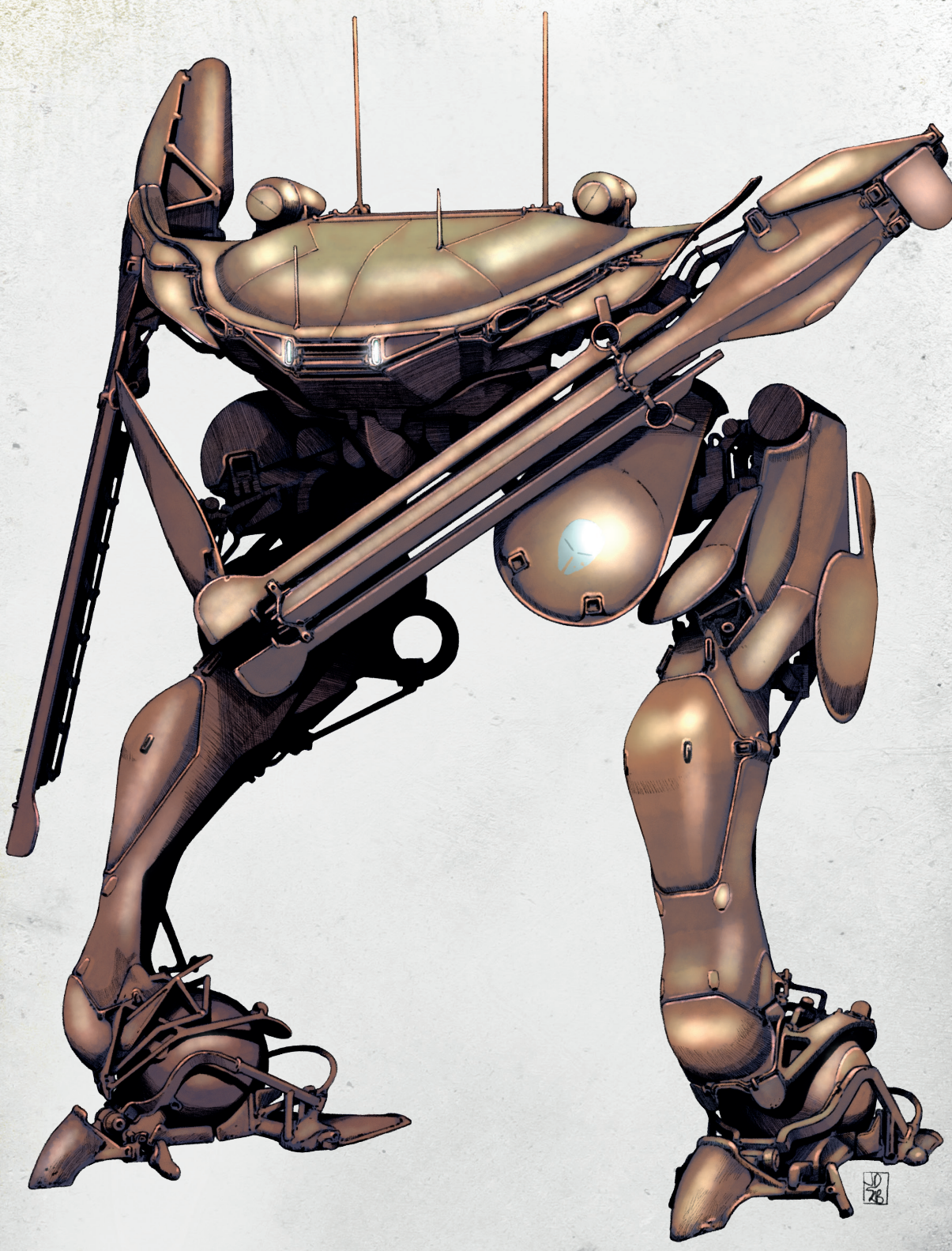
During a Campaign, there are often Old-Tech Offensive and Technical Loadouts discovered while on Missions. These unique pieces of equipment fall into the same categories as their more standard counterparts and are typically equipped to a Frame in the same way.



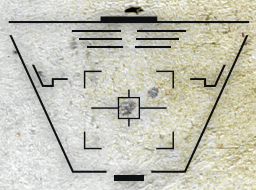
TECHNICAL LOADOUT TABLE

Loadout Name	Effect	Weight	Materiel Cost
Ablative Armour	Reinforcing a Frame's more delicate Weapon Systems or Sensors can often mean the difference between it remaining operational or failing due to Damage during a Mission. This Loadout may be purchased once for each Hardpoint, Frame Body, Sensor, and Propulsion System. Increase the amount of Damage that area can take by 1. Apply the Materiel Cost and Weight each time this Loadout is purchased.	1	10
Chaff Launcher	This venerable method for confusing incoming ordnance uses a timed explosion of heat flares and other detritus to confuse the tracking systems for Missiles and Rockets. Once per mission, when targeted by a Rocket Pack or Anti-Tank Missile, this Frame may deploy its Chaff Launcher. The attacking Frame suffers -1 to Gunnery Test results for that attack.	1	10
Decoy Beacon	This deployable piece of equipment is used to spoof the presence of another Frame on the battlefield by projecting a believable sensor-ghost to the enemy. This valuable deception can cause enemy Crews to be wary of threats from all sides. This Loadout may only be purchased for Light and Medium Frames. When deploying this Frame to the battlefield as a Contact Marker instead of a model, the player may deploy an additional Contact Marker anywhere within 18" of the first. This Contact must be in a legal deployment area and not in Lock with any enemy Frames. Make a note of which Contact Marker represents the actual Frame. As soon as the Decoy Beacon's Contact Marker is in Lock with an enemy Frame, it is automatically revealed and removed from the battlefield. It may not move or take any actions in the Manoeuvring Phase.	0	20
Ejection System	The Frame with an Ejection System can quickly remove the Pilot from the battlefield. If using the optional rules for Bailing Out (described later), you may place the Pilot anywhere within 12" of the Frame instead of the usual base contact when they exit. If this causes them to leave the edge of the Area of Operations, they automatically succeed in escaping to the Crawler.	1	10
Electronic Countermeasures	This Frame uses a sophisticated suite of laser and electronically projected spoof information to confuse enemy Rockets and Missiles. When targeted by enemy Rockets or Missiles, the Pilot may choose to deploy ECM instead of trying to Evade. Stress the Pilot, then Oppose the Gunnery Test with a Technical Test instead, adding +1 to the results. This Frame does not make any movement at the end of this Opposed Test.	2	15
Energy Shielding	This Frame has additional layers of thermal and Energy Shielding to resist incoming Energy attacks. Ignore the additional Stress to Reactors the first time this Frame is targeted by Energy Weapons during a Mission.	2	15
Fuel Reserves	This Frame is equipped with additional Fuel Reserves that allow it to perform for extended periods away from the Crawler. Add +3 to your War-Clock for each Frame in your Crew with this Loadout.	2	20
Heat Sink	Heavy-duty Heat Sinks are built into this Frame's Reactor housing. The additional Weight is worth the additional cooling, especially for Heavy Frames. Add +1 Success to Technical Tests during the Cooldown Phase.	1	10

Now that you have selected your Crew and Frames (for a one-off game, or after Re-fitting your Frames during a Campaign), you are ready to set up the battlefield and play.



PLAYING GAMMA WOLVES



PHASES

Gamma Wolves is a miniature war game played in Phases. Each Phase emphasises certain tasks that Frames can perform on the battlefield and de-emphasises others, but this does not mean Frames cannot fight during the Manoeuvring Phase or move during the Gunnery Phase. The Pilots are simply focusing on a certain task during each Phase and do not perform other tasks as skilfully during that time. Each Phase represents mere seconds of real-time on the battlefield, as the massive powered suits crawl, stomp, and crush their way across the broken landscape.

A game Round contains the following five Phases:

1. Determine Initiative
2. Manoeuvre Phase
3. Gunnery Phase
4. Cool-Down Phase
5. Check War-Clock

DEPLOY CONTACTS AND FRAMES

Both Crews determine there is useful Salvage – or some other key interest – in this area and Encounter each other. While peace may hold around Free Stations, here in the Sea of Destruction it is every Crew for themselves.

Players roll-off and the winner chooses which table edge their Crew will use as an Approach Vector. This becomes that player's deployment and retreat edge, and is considered the shortest route back to their Crawler. The opposite table edge becomes the other player's Approach Vector.

Beginning with the player who won the roll-off, each player selects one Frame to deploy as a Contact Marker (not as a model) within 8" of their Approach Vector. This represents the build-up as Frames approach the battlefield and appear on each crew's sensors. While the pilots know something is there, they must gain Lock on the enemy to identify any details about it apart from size. When a player deploys a Contact Marker, they must note which Frame it represents and cannot change this information later. It can be useful to number Contact Markers for reference.

The first Frame deployed to the battlefield must always be a Contact Marker, as there are no other Frames on the battlefield to determine what it is.

If the second player wishes, they may deploy a Frame instead of a Contact Marker. If the Frame is in Line of Sight of an enemy Contact Marker. The enemy Contact Marker is then revealed, as it has now been identified during Deployment.

The players alternate Deploying Frames (or Contact Markers) until all their Frames are deployed. This may result in both Frames and Contact Markers on the battlefield, as some Frames gain Line of Sight to each other during deployment while others remain hidden by the terrain.

DETERMINE INITIATIVE

Any Pilot, regardless of experience, knows that deception is the name of the game in a Frame battle. Your opponent should be unaware of your plans until it is too late; keeping them guessing gives you the edge in a fight. For this reason, the advantage always goes to the Pilot who can keep hitting and running throughout an engagement. This also means that as the battle continues, the outnumbered Crew becomes slightly more agile as they co-ordinate a smaller Crew.

At the start of each game Round, both players count the number of Frames they have with Line of Sight to an enemy Frame. The player with the fewest Frames able to draw Line of Sight to the enemy has the Initiative for this game Round. In the case of a tie, roll-off. The winner has the Initiative.

MANOEUVRE PHASE

During the Manoeuvre Phase, Pilots move their Frames around the battlefield. Their main goals are to try to gain a better position, obscure their Frames so they are less vulnerable to enemy fire, or force enemy Frames into a more vulnerable position.

PASSES

At the beginning of this Phase, each player counts the number of functioning Frames they have on the battlefield. The player with the lower number generates Passes equal to the difference between the two (so, if player 1 has four Frames and player 2 has five, player 1 generates one Pass). Passes are used to pass the active player status back to the reactive player, without activating a Frame or ending your Manoeuvre Phase.

Active Frame

Beginning with the player that has Initiative for the game Round, each player takes turns selecting a single Frame or Contact Marker to activate. This becomes the **Active Frame**. Stress the chosen Frame's Reactor by 1.

Movement

The Active Frame may then Manoeuvre up to its **Speed**. A Frame may move at full Speed anywhere within its 90-degree Front Arc, maintaining its current Facing. It moves at half Speed when it moves to the Side or Rear Arcs. It must, therefore, spend 2" of movement for every 1" of actual distance travelled if it moves to its Side or Rear Arcs.

When a Frame performs a Manoeuvre, it may only split its movement between a maximum of two adjacent Arcs for that Manoeuvre.

A Frame **must** travel a minimum of 1" during a Manoeuvre to count as having Activated in this Phase. Frames may not Manoeuvre in place, and all Manoeuvres (including claiming salvage and deploying stabilisers, see pages 51 and 88) trigger Snap Fire.

EXAMPLE

A Frame may make movement in its Front and Left Arcs during a Manoeuvre, or its Rear and Right Arcs. These Arcs are adjacent and, therefore, available for a Frame to move into during a Manoeuvre. This prevents Frames from moving back to their starting positions during a Manoeuvre or "moving in place" to simply Stress their Reactors.

Turns

Based on the Frame's current Speed, determine the number of **Turns** the Frame is eligible to take. This the current Speed of the Frame divided by 2, rounded up. Remember that Weight on a Frame may affect its Speed, as can Manoeuvring through Broken Ground. These Turns may be taken at any time and may be combined to take larger Turns. Each Turn allows a Frame to rotate up to 45-degrees about its centre. You may not save the excess from partial Turns for later.

Broken Terrain

If a Frame Manoeuvres or intends to Manoeuvre through any Broken Terrain, reduce its Speed by 1". This happens before you determine the number of Turns a Frame has, as well as movement when Manoeuvring or Evading, unless the Frame's Propulsion Type or a Talent allows it to ignore this rule.

DROPS

A Frame that Manoeuvres off a vertical edge may Drop to a lower level at no additional Speed cost. Place the Frame at the bottom of the Drop with the far edge of its base now in contact (or directly below) the edge of the Drop. You may not measure the distance of a Drop prior to moving the Frame.

A Frame may Drop up to half its Height in distance without suffering any Damage. A Frame suffers 1 point of Damage to its Propulsion for each increment (round up) after half its height that it falls. If a Frame Drops twice its Height or more, the Pilot also suffers a point of Injury.

Use the actual height of the model, measured from the top of its head (or head area). Discuss with your opponent what Terrain may result in a Drop when setting up the Area of Operations.

LEAVING THE AREA OF OPERATION

When Manoeuvring a Frame, treat all battlefield edges except their Approach Vector as Impassable Terrain. Frames may not Manoeuvre in those directions and must move elsewhere. If a Frame ever Manoeuvres so that its base overlaps the edge of its Approach Vector for that Mission, remove the Frame from the battlefield. The Pilot returns to their Crawler, along with any Salvage the Frame may be carrying. When a Frame exits the battlefield, immediately reduce that player's War-Clock by the amount of Stress on that Frame's Reactor when it left the Area of Operations.

Claiming Salvage

If a Frame is within 1" of a Salvage token, the active player may choose to load the Salvage aboard the Frame instead of Manoeuvring it. Stress the Frame's Reactor as usual. The Pilot hauls the Salvage token aboard using magnetic grapples, kinetic lifters, or auxiliary manipulator arms. This counts as activating, which means the Frame triggers Snap Fire and may not Evade.

Immediately increase the Frame's Total Weight by 10, which may immediately affect its Encumbrance. The number of Salvage tokens Frames may carry at any given time depends on their size. Light Frames may carry one, Medium Frames may carry two, and Heavy Frames may carry up to three.

If a Frame is disabled during a Mission, immediately place any Salvage token it is carrying in base contact with the Frame model. These tokens may not overlap.

A Frame carrying a Salvage token may drop the token instead of Manoeuvring. Stress their Reactor, as usual. This counts as activating, which means the Frame triggers Snap Fire and may not Evade.

Place any number of Salvage tokens the Frame is carrying in base contact with the Frame model, but not in Impassable Terrain.

Snap Fire

Once the Active Frame Manoeuvres, the reactive player may choose to Snap Fire using any of their Frames that now have Line of Sight to, and Lock on, the Active Frame's new position by placing a point of Stress on their Pilot(s). The active player performs an Evade Test without placing Stress on their Pilot. This Evade Test is used for all Snap Fire Gunnery Tests made against the Frame. At the end of this Evade, the Active Frame may not move any additional distance.

The reactive player is not obligated to perform Snap Fire and may opt to simply not react.

SNAP FIRE

Reacting to a Frame moving at Speed while also focusing on piloting one's own Frame is far more difficult than waiting for the right moment to strike. All Snap Fire Gunnery Tests are considered outside Effective Range.

All Pilots that attempt to Snap Fire at the active player's Frame roll their Gunnery Tests simultaneously (see page 55 for Gunnery Tests). The Active Frame makes a single Evade Test and compares it to all incoming fire.

Pilots that Snap-Fire and successfully engage the Active Frame may not trade Successes to adjust the Location of Damage.

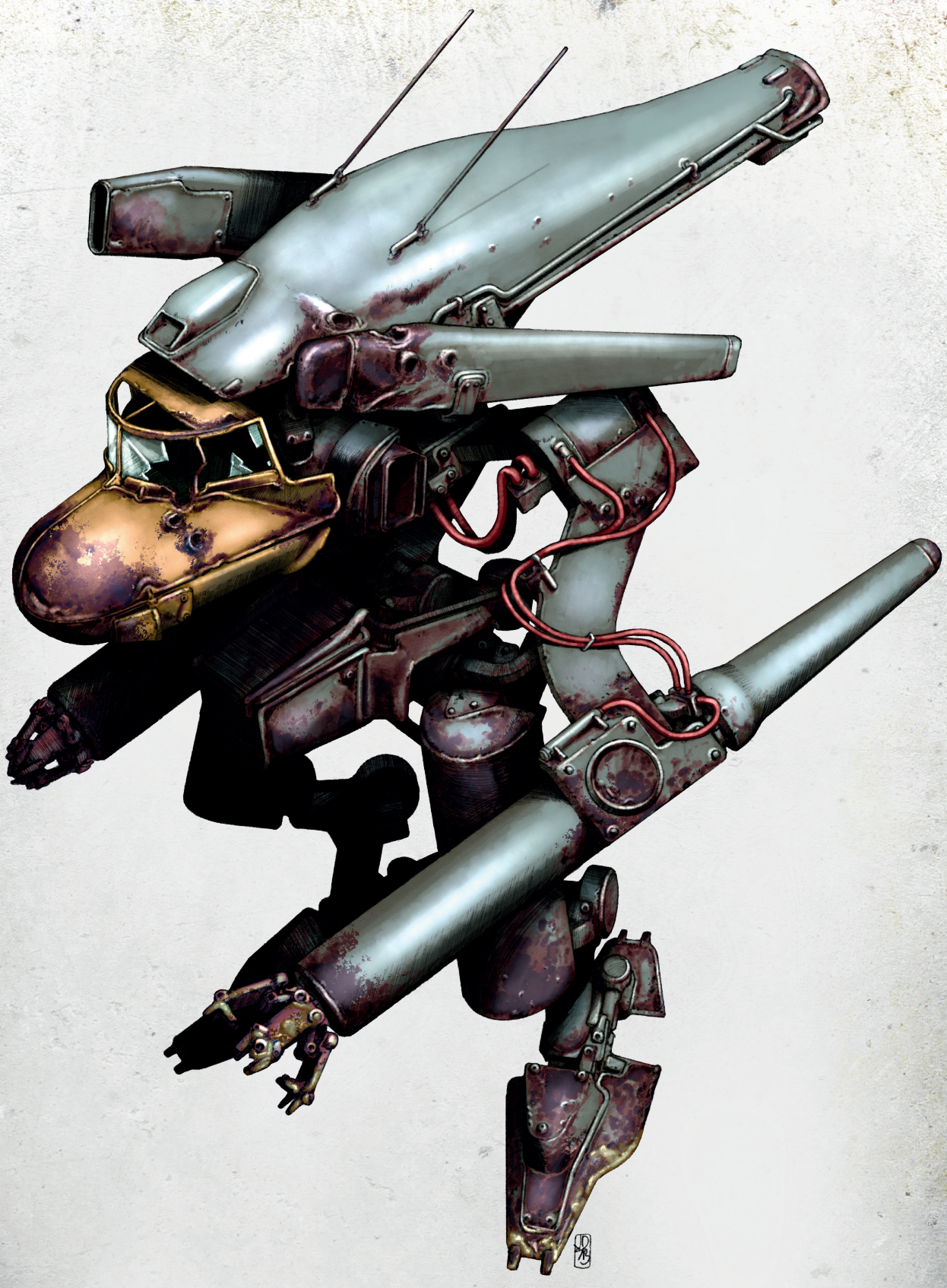
Change Active Player

Once the active player Manoeuvres their Frame and any Snap Fire is resolved, the reactive player becomes the active player and selects a Frame to activate and Manoeuvre, following the same process.

Players may select the same Frame to Manoeuvre more than once per Phase, but not until each other Frame in the Crew has either Manoeuvred or opted not to activate that Phase. Opting not to Manoeuvre is not an activation; it simply skips that Frame for the purposes of returning to others to Manoeuvre. Once a Frame has chosen not to activate in the Manoeuvre Phase, it may no longer be selected to Manoeuvre during that game Round. A Frame must be able to take Reactor Stress to execute a Manoeuvre.

If only one Frame remains eligible to Manoeuvre, it may continue to do so for as long as it can still take Stress.

If a Player does not wish to Manoeuvre any more Frames and cannot Pass the active player status to the reactive player, they may choose to end their Manoeuvre Phase (see page 49 for more on Passes). The other player then remains the active player until they, too, no longer wish to Manoeuvre Frames, at which point the Phase ends.



GUNNERY PHASE

During the Gunnery Phase, Frames engage each other with their Offensive Loadouts and try to destroy or drive the enemy from the Area of Operations.

PASSES

At the beginning of this Phase, each player counts the number of functioning Frames they have on the battlefield. The player with the lower number generates Passes equal to the difference between the two (so, if player 1 has four Frames and player 2 has five, the player 1 generates one Pass. Passes are used to pass the active player status back to the reactive player, without activating a Frame or ending your Gunnery Phase.

Starting with the player that has Initiative, Crews take turns selecting a single Frame whose Pilot can still take Stress. They become the **Active Pilot**. Place a Pilot Stress token on the Pilot's Frame.

The Active Pilot then engages an enemy Frame using their Frame's Weapon Systems and the following procedure:

- Select and activate a single **Offensive Loadout** that has not yet activated during this Phase. The player may select a Loadout that Snap Fired during the Manoeuvre Phase.
- Check **Line of Sight**, **Lock,** and **Measure** range to enemy Frames. Any enemy Frames within Line of Sight and Lock may be chosen as a Target. Remember that there is no maximum range for Weapon Systems unless they have the Melee Trait.
- Declare the **Target**.
- The target enemy Frame may then Declare whether it plans to **Evade**. If it does, the Pilot gains a Stress Token. The Gunnery Test is now Opposed.
- Determine the **Dice Pool**.

Dice Pool

The Dice Pool for a Gunnery Test is always 3, plus the Offensive Loadout's **Bonus Dice**.

If the Target is in Effective Range of the Loadout, add the full number of Bonus Dice to the Dice Pool.

If the Target is outside the stated Effective Range, add half the number of Bonus Dice (rounded down) to the Dice Pool.

For example, an Offensive Loadout with 3 Bonus Dice that is outside Effective Range adds +1 die. An Offensive Loadout with 1 Bonus Die adds 0 dice.

LINKING WEAPON SYSTEMS

If a Pilot wishes, they may link two Offensive Loadouts of the same type for the same Gunnery Test. If they do, both Offensive Loadouts count as being activated during this Phase and may not be activated again. Add the Bonus Dice from both Loadouts to the Gunnery Test and resolve it as a single action.

When firing outside Effective Range with Linked Weapon Systems, you may add the Bonus Dice before you round down, which may result in dice being saved.

Gunnery Skill and Attack Vector

Determine the Pilot's **Gunnery Skill**, the **Attack Vector** and whether the Target is **Vulnerable**.

A Pilot's Gunnery Skill is noted on their Pilot Card. This skill is typically based on the Pilot's Experience Level, unless you are playing a Campaign game in which Skills can increase and decrease, or the Pilot is Wounded. The Pilot Gunnery Skill, as based upon Pilot Experience Level is shown below.

- **Rookie Pilots** have a Gunnery Skill of 5+
- **Trained Pilots** have a Gunnery Skill of 4+
- **Veteran Pilots** have a Gunnery Skill of 3+

The Attack Vector is the direction from which the Active Frame is approaching the Target Frame. Modifications to a Gunnery Test's results depend on the angle of attack.

If the majority of the Active Frame is in either of the 90-degree Side Arcs of the Target Frame, add +1 to Gunnery Test results.

If the majority of the Active Frame is in the 90-degree Rear Arc of the Target Frame, add +2 to the Gunnery Test results.

Terrain offers some protection from incoming ordinance, but a Frame does not receive a huge benefit from cover unless it is obscured entirely. A Frame in the open, however, is in trouble – its large profile allows the enemy's sophisticated targeting equipment to Lock onto it fully.

If the Active Frame can draw complete Line of Sight in a corridor from the Left and Right Sides of its base to the Left and Right Sides of the Target Frame, then the Target is considered Vulnerable. If any Terrain (including Broken Terrain) or other Frames interrupt this corridor, the Active Frame does not receive the Vulnerable bonus. Note that a Vulnerable Target most likely means the Active Frame is Vulnerable, as well!

If the Target Frame is Vulnerable, add +1 to the Gunnery Test results.

GUNNERY TEST MODIFIER TABLE	
Criteria	**Die Roll Modifier**
Side Arc Attack	+1
Rear Arc Attack	+2
Vulnerable	+1

The Medium Frame is in the open to the Light Frame, as a clear line can be drawn from both Sides of each Frame's base to the other. The line to the Heavy Frame is obscured by Terrain, therefore neither Frame is in the open and as such is not Vulnerable.

Net Successes

Roll all dice in the **Dice Pool** and apply any Modifiers for **Attack Vector** and **Vulnerable**. Remember that an unmodified 6 is always a Success and an unmodified 1 is always a Failure. Apply any rerolls and determine the results.

Determine number of Successes.

If the Target decides to Evade, they must now make their Evade Test. Determine the Dice Pool (see 57), roll the dice and add or subtract any Modifiers for Frame size or Injuries. Remember that an unmodified roll of 6 is always a Success and an unmodified 1 is always a Failure.

Reduce the number of Successes in the Active Frame's Gunnery Test by the number of Successes in the Target Frame's Evade Test to determine the total number of Net Successes. If there is at least 1 Net Success that means that a hit has been scored see Determining Hit Location for its effects. If there are zero Net Successes, see After Evading or Suffering Hits on page 58.

EVADE TEST DICE POOL

The Dice Pool for an Evade Test is always 3. The Target Frame uses the Pilot's Manoeuvring Skill for Evade Tests. A Pilot's Manoeuvre Skill is based on their Training Level, unless you are playing in a Campaign where Skills can increase over time.
Rookie Pilots have a Manoeuvre Skill of 5+
Trained Pilots have a Manoeuvre Skill of 4+
Veteran Pilots have a Manoeuvre Skill of 3+

Determine Hit Location

Hit Location is determined in the same way, regardless of Frame size. Roll 1D6 and consult the *Hit Location Table*.

HIT LOCATION TABLE	
D6 Roll	**Hit Location**
1	Sensors
2	Loadouts (If the Frame has more than one Loadout mounted, roll again: 1–3 Primary, 4–6 Secondary. If both Left and Right Loadouts are still mounted, roll again: 1–3 Left, 4–6 Right)
3	Body
4	Body
5	Body
6	Propulsion

A Pilot may spend Net Successes to correct their aim after rolling for Hit Location. For each Net Success spent, they may modify the initial (or subsequent) D6 result up or down by 1. They must have at least 1 Net Success remaining after making any corrections.

If a subsequent D6 roll for Loadout Location hits an already disabled Loadout or one that does not exist because the Pilot left the Hardpoint empty, apply the Hit to the Frame's Body, instead.

Apply Damage to the Target Frame

The amount of Damage a Weapon System does is equal to the number of **Net Successes** remaining in an attack (after using any to modify Hit Location), multiplied by the Offensive Loadout's **Damage** Stat.

Fill in **Damage Boxes** on the Frame Card equal to the amount of Damage inflicted. If a Location is Critically Damaged (no boxes remaining) and there is still unapplied Damage, apply it to the Frame's Body, instead. If the Frame's Body is Critically Damaged, apply remaining Damage to the Pilot by filling in an Injury Box for each point of Damage inflicted.

Critical Damage occurs when a Location is completely compromised by Damage. Depending on the Location of the Damage, various problems can occur.

- **Sensors:** If this Location is Critically Damaged, the Pilot must rely on conventional vision systems to Manoeuvre their Frame and employ its Weapon Systems. The Frame may no longer use the Indirect Trait on any Offensive Loadouts and incurs a -1 penalty to die results when making Gunnery Tests.
- **Hardpoints**: If a Hardpoint is Critically Damaged, it ceases to function for the remainder of the Mission and may no longer be activated. Additionally, roll 1D6. On a 1, the Loadout's ammunition detonates. The Frame takes 1 point of Damage to its Body, as though hit by the Blast Loadout Trait. This is Blast (1") for Light Frames, Blast (2") for Medium Frames, and Blast (3") for Heavy Frames.
- **Propulsion**: If a Frame's Propulsion is Critically Damaged, its Speed is reduced to 25% of its current Value, round down. This can take its Speed to 0", at which point it may no longer Manoeuvre, Turn, or Evade. If it was Evading during this attack sequence, however, it does make its final Evasion movement after the attack is resolved.
- **Body**: If a Frame's Body is Critically Damaged, all further Damage to this Location applies to the Pilot in the form of Injuries. Additionally, the toxic atmosphere of the outside environment begins to enter the Frame. The Pilot suffers 1 point of Damage at the end of the Cool-Down Phase.

  Additionally, when a Frame's Body becomes Critically Damaged, roll 1D6 and add the number of Stress tokens currently on the Frame's Reactor, plus any additional Damage that breached the Body from this Gunnery Test and was applied as Injuries. If the result is 11+, the Frame's Reactor detonates. Place any Mission tokens it currently carries in base-contact with the Frame, then remove the Frame from the battlefield as **Destroyed**. Frames Destroyed in this way may not be salvaged by either side after the Mission. The Pilot automatically succumbs to injury and must add +2 to any Injury Roll they make in a Campaign. Reduce the player's War-Clock by the amount of Stress on the Destroyed Frame when it is removed.

Pilot Injuries

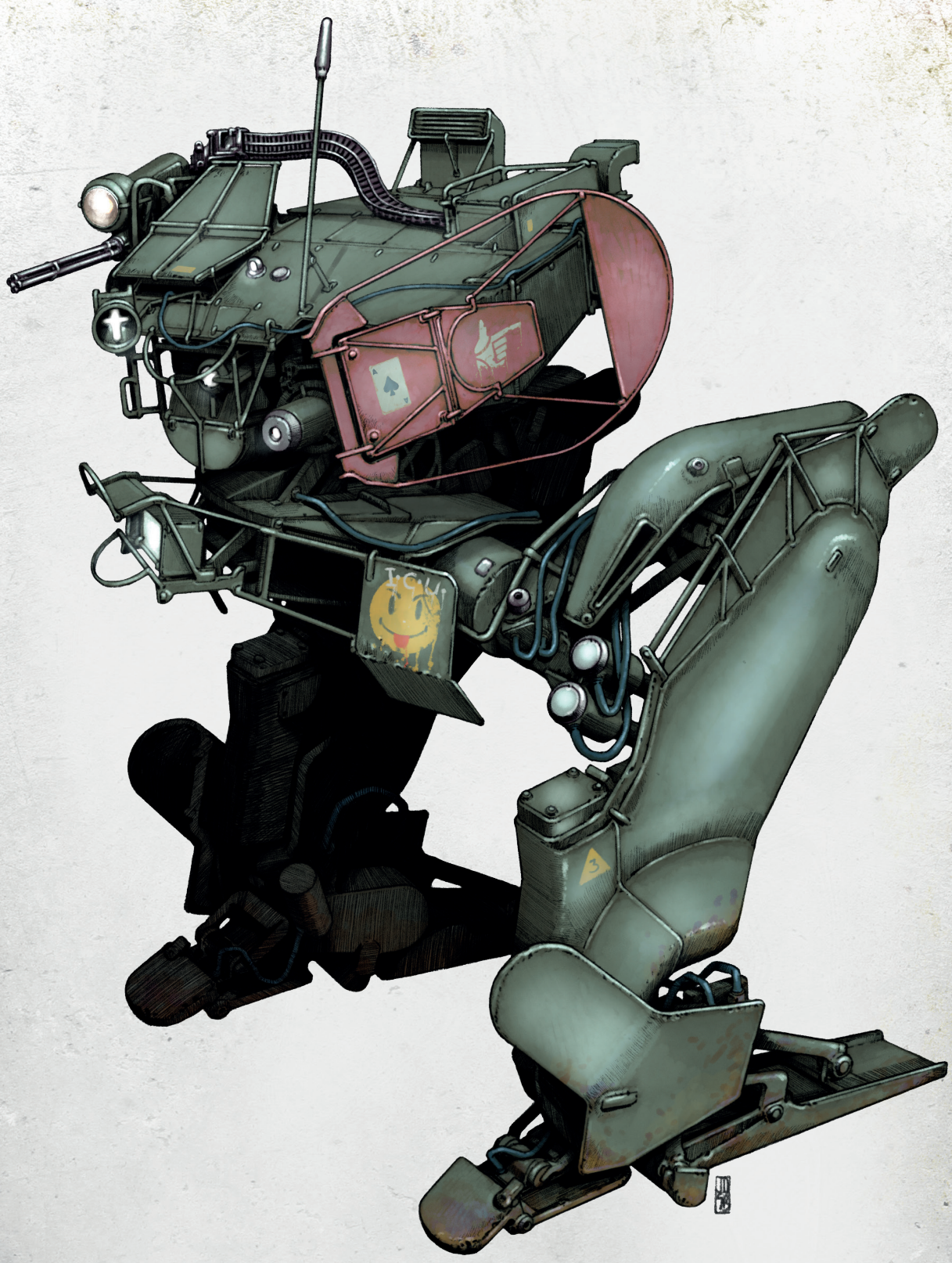
A Pilot may suffer up to three **Injuries** before slipping into unconsciousness and possibly dying from their wounds. For each Injury they suffer, they incur a -1 Penalty to all Gunnery, Manoeuvre, and Technical Tests. Once a Pilot suffers three Injuries, any subsequent Damage causes them to pass out and their Frame to go **Inert**. It remains on the battlefield, but drops any Mission tokens it is carrying and may no longer be targeted by Offensive Loadouts. For all intents and purposes, it is now a piece of Terrain.

During the Cool-Down Phase, remove all Reactor Stress from an **Inert** Frame and reduce the controlling player's War-Clock by that same amount.

Pilots that succumb to Injuries during a Campaign must make an Injury Roll in the Post-Game Sequence (see page 79).

After Evading or Suffering Hits

The Target Frame may immediately Manoeuvre at half its Speed, rounded down. Remember to reduce its Speed for Weight or Broken Terrain before making this Manoeuvre.



Change Active Player

The active player passes play to the reactive player, who may now select a Frame to activate.

Players continue to take turns activating Frames and applying Pilot Stress or Passing active player status to their opponent.

If a player does not wish to activate any more Frames or has no remaining Pilots that can be Stressed or Offensive Loadouts that have not yet been activated, the other player remains the active player. They continue to activate Frames until they, too, have no Pilots that can be Stressed and no remaining Offensive Loadouts to activate, or they also no longer wish to activate in this Phase, at which point the Phase ends.

COOL-DOWN PHASE

The Cool-Down Phase represents momentary lulls in combat when Pilots can check the condition of their Frames and gather their wits for the next Engagement. Starting with the player that has Initiative, each player enacts the following procedure for all Frames remaining in their Crew. They become the active player for the duration of both steps.

Manage Reactor

Each Frame that is still active during the Cool-Down Phase makes a Technical Skill Test. The active player may perform these Tests in any order they wish.

The Dice Pool for Reactor Management Tests is always 3. The Test receives Bonus Successes according to the size of the Frame, which represents the more robust management systems of larger vehicles.

- **Light Frames** receive +1 Success.
- **Medium Frames** receive +2 Successes.
- **Heavy Frames** receive +3 Successes.

The Frame uses the Pilot's Technical Skill for Reactor Management Tests. A Pilot's Technical Skill is based on their Training Level, unless you are playing in a Campaign where Skills can increase over time.

- **Rookie Pilots** have a Technical Skill of 5+
- **Trained Pilots** have a Technical Skill of 4+
- **Veteran Pilots** have a Technical Skill of 3+

If a Pilot still has available Endurance, a player may add one Pilot Stress token to generate one **Automatic Success** for each Stress they may still place on the Pilot. They do not need to roll dice to generate this Success, and it is added to the Net Successes for the Test.

Roll the Dice Pool. Each result equal to or higher than the Pilot's Technical Skill generates one Success.

For each Net Success, the Pilot may remove 1 Reactor Stress from the Frame. For each Reactor Stress removed from the Frame in this manner, reduce the War-Clock for that player's Crew by the same amount.

Pilot Focus

Each Frame removes all Pilot Stress as they collect themselves, take a breath, and prepare for the next Engagement. Once the active player performs these two steps for all Frames in their Crew, the other player becomes the active player and performs the same steps for all their Frames. After both players perform their Cool-Down steps, the Phase ends.

CHECK WAR-CLOCK

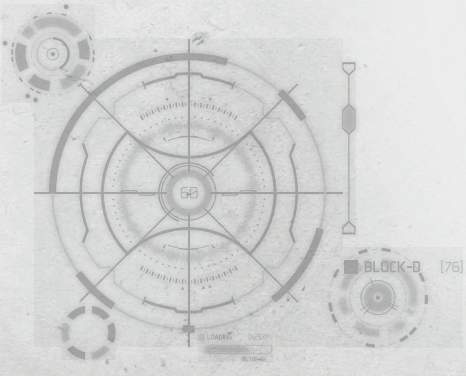
Frames that operate away from their Crawler are on a clock – for both clean air and fuel – even when they run at minimum power and are simply scavenging for resources and Old-Tech. Managing your Crew's War-Clock in *Gamma Wolves* can be the key to victory.

When a Frame brings its systems fully online and starts using active sensors and weapons to hunt, its consumption of available fuel drastically increases. Combat Missions always run the risk that Pilots will not have the reserves to return to their transport during a protracted Engagement.

The Crew disengages when their War-Clock hits zero, and removing Reactor Stress tokens is the primary way to reduce your Crew's War-Clock. Each time you remove a Reactor Stress token from a Frame, you also reduce your Crew's War-Clock. The amount of time on a War-Clock is dictated by the Mission being played. **If you are playing for the first time, or if the Mission does not specify otherwise, War-Clocks are set to 40 at the beginning of the game.**

Starting with the player with Initiative for the turn, players check their Crew's War-Clock.

If a Crew's War-Clock is at zero, their Frames must disengage or risk being stranded outside their Crawler's retrieval range in the Sea of Destruction. Any Frames carrying Salvage tokens when their Crew disengages must immediately make a Manoeuvre Test. They may continue to carry one Salvage token for each Net Success. They must drop each Salvage token they can no longer carry in base contact, as close to the centre of the battlefield as possible, and their Frames are then removed from the Area of Operations. If both Crews' War-Clocks hit zero in the same game Round, both sides disengage. If only one player has active Frames on the battlefield at the end of the game Round, the Mission ends.



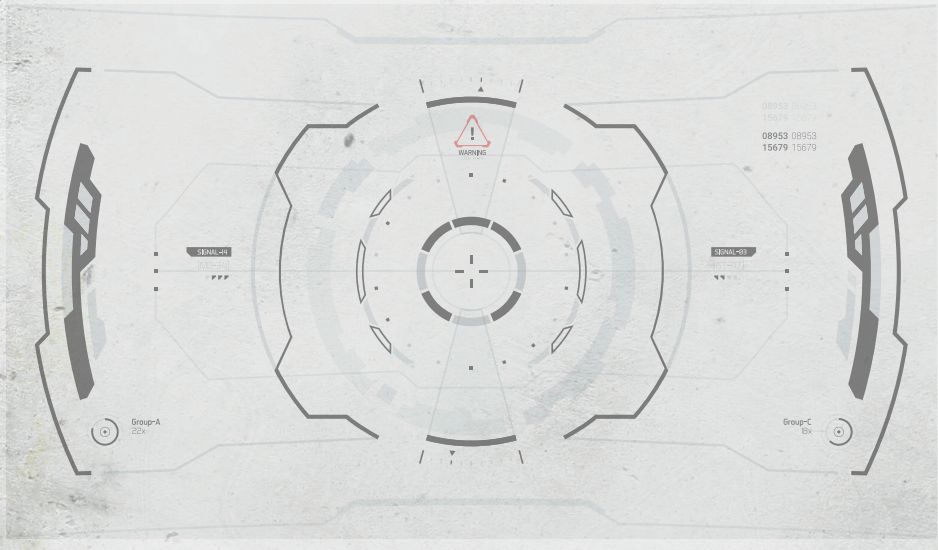
WINNING THE GAME

Unless otherwise specified by a Mission's rules, the Crew that retrieves the most Salvage tokens from the Area of Operations is the victor.

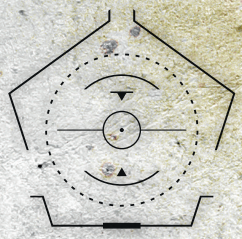
If one player still has active Frames on the battlefield at the end of a Mission, and there are unsecured Salvage or Mission tokens on the battlefield, they control the tokens for the purposes of victory. In a Campaign, they may also claim any benefits and rewards for securing the tokens.

Further, a Crew with active Frames remaining in the Area of Operations may secure any disabled enemy Frames when the game ends. This has no impact on victory in a regular game, but they can be striped for parts in a Campaign.

If both players secure the same number of Salvage tokens, the game ends in a draw.



AREA OF OPERATIONS AND MISSIONS



A Mission's Area of Operations dictates a lot about the Terrain a Crew encounters and the types of challenges they may meet while combatting other forces during an Encounter. The Sea of Destruction is littered with the ruins of ancient cities, old industrial complexes, and the battlefields of wars long-forgotten. All these sites are rich with potential Salvage and form the main battlegrounds for Arcology Crawlers and their Crews.

The *Gamma Wolves* battlefield is largely made up of ruined buildings or industrial terrain, broken rock, and dead vegetation. The Terrain can vary – from hot and blasted, to frozen and ice-covered – depending where on the globe you wish to depict your Campaign. You may even wish to include strange, toxic forms of life or vegetation growth in this new world if your game is set in more temperate zones. A good collection of suitably apocalyptic Terrain is required, as the game is more interesting when the Crews must manoeuvre to Engage each other and earn Line of Sight, rather than just pounding each other's Frames from the get-go. Consider the size of your models when building your Terrain collection – a good rule of thumb is that at least two or three pieces of Terrain should be able to block Line of Sight to the largest Frame in your collection.

Free Stations are primarily located far away from these areas of conflict, with good reason. This means it is a considerable journey out to these areas from any safe port of call. Before each Mission, you and your opponent must first determine the Area of Operations in which your conflict occurs. You typically set up the Area of Operations before you determine Deployment Zones, so try to spread Terrain evenly across the battlefield.

Roll 1D6 and consult the following Table to determine the Area of Operations:

AREA OF OPERATIONS TABLE

D6 Roll	Area of Operations	Effects
1	**Open Wasteland:** The Crews encounter a salvage opportunity in one of the vast stretches of open Terrain that may have once been a seabed or other body of water, a tundra, or another largely uninhabited area.	The Terrain is primarily open, with very little cover between the opposing Crews. No more than three pieces of Terrain may be placed in the Area of Operations, and none taller than 3". The Terrain should represent gently rolling hills or other raised areas or areas of broken ground that can impede movement. Place the first piece in the centre of the battlefield and each additional piece not within 3" of another.
2–3	**Broken Wasteland:** The Crews are picking their way through largely Rough Terrain with large spires of broken rock. This area may have been inhabited once.	Set up six to nine pieces of Terrain in the Area of Operations, at least half of which are Impassable Terrain that can block Line of Sight to the largest Frame in your collection. Place the first piece in the centre of the battlefield and each additional piece not within 3" of another.
4–5	**Urban Wasteland:** The ruins in this part of the Wasteland once formed a major population centre. The carcasses of buildings loom all around and even the areas between them are filled with spilled-out junk, making it hard to manoeuvre.	Set up six to nine pieces of Terrain in the Area of Operations, at least half of which are areas of Broken Ground that impede movement. The other half should be Impassable destroyed structures in various states of collapse. Place the first piece in the centre of the battlefield and each additional piece not within 3" of another.
6	**Industrial Complex or Battlefield Site:** Regardless of the Terrain Type in this Area of Operations, it was also either an Industrial site or the site of an ancient Battle. This makes the area far more likely to contain valuable Old-Tech.	Roll 1D6. On a 1, 2, or 3, the Area of Operations is Broken Wasteland. On a 4, 5, or 6, it is an Urban Wasteland. Deploy one additional Salvage token on the battlefield, within 6" of the centre of the battlefield and not within 6" of any other Salvage token.

Players should roll-off and then alternate setting up battlefield Terrain from the appropriate selection available. Remember that the Approach Vector (starting table edge) for each Crew has yet to be determined, so Terrain should be spread out evenly across the battlefield.

TERRAIN TYPES

Open Terrain is any battlefield surface clear of obstructions. Frames move over this Terrain without impediment. This includes inclines, such as hills and other slopes, that Frames can easily move across.

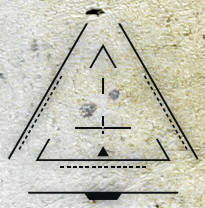
Broken Terrain is the savage and uneven detritus that litters the Sea of Destruction. It reduces a Frame's movement on the battlefield, as described in the Manoeuvre Phase (see page 51).

Impassable Terrain is any solid structure through which Frames cannot pass, or a huge vertical drop. Typically, spires of rock and ruined buildings represent Impassable Terrain. A Frame may not move through or overlap Impassable Terrain at any time.

Once the Terrain and battlefield is set up, players should roll-off. The winner places a Mission token representing Salvage within 6" of the centre of the Area of Operations. Each player then places two more Mission tokens (also representing valuable Salvage) within 14" of the centre of the Area of Operations, and not within 6" of another Mission tokens.

When playing a specific Mission, the Mission rules may dictate alternative modes of setting up Terrain or Mission tokens. Such rules supersede these general setup rules. Once you assemble your Crew of Pilots and Frames and set up the Area of Operations, the Mission can begin.

GAMMA WOLVES CAMPAIGNS



Playing individual and pick-up games of *Gamma Wolves* is a perfectly acceptable way to enjoy the game; however, there is nothing more satisfying than tracking the adventures and progress of a Crew as they make their way through the Sea of Destruction in search of salvage and glory in the lawless wastelands of the ravaged Earth.

What follows are rules for mustering a Crew of Pilots sent from their Arcology with a Crawler, a stable of Frames, and the goal of securing and retrieving whatever they can from the wasteland to ensure the Arcology's survival. You may opt to manage the soulless Ghosts of Tiamat or the war-weary Ronin in place of an Arcology; but, functionally, these Crews have the same goals as those dwelling in the conventional shelters that contain most of the human race. You must find what you need to survive, defend it, and bring it back at any cost.

MUSTERING YOUR CAMPAIGN CREW

A *Gamma Wolves* Crew is typically made up of a variety of Pilots, all of whom bring different Experience Levels to the battlefield. Before you embark on Missions in a *Gamma Wolves* Campaign, your Crawler needs no more than eight Pilots totalling 18PV assigned to it. The Experience Levels of these Pilots must conform to the Initial Pilot Training Level limits defined by your chosen Arcology, but they will most likely grow to exceed these levels. Just as with one-off Missions, your Crew may only contain a single Ace.

These Pilots form the core of your *Gamma Wolves* Crew. Their adventures see them become more proficient with their Frames, suffer injuries at the hands of rival Crews, and possibly even perish in the Sea of Destruction.

It is important to differentiate between your Pilots in a Campaign, so it is worthwhile to develop a name and bit of backstory for these heroes (or possibly villains) of the 23rd century.

THE CRAWLER

The Crawler your Crew is assigned has its own Crew Chief. It is worthwhile to give the Crew Chief a name as well – even though they play no part in combat during Missions, they are the one who will spit profanities at the Crew for returning their Frames in various states of disrepair (or not at all!). There are also one or more Pilots dedicated to the Crawler itself, and an Engineer to maintain the enormous vehicle. These characters do not participate in salvage Missions; but, just like the Crew Chief, they can form an interesting bit of trivia and backstory for your Crew.

Crawlers have many forms – from large, tracked or wheeled vehicles to lumbering, anti-gravity arks that float just above the broken landscape. No matter their form, they contain vast fuel reserves, foodstuffs, and a Crew-bay that allows them to support the Crew for months in the wilderness, if required.

A Crawler has room to store and maintain six Frames, as well as the parts reserves and armoury suitable to equip these same half-dozen fighting machines.

Prior to your first mission, you must select these six Frames to be loaded onto the Crawler's Mission Deck. You may choose Frames of any size required or allowed by your Arcology. It can be useful to select multiples of the Frames your Arcology requires you to

deploy on a Mission so you can still deploy if one Frame is destroyed or stripped by the enemy.

You must choose the Propulsion system for each Frame, but you do not need to specify its Loadouts at this time. Loadouts are fitted from the Crawler's armoury and do not need to be permanently assigned to a Frame, as they change from Mission to Mission.

PLAYING A CAMPAIGN GAME

Preparing for a Mission in a *Gamma Wolves* Campaign follows the same process as setting up to play a single, one-off game, with one exception: you may only use the available Pilots and Frames in your Crawler build your Crew. Each player builds a 12 PV Crew and their Frames from a budget of 500 Materiel.

You may not be able to deploy exactly 12PV of Pilots in a Campaign game, due to the costs of those available on your Crawler. In such cases, you may go over the 12 PV, provided no more than three Pilots are being mustered into a Crew and their combined PV does not exceed 12 plus the lowest individual PV on the Crew. Your budget for Materiel remains unchanged.

The Crawler must always contain at least 12 PV in Pilots. Without living bodies to Pilot the Frames, they must return to the Arcology to be reinforced. This is detailed later, but it means a Crew should never be unprepared for their next Mission.

When assigning Loadouts to your Frames, you must follow the 500 Materiel budget. This also includes the Cost of adding any Old-Tech the crew discovers on Missions to the Frames. Remember, you do not need to spend all 500 Materiel, but you may not exceed that budget.

It is entirely likely some Frames have Damage carried over from the previous Mission, especially if the Crew did not recover enough parts to fully repair them. There is no Materiel rebate for taking damaged Frames into a Mission.

Once both players select Pilots and Frames and equip their Loadouts, it is time to determine the Mission on which the Crews will embark. Roll 1D6 and consult the Table below:

MISSION TABLE	
1D6 Roll	**Mission**
1	Salvage Yard
2	Hunting Grounds
3	Relic of the Past
4	Trial by Combat
5	Ghost and the Darkness
6	Loading Zone

Each Mission includes instructions for setting up the battlefield and any Special Rules required. Once the Mission is complete, the remaining Frames and their Pilots return to the Crawler with their injured and any Salvage they managed to secure. They may have also stripped enemy Frames remaining on the battlefield for parts, which is detailed later.

MISSIONS

The Sea of Destruction is full of myths, stories, tall tales, and legends. Memories of the nations, cities, and cultures that once populated the ravaged landscape have faded into stories passed down throughout generations in the Free Station markets and the Arcologies that soldier on with some version of civilisation.

The world's folklore is brought back by the Crews sent out to explore. The Arcology Crews and Free Station Ronin speak of ruined monuments that still reach up to the poisoned sky. Faded signs and petrified foliage provide clues to the full and vibrant world that died over the centuries.

They also speak of their clashes with the forces of other Arcologies. Famous Crews become Legends of the Wastes – the names of their Frames and Pilots spoken in hushed whispers throughout mess-halls and workstations by those who will quite likely spend their entire lives inside the massive survival bunkers that are mankind's new home.

What did they fight for? What did they discover? Every Mission tells the story of one of these Encounters and provides clear goals for the forces involved.

SALVAGE YARD

Rust-marked rubble stretches as far as the Frames' sensors can scan. That rust is a good sign – it means there are ferrous objects buried just below the surface or half-submerged in the endless ash that has calcified around them, protecting them from the acidic rains. If the Crews are lucky, this massive scrapyard may have scientific or military applications. Whatever created it, its contents are valuable enough that two forces have converged on it at the same time and must fight to the finish for the ability to drag what they find back to their Crawlers.

Setting Up

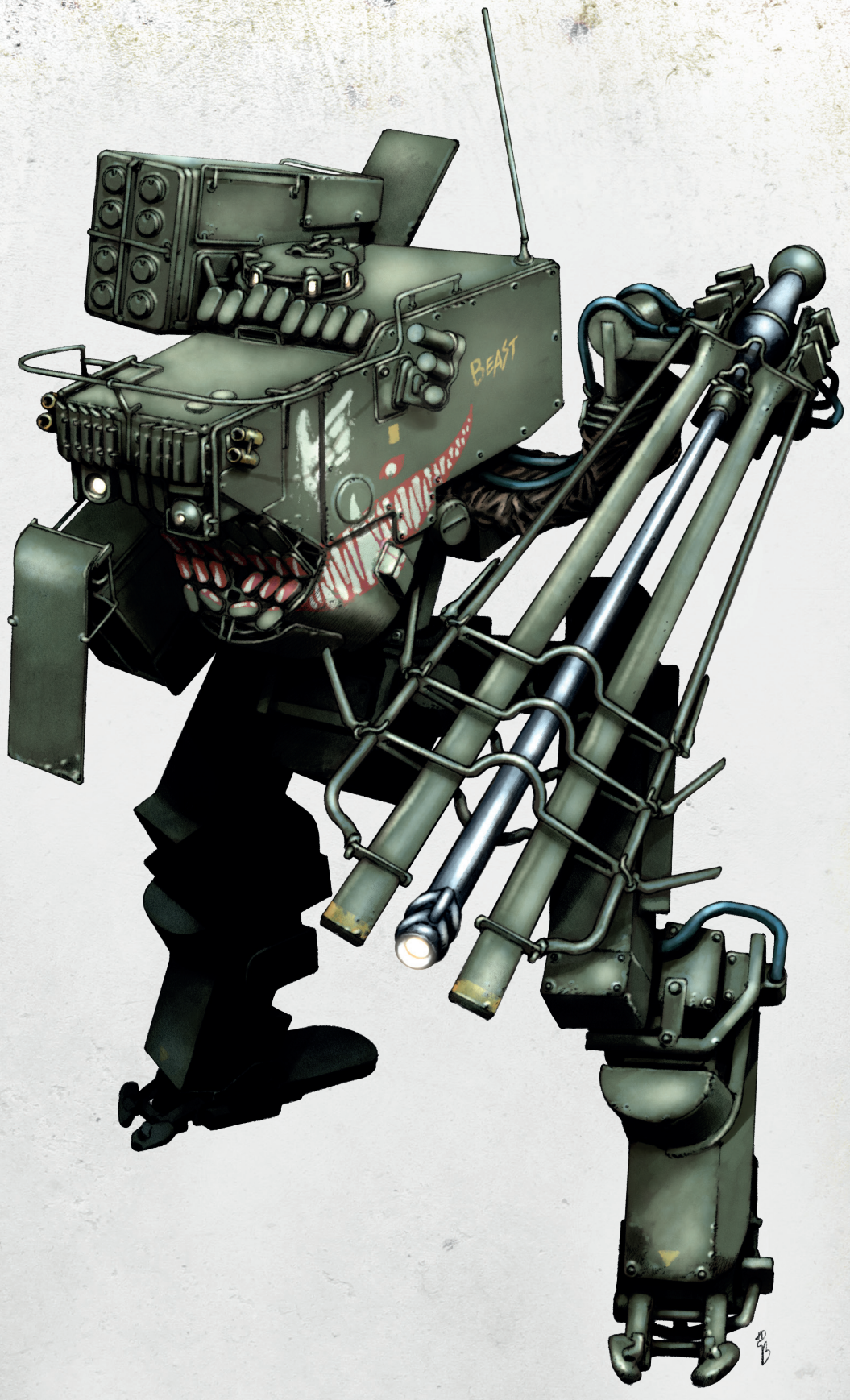
Use the standard steps for a game of *Gamma Wolves* to set up the Area of Operations for this Mission. No additional Terrain or tokens are required. Deploy Frames, as usual.

Special Rules

There are no additional Special Rules for this Mission.

Ending the Mission

This Mission ends when one or both War-Clocks reach zero, or when either Crew no longer has active Frames in the Area of Operations. The Crew that retrieves or secures the most Salvage tokens at the end of the Mission is the winner. Any other result is a draw.


BEAST

HUNTING GROUNDS

There is an adage amongst less scrupulous Crews in the Sea of Destruction: *Never do work someone else can do for you.*

These Crews focus more time and attention on hunting their Rivals than they do searching for Salvage itself. Their logic is that it is far easier to hunt the hunters than search for the best locations to recover items for themselves. Many a Crew has had a peaceful Salvage Mission suddenly erupt in violence as they come under siege from a marauding enemy Crew looking to take their Salvage.

Setting Up

Roll-off. The winner decides the Attacker and Defender for this Mission. The Attacker attempts to steal the Salvage already acquired by the Defender. The Defender attempts to extricate themselves from the Area of Operations and return to their Crawler with their Salvage before it is stolen.

Set up the Area of Operations following the usual steps for Terrain placement. Place the central Salvage token, as usual. After this is done, the Attacker holds onto the four remaining Salvage tokens until after Deployment.

Deploy Frames according to the usual procedure. The Attacker may deploy their Contact Markers within 8" of either side of the Area of Operations in addition to their Approach Vector, up to the centre line of the battlefield. This represents their forces launching a net to trap the other Crew.

Once this is done, reveal any Frames on the Defender's Crew that are still Contact Markers. This represents the Attacker's Crew identifying their targets before launching their assault.

The Attacker then places the four remaining Salvage tokens on the Defender's Frames, up to the maximum number for their Size. (A Light Frame may carry one token, a Medium Frame two, and a Heavy Frame three).

Now, the Mission can begin.

Special Rules

For this Mission, the Attacker's Approach Vector is the side of the battlefield from which the Defender's Frames can retreat with their Salvage. The Defender's Approach Vector is the side from which the Attacker's Frames can retreat with their Salvage. Neither Crew may retreat from their own Approach Vector.

Any Defender's Pilots that exit the Area of Operations with a Salvage token consider it a Mission Objective in addition to any other Experience earned.

Any Attacker's Pilots that cause an enemy Frame carrying Salvage to go Inert or be Destroyed consider it a Mission Objective in addition to any other Experience earned.

Ending the Mission

- Attacker War-Clock – 30
- Defender War-Clock – 40

The Mission ends when one or both War-Clocks reach zero, or when one Crew no longer has Frames in the Area of Operations. The Crew that retrieves or secures the most Salvage tokens at the end of the Mission is the winner. Any other result is a draw.

RELIC OF THE PAST

Sometimes, Salvage of unimaginable value appears on the Crawler's sensors. Faint energy signatures, residual magnetic, or heavy-mineral signifiers can mean that a near-intact piece of Old-Tech is somewhere out there in the rubble. Like proverbial months to a flame, Crews rush to identify and retrieve such valuable objects; and battles over them are common in the Sea of Destruction.

The desperate race for such an awesome discovery can cause reckless behaviour amongst Crews; often, Frames are so heavily damaged from the fighting in such Missions that one side is forced to retreat to their home Arcology for refit and resupply.

Setting Up

Set up the Area of Operations, as usual. The central Salvage token in this Mission is an incalculably valuable piece of near-intact Old-Tech. Set up only two additional Salvage tokens for this Mission, instead of the usual four.

Special Rules

The central Salvage token for this Mission is called *the Relic*. Because of its size, it increases the Total Weight of a Frame by 30 when claimed during the Mission.

Retrieving or securing the Relic is considered a Mission Objective, in addition to being a Salvage token, for the purposes of Experience.

Ending the Mission

The Mission ends when one Crew's War-Clock reaches zero, or all Active Frames exit the Area of Operations.

The Relic counts as three Salvage tokens for the purposes of determining the winner at the end of the Mission. During the Post-Game Sequence of a Campaign, make three rolls when rolling to inventory it for Old-Tech and Parts.

TRIAL BY COMBAT

The various Arcologies' influences do not tend to extend much further than the few miles patrolled by its residents and sensors; still, some law exists in the Sea of Destruction.

Free Stations may not have the resources of the Arcologies, but they do exert a great deal of influence. Because they represent ports of survival in the vast distances between Arcologies, the various Salvage Crews tend to support the regulations they impose. Valuable resources often sweeten the pot, and a Crew may find themselves accepting temporary deputisation to enforce a Sanction against an enemy Pilot for poor behaviour in Free Station territory or aboard the Station itself.

These Sanctions typically include the Destruction of the offending Pilot's Frame and, when possible, their death or retrieval. It is likely the offending Pilot behaved poorly to gain some additional reward, as well; so, if their Crew can ensure their survival and exoneration, the Pilot will have to share their ill-gotten gains with the rest of their Crew.

Setting Up

Roll-off. The winner decides the Attacker and Defender for this Mission. The Attacker attempts to destroy a specific enemy Frame and its Pilot, while Defender attempts to exit the Area of Operations with said Frame and Pilot.

Set up the Area of Operations, as usual. Place the central Salvage token, as usual; then place only two additional Salvage tokens, instead of the usual four.

Before Deploying any Frames, the Defender must randomly determine which of their Pilots is marked for frontier justice. This Pilot and their Frame must be the first Deployed to the battlefield and must be Deployed within 8" of their Approach Vector, but not within 18" of either side edge of the Area of Operations. This Pilot is referred to as *the Fugitive*.

The Attacker may Deploy their Contact Markers within 8" of their Approach Vector edge and within 8" of either side edge, up to the centre line of the Area of Operations. They may not deploy Contact Markers or Frames within 6" of the centre of their Approach Vector.

Special Rules

The Fugitive may only exit the Area of Operations from the Attacker's Approach Vector. The rest of the Defending Crew may exit from any edge should they choose to abandon the Fugitive to their fate.

The Attacking Crew may only exit from the side edges of the Area of Operations during this Mission, as they fade back into the wastes from which they struck.

Causing the Fugitive's Frame to go Inert or be Destroyed or being the closest Frame to the Fugitive when the Mission ends are Mission Objectives.

Ending the Mission

- Attackers War-Clock – 30
- Defenders War-Clock – 40

The Mission ends when either War-Clock reaches zero, or when one Crew has no Active Frames in the Area of Operations.

If the Fugitive or their Inert Frame is still in the Area of Operations when the War-Clock reaches zero, or if the rest of their Crew have fled, they are captured for the purposes of the Mission. If their Frame detonates and is Destroyed, they are also captured – so long as the Attackers still have Active Frames in the Area of Operations.

If the Fugitive exits the battlefield during the Mission, they have escaped for the purposes of victory.

In addition to any Salvage tokens seized during the Mission, the Attacker receives two Salvage tokens from the Station that deputised them to track down the Fugitive. These tokens count when determining the winner.

In addition to any Salvage tokens seized during the Mission, the Defender receives two Salvage tokens if the Fugitive escaped, as the Pilot shares the black-market goods with their Crew to repay them for their help evading justice.

The player with the most Salvage tokens at the end of the Mission wins.

GHOST AND THE DARKNESS

There are things in the Sea of Destruction that make even the most seasoned Frame Pilots jumpy. There is something terrifying about movement in an environment that clearly should not support life.

The End-Wars that caused the planet's ruination were often fought by autonomous drones or other platforms that did not need a Pilot – or, perhaps, no longer need a Pilot. The Ghosts of Tiamat's strange autonomous Frames often begin as salvaged components of such Old-Tech. Whatever its origins, it is full of valuable components, particularly for military application.

The problem is, these chunks of Old-Tech are still partially active. While they may no longer be mobile, their active Weapon Systems engage anything their ancient programming considers a threat. Unfortunately for the Crews, the transponder IDs on their Frames do not match anything this military hardware would consider friendly; so, everyone is a viable target!

Setting Up

Set up the Area of Operations, as usual; however, instead of placing a piece of Terrain in the centre of the battlefield, place a Heavy Frame Contact Marker. For all intents and purposes, it is considered revealed. This Contact Marker is 5" tall and can be modelled as a partially destroyed Heavy Frame. This Contact is referred to as the *Ancient Drone*. Being in Lock with the Ancient Drone reveals Contact Markers during Deployment as if it was an enemy Frame.

Set up the remaining Terrain, as usual.

Do not set up a central Salvage token. Each player may place one Salvage token using the usual methods.

Special Rules

The Ancient Drone is a Trained, Heavy Frame with a Rifle, Autocannon, and Energy Shielding. It never activates or Manoeuvres during the Manoeuvre Phase, but whenever a Frame from either Crew moves within 18" of it during the Manoeuvre Phase, it turns 45-degrees toward the Frame at the end of this movement and Snap Fires with its Autocannon if it has Lock.

During the Gunnery Phase, before any Frames are nominated to Activate, the Ancient Drone engages the nearest Frame in Lock – first with its Rifle, then with its Autocannon. That Frame may attempt to Evade, as usual.

The Ancient Drone cannot Evade when targeted during the Gunnery Phase. Any hits to its Propulsion are automatically transferred to the Drone's Body. Any Loadout that would cause its Reactor to be Stressed (though it does have Energy Shielding) causes additional Damage to the Body, instead. If the Body is crippled, the Drone immediately goes Inert. It does not explode.

The player whose Pilot Destroys the Ancient Drone may place three Military Salvage tokens in contact with the Ancient Drone. Each of these tokens must be placed in a different Arc, and may not be placed within 2" of another Military Salvage token. Destroying the Drone is a Mission Objective.

Any Military Salvage tokens a Crew secures or claims at the end of a Mission are Mission Objectives.

Ending the Mission

The Mission ends when one War-Clock reaches zero or one Crew's Active Frames have left the Area of Operations.

The Military Salvage tokens are regular Salvage tokens for the purposes of determining the winner, but are not inventoried in the same manner as Old-Tech during a Campaign. Instead of rolling on the usual Old-Tech table to determine what is recovered, roll 2D6 on the *Military Old-Tech Table*: Military Salvage does produce Parts in the usual manner.

MILITARY OLD-TECH TABLE	
2D6 Roll	**Military Old-Tech Recovered**
2	Optic Camouflage
3	Electronic Warfare Suite
4	EMP Grenades
5	Crawler Mines
6	Explosive Rounds
7	Bayonet System
8	Magnetic Accelerator
9	Laser Guidance System
10	Particle Collider
11	Deployable Stabilisers
12	Energy Shield

A single, Ancient Drone can only carry so much Old-Tech. Each player should reroll any duplicate results when determining what type of Old-Tech the Salvage tokens contain. So, both players could find the same Old-Tech, but each individual player can only roll a single result one time. They may still find duplicate Old-Tech from regular Salvage tokens, as this could represent pieces of similar Drones being unearthed on the same battlefield.

LOADING ZONE

Most Crews go to enormous lengths to protect their Crawler from being engaged by a rival Crew. It is their only ship in the vastness of the Sea of Destruction; if it were lost or compromised, the entire Crew would likely perish out in the wasteland. The Crawler is far from defenceless, however, as it mounts Weapon Systems that can punish a group of Frames at an immense distance, should they be detected.

The Crawler is typically at its most vulnerable when it stops to load Salvage aboard from a Mission. As the Crew Chief opens the bay doors and operates the Crawler's hoist and manipulators to bring in these valuables, Pilots who are not aiding in the task remain in their Frames and form a watchful perimeter. As the Crawler cannot reposition its Weapon Systems, it often has a *blind spot* inside this range. The Crew patrols that area, watching for predations of any Crew that may have followed them.

Rivals that are tracking them typically attack in these moments, attempting to Manoeuvre past the defending Crew to seize and make off with their Salvage before the Crawler's Crew Chief and other Pilots can react.

Setting Up

Roll-off. The winner decides the Attacker and Defender for this Mission.

Set up the Area of Operations, as usual, but do not place any Salvage tokens.

When deploying Contact Markers, the Attacker deploys theirs, as usual. The Defender may deploy Contact Markers up to 12" from their Approach Vector.

Special Rules

The Attacker attempts to blitz the lines of the Defender to secure as much Salvage as possible. The Attacker treats the Defender's Approach Vector as their own for the purposes of exiting the battlefield. The Defender's Crew may not exit the Area of Operations.

If the Attacker exits the battlefield from the Defender's Approach Vector, it counts as a Mission Objective and as having Secured a Salvage token, in addition to the usual Experience.

If the Defender causes an enemy Frame to go Inert or be Destroyed, it counts as a Mission Objective and as having Secured a Salvage token, in addition to the usual Experience.

Ending the Mission

- Attacker War-Clock – 30
- Defender War-Clock – 40

The Mission ends when one War-Clock reaches zero, or one Crew has no Active Frames remaining in the Area of Operations.

There are five Salvage tokens in the Defender's Loading Zone. For each of the Attacker's Frames that exits the Defender's Approach Vector, the Attacker secures a number of Salvage tokens equal to the maximum number that size Frame can secure (a Light Frame can secure one token, a Medium Frame can secure two tokens, and a Heavy Frame can secure three tokens).

Any remaining Salvage tokens are considered secured by the Defender. The Crew with the most Salvage tokens secured at the end of the Mission wins.

PILOT INJURIES

Missions can be extremely dangerous, and Pilots' life-expectancy can be quite low. If a Pilot is taken out-of-action during a Mission, roll 2D6 and consult the following *Pilot Injury Table* to determine their fate:

PILOT INJURY TABLE	
2D6 Roll	**Effect of Injury**
2	**Dead:** Remove the Pilot from the Crawler's roster. They succumb to their injuries from Combat before their Crew can reach them.
3	**Blurred Vision:** When Stressed, this Pilot's vision begins to blur from some type of neurological Damage. If this Pilot has Pilot Stress totalling more than half their Endurance when engaging in a Gunnery Test, they must reroll one Success. This injury can apply more than once, in which case it worsens. Note the number of times the Pilot suffers this condition in brackets on their Pilot Card. This is the number of Successful dice they must now reroll when making Gunnery Tests.
4	**Tremors:** This Pilot develops a tremor that impacts their ability to control their Frame in tense situations when they are under pressure. If this Pilot has Pilot Stress totalling more than half their Endurance when engaging in a Manoeuvre Test, they must reroll one Success. This injury can apply more than once, in which case it worsens. note the number of times the Pilot suffers this condition in brackets on their Pilot Card. This is the number of Successful dice they must now reroll when making Manoeuvre Tests.
5–9	**No Long-Term Effects:** The Pilot suffers no long-term effects from their Injuries and rolls to recover as described below.
10	**Slowed Reaction Time:** The Pilot's ability to rapidly respond to emerging and disappearing threats is temporarily slowed by their Injury. During the next Mission in which this Pilot is deployed, roll 1D6 each time this Pilot wishes to Snap Fire. On a result of 1, they miss their opportunity and do not take the shot. Stress the Pilot, as usual, but do not perform the Gunnery Test.
11	**Slow Recovery:** The Pilot's Injuries take a significant amount of time to heal. They must sit out at least one Mission to recover and cannot be Deployed into the next Crew Encounter. After they sit out for one Mission, all remaining Injuries clear, as usual.
12	**Valuable Lesson:** The Pilot suffers no long-term effects from their Injuries and rolls to recover as described below. Additionally, the Pilot receives D3 Experience Points.

Pilots who suffer Injuries during the Encounter or have Injuries carrying-over from a previous Mission may roll 1D3 and erase that number of Injuries from their Pilot Sheet. Any remaining Injuries carry over into the next Mission and impact their performance for the entirety of that Encounter.

Pilots who did not participate in the Mission but remained in the Crawler due to Injuries may now clear all Injuries from their Pilot Cards, as they used the time to recover.

Add up the PV of all Pilots remaining on the Crawler who are not required to miss the next Encounter due to Slow Recovery. If the total is less than 12 PV, the Crawler must return to the Arcology for replacement Pilots, as described later. Players may voluntarily choose to return to the Arcology, as well.

EXPERIENCE POINTS AND LEVELS

Combat is the best teacher in the 23rd Century; its hard-won lessons allow Pilots to improve their Skills, learn new Talents, and even increase their overall Experience Levels.

Each Pilot Card has a place to mark Advances. At each Experience Level, a Pilot may spend Experience Points (Exp) to improve their Skills or learn a Talent. Each time they do so, fill in an Advance Box. When a Pilot fills in three Advances, their Experience Level immediately increases. Their PV and Endurance both increase by one. Rookie Pilots are now considered *Trained*, Trained Pilots are now considered *Veteran*, and Veteran Pilots are now considered *Legendary*.

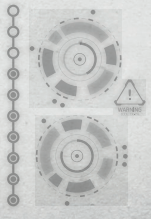
Once a Pilot becomes **Legendary**, they may no longer earn Experience or purchase Advances. They have learned the lessons of combat and can now only look forward to the war-weary march of combat and death.

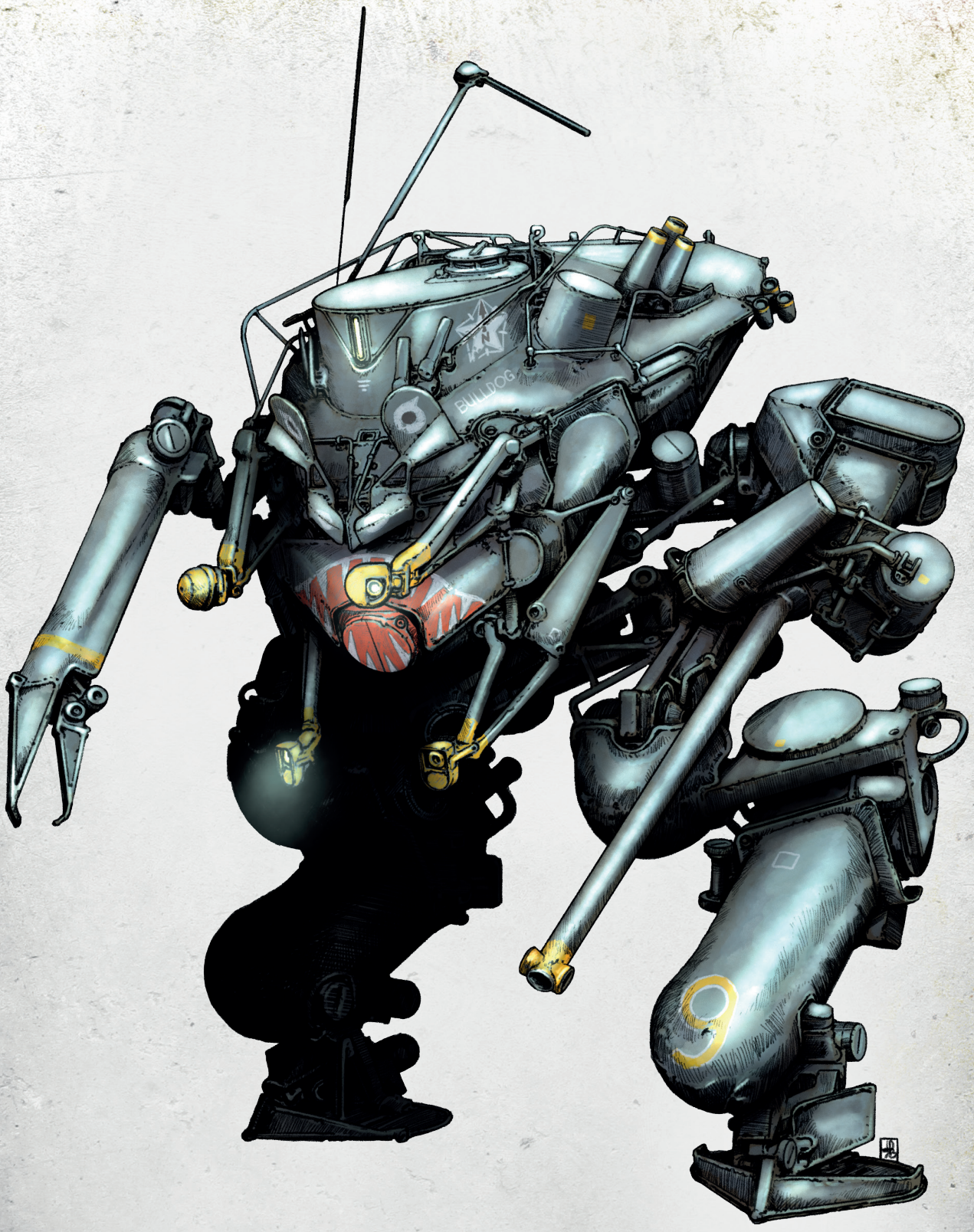
Besides any bonus Experience specified by Missions, Pilots always earn Experience by achieving any of the following during a Mission:

PILOT EXPERIENCE TABLE

Pilot Achievement	Exp Earned
Inflict Damage on an enemy Frame in the Gunnery Phase without causing it to go Inert or Explode.	+1
Inflict Damage through Snap Fire on an enemy Frame in the Manoeuvre Phase without causing it to go Inert or Explode.	+2
Cripple a Location on an Enemy Frame. This is cumulative with any Experience earned from causing Damage but not with causing the Frame to go Inert or Explode in the same action.	+2
Cause an enemy Frame to go Inert in the Gunnery or Manoeuvre Phase. This is cumulative with the Experience for Inflicting Damage but not with Crippling a Location.	+3
Survive a Mission without going out-of-action.	+1D3
Perform an Evade or Technical Test when targeted by a Gunnery or Manoeuvre Test that results in the attacking Frame having zero Net Successes.	+1
Complete a Mission Objective – These are noted in the individual Mission briefings.	+3
Retrieve a Mission or Salvage token from the Area of Operations or secure it at the end of a Mission. The Pilot must be the closest Frame to the Salvage token to secure it at the end of a Mission.	+3

Players should keep track of Pilot Experience as they earn it. This Experience is later pooled and spent to purchase Pilot Advances.

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PILOT ADVANCES

Once you determine how much total Experience a Pilot earned during a Mission, the Pilot may spend that Experience to purchase Advances.

The Experience Cost of Advances differs based upon the Pilot's current Experience Level. As Pilots become more seasoned, it takes longer for them to learn new tricks and they begin to plateau in their Abilities. Once they are Veterans, learning new Skills and Abilities takes some time as they work to earn Legendary status!

PILOT ADVANCES TABLE	
Pilot Experience Level	**Experience Cost to Advance**
Rookie Pilot	9 Exp
Trained Pilot	12 Exp
Veteran Pilot	24 Exp
Legendary Pilot	May no longer Advance

Each time a Pilot Advances, they may either improve one Skill by +1 (either **Gunnery**, **Manoeuvring,** or **Technical**) or select a *Talent*. Some Talents list a Minimum Skill required to purchase. A Pilot must have at **least** the minimum level of proficiency in order to purchase that Talent and may not do so until their Skill Level meets the required threshold.

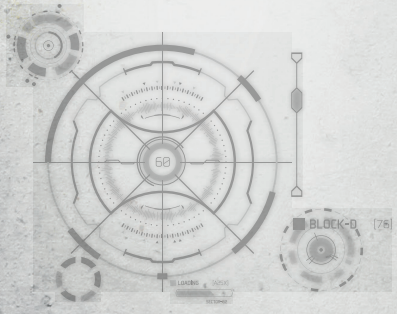
When a Pilot improves a Skill, note it on their Pilot Card. Improved Skills lower the value required for a Success. So, a Skill Level of 5+ becomes 4+, 4+ becomes 3+, etc.

Pilots may only improve each Skill once per Training Level. So, a Rookie Pilot can improve each Skill by +1 point. Once they increase their Training Level (by having three Advances), they may then improve each Skill again.

PILOT TALENTS

Talents are extra tricks and quirks that Pilots pick up through the experience of Combat that make them just a little bit better at something they do. Some of these Talents require a certain amount of competency, however, and may only be learned by Pilots with higher Skill Levels. Such Talents often define Rookie Aces, as their increased competency in a certain area gives them access to Talents far earlier than other Pilots with a certain discipline.

All Talents branch from Skills, which means there are three types of Talents just as there are Skills. When purchasing an Advance, a Pilot may opt to learn a Talent **instead** of improving a Skill. If they do so, note this new Talent on their Pilot Card. Each Talent can only be learned once.



GUNNERY TALENT TABLE	
Gunnery Talents	**Minimum Gunnery Skill Required**
Eagle Eyed: Increase the maximum Effective Range of all Offensive Loadouts without the Melee Trait by 1". This does not affect Offensive Loadouts that fire using the Indirect Trait.	5+
Marksmanship: When using an Offensive Loadout without the Melee Trait or when using the Indirect Trait in a Gunnery Test, this Pilot can reroll one Failure.	5+
Artillerist: When attacking with an Offensive Loadout using the Indirect Trait, this Pilot can reroll one Failure.	5+
Perfect Aim: When using an Offensive Loadout without the Melee Trait in a Gunnery Test, this Pilot can correct the Hit Location by 1 without spending a Net Success to do so. Any subsequent corrections cost Net Successes, as usual. This does not allow a Pilot to adjust their Aim during Snap Fire.	4+
Quick Draw: When this Pilot Snap Fires, round up when you halve any partial Bonus Dice for the Gunnery Test instead of rounding down.	4+
Deadly: Add +1 Net Success to any Gunnery Test when using an Offensive Loadout without the Melee or Indirect Traits in the Manoeuvre and Gunnery Phase.	3+

MANOEUVRE TALENT TABLE	
Manoeuvre Talents	**Minimum Manoeuvre Skill Required**
Superior Reflexes: When making an Evade Test, this Pilot may reroll one Failure.	5+
Dexterous: When using the Manoeuvre Skill to attack with an Offensive Loadout that has the Melee Trait during the Gunnery or Manoeuvre Phases, the Pilot may reroll one Failure.	5+
Light Footed: Movement through Broken Terrain does not reduce the Speed at which this Pilot's Frame moves, regardless of its Propulsion Type.	5+
Agile: When turning during the Manoeuvre or Gunnery Phases, this Pilot may turn their Frame up to 90-degrees during each turn, instead of 45-degrees.	4+
Sixth Sense: Reduce the Attack Vector bonus against this Pilot by one, to a minimum of zero. This means Gunnery Tests Targeting this Pilot's Frame from the Sides do not receive bonuses and those to the Rear receive only +1.	4+
Lightning Reflexes: When a Location on this Pilot's Frame is about to become crippled by Damage, their innate reflexes may manage to jerk it out of the way at the last second and prevent it from being Disabled. Roll 1D6: on a 1, 2, or 3 apply the Damage, as usual. On a 4, 5, or 6, this Location stays online but has only 1 Damage Box remaining.	3+

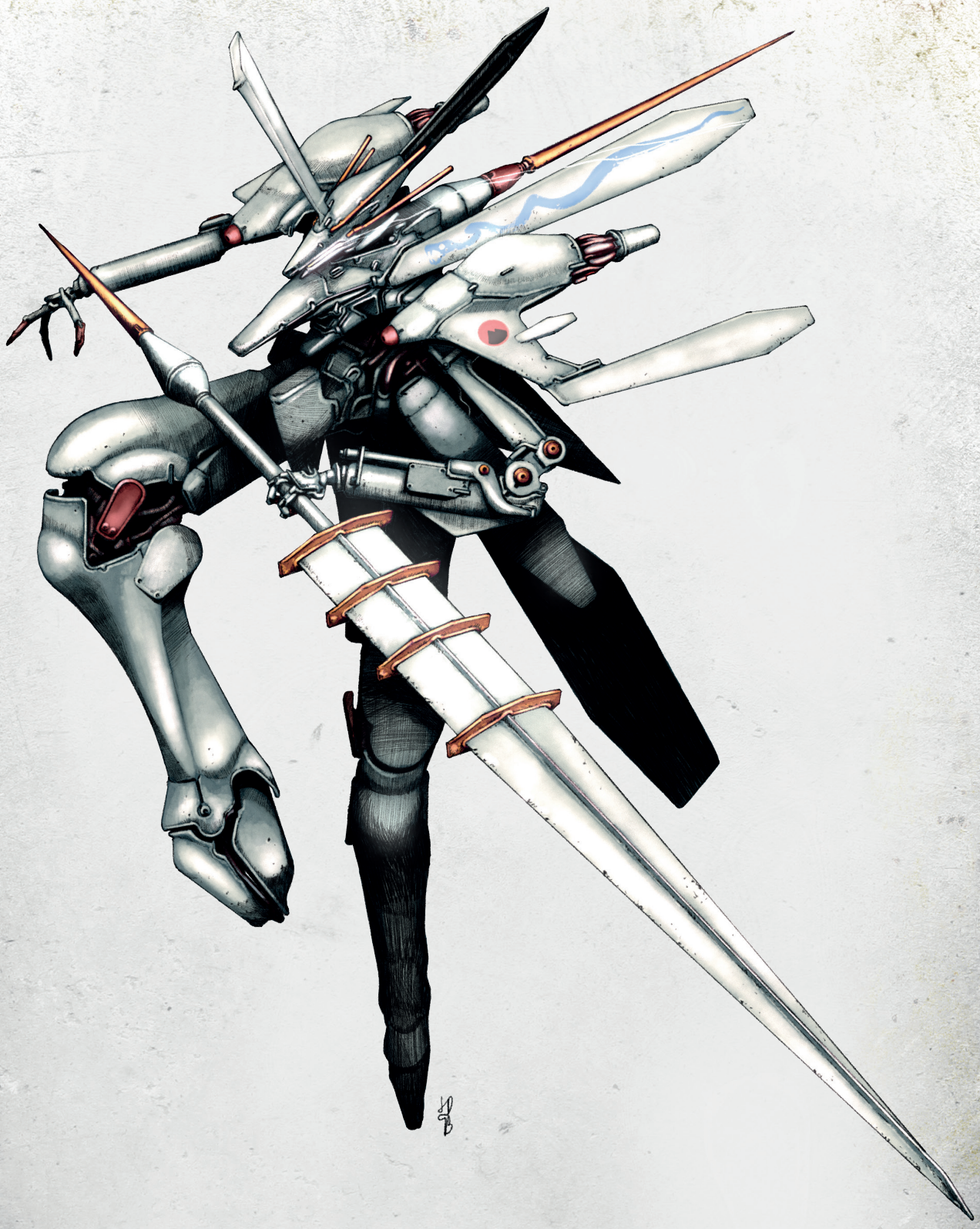
TECHNICAL TALENT TABLE	
Technical Talents	**Minimum Technical Skill Required**
Energy Efficient: This Pilot excels at managing their Frame's Reactor. When removing Reactor Stress during the Cool-Down Phase, they may reroll one Failure.	5+
Jury-Rig Repairs: During the Cool-Down Phase, this Pilot may attempt to enact emergency repairs instead of managing their Reactor's Stress. Make a Technical Test with no Bonus Dice. If you achieve at least one Net Success, return a single Critically Damaged system to operational. Remove up to one Damage from that System, regardless of how many Net Successes you achieve.	5+
Scavenger: When this Pilot secures a Salvage token at the end of a Mission, they may roll one extra Die and discard the lowest when determining its value in Parts.	5+
Load Optimiser: When this Pilot brings a Salvage token aboard in the Manoeuvre Phase, they selectively load the choicest parts of Salvage to optimise the weight carried on their Frame. Each Salvage token adds only 5 Weight to this Pilot's Frame, instead of the usual 10. If another Frame subsequently picks up this Salvage token, it adds 10 Weight, as usual, unless that Frame's Pilot also has this Talent.	4+
Old-Tech Archaeologist: When rolling on the Old-Tech Table to identity what type of components a Salvage token contains, this Pilot may increase or decrease the result of any single Die by one.	4+
One with the Machine: This Pilot is so in-tune with their Frame that even when Injured, their instincts allow them to operate at near-peak efficiency. This Pilot may always count their Injury Level as one less when determining penalties to any Tests they must make.	3+

Once you total the Experience for all Pilots and complete any Advances and Experience Level increases, the Crew looks over the Salvage they retrieved from the battlefield.

INVENTORY SALVAGE

Salvaging the wasteland that is the Sea of Destruction is a perilous, if lucrative occupation. Typically, what Frames drag back to the Crawler are not functioning pieces of equipment but instead large hunks of *something* – an old land-vehicle, a fighting machine, a weapon, a generator, or manufacturing equipment. A Salvage token can represent any of a thousand different things the Crew thought valuable-looking enough to carry back under fire.

Unless otherwise specified by the Mission, each Salvage token contains one Old-Tech system that can be removed, repaired, or modified for use by the Arcology or the Crew themselves. The Crew Roster has a place to note all your available Old-Tech. It is important to keep track of what your Crew has and remember to remove any Old-Tech lost during combat.



Old-Tech

The term *Old-Tech* typically refers to parts of old systems or weapons that are beyond current engineers and scientists' manufacturing capabilities or understanding. While these pieces often have no battlefield application, sometimes you can find something truly remarkable that you can actually mount to a Frame to increase its potency in combat.

Civilian Old-Tech of no particular use to the Crew is still worth keeping aboard the Crawler, as it is usually incredibly valuable and can be traded for Parts at a Free Station Market or used to pay tribute to the Arcology when the Crew needs to replace lost or Damaged Frames or take on new Pilots to replace casualties.

The *Old-Tech Table* below represents the most common items found in the Sea of Destruction. Other *Old-Tech Tables* representing other battlefields or areas of the world will be released in the future, giving Crews access to even more rare and interesting technology.

Roll 2D6 twice, once across the top row and once down the side column to determine the nature of each Salvage token claimed by your Crew during the Mission.

OLD-TECH TABLE

2D6 Roll	2	3	4–5	6–8	9–10	11	12
2	Energy Shield	Survey System and Civilian Old-Tech	Remote Drone and Civilian Old-Tech	Improved Powertrain	Magnetic Grapple and Civilian Old-Tech	Crawler Mines and Civilian Old-Tech	Auto-Repair System
3	Magnetic Accelerator and Civilian Old-Tech	Pilot E.E.F.	Magnetic Grapple	Fuzzy Dice	Remote Drone	Magnetic Accelerator	Electronic Warfare System and Civilian Old-Tech
4–5	Electronic Warfare Suite	Crawler Mines	Civilian Old-Tech	Civilian Old-Tech	Civilian Old-Tech	Survey System	Sensor Spoof
6–8	Deployable Stabilisers	Fuzzy Dice	Civilian Old-Tech	Civilian Old-Tech	Civilian Old-Tech	Fuzzy Dice	Laser Guidance System
9–10	EMP Grenade	Survey System	Civilian Old-Tech	Civilian Old-Tech	Civilian Old-Tech	Crawler Mines	Bayonet System
11	Bayonet System and Civilian Old-Tech	Explosive Round	Remote Drone	Fuzzy Dice	Magnetic Grapple	Particle Collider	Pilot E.E.F and Civilian Old-Tech
12	Synaptic Control System	Particle Collider and Civilian Old-Tech	Explosive Round and Civilian Old-Tech	Remote Pilot Override	Deployable Stabilisers and Civilian Old-Tech	Laser Guidance System and Civilian Old-Tech	Optic Camouflage

Once you determined what type of Old-Tech your Crew has discovered, consult the Table below to determine its uses, the Materiel Cost required to mount the Loadout on a Frame during a Mission, and the Weight it adds to a Frame should you choose to do so. When you first discover Old-Tech, mark that you salvaged it by writing (S) next to its name on your Crew Roster. Adapting Old-Tech systems requires advanced workshops, which you can pay for during visits to Free Stations. Alternatively, you can sell Old-Tech for Parts, which is explained later.

Finally, you may automatically seize any Old-Tech mounted on Inert enemy Frames left behind by the opposing Crew without rolling. You still need to adapt the it, as usual; mark it with an (S) until you take it to a Free Station workshop.

Old-Tech Loadouts

Auto-Repair System

Weight: 2
Materiel Cost: 30
This simple AI system allows for on-the-spot repair of Critically Damaged Systems without the need for Pilot distraction. Whenever it detects a System go offline during combat, it prioritises and attempts to stabilise that area for at least temporary re-initiation. The Crew Chief may curse and roar about the long-term harm caused by emergency repairs when the Frame returns to its station aboard the Crawler, but the Pilot appreciates not choking to death on bad air or being able to take one final shot with a Damaged Weapon System.

If this Frame has any Critically Damaged Systems during the Cool-Down Phase, select one for the Auto-Repair System to fix. Perform a Technical Test with a Dice Pool of 2 and a Skill of 4+. If at least one Net Success is generated, restore one point of Damage to the selected System

Bayonet System

Weight: 2
Materiel Cost: 10

Ancient military Frames often had a supplementary Melee Weapon attached to their Ranged Loadouts. This practice is uncommon in the 23rd Century, but sometimes one of these huge, hard-alloy bayonets is discovered and mounted to a piece of contemporary weaponry.

This Loadout allows for a Primary Hardpoint System to also be activated as a Melee Weapon. You may not activate them together; activating either one counts as that Hardpoint activating during the Gunnery Phase.

Crawler Mines

Weight: 5
Materiel Cost: 10

These sophisticated miniature explosives can be remotely operated, advancing into position to attack or trap Enemy Frames. Once per game, when this Frame makes a Manoeuvre, place a Contact Marker in base-to-base contact with the Frame. Instead of the Frame Manoeuvring, this Contact Marker Manoeuvres at a Speed of 8". It has a height equal to the Marker itself, considers every direction its Front Arc, and ignores Broken Terrain. It is never revealed but may be targeted with Snap Fire. Both the Frame and Contact Marker count as activated for the purposes of triggering Snap Fire. When this Loadout is activated, reduce the Total Weight of the Frame by 5 for the remainder of the Mission. This Contact Marker may be Manoeuvred so it overlaps the base of another Frame (underneath).

The Pilot of this Frame may continue to Manoeuvre, causing the Contact Marker to Manoeuvre in the same way. Both the Frame and Contact Marker count as Manoeuvring for the purposes of Snap Fire.

Whenever an enemy Frame Snap Fires at Crawler Mines, it requires an unmodified roll of 6+ to generate Successes. The Crawler Mines have a Manoeuvre Skill of 3+ and always Evade; however, the Frame controlling them does not automatically Evade when targeted with Snap Fire. Any Successes against Crawler Mines automatically detonate them. Remove the Contact Marker.

If an enemy Frame Manoeuvres or Evades while in contact with the Crawler Mines, it automatically suffers an Attack with a Gunnery Skill of 3+, +6 Bonus Dice, and a Damage of 1 that targets its Propulsion. It may compare its Manoeuvre or Evade roll against this attack, as usual.

When this attack is completed, remove the Crawler Mines Contact Marker.

Deployable Stabilisers

Weight: 2
Materiel Cost: 10

These retractable spikes or broad stanchions allow a Frame to almost instantly set itself up to use Heavy or Precise Weaponry, even if it already Manoeuvred.

When selecting this Frame to Manoeuvre, it may instead declare it is deploying Stabilisers. This counts as the Frame's Manoeuvre and but no actual movement occurs,

though it does trigger Snap Fire and gains Reactor Stress, as usual, but cannot Evade. It may not be activated to Manoeuvre again this Phase, but counts as **not** having Manoeuvred in the Gunnery Phase.

To retract its Stabilisers in the following Game Round, the Frame must be selected to Manoeuvre again, whereby gaining Stress and triggering Snap Fire. After they are retracted, the Frame may once again Manoeuvre as usual. A Frame may retract and deploy its Stabilisers in the same Manoeuvre Phase.

A Frame with deployed Stabilisers may not move or Evade until they are retracted.

EMP Grenade

Weight: 3
Materiel Cost: 10
Frames rely on energy management and many other vital systems to operate properly. This Loadout is a bulky and somewhat impractical short-ranged weapon system that can cause these the enemy's Frame systems to overload and short out.

Once per game, a Frame with this Loadout may use it for a Gunnery Attack. The Gunnery Test gains +2 Bonus Dice and the Melee Trait, and the EMP grenade may be used to Snap Fire, as usual. If you generate any Net Successes, instead of Damage this attack causes D3 Reactor Stress to be placed on the enemy Frame (reduce this by 1 for Frames with Energy Shielding). If you cannot place more Reactor Stress on the Target, inflict 1 Damage to the Frame's Body for each point of Stress you cannot place.

A Burg Frame focuses on retrieval of a piece of Old-Tech while being harassed by shots from a North-Star Light.

Energy Shield

Weight: 3
Materiel Cost: 30
This Old-Tech system projects a stabilised Energy Field that can absorb a Kinetic or Energy Attacks before it collapses.

After rolling for Hit Location and determining Damage, this Energy Shield absorbs up to two points of Damage and then collapses. Apply any remaining Damage to the Hit Location. If the Shield absorbs less than two Damage, it dispels the attack and the Damage is ignored. The Shield can be raised at the start of this Frame's activation during the next Manoeuvre Phase in the following game Round by pushing its Reactor once. This counts as the Frame's Manoeuvre and no movement occurs, though it does trigger Snap Fire, as usual. This Frame may not Evade while raising the Energy Shield.

The shield is considered raised at the beginning of a game.

Electronic Warfare Suite

Weight: 2
Materiel Cost: 20
A subtle but powerful tool for interfering with the operation of enemy Frames, this suite of data invasion devices allows a Pilot to interfere directly with their Target's Systems.

Once per round, during the Cool-Down Phase, the Pilot of this Frame may make a Technical Test to oppose the Reactor Management Test of an enemy Frame within 18". The Pilot's Frame does not need to have Lock with the enemy Frame.

For each Success negated by this Pilot, the enemy must reduce their War-Clock, as usual, but cannot remove the point of Reactor Stress from their Frame.

Explosive Round

Weight: 1
Materiel Cost: 10
This micro-warhead can be carefully mounted into a Rifle mounted on this Frame. Due to its unstable nature, however, the Crew Chief only allows a single Explosive Round in each Rifle Magazine.

Once per game, when activating a Rifle to Attack, it gains the Blast (3") Trait for that action. This Loadout must be purchased twice for the Explosive Round to be used in a Linked attack.

Fuzzy Dice

Weight: 0
Materiel Cost: 10
Not always literally Fuzzy-Dice. This novelty of the Old World might be an image of an ancient city or scene, a storage device for old music, or some other trinket from the world before the Sea of Destruction. The item has meaning to the Pilot – a lucky charm of sorts. Once per game, this Pilot may reroll any one Die result.

Improved Powertrain

Weight: 2
Materiel Cost: 20
Frame Technology is well-understood, due to Arcologies relying on their continued use; however, innovations during the planet-destroying End-Wars pushed their performance far past what is seen today. This improved Power Distribution System allows for increased Speed no matter the type of Propulsion the Frame it is fitted to requires.

This Frame gains +1 to its Speed Attribute.

Laser Guidance System

Weight: 2
Materiel Cost: 10
This remote-guidance Interface System can be attached to an Anti-Tank Missile Loadout to allow the Pilot to adjust its trajectory in real-time. This allows the projectile to turn, dive or climb as needed and effectively allows it to shoot around corners.

Attach this Loadout to a single Anti-Tank Missile Loadout. It gains the Indirect Trait and may be used up to the same number of times as its Limited Trait.

Magnetic Accelerator

Weight: 2
Materiel Cost: 10
This Old-Tech enhancement for kinetic weapons allows for incredible acceleration of projectiles and converts energy into propulsion instead of solid fuel. This Loadout may be applied to a single Autocannon or Rifle mounted on a Hardpoint on this Frame.

This Autocannon or Rifle receives +1 Bonus Dice when being activated to Attack.

Magnetic Grapple

Weight: 2
Materiel Cost: 20
This hauling system allows a Pilot to latch-on to Salvage at a remarkable distance and drag it back to the Frame to be stowed for retrieval. A Frame with this Loadout can Manoeuvre to Interact with unclaimed Salvage tokens up to 6" away.

Optic Camouflage

Weight: 1
Materiel Cost: 30
This highly advanced piece of Old-Tech uses complicated nano-reflectors that coat the exterior of the Frame and deflect incoming sensors, causing the Frame to *break apart* visually.

Enemy Pilots suffer -1 to Gunnery Test results when targeting this Frame from over 12" away. This penalty does not affect Weapons using the Indirect Trait. Add +1 Reactor Stress to this Frame at the start of each game Round, otherwise this System loses power and deactivates for the rest of the game Round.

Pilot Emergency Environment Field

Weight: 1
Materiel Cost: 10
This auto-engaging envelope detects hazardous changes in the oxygen environment and responds by generating a short-lived bubble of clean air to sustain the Pilot until they can repair the Damage or be rescued.

When a Frame suffers Critical Body Damage, this Field absorbs the automatic Pilot Damage from the Cool-Down Phase up to three times. After the third time, it collapses and may not be used again during this Mission.

This Field has no effect on overflow Damage from attacks that hit the Frame's Body.

Particle Collider

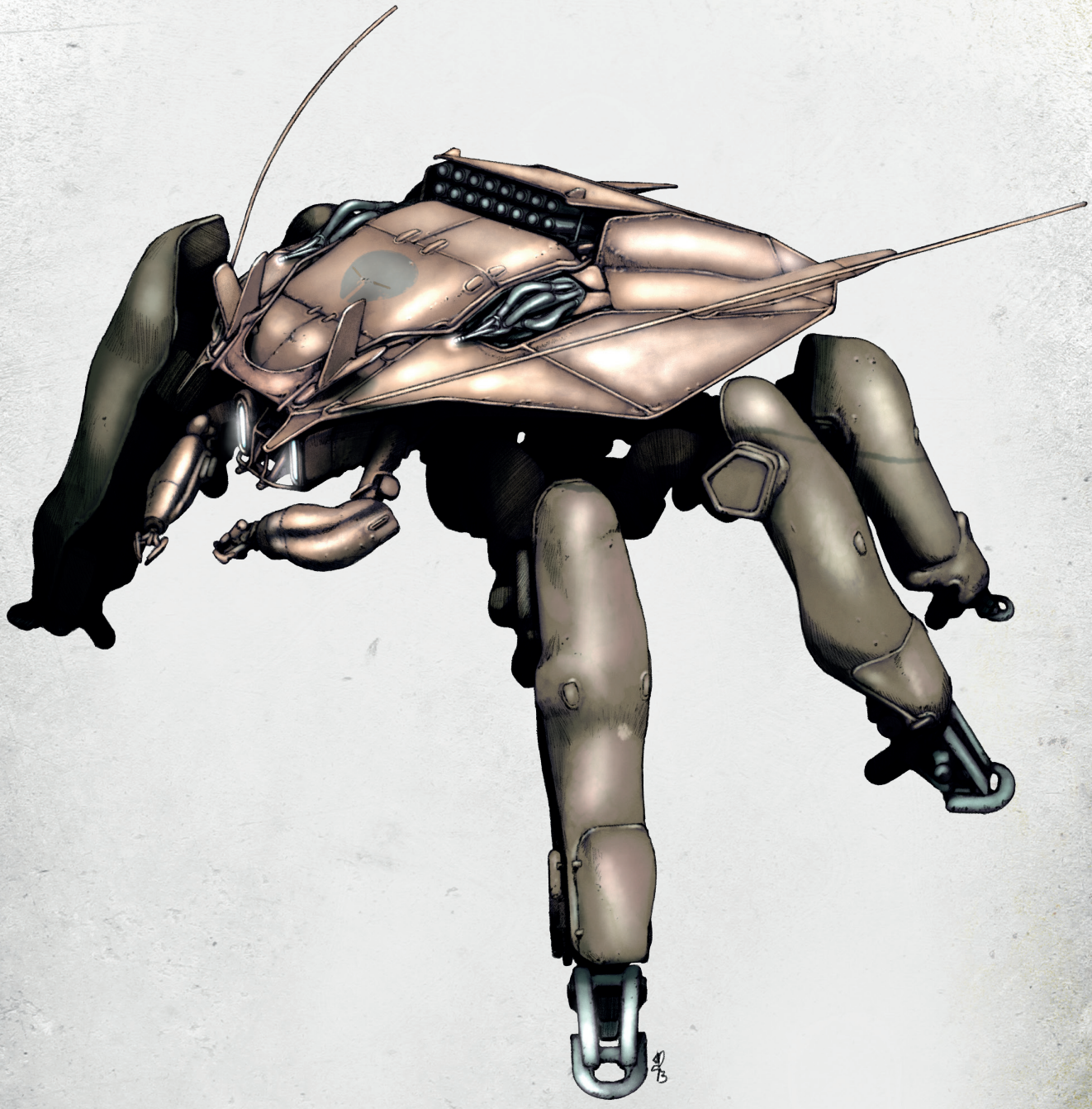
Weight: 1
Materiel Cost: 10
This bit of Old-Tech allows for the enhancement of Rapid-Fire Energy Weapons by destabilizing their particles as they exit the chamber. This causes them to throw out energy on impact and inflict superficial damage at a distance. Add the Blast (1") Trait to a single Rapid-Fire Energy Weapon Loadout. This Loadout may only be activated as a Linked Weapon System if **both** Rapid-Fire Energy Weapons have this Old-Tech attached.

Remote Drone

Weight: 0
Materiel Cost: 10
This remotely controlled reconnaissance Drone allows Pilots to survey areas their Frame's sensors may not be able to penetrate, as well as acting as a useful spotter for indirectly fired Weapon Systems.

When this Frame is deployed on the battlefield, place a 1" circular Contact Marker in base contact. Whenever this Frame Manoeuvres, this Contact Marker may Manoeuvre, as well. This Contact Marker may be revealed as a 1" tall model. It has a Manoeuvre Skill of 3+, automatically Evades if Manoeuvring or Attacked, and is removed if any Successes are generated when it is Targeted it with an Attack.

It does not count as a Frame in Lock when determining turn order, but it does cause other enemy Frames to be in Lock. When firing using the Indirect Trait, a Frame with a Remote Drone counts any units in Lock with the Remote Drone as being in its Front 90-degree Arc.



Remote Pilot Override

Weight: 2
Materiel Cost: 20
This auxiliary system includes interfaces for the other Frames in this Crew at no additional cost. The Pilot of this Frame may activate the controls of a friendly Inert Frame during the Manoeuvre Phase instead of piloting their own Frame. The friendly Frame Manoeuvres instead of the Pilot's own Frame, and both trigger Snap Fire. The Frame with this Loadout does not Manoeuvre or Evade during this activation, but it does gain a Reactor Stress. The Inert Frame does not gain Reactor Stress.

If the Inert Frame suffers any damage to its Body during its Manoeuvre, roll 1D6. On a 5 or 6, something vital inside the Frame detonates and it is Destroyed as described in the Damage section of the Gunnery Phase.

If the Inert Frame dropped any Salvage tokens that are still in contact with it at the beginning of its movement, remove the tokens from the board at the end of its Manoeuvre and once again place them in Contact with the Inert Frame being remotely activated. This represents the Frame continuing to drag its Salvage along as it is forced to limp away.

Sensor Spoof

Weight: 2
Materiel Cost: 10
Designed to confuse Targeting Systems by broadcasting additional Location Data and other sensor noise to enemy Pilots, this Loadout is highly effective at protecting a Frame from ordinance attacks that originate out of the line-of-fire.

The Pilot of this Frame receives +2 Bonus Dice for Evade Tests against attacks using the Indirect Trait.

Synaptic Control System

Weight: 2
Materiel Cost: 25
An Old-Tech Interface System for Frame Pilots that is currently incredibly difficult to manufacture, this System connects the Frame directly to the Pilot. There are drawbacks to the increased responsiveness of the Frame, however, as there is the possibility of Sympathetic damage to the Pilot whenever the Frame becomes compromised in some way.

The Pilot of a Frame with this Loadout gains +1 to all Evade Tests results. When a System on this Frame becomes Critically Damaged, roll a die. On a 1, 2, or 3, the Pilot suffers one point of Damage as the overload is fed to them by the controls.

Survey System

Weight: 3
Materiel Cost: 25
Basic Frame Sensors rely on heat or other radiant energy signatures to lock-on and identify active Targets on the battlefield. This enhanced suite of survey equipment allows the Pilot to

also detect hidden minerals, hollows, or faint residual energy signatures buried below rubble or just under the surface. This Salvage is undetectable by other Crews or Frames.

When Setting Up a Mission, the player whose Frame includes this Loadout may set up an additional Salvage token. This usually means they set up three tokens, instead of two. This additional token must be deployed within 14" of the Frame with this Loadout. It does not matter how many Survey Systems players have, each player may only set up one additional token in this way.

PARTS

In addition to any Old-Tech Pilots can dig out of a huge hunk of Salvage, they can break down the surrounding metal and any other technical assets it contains such as circuit boards, resistors, power supplies, or cabling for Parts. Parts is a general term that represents raw goods used to mend damage, repair critical systems, and otherwise put right all the wear and tear a Frame undergoes while deployed on a Mission. Every Salvage token secured provides the Crew with (2D3+1) x 100 Parts to add to their Crew Roster. They need these Parts during visits to Free Stations and to repair and refit their Frames damaged in combat.

Finally, if the enemy left any Inert Frames on the battlefield after they retreated from the Area of Operations or were forced to evacuate because their War-Clock reached zero, these may be stripped for Parts, as well. Multiply the amount of Damage that remains for all Locations on the abandoned Frame by ten and add that many Parts to your Crew Roster as you strip the Frame of any remaining Tech.

These Frames count as Destroyed for the opposing Crew and must be replaced at their Arcology. Any Old-Tech Loadouts on a stripped Frame may be added to a Crew's inventory and marked with an 'S'.

Refitting Frames

A combat Mission can result in a lot of Damage to a Frame. Limbs and Loadouts may be destroyed and the hull itself can be compromised if it takes enough Damage. So long as a Pilot manages to survive the Encounter, they will need to refit their Frame for the next Mission. Frames destroyed by a detonation or stripped for Parts by the enemy cannot be repaired. Remove them from the Crew Roster. The Crew must replace them by visiting the Arcology and either paying Tribute by turning in Old-Tech or paying the penalty for their Failure.

Repairing and refitting a Frame costs **Parts**. The Crew must pay 10 Parts to repair each Damage Box marked off on a Frame. Additional Damage boxes created by Ablative Armour do not need to be repaired, as they are a temporary Loadout and designed to be replaced using Materiel after each Engagement.

EXAMPLE

A Medium Frame suffers Critically Damaged Primary and Secondary Hardpoints, six points of Damage to the Body, and three points of Damage to the Propulsion during a Mission. This is a total of 25 points of Damage across the Frame. It would cost 250 Parts to repair this Frame completely.

You may use any Materiel from your 500 Materiel budget that you do not spend to outfit Frames during a Campaign game to repair them after a Mission as if they were Parts.

Depending on a Crew's available Parts, they may wish to repair some, all, or none of the Damage done to a Frame. A Frame with Critically Damaged systems may not be deployed on a Mission, so they must repair at least one point of Damage to all Critically Damaged Locations for it to be operational.

At this point in the Post-Game Sequence, a Crew may also enact repairs on any Frames still stored on their Crawler.

Remove any Parts spent from the Crew Roster. Now that the Frames are refit, the Crawler may visit a Free Station **or** return to the Arcology, but not both. Ghosts of Tiamat Crews may never visit a Free Station.

If a Crawler ever has fewer than four operational Frames aboard, it must return to the Arcology to receive new Frames before the next Mission.

VISITING A FREE STATION

Free Stations represent rare ports of solace in the otherwise endless Sea of Destruction. Ronin Frame Crews and security forces fiercely defend the independence of these neutral territories., Various Crews of Gamma Wolves grudgingly enter cease-fires with their most hated enemies while on a Free Station. The ability to purchase fuel, food, and repairs is far too valuable to the continued survival of both the Crews and the various Arcologies to risk exile in the Sea of Destruction.

Still, fights do occasionally erupt. Free Stations are reminiscent of the Age of Sail's free-ports – criminal networks, fighting pits, and all manner of illicit items are found here across the globe. Some Free Stations are clean, well-kept, and organised; others are little better than ramshackle ruins, barely sealed against the outside environment, and run by coalitions of gang-leaders and black-marketeers.

Regardless of their nature, a Crew always has the option to visit a Free Station between Missions. While there they can buy or sell Old-Tech, adjust any Old-Tech they discovered in the Sea of Destruction to fit their Frames, or simply rest and recuperate outside the confines of the Crawler.

The Old-Tech Market

The Old-Tech Market is where Crews come to trade what they find for more useful items, such as much needed Parts to repair their Frames, or test their luck perusing the odds and ends other Crews brought to the Station that are now available from various vendors and black marketeers. First, you can roll to see what is available at the Market. Old-Tech comes and goes – sometimes the pickings are excellent, other times there is nothing useful to be found.

Roll D3+1 times on the *Salvage Token Table* to see what your Pilots are offered during this visit. These items are only available during this trip to the Old-Tech Market – different items are available after the next Mission, as other Crews buy up what is here and bring in new items.

Each Old-Tech item can be purchased for **500 Parts**.

Crews may also sell Old-Tech of any type to merchants at the Station. Because these hard-working criminals want to see a return on their investment, the most Crews can haggle from them is **(D3+1) x 100 Parts**. Make this roll each time your Crew sells off a piece of Old-Tech in this way. Immediately add the Parts to your Crew Roster.

Finally, the Crew may visit the Station's workshops to have Old-Tech they wish to keep for themselves adapted to the systems of their Frames. This costs **100 Parts** per piece of Old-Tech adapted in this way. Remove the (S) salvaged note from the piece of Old-Tech on your Crew Roster, as it is now available as a Loadout for the next Mission.

Remember that you must adapt Old-Tech seized from enemy Frames left on the battlefield in this same way, as the other Crew's systems are not immediately compatible with your frames.

Once the Crew completes all transactions with the merchants and engineers on the Station, they can relax, hit the local attractions, and enjoy some time outside the cramped confines of their Crawler.

RETURNING TO THE ARCOLOGY

Returning to the Arcology can be a triumphant homecoming if they are laden down with Old-Tech and the spoils of war. A *Gamma Wolves* Campaign concludes when a Crew successfully returns enough Old-Tech to the Arcology to satisfy their command. At that point, the Crew may be reassigned, split up, or given their own Crews to lead.

On the other hand, it can be a harrowing experience if the Crew lost Pilots and Frames. The Arcology leadership demands Old-Tech as payment to replace Pilots and Frames from unsuccessful Crews and may reassign, demote, or even remove Pilots as punishment if the Crew cannot pay this Tribute.

A Crew may voluntarily return to the Arcology instead of going to a Free Station after any Mission. When they do so, they may receive replacement Pilots, if desired, or new Frames.

Pilot Replacements

If a Crew wants to take on new Pilots, they may rotate out any Pilot they wish to remove (perhaps because the Pilot's Injuries are making them a liability). This does not cost anything and the Pilot is immediately replaced with a qualified candidate from the Arcology. This Pilot is the same Experience Level as the one replaced, but they have no Advances at that Level and begin with zero Experience.

If a Crew sustains Casualties in combat and has fewer than six Pilots but more than 12 PV of Crew, they may exchange one piece of Old-Tech for each Replacement Pilot drafted into the Crew. These Pilots can have any PV, provided they do not increase the Crew's total PV to more than 18.

If a Crew sustains Casualties in Combat and has fewer than six Pilots but the Crew's Experience and Advancements mean recruiting a new Pilot would take them over 18 PV, they may only recruit Rookie Pilots. Essentially, Command demands these veterans teach new Gamma Wolves the ropes. These replacements still require the exchange of one piece of Old-Tech each.

If a Crew has fewer than 12 PV of Pilots remaining in the Crawler, they **must** exchange Old-Tech to recruit enough Pilots to take them over the 12 PV threshold. These recruits may be of any Level, and they cost one piece of Old-Tech per Pilot. If a Crew cannot pay this Tribute, they are disbanded. Immediately replace the Crew with new Pilots, up to 18 PV. These Pilots have zero Experience and follow all restrictions for an Initial Crew from that Arcology.

Frame Replacements

A Crew that returns to the Arcology may freely exchange any Frames in the Crawler for fresh Frames of the same size with no Damage and the same Propulsion Type. If there are empty Frame Bays on the Crawler, they may exchange one piece of Old-Tech for each Frame they must requisition from Command. These Frames must still obey the Frame Preference limits of their Arcology.

If a Crew was forced to return to their Arcology with fewer than four Frames aboard their Crawler, they **must** pay Tribute in Old-Tech to requisition new Frames, to a minimum of 4, to be placed aboard the Crawler. If they cannot pay this Tribute, they may request stripped-down or moth-balled Frames, instead. This may not be done voluntarily, but only if there is **no** Old-Tech aboard the Crawler with which to pay the Tribute.

The Crew may accept these inferior Frames to reach their required minimum total of four aboard the Crawler, but they have half their Damage boxes already marked for every Location. These Frames must still obey the Frame Preference Limits of their Arcology.

Depositing Old-Tech

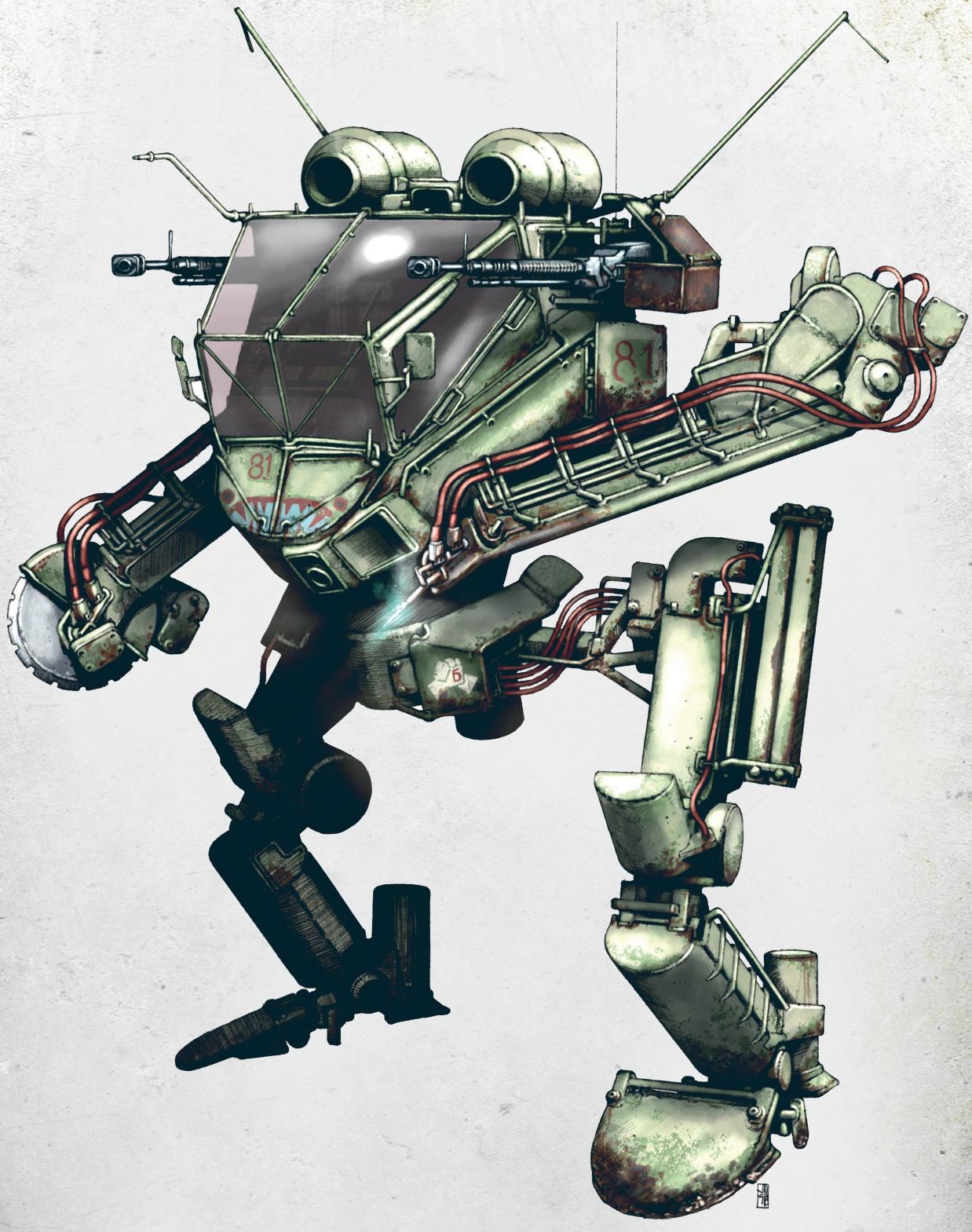
Once the Crew takes on new Pilots and Frames as required or desired, they may also turn in any remaining Old-Tech to High Command. This is the Crew's ultimate goal, to find themselves celebrated by the Arcology's scientists and engineers for their contribution, which helps maintain the habitat.

For each piece of Old-Tech the Crew delivers to the Arcology in this way (but not for Old-Tech used to receive replacements for Pilots and Frames), gain one Arcology Survival Point for the Campaign.

ENDING THE CAMPAIGN

A Campaign is most satisfying when it has a conclusion or goal that all players are attempting to accomplish. There are some important aspects to remember when playing a Campaign – these guidelines are generally applicable to any wargame played by multiple people with a group goal.

One player should either volunteer (hopefully!) or be nominated to manage the Campaign. This player keeps track of all the Campaign information, such as how many Arcology Survival Points each player earns, and organise the players in pairs to play games. How this is done is ultimately up to the individual, but a bit of organisation goes a long way to the success of a Campaign. While it can, at times, be frustrating to run a Campaign, its chances of making it to its conclusion vastly improves if someone steps up to take responsibility for tracking its progress.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81

All players should endeavour to play roughly the same number of games over the Campaign timeline. If players get together weekly, playing a single game each over that time frame works out fine. If there are an odd number of players in the Campaign, it is perfectly acceptable for someone to play an additional game so no one is left out; however, you should rotate through players for extra games, if possible, so they all play the same number of games over the course of the larger Campaign.

The Campaign conclusion should have a bit of story to it. Perhaps scientists are tracking a massive solar flare that is expected to shoot toward the earth and there are only a few months to reinforce the Arcologies to survive. This gives the Campaign a sense of urgency, as players scramble toward a goal. The Campaign organiser can come up with this story element, or the players can agree on it, collectively.

Here are some examples of other plot hooks you could expand on for a fun narrative in a *Gamma Wolves* Campaign:

- Free Stations are reporting more and more attacks by pilotless Ghost Frames and Old-Tech drones. Worried about the mounting activity in the Sea of Destruction, High Command sends Crews of Gamma Wolves out to secure war materiel and Weapon Systems to reinforce the Arcology Defences before a large-scale attack takes place on the shelter.
- A new, virulent strain of an End-War plague has infected Arcologies all over the world, carried by unsuspecting merchants and Gamma Wolves Crews to nearly every shelter before it was identified. The Scientists are desperate for Old-Tech medical equipment and virus samples to find a cure and inoculate the population before it gets out of hand.
- Tensions flare between shelters as conflicts between Gamma Wolves on the borders of claimed sovereign territory cause old rivalries to re-emerge. Arcologies begin to stockpile for a war on their borders, each accusing the other of overreaching and stealing from areas they claim as their own.

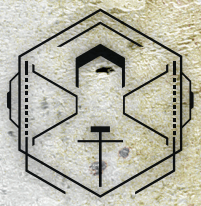
The easiest way to end a *Gamma Wolves* Campaign is to set a target number of games and an Arcology Survival Points goal. As a rule, **twelve games** and an **Arcology Survival Points goal of 20** provides a satisfying experience for players, who may decide to immediately build a new Crew, choose new Frames, and attempt another Campaign!

Any Crew that successfully returns enough Old-Tech to their Arcology to score at least 20 Arcology Survival Points successfully completes the Campaign. If they wish to play the same Arcology in the next Campaign (or Ronin, if they want their Pilot to abandon their Arcology), they may recruit one of their existing Pilots into their new Crew with all Experience, Injuries, Talents, and Advances intact. Legendary Pilots transferring Crews in this way count as Veteran Pilots for the purposes of Recruitment.

In this way, *Gamma Wolves* Campaigns can link one-to-the-next. Pilots can begin as Rookies and become Legendary warriors of the Sea of Destruction over the years, carving out names for themselves as they learn the lessons of war.

The Crew with the most Arcology Survival Points is the victor of the Campaign, having best reinforced their Arcology for surviving the years to come. In the case of a tie, the Crew with the higher total PV is the victor.

OPTIONAL RULES



Gamma Wolves is intentionally vague about scale, leaving it up to the players to determine how they wish to handle their Terrain collection and models to provide exactly the experience they desire. This means no mention is made of how large Pilots are in relationship to their Frames or the Terrain around them. Likewise, the Campaign structure is typically a head-to-head experience, but gaming groups often like to get together to play larger games and this is also a great way to enjoy *Gamma Wolves*. The following rules are entirely optional; their intent is to provide more of a *bonus experience* for players or to add a bit of depth to your Missions.

PILOT EJECTION

The narrative around how Pilots return to their Crawlers when Injured to the point of unconsciousness is left to the players' imagination. For those who crave a bit more detail, however, use the following rules for having Pilots exit a Frame, leave the Area of Operation without their Frame, or even mount a friendly Inert Frame whose Pilot is Injured and out of action.

Regardless of the scale players determine they are playing, a Pilot model is always represented by a 25mm (1") base that is considered 1.5" tall.

When activating during the Manoeuvre Phase, a Pilot may choose to disembark from their Frame or use its Ejection System to leave. If disembarking, place the Pilot model in base contact with their Frame. The Pilot may immediately make a Manoeuvre of 6". Pilots consider all facings

to be their Front Facing for the purposes of movement and Line of Sight; they have no Arcs. Broken Ground and Impassable Terrain affects them, as usual. When disembarking or Manoeuvring a Pilot, place a Stress token on the Pilot instead of the Reactor. When the Pilot disembarks, their Frame immediately goes Inert.

Both the Frame and Pilot can trigger Snap Fire during the disembarking Manoeuvre. Melee Trait weapons may only consider the Pilot's end position for the purposes of triggering Snap Fire when the Pilot uses an Ejection System.

All Manoeuvre and Gunnery Tests from an enemy Frame that Target a Pilot generate Successes only on an unmodified roll of 6+.

Pilots that disembark or eject don EVA gear incompatible with normal Frame operations and do not suffer the automatic Damage to Pilots from the atmosphere during the Cool-Down Phase. They do suffer Injuries from Attacks, as usual.

While Pilots are equipped with a sidearm for personal protection, this weapon is ineffective against enemy Frames. If they wish to Snap Fire or activate in the Gunnery Phase, they may only attack enemy Pilots that have also disembarked from their Frames. Their sidearm has an optimal range of 0–12" with +2 Bonus Dice and a Damage of 0.5. They use their normal Gunnery Skill for this Test.

If a Pilot model is within 1" of a friendly, Inert Frame when activating during the Manoeuvre Phase, they may board the Frame, stabilise their Crew member, and then attempt to repair the Frame and get it operational. Place a Stress token on the Pilot and make a Technical Test using 3 Dice. If it results in at least 1 Net Success, remove the Pilot model from the battlefield. They are now Piloting the formerly Inert Frame, which now becomes active. Place all Pilot Stress on the formerly Inert Frame. Remove one point of Damage from the Frame's Body to represent the hasty field-repairs performed by the Pilot.

The Pilot triggers Snap Fire from its position within 1" of the Inert Frame whether this Manoeuvre is successful or not, but automatically Evades, as usual. The Inert Frame does not trigger Snap Fire.

Pilots may not claim Salvage tokens while outside their Frames, but they may leave the Area of Operations from any edge of the battlefield.

MULTIPLAYER GAMES

While *Gamma Wolves* was written to be a head-to-head, Campaign-driven experience, some players crave a bit more cooperation or mayhem in their games.

The Core Rules for *Gamma Wolves* support multiple combatants relatively well. For games with 3–4 players, the *Salvage Yard*, *Relic of the Past*, or *Ghost and the Darkness* Missions are recommended. Any future missions without an Attacker and Defender are typically well-suited to multiplayer games, as they do not rely on diametrically opposed forces to determine victory.

If your gaming group wishes to organise a multiplayer event for their Campaign, simply perform the Post-Game Sequence as usual when the game is complete.

All Missions should use the following changes when playing with 3–4 players.

Missions

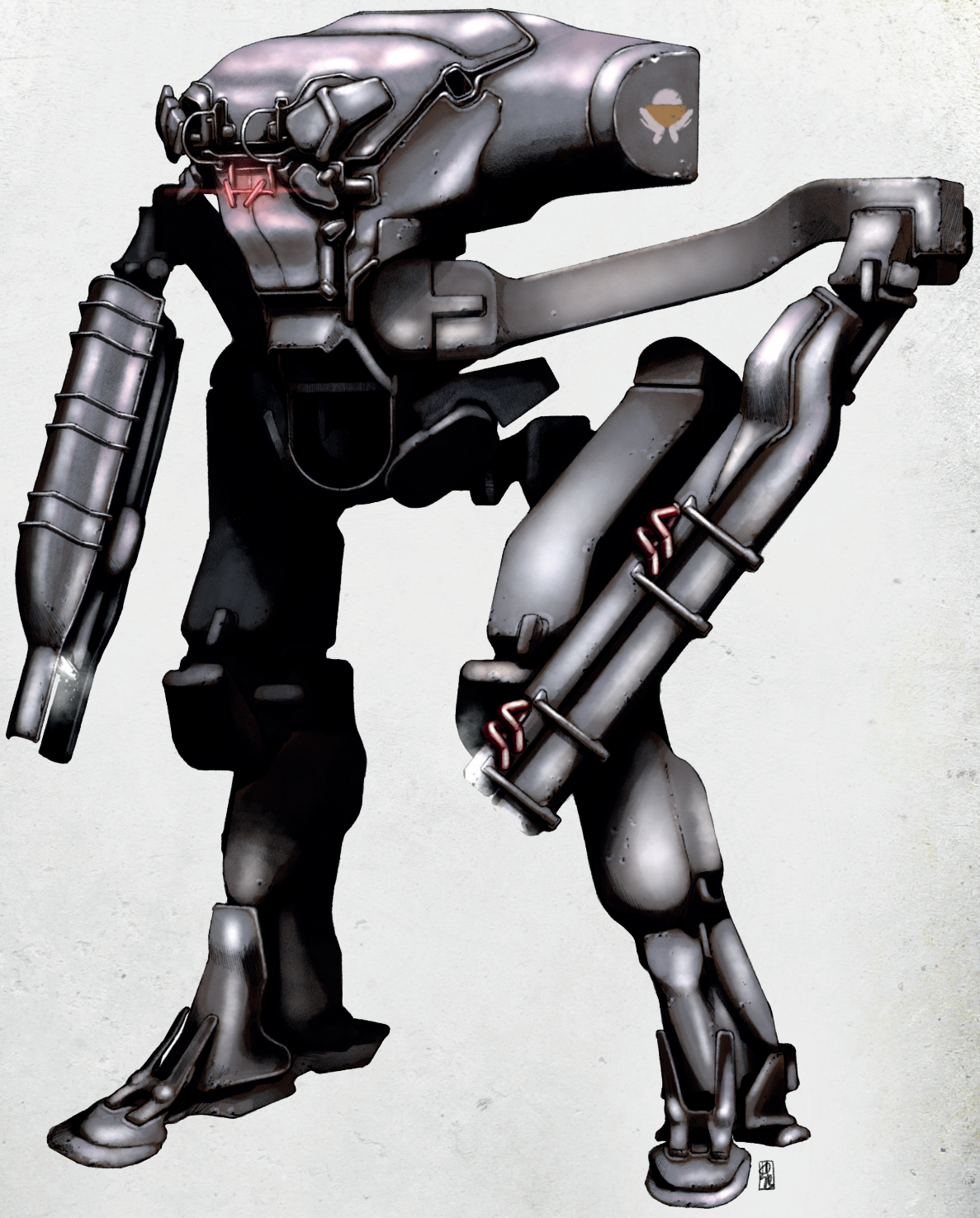
As stated earlier, the *Salvage Yard*, *Relic of the Past*, and *Ghost and the Darkness* Missions work best for games with more than two players. When you place the additional Salvage tokens during the Mission Setup, each player should place the same number of tokens, following the usual restrictions for placement (so, when placing two additional tokens, there are six total with three players and eight total with four players). For *Ghost and the Darkness*, place one Salvage token, plus one additional token for each player when the Ancient Drone is destroyed.

Deployment

Approach Vectors are not used in multiplayer games. Instead, players deploy Frames a certain distance from a point on the battlefield. For a three-player game, these points are two of the adjacent battlefield corners and the centre of the opposite edge. In a four-player game, these points are the four corners of the battlefield.

Players may deploy their Frames anywhere within 12" of these points in the Area of Operations. The edges of the battlefield extending 12" to either side of these points are considered the Approach Vectors.

A North-Star Frame Crew stalks the ruins of the Sea of Destruction. Models from Zandris IV, WHISPER, and Armoured Syndicate.



Determine Initiative

When determining Initiative, use the usual method of least number of Active Frames in Lock. Roll-off to break any ties until you determine an Initiative Order for all remaining players in the game.

It is useful to have Numbered tokens (1 through 4) when playing multiplayer games of *Gamma Wolves*. These should be distributed as soon as Initiative is determined at the beginning of each game Round so players can remember their order of activation during that game Round. Collect the tokens after players check their War-Clocks and redistribute them in the next Round.

Ending the Game

A multiplayer game concludes when only one player has Active Frames on the battlefield or all but one player has time remaining on their War-Clock.

Experience and Timing

Multiplayer games can get a bit frenetic as multiple players begin to declare Snap Fire. When declaring Snap Fire reactions, the player holding the highest Numbered token for Initiative must declare first, followed by the next highest, until all players have declared or declined.

When earning Experience from events that occur only once, such as Critically Damaging a System or causing a Frame to go Inert or be destroyed, the player with the lowest Numbered token claims the Experience for the result, provided they contributed to it (for instance, if their attack damaged a Hardpoint but not the Body of a Frame, they could not claim Experience for causing it to go Inert).

Always resolve Loadouts (such as Electronic Warfare Suites, or other non-standard operations), in the order of the player with the lowest Numbered token to the highest.

Essentially, the lower the Numbered token a player currently holds, the faster their reaction time. You may need to apply some common sense to odd situations caused by Old-Tech or other Loadouts, but for the most part this touchstone should prevent any timing issues.

ACKNOWLEDGEMENTS

This book is the culmination of my answer to two questions: *Do I have another miniature wargame in me?* and *Can I make a game that doesn't involve soldiers wandering around the table?*

As often happens, I began writing this game by looking for a niche in my model collection for which I didn't currently have a rule set that satisfied the itch in the back of my mind.

The giant-robot genre is overflowing with wonderful models, films, series, and other media. There are also plenty of wargames in this arena, but none that offered me the flexibility I was looking for when using my model collection. I wanted to see the action firmly fixed on the machines and their pilots, without the distraction of other ground forces. The world of *Gamma Wolves* is my McGuffin in that regard, as the Frames are pushed firmly to the forefront without the interference of other forces in their adventures.

The Pilots were also important – so many of the various series and films that incorporate mecha focus on the Pilots' journeys. I wanted to explore the story of hot-shot rookie pilots learning about the horrors of war and ending up grizzled veterans of thousands of battles as they climb into their legendary Frames in these rules, as well.

My hope is that this rulebook helps you get some toys, models, miniatures, and other mecha related things off your shelf and onto the table. Getting extra enjoyment from things I love is always at the forefront of my mind when I think of new ways to enjoy what I already have or create an excuse to try something I haven't done before.

So, I suppose the answer is, yes. I did have another game in me (and probably a few more, now that I sit and think about it.) I'm also excited about how the robots feel fighting on the table, but I'll leave that judgement to you, the players who were kind enough to grab a copy of this book.

As ever, I want to thank my wonderful family for their endless love and support. From my mum and dad to my wife and kids, I've been lucky to always have people in my corner that understand my love of imaginary worlds. I'd also like to thank my partner-in-crime, Owen Schindel, for his help play-testing the last few kinks out of *Gamma Wolves* and always being available to discuss my ideas. Additional thanks to Joe McCullough for always being willing to look at random Word docs I email him, and to my Indie Game cohort that gets together once a year at *Adepticon* to talk shop. Huge thanks to Austin and Joe at *Death Ray* for their amazing work on the accessories. Thanks to Phil and Chris from *Osprey* for their continued support and for always being on the same wavelength when it comes to art and design. Thanks to all the great sculptors and designers of the models that appear in the pages of this book: check below to find out who they are and where to find their excellent products. Then, go purchase them and support great, independent creators!

Finally, huge thanks to the *Guerrilla Miniature Games'* extended family of Patrons, designers, artists, supporters, and hobbyists around the world who are there every day with encouragement, a quick, kind note, or even a thumbs-up on social media. When you're making something out of nothing, that kind of emotional and mental support goes farther than anyone who hasn't done it can ever know.

-Ash

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Terrain Manufacturers

Blacksite Studio (www.blacksitestudio.com)
Death Ray Designs (www.deathraydesigns.com)
Greenleaf Terrain (facebook.com/greenleaf.terrain)
UrbanMatz (www.urbanmatz.com)

Gaming Mats

Hot Dice Miniatures (www.hotdiceminiatures.com)
UrbanMatz (www.urbanmatz.com)

Miniature Manufacturers

FilipTurzyński (thingiverse.com/filipturz)
Hasslefree Miniatures (HFminis.co.uk)
Impact Miniatures – WHISPER Mechs (www.impactminiatures.com)
Immortal Kings – (https://ik-minis.com/)
Armoured Syndicate – (armouredsyndicate.com)
Zandris IV Miniatures (z4miniatures.blogpost.com)

Tokens and Widgets

Death Ray Designs (http://deathraydesigns.com/product-category/accessories/guerrilla-miniature-games/gamma-wolves/)

Coffee and Quiet

Mahtay Café (Thanks Chris et. all!) (mahtay.ca)

FRAME AND PILOT CARDS

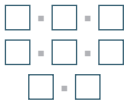
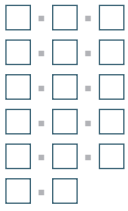
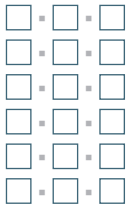
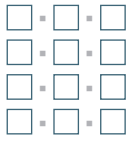
Pilot Name					
Arcology			Experience		
Experience	**Endurance**	**Manoeuvre Skill**	**Gunnery Skill**	**Technical Skill**	**Pilot Value**
Rookie	2	5+	5+	5+	2
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					

Pilot Name:					
Arcology			Experience		
Experience	**Endurance**	**Manoeuvre Skill**	**Gunnery Skill**	**Technical Skill**	**Pilot Value**
Trained	3	4+	4+	4+	3
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					

GAMMA WOLVES

Pilot Name:					
Arcology			**Experience**		
Experience	**Endurance**	**Manoeuvre Skill**	**Gunnery Skill**	**Technical Skill**	**Pilot Value**
Veteran	4	3+	3+	3+	4
Quirks:					
Talents:					
Injuries: ☐ ▪ ☐ ▪ ☐					
Advances: ☐ ▪ ☐ ▪ ☐					

Name:			**Materiel Cost:**	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Light	8" ( )	2	1 x Prim, 1 x Sec.	15
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐	Prim. ☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐ Sec. ☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐	☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐ ☐	☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐ ▪ ☐ ☐ ▪ ☐	
Primary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Secondary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	Light Frames receive +1 to Evade Test results and may Evade one additional time, even after a Pilot is fully Stressed.			

Name:			**Materiel Cost:**	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Medium	6” ( )	4	2 x Prim (L & R), 1 x Sec.	25
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
	Left Right Sec. 			
Primary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Secondary Loadout	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	None.			

GAMMA WOLVES

Name:			Materiel Cost:	
Frame Size	**Speed**	**Reactor**	**Hardpoints**	**Weight Tolerance**
Heavy	4" ( )	6	2 x Prim (L & R), 2 x Sec (L & R)	30
(1) Sensors	**(2) Hardpoint**	**(3–5) Body**	**(6) Propulsion**	**Total Weight**
☐▪☐▪☐ ☐▪☐▪☐ ☐▪☐▪☐ ☐▪☐▪☐	Left ☐▪☐▪☐ ☐▪☐▪☐ ☐▪☐ Right ☐▪☐▪☐ ☐▪☐▪☐ ☐▪☐ Left Sec. ☐▪☐▪☐ ☐▪☐▪☐ Right Sec. ☐▪☐▪☐ ☐▪☐▪☐	☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐	☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐▪☐▪☐ ☐▪☐	
Primary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Secondary Loadouts	**Bonus Dice**	**Damage**	**Effective Range**	**Traits**
L: R:				
Technical Loadouts			**Propulsion Type**	**Encumbrance**
Special Rules:	Heavy Frames suffer -1 to Evade Test results.			