

Within the asteroid belt, Moksha rouses from its slumber. The drydock within the large rock is shuttered as ceramic-coated humanoid machines emerge from within, eight feet tall and towering over the fleeing workers in spacesuits. Armored Personnel Units, modern mechanized war machines, they have already seen what has happened outside, and they are the only defense left for the secrets inside.

The videos were clear. The machine was clad in golden yellow, and though it was a heavyset Zero-Three 'Magus' type laden down by great masses of armor and equipment, it moved as though it were a Zero-Two 'Thief' featherweight, and it shot its large-bore bazooka with the accuracy of a laser. As though a machine were the pilot, it effortlessly plows through every APU and space pod that Moksha has to offer.

The drydock has already been vented, and impacts appear on the hardened shutters. Autocannon rounds, each of the caseless projectiles as thick as a golf ball, begin to eat away at the armor. The APUs raise their rifles, the five Zero-One 'Warrior' machines easily outnumbering this lone invader. Any ordinary machine, any ordinary pilot, would be dead the moment they blasted through.

This was no ordinary pilot.

The rocket round blasted right through the door, continuing to move and bringing a chunk of steel with it to slam against the wall. The yellow-gold machine bore its glowing red sensor 'eye' down upon the stunned opponents, and a burst of blue-hot plasma from its backpack brought it into the dock. Each soldier started to move, plasma bursts from hidden jets along the machine's surface shifting them laterally as large jets in their hollow feet minimized friction along the floor, fighting against the artificial gravity to move at very high speed.

Yellow tracers followed each burst, the helical magazine containing enough ammunition for extended combat, but each and every shot was deflected by the shield. Without even looking, the gold machine hefted its bazooka, the one-handed grip no impediment to firing a hole into the rightmost mech as its boosting got it caught on a wall. The machines span in circles around the golden mech...but the shield blocked all of their rounds.

A burst of autocannon rounds caught another machine in the head. The glass in front of its sensor shattered and the unit fell as the enemy battered the rest of its body. The pilot lay helpless as the feed to his optic nerve went black. The golden APU managed one last bazooka shot against yet another, the explosion knocking the third opponent against one of the ships in dock, artificial muscle straining to rise.

Each of them fired its missiles, despite the extremely weak lock; the machine darted from place to place and always had the first strike. Autocannon bursts shot down most of the missiles, but one got through...shattering the alloys on the golden machine's shield and damaging it beyond repair.

This only served to anger the pilot. Radio interference crackled as the woman inside declared, "Let me be your...**Sledgehammer!**"

When the battle cry ended, both the bazooka and shield were on the floor, two wicked instruments on each of its forearms — impact hammers, designed expressly to batter and penetrate ceramic plate. The first of the remaining two got a hole ripped into its torso as its hammer-fueled punches went straight through. And the last one, stunned, raised a blade on his left arm of shimmering plasma in an attempt to block the blows...

And was struck down, the arm torn off completely as the enemy pilot's golden steed was coated in lubricants and vital fluids.

As the last machine's HUD flickered and the optical feed died down, the pilot knew who this was. The symbol of a woman hefting a warhammer sat on the machine's left shoulder, a unique emblem. It was Sledgehammer, and her APU Gold Lion, a mercenary and a constant enemy of his organization...but he could only get out one last word.

"M...Magus..."

Welcome to the Lunar Reckoning

Seventy years ago, Common Era 2154, the most destructive war the world had ever seen took place. The Lunar Independence War was responsible for the death of one billion and the devastation of the Earth's biosphere. The use of relativistic kill vehicles in the end days of the war very narrowly avoided destroying the planet outright. But with the surrender of the old Earth international administration ATLAS, the Lunar Republic and the Jovian Dominion had their victory — but at a high cost.

It was decided that those who remained would form a new government, the Unified Republic of Terra, Luna, Mars and Jupiter (the Union, for short). None of the governments involved could survive alone, and they pledged to themselves, and to the people, that no war as destructive would happen again. They declared that 2155 would be the beginning of a new age, and they called it the Lunar Reckoning.

And so, under the supervision of the Union, the people of Earth took to the task of reconstructing their shattered home, creating the Megacity Project — to create urban living technologies that would enable humanity to enjoy an ever greater standard of living in an ever smaller footprint of land and ecology. The great success of Morant, a city built in North Africa within what was once desolate desert, showed that the template could be applied to countless other cities, while the rest of the planet slowly healed from the scars of industrial abuse and war.

And as people entered the Megacities, the Union's efficient splitting of different levels of government activity increased the standard of living for everyone. Led by Oncari Industries, a group of multinational corporations took on the Union's contracts to create a perfect world. Poverty, disease, economic disparity, crime, strife, everything bad in the world seemed like it would someday disappear completely.

But for those who thought war would disappear, well, they were a little too optimistic.

During the 40s and 50s, there were several small-scale conflicts between the Union government and factions operating out of the Orbital Colonies. And in LR 59, the Last Colonial War took place, as the Alphonse family declared the Colonies an independent nation. On paper, it was a small war, casualties measuring in the thousands before a treaty was signed. But in reality, what took place there would change the fate of the world.

Oncari Industries was seeking to increase the capability of the mechanized Armored Personnel Unit, to improve the cost of its use and the performance of the humanoid infantry machines. They created new compartmentalized parts that could be swapped at will, with new standardized weapon mounts and advanced systems. To prove its capability, they spent huge amounts of money and materials tuning parts, testing the armor, creating a machine of impeccable performance. They painted their APU-03 Magus-based machine in navy blue, and gave the machine to a pilot with an impeccable record.

This machine, in her hands, singlehandedly turned the tide of battles. Locked in its distinctive blue color scheme no matter the battlefield, her exploits soon spread throughout the fleets of both sides of the war. News stories filmed by deep space reporters focused on her. She became a legend, and when she appeared on the battlefield, the commanders would order a retreat because they knew they would lose.

On both sides, they told each other to watch the blue Magus. Soon enough...that was her name. The Blue Magus. The finest pilot since Allfather Seven singlehandedly destroyed the defenses of the Ad Astra launch facility with Diana One. The finest engineering since a team of engineers on Mars created a war machine out of a construction work mech and drove back the Jovians. And she began a legend.

On the other side, Colonial Heavy Industries created a prototype transforming machine known as the Shooting Star. They knew what was coming. The pilot who bore it painted it in red and gold and faced the Blue Magus in the end days of the war. The two of them, legends, faced down, the Blue Magus coming out victorious.

The war ended. The Colonies were given new seats in the government, and everyone thought it would be the end of that. As usual, the soldiers went back to their duties in stopping terrorists, paramilitary organizations, all the people who made the military necessary in the first place.

But then a funny thing happened. The Blue Magus left the military. She became a mercenary, bringing her machine to the battlefield on her own terms. And others followed. Veterans of the war scrounged up their cash and bought their own machines, painted them in distinctive colors. They fought like her, using a machine that was tailored to their skills, no authority but their own conscience. Their numbers grew, and they were a sight in hundreds of battles everywhere in the solar system.

The first of them was known as the Blue Magus. They were recognized as her successors, those who took up her mantle and ideals alive. And all across the world, they could only bear one name to them, one name that would describe, no matter their philosophy, who they were.

In her honor, they are known as Mages.

You are one of them.

You Are A Magus

This is the year Lunar Reckoning 69, an age of peace and prosperity. There hasn't been a full-scale conflict since the Last Colonial War. But even in such an age a military is needed, especially when the government has to keep track of entire worlds. Machine shops on Mars churn out cheap military mechs and sell them to unscrupulous groups with a grudge against the Union, usually because they didn't get mustard on their smoked meat or something like that. And then there are those who continue to fight wars they lost, perhaps even centuries ago, because they can never let go of the past.

Naturally, there's a good place for mercenaries here.

The generally agreed-upon definition of a Magus is one who utilizes a customized APU in combat as a mercenary. This isn't entirely universal; some call any sufficiently skilled pilot 'Magus', some extend the term to mean those who use other types of mechanized unit as well.

(Somewhat confusingly, 'Magus' is also the term for a class of APU, but they're often called other names too, like Zero-Threes, or Wizards. It's usually clear by context what is meant, and sometimes 'Mage' is used for a mercenary as well.)

Mages have some common traits. The most common of these is a callsign. Be it chosen by the pilot themselves, or be it chosen for them, this is the name they are known by. The extent this is a secret identity is varied — for instance, since the Colonial Wars, no one has seen the Blue Magus' face, but there are several Mages whose identity is known and famous internationally. The general assumption is that it's something of an 'open secret' — one can't really do business without giving away their name, but most keep a blind eye and don't keep it on record.

They also bear a customized machine. Not only are the parts and weapons bought from Oncari sub-contractors for a high price that reflects the very high materials quality and manufacturing tolerances, they are also given a working-over by the Magus and their own team. Through tuning of parts, loosening of safety tolerances, and modification of computer responses, these machines are capable of very high performance...and when put in the hands of a pilot who knows it as if it is their own body, they become unstoppable.

The other common trait is a distinctive color scheme for their machine. Camouflage is almost a formality given the availability of radar and other detection, but an APU is capable of changing colors relatively quickly (a few minutes' notice), bearing camouflage that will blend in with the next battlefield. A Magus is different — a Magus wants to be seen. The color scheme puts a name to a face, as it were, and puts the name recognition into the pilot's career.

Usually the pilot's callsign and the name of their APU is identical, but not always, particularly if the Magus uses more than one machine (which isn't unheard of, as many of them moonlight as fighter pilots or the like).

The appearance of a Magus on the battlefield is an instant game-changer. The assumption that a Magus's skill is enough to turn the tide of battle is wrong, but the presence of one is what really turns it. It's a psychological thing, bolstering the morale of one side and weakening the other's, with the addition of a skilled pilot to boot. The hiring of Mages is nearly universal for any job too small for a PMC, too fleeting for a normal military placement, or too significant for a police force.

A few groups serve as go-betweens for Mages and other groups, many of them also normal PMCs. Some operate alone, so well-known that groups come out to find them. Still others serve as the exclusive guardian of a single group, usually a large corporation involved in APU manufacturing.

The real question is...why are you a Magus? Were you a veteran of the Colonial Wars? Part of a special ops mission gone wrong? A young man in the wrong place at the wrong time? Did you think the idea of being a modern knight sounded good, and found you were better than you expected to be?

And what is your machine? Is it a fast-attack machine bearing a shotgun to match your aggressive, nothing-to-lose attitude? Are you the silent sniper who seeks death from afar in a single shot? Do you like to watch missile barrages and the trails they make? Your machine is your face, a part of you, and it should reflect your personality as much as your skill.

And of course, your callsign. This is what your enemies will know you as. This might be something insignificant, chosen on a whim, or might tie in to the thread of your life. Maybe it's the name of your old squadron. Maybe it's the name of something you once owned. Maybe it's a legendary figure or military machine. Or maybe it was given to you. Is your name the same as your machine's, or is it different? But choose wisely, as rare is the Magus who can change their name for good.

A Few Names To Take Note Of

During your tour through the Lunar Reckoning, you'll probably find out a lot about this future history. But this should get you started. If it looks daunting, don't worry—just come back here when you need it. It is by no means comprehensive or complete, and leaves a lot of holes for the GMs and players to fill.

Most technologies will be covered next chapter, with an extended rundown on the APU and mechanized warfare.

Governments

The Union — Officially the Unified Republic of Terra, Luna, Mars, and Jupiter, but no one calls it that. The Union is a supranational entity, which separates its powers into continental, territorial, provincial, district, and city government levels, sometimes fewer in some cases (like the Orbital Colonies or Mars). The Union has several branches of military (most prominently the interstellar Terran-Lunar Openspace Navy) and a few interstellar exploration and colonization branches.

Most consider the Union to be a successful democratic government, but the Union has found itself fraught with conflict as many see them as the heirs to the abuses of the governments it was formed from, and still others are dissatisfied with the way the Union seeks to run the world. Despite attempts to downsize their military, belligerence from other interstellar governments and illegal military actions in their own borders keep those plans on the back burner.

ATLAS — Once, it was a part of the United Nations, but it became increasingly huge before it absorbed it altogether. Once a puppet of Western foreign policy, it soon became too large and gained its own outlook. The ATLAS Wars were a series of national conflicts in which ATLAS forcibly intervened, often with nuclear weapons, while sending many undesirables to Luna, one of the direct causes of the later Lunar Independence War.

ATLAS' impact on history is mixed — on one hand, it was their space colonization programs that discovered life on Europa and build the Ad Astra, the first FTL ship, and they were tireless crusaders for improving the quality of life in the Third World; but on the other, the ATLAS Wars are an atrocity, creating nuclear fallout in many parts of the world that lasts to this day, and many of the sins of the Lunar Independence War can easily be laid at their feet.

The Lunar Republic — The dream of Leon Naples, the man who masterminded the war and pushed the button that launched the RKVs. Through secret factories, a pact with the Jovians, and the development of their Lightspeed Experimental starfighter, the Lunar Republic rose and quickly decimated the ATLAS space forces, allowing them to bomb the Earth. Though the Lunar Republic won in the most technical of senses, ATLAS having surrendered to them, Luna's surface was bared of the facilities they would need to continue surviving as an independent entity, just as Earth was damaged. It was the decision of those who survived after the death of Leon and his cabinet to form the Union.

The Martian Terraforming Administration — Better known as Mars Admin. The group that oversees the inhabitation, construction, and maintenance of Martian facilities. Once a subset of ATLAS, they're now a part of the Union. Perhaps most famous for their engineers, who constructed the first APUs and drove back the Jovian occupation fleet. Many of Oncari's manufacturing and testing facilities are on Mars. Mars Admin has a large and famously efficient security force, Mars Security (or MarsSec), which defends the planet and its vital terraforming zones.

The Jovian Dominion — Shrouded in mystery. No one knows quite who planned the secret construction of colonies in orbit over Jupiter's moons delivered by deuterium gathering fleets, why they did so, nor why the Jovians broke off from whichever organization oversaw this construction. The asteroid belt divided them from ATLAS, who only tolerated their existence as an independent state because of their very efficient resource gathering fleets.

Once, they were technologically sophisticated, and aloof, practicing genome modification and creating advanced deep space technology that, once the war was over, soon spread throughout the Union. They fought alongside the Lunar revolutionaries, and were accepted into the Union at war's end. Since the Union's blanket ban on artificial genetic engineering, and the integration of the Jovians into the rest of society, many think that it will be difficult to know what life was truly like for the first of the Jovian colonists.

Corporations

Oncari Industries — The largest company in the Union. In fact, the Union owns a huge portion of this company. Oncari was first formed in LR 1, by the same engineers who built the APUs. It is, to put it mildly, the lynchpin of the Union's military-industrial complex. They're nearly the exclusive designer of APU frames (though not weapons). They also have a huge hand in Variable Tanks (VTs), infantry armor, sighting and radar systems, armored fighting vehicles, and other such military tech. One could even say that they're directly responsible for the existence of Mages.

Oncari's made it a mission since the beginning to be in businesses other than the military. As such, they manufacture construction mechs and vehicles, tools, toys and model kits, and, their biggest venture, colony and terraforming equipment.

Oncari's headquarters was once on Mars. While many of their facilities are still housed there, they are now headquartered in Morant, the very city they themselves built.

Neucom — Short for 'New Communications', formed in Japan during the 20th century and growing to be a huge company with hands in most companies. Infamously, rather influential in the Network Dismantlement. But perhaps what they're most famous for is making the first mass production mechanized unit, the Neucom Sportwalker, a four-legged off road machine. They're automobile manufacturers, manufacturers of sport mechs and VTs, aircraft manufacturers, and run most power, water, and communications systems in the Megacities. They also constructed the Megafloat, a floating city/mass driver assembly atop the Pacific in Southeast Asia, and their headquarters is an underground facility known as the Geofront in Japan.

Aircraft Holding Industries — AHI's existed under several names for a long time, though their most recent one is the product of the 22nd century, and most of their organization is brand new. They manufacture, of course, aircraft, both civilian and military. Their headquarters is within the Bermuda Facility.

Gillian Manufacturing — They make starships. They have small hands in other industries, but Gillian Manufacturing's main industry is that of making starships big and small, from colony construction pods and linear pods to massive colony ships. Their continued success is vital to resource gathering efforts in the solar system. Not only do they manufacture ships, they also repair them, with an extensive network of subcontractors to dole out the parts and expertise. Owned by the Gillian family for years, they're unique among multinationals in that they've always been family-owned. Their main headquarters is within Morant.

Light Laboratories — Light Labs does not make things. Instead, they manufacture ideas. A recently-formed company, formed in the first decade of the Lunar Reckoning, they're the brainchild of the programmer Tadashi Hikari and the engineer Albert Weil. They make money off of patents and licencing, leading development into artificial muscle, FTL communications, optics, lasers, fusion power, and hundreds of other scientific fields. Their cooperation was vital in the construction of the Megacities.

Most consider their interests dubious, owing to their history in AI research before the Lunar Reckoning, but Light Labs has a very good reputation among the business and international community — that, and no one's been able to prove it. They're headquartered in New Berlin.

Western Microprocessor — Neucom was once a major player in the computer industry, along with growing firms in East Asia, with a rapidly-growing population of educated professionals along with still-cheap manufacturing labour. To compete, many of the biggest players in Silicon Valley merged together, and took on the new moniker Western Microprocessor. Though they bore old brand names for years, today, Western Microprocessor is the brand name.

They dominate the computer industry, with Light Labs and Neucom their primary competitors, and make everything from cheap laptops and cellphones to massive augmented reality assemblies and military-grade targeting computers. They also lead research into quantum computing, and they say they'll have a quantum processing core available for the home office within two decades. Their headquarters is in Silica City, a Megacity formed from the many cities of the Silicon Valley.

Organizations

Horizon — A private military company widely known for being effective troubleshooters. Horizon operates not only in the solar system, but abroad as well, and is even known for hiring extraterrestrials in the frontier. Horizon is a stringent supporter of the Union and serves in military operations, private defense for high-value corporations, and as security for VIPs.

Lately, Horizon has found new business in providing services to Mages. They provide transportation, equipment, repair, and field support for operating Mages, and serve as a go-between with their clients. Though they have many competitors in the field, Horizon prides itself on its forces, and will continue to vie for the good of all humanity. Their unofficial motto is, 'the last damn heroes in the solar system'.

Children of Bermuda — In the 21st century CE, it was decided that the island of Bermuda would serve as the site for the first mass driver. This was brokered between the United States and Great Britain, and the Bermudans were given no choice in the matter. Though the international community was outraged, by the time anything was made of it, the mass driver had already been completed.

Those who were dispersed formed the Children of Bermuda, a political lobbying group and charity working for the interests of those who would otherwise be dispersed by space exploration, and other small nations abused by the powers of the time. Widely well-respected, though unfortunately perennially unsuccessful, they were among those who condemned the atrocities of the ATLAS Wars before said atrocities were even public.

That was then. And this is now.

The real Children of Bermuda eventually dissolved into several factions, some of whom merged with terrorist and other less scrupulous groups. As the political situation changed, and history moved on, opposition to space exploration turned from a viable position to a complete denial of reality, and nations became increasingly irrelevant even without ATLAS' direct influence. Once the Union was formed, those who still bore the name were nothing more than radicals.

What do they seek? They seek the past.

The Children of Bermuda are nationalists. As in, they want an Earth with nations to return. That's their motto — 'One Earth, Many Nations'. They oppose not only deep space exploration missions, but the mere idea of space colonization. Even with all the colonies there already. They want the networks back, they want to eliminate mindlink implants, they want to stop the Megacity project...essentially, they want to turn the world back to the years just before Bermuda fell.

The funny thing is, with the lineage of the name in dispute, and several groups using it (all radicals), most think that relatively few of them are literal Children of Bermuda. And like all radical groups who use military action, they're willing to use the technologies they despise to fight against their oppressors. Not dangerous, but like cockroaches —smash one and two more will scurry out to rejoin it.

Free Mars — Colonial autonomy is a huge issue in the Union, with plenty of factions vying for their position. Most independence/autonomy groups are peaceful, if rather heavy on the rhetoric, and few truly wish for full independence from the Union. Even the Colonial Wars were autonomy disputes rather than independence revolutions.

Then, you have groups like Free Mars.

Free Mars seeks independence at all costs. That includes the cost of everyone who doesn't like them. Even the moderates in Martian autonomy are too much for them. Try to tell them that Mars has no economic basis for autonomy and they'll spit in your face. Free Mars is dangerous because they have just enough popular support for something that sounds kind of like what they really want that they have no shortage of young Martian rebels to recruit.

The best thing you can say about Free Mars is that they're honest. The worst thing you can say is that they're willing to use bombs, biological agents, blackmail, assassination, and anything else to achieve their ends. Free Mars has usually just been a problem for MarsSec, but recently they've been operating on Earth as well, thinking the Union will listen to them more if they perform their atrocities a little closer to home.

The Lunar Revolutionary Army — Not the historical Lunar Revolutionary Army of the Lunar Republic, the modern one. Even seventy years after the war, some people still think Leon Naples got it right, and the Union is simply ATLAS' successor, despite all historical and political reality. They deny the photographic evidence of Naples activating the RKVs. They see any political action by the Union that relates to Luna in any way as a betrayal. They claim that the ceasefire that was signed is invalid because the order of succession was never determined.

Clearly, they're crazy. But they also have guns. The LRA's activities are sporadic, and usually easily put down, but they still haven't gone away and they still manage to kill people every now and then. Some believe that if they could, they'd destroy the Earth completely. It's a good thing they aren't that well-equipped, but most would prefer they weren't equipped at all.

The Data Angels — Some people never really got over the loss of the Internet. Some people never really got over the AI and genetic engineering restrictions. Some people still want to live forever in a virtual paradise.

The Data Angels are a fairly benign group...for the most part. They run augmented reality entertainment centres and some massively multiplayer game servers under the name Metaverse Incorporated. They publish books on the history of computer networks and trans-humanist philosophy. They have political representation. Credentials. Cash.

They're also big into organized crime and terrorism.

Once, they got one of their agents into a broadcast centre and replaced the end of a speech from the President with the last five minutes of *The Matrix*. Another time, they hijacked an advertisement blimp and changed it to say 'FREE YOUR MIND'. And of course, they deal in illegal drugs, launder money, and do just about anything the establishment doesn't like.

It's rare that the Data Angels perform military action, but when they do, it gets messy. They don't play by the rules of mechanized combat, figuring all the enemies they face are simply tools of the government, and not worthy of life. If the Data Angels are suspected to be behind any sort of criminal action, standard operating procedure is to let loose the bomb squads and information warfare specialists through the communication infrastructure. And their vast financial resources means they can equip top-line equipment.

Locations

New Berlin — Berlin was destroyed by Lunar assaults. There was no military value in the act. The excuse given was that when the attack took place, there were fighters in the sky, but it was an aerobatics demonstration and mock dogfight by an airshow during which contemporary ATLAS fighters took the sky with planes from the earliest days of aviation and everywhere between. What little remained was destroyed by the RKVs.

Berlin was of the destroyed cities chosen for reconstruction, and could be considered the first place where Megacity techniques were used, though it did not join the project until after Morant's completion of primary construction. Today, it's called New Berlin, or more properly Neuberlin, and is the most populous city on Earth, a centre of culture, economics, and government. It was chosen as the primary site of the Union government, the towering Parliament still the tallest building in the world, the extensive network of ground-level and building-to-building transit the most extensive currently built. The few remaining landmarks, like the Brandenburg Gate and the Olympiastadion, share

space with such sights as the Flugschau-Denkmal (Airshow Memorial) and the Museum of Modern Robotics. The city has strived to be one which truly lives up to its motto, 'Ich bin ein Berliner'.

Morant — The Megacity project would never have gotten off the ground if Oncari hadn't stepped in. Back in the first days of the Lunar Reckoning, skeptical factions within the new Union government, those who wished to focus on construction of orbital colonies, managed to choose a site within North Africa, far from the verdant Nile River or any other place where a settlement would be viable.

Oncari did the unthinkable — they built a city in desert and sand and made it into a paradise.

The first Megacity set the template for the rest — to create a city unreliant on outside support to survive. Towering mixed-zoning structures were linked with off-ground transit systems. Tunnels were built underground, and the most extensive elevator systems known filled every skyscraper. Using the same techniques the Jovians used so long ago, they created agricultural structures that did not rely on huge amounts of precious land or soil. The only thing Morant lacked was water, the only thing that had to be imported — and later in the city's life, underground aquifers and pipe networks made that a moot point. Morant was a dawn of a new age, one that proved that humanity could survive despite all odds, even after the nightmare that was the Lunar Revolution.

Oncari and Gillian Manufacturing make their home here, as do countless firms big and small. Morant is actually among the smallest of the Megacities, so a very strict population control is in place to ensure that it does not grow past its limit. Nevertheless, it's a site of tourism worldwide and a hub for travel between Europe and Africa.

Bermuda Facility — The Bermuda Mass Driver was the dream — a new kind of space launch facility for a new age of space exploration. The fact that thousands of people had to be displaced for its construction didn't seem to bother the governments involved. Despite the historical issues behind its construction, however, it was indeed the first mass driver facility and still the most well-known. But perhaps even more well-known than the launch loop is the towering structure known as the Bermuda Facility.

The Facility, strictly speaking, consists of not only the skyscraper filled with government and office facilities, but the surrounding residential, commercial, and military facilities, as well as the area dedicated to preparing space launches. But the name is usually used in reference to that tower, the tallest built in the world at the time and still impressively large. Once meant for exclusive supervision of space launches and administration of the island itself, it now houses thousands of organizations big and small, mostly independent corporations with a particular interest in space launch or otherwise desiring close access to the Americas — or simply because the founders wanted to be in a piece of history or live in a tropical climate.

The Megafloat — Designed by Neucom as the definitive proof that complete artificial island-based mass drivers were viable, the Megafloat soon became far more. An artificial island far south of Singapore, and one of the greatest wonders of the 22nd century of the Common Era and the pre-Union era in general, the Megafloat grew far beyond its original plans as the facilities to house the workers who constructed the structure grew into a city in their own right.

Often considered to be a precursor to the Megacities (although the Megafloat was always designed to be reliant on imports), the Megafloat has a large city within the floatation ring, the ring itself housing the launch loop, while underneath the waves lie habitation and fishing facilities, deep-sea oil drills, and other such things. Outside the ring, there are cargo docks, hangars, and agricultural facilities. The entire Megafloat has a gleaming grey-white look to it, visually impressive whether one is seeing it from the air or from within. Though Neucom's headquarters lies elsewhere, this is the living proof of their impact on the world.

Luna — The first facilities on the Moon predate most other space developments, and ATLAS itself. Intended as a place of scientific research, a stepping stone for future space launches, and a resource gathering zone (particularly for helium-3), Luna was never intended to become a permanent colony. The potential of Luna was always considered to be minimal compared to the investment that would be required, as the Moon would never be capable of supporting life without human activity, nor would the conditions of Lunar facilities ever approach the true controllability of an orbital colony structure.

For this reason, ATLAS considered Luna its lowest-priority colonization project. And as the Lunar population grew, as facilities spread both across the surface and deep into the lunar regolith, ATLAS never realized what kind of beast they would unleash...nor the devastation that would follow.

The cities of Luna are dark, dank, and claustrophobic. Highways on and under the surface criss-cross along countless structures, factories, recycling facilities, all squeezed together in a chaotic mess. Across the surface, helium-3 gathering efforts are the greatest endeavor, while the cities manufacture goods at an incredible pace for consumption throughout the solar system. Despite the ostensible victory in the war, corruption and crime find hold in the spaceports, as Luna is the path where all ships intersect before they reach Earth.

But for those who can stand a life without sky and a city without green, Luna is a land of opportunity and prosperity still, and year by year the situation improves as constant construction creates new facilities out of old, some still standing from the 21st century. And in a preserved crater within Tranquility Spaceport, one can still catch a glimpse of the first tentative steps toward space, and see how far humanity has truly come.

The stereotypical Lunarian is tall, slender, and athletic, often impulsive. There's a sense of self-reliance within the Lunar people, born in one of the harshest environments mankind knows, and many of them look down on the decadence of society elsewhere in the system, especially the Colonies.

Orbital Colonies — ATLAS pushed its hopes and dreams for humanity into outer space. The work of Gerard K. O'Neill formed the groundwork for the System Colony Project, and what would become known, collectively, as the Orbital Colonies. Though the vast majority are O'Neill cylinders of various types, the development of artificial gravity and other such life support has meant that the designs have changed to all sorts of types for all kinds of purposes and populations. Though orbital facilities exist over all the major settled areas, the term refers specifically to the ones in the Earth-Luna system.

While the Colonies could hardly be called a failure, to say that they saved humanity would be a stretch. The population of the Colonies was never high enough to truly lift the burden from the Earth, and huge cost overruns were involved in their already-expensive construction. An entrenched aristocracy formed, as those who could go to the Colonies were generally the rich or otherwise well-connected. They lived in a relative paradise, perfectly climate-controlled and designed for absolute comfort.

Colonists have a very distinctive way of thinking and speaking, a distinct accent that is undeniably the product of a blue-blooded upbringing. It's not difficult to spot someone who grew up there.

Mars — The Red Planet was once living. Humanity has begun steps to ensure that it will become living again. The long-term terraforming of Mars is the biggest engineering and scientific endeavor in history. Even during the Lunar Independence War, all sides recognized that humanity had a responsibility to Mars — and oddly enough, this very fact, which kept the Jovians out of construction matters on Mars, is what created modern mechanized warfare.

In some areas, one can walk around the surface with little more than an oxygen supply, though most of the time environment suits are still required for operations outside protected habitations. Algae and greens spread across the surface, waters from comets fill the planet's depressions, CO₂ from Venus warms the atmosphere. Humans stick to certain sealed settlements — Elysium, the birthplace of the APU; Olympus, the beginning and the end of the extensive Martian highways; Central Admin, the orbital colony where the Martian project is overseen; and Paradise City, the most populous and luxurious human settlement and the most popular vacation spot on the planet.

In many ways, Mars is a hard planet to live on. It's said that it's a planet of engineers and construction workers, and the difference between one and the other is whether they have a diploma in their house. The stereotypical Martian is short, tough, smart, and bitter. That most of the tobacco produced in the Union goes to Mars leads to most Martians in movies being heavy chain smokers, which isn't exactly far from the truth.

Jupiter — The Jovian colonies are a wide and diverse arrangement of nearly ancient space facilities mixed with modern orbital colonies and surface-borne settlements. Jupiter is an important place, being close to all the major resource gathering and materials reclamation operations, and the Jovians often live half their lives on mining or junk-sweeping ships. Upon Europa, humans live underneath the ice surface in submarine settlements, as marine biologists catalogue every single bit of life developed beneath — and the rich and the famous come to dine on said life. The vast majority of the technologies that modern people take for granted in the Colonies and Megacities were born here, but the historical technological domination of Jupiter has long since ended.

The Jovian Dominion practiced genetic engineering on a mass scale. This has led to a Jovian society with very exotic appearances. Willowy, aloof, looking very good in a pilot suit, perhaps a touch Asiatic or East European in their accent and looks, with hair color that in an earlier time wouldn't be out of place in a cartoon or comic book, the integration of Jovian society with the rest of the solar system spread these benefits out at a very quick pace, within only two generations — and the

impact of Jovian genetics programs continues even under the Union's conservative regulations regarding genetic engineering.

Beyond The Solar System — Computer-borne limitations of FTL speeds limits human contact with other worlds. Extraterrestrials, barring a few races, give humans little notice. The Lucifer colony has been rather successful, as have other efforts, like a waystation around Van Maanen's Star. Time will tell if humanity will make its mark on the interstellar community, one already dominated by great powers.

Wars

ATLAS Wars — ATLAS was once a small organization under the wing of the United Nations, with a military arm intended to give the UN more influence on global politics. However, during the latter half of the 21st century, eventually they grew to a point where their own forces were the largest army in the entire world. And they couldn't resist the use of their forces to end low-level conflict across the globe.

Due to the loss of digital information of the time (the Network Dismantlement took place around the same time), there's a lot that's unknown about the ATLAS Wars. What is known is that all over the world, radioactive fallout marks the scars of where ATLAS chose its last resort. Since ATLAS controlled space, they could prevent nuclear retaliation — and strongarmed their way into becoming the de facto world government.

It should be said that the ATLAS Wars did what they meant to do, specifically, create peace within the nations of the world. Even as they sent many 'undesirables' to Luna to ensure greater global stability, they ensured that nations gave all their citizens the standard of living that once had been the exclusive purview of the First World, and to encourage space exploration for resource gathering and colonization. History judged ATLAS poorly, but there is a growing group of historians that seeks to redeem ATLAS, either partially or wholly, usually by stating that they were the right government for the right time, but kept to their old ways too long and were completely blind to the growing unrest on Luna.

Lunar Independence War — Also known as the Lunar Revolution. One billion casualties, most of them civilian. The destruction of untold amounts of infrastructure, cultural history, and historical record. The extinction of several hundred recorded species, and probably more that were never known. What began as a noble crusade to bring down the oppressive ATLAS government quickly turned into a conflict where no target was considered too sacred to be taken out. Most agree that it is only the actions of a few good men that kept the war from destroying humanity altogether.

While a full analysis is beyond the purview of this document, the war spans roughly a full year, beginning in January of CE 2154 with the launch of the Lunar carrier fleet, and ends in December with the launch of the Ad Astra by Allfather Seven and Diana One, the impact of the RKVs on the Earth's surface, and the subsequent assassination of Leon Naples by an anti-war faction within the Lunar Republic. The war saw the refinement of dozen technologies — the first successful fully autonomous starfighters, the creation of the Armored Personnel Unit, the mass deployment of laminate coating, the first practical small-scale energy weapons, and the launch of the first FTL ship. Even seventy years later, the impact of the war cannot be underestimated.

In the strictest sense, the Lunar Republic won, in that they achieved the full surrender of ATLAS forces and recognition as an independent state. However, neither state could support themselves economically on their own, and vast swaths of every government structure in existence were devastated. Society needed to be rebuilt from the ground up, and after the war, the formation of the Union managed to keep humanity together during the fragile post-war years.

Colonial Wars — During the LR 50s, the Orbital Colonies, long a bastion of economic strength and aristocracy, found itself in frequent conflict with the Union administration. Small-scale battles against radical factions, megalomaniacal colony governors, and other such subversive forces were quickly dubbed the Colonial Wars. As the years went by, the Union found itself entrenched within the Colonies, the occupation forces taking increasingly visible presence within.

Last Colonial War — The situation came to a head as the Alphonse family, the most influential of the many plutocratic families in the Colonies, sought to manipulate the Union into open conflict to gain political clout. While records are sketchy and members of the family continue to be under trial to this day, the general consensus is that they wanted to increase Colonial representation in the Union government so that they could push their influence into the political field, while at the same time,

through the formation of the Oncari splinter group Colonial Heavy Industries, gain direct control over a lucrative corporation, subverting the stock market.

When Colonial Heavy Industries split, there was an outcry in the Union and Oncari both, with CHI taking a great deal of research along with its workers. In LR 59, team of APUs backed by Oncari infiltrated one of CHI's research colonies and stole some data, setting the catalyst that the Alphonses needed to begin the war.

What ensued was a long but rather limited conflict, with most of the battles being fleet skirmishes for the vast majority of the seven-month conflict. While Union chopper units kept the peace in the Colonies, most operations against them were small-scale guerilla operations with varying degrees of success. The most important impact of the war was the appearance of the Blue Magus and the Shooting Star, their conflict ending with the last battle of the war and Shooting Star's death. The Colonies received greater representation, while the holdings of the Alphonses were broken up and sold off, CHI returning to Oncari's fold and the masterminds behind the war called to trial.

People

Allfather Seven — So named because he was the seventh pilot of ATLAS' Allfather squadron, one of the CSF pilots (Lightspeed StarFighter) of the experimental squad. Though his real name is known, it is almost never used in reference to him. In the first conflict between the neutrino-drive craft of Terra and Luna, the entirety of Allfather squadron was wiped out. Only the arrival of Thunderlord and Lonefighter squadrons allowed Allfather Seven to survive.

Throughout the war, Allfather Seven hopped from squadron to squadron and made his mark on the conflict. He was instrumental in the breakup of the blockade over Mars, participated in many of the bombing runs of the Lunar military factories, and constantly found himself locked in deadly dogfights with his rival, Diana One. But he was not without compassion, for he refused to destroy civilian supply fleets under direct orders from his superiors, and at the end of the war he aimed his weapons at the ships that would destroy the Lunar cities entirely.

It is well-known that he and Diana One joined forces in an attempt to end the war. Storming the Ad Astra launch facility beyond Jupiter, the two of them single-handedly overtook the defenses of the station and launched the ship. Not only did it manage to launch even with their fighters strapped to the hull (and arriving intact), it performed the first recorded flight at fast-

er-than-light speeds, a flight it was designed to make only after months of stringent testing and adjustment.

At war's end, Allfather Seven was given military honors by the Union, despite his actions on what was ostensibly the losing side of the war. He chose to leave the earth sphere, to become an explorer with the FTL fleets, and remained in that role until his (unconfirmed, but rather strongly assumed) death in LR 45.

Diana One — Allfather Seven's opposite number, of the Diana squadron. Her skills are believed to be nearly a match for his, but more importantly, she was among the first to question the leadership of Leon Naples. She found herself in conflict with command at every turn as the tactics of the Lunar forces became increasingly desperate.

Her record is impeccable — five downed battleships in the famed dogfight where the Allfather squadron was destroyed. There's a story (probably apocryphal) that her mechanics stopped painting kill marks on her plane because they ran out of space to put them. And she too pointed her weapons at her own allies, choosing honor over the death of innocents on her conscience. When she was dismissed from the Lunar Revolutionary Army, she stole her plane back and performed the historic storming of the Ad Astra.

At war's end, she continued to serve in the Union forces for a time, training a new generation of pilots. Rumors of romantic involvement between her and Allfather Seven dogged her throughout her career, though most realized that Allfather Seven's decision to leave the system was a powerful rebuttal to such suggestions. She eventually settled on Earth and lived a peaceful life until the LR 30s, where she died on a hospital bed in Montreal of heart failure.

Leon Naples — He was the son of one of the first Lunar colonists, and never knew any home but the Moon. He watched as the colonists struggled to create their home, watched as ATLAS abused them, watched as so many were sent to Luna without the facilities to house them. He knew first hand of the injustice that he had to fight against. He ran an underground press, he gathered allies and resources, the spiritual father of the Lunar revolutionary movement, and when it began, its leader. No one would think of having anyone else be the face of the Republic.

But no one could predict what he had become.

A bitter man, Leon Naples was bitter not only to ATLAS, but to everyone on Earth. Until Earth was broken, until they had no choice but to give Luna freedom, he would kill indiscriminately. When command began to question his orders, he had them sacked and replaced

with inexperienced officers who would do their job. When that stopped working, he falsified reports to make targets more palatable. And when that too stopped working, he used AI-based weapons, including the infamous RKVs, which would not question his crusade.

His own tight control of his cabinet would be his undoing. Any who questioned his orders were dismissed, some of them shot. Anti-war factions continued to infiltrate his ranks, but none of them managed to get close enough to him before the RKV launch, after which he was shot by his own Chief of the Armed Forces, who told Leon an hour before the launch that the use of such weapons would end any legitimacy that the Lunar Republic had as a responsible, defensible independent state.

Few argue the reality of Leon's actions. Whether the Lunar Revolution was justified or necessary is a matter for the historians to decide, but Leon's command was directly responsible for the elevation of hostilities that caused so many deaths. Had another been in charge of the revolution, it may have ended far more peacefully. Nevertheless, the distance that history brings from Leon Naples is making him into something of a youth icon of rebellion — t-shirts that bear his face are fast sellers.

Blue Magus — "Let them know who you are. Let them know your name. Let them know who it is that is about to end their life. Let them know, and those who survive will never forget." Those were the words the Blue Magus spoke when she destroyed the Shooting Star, and pushed herself into history. That is the name she chose to be known as, and those words inspired every single other soldier in her squadron to take up the mantle of a Magus.

Little is known of her true identity. It's known that she was an officer in the Union forces that worked for Oncari as a test pilot. It's known that she served in most APU engagements in the Last Colonial War, even before the Blue Magus' appearance. Those who know her, and they say little, say that she has particular interest in xenophilosophy; in particular, her reasons for fighting and her actions in the Colonial Wars seem heavily inspired by Darkaran thinking. Nevertheless, the Blue Magus continues to operate; though her appearances are few, everyone knows when she makes one.

Shooting Star — A member of the Alphonse family, his callsign was 'Bandit'. History knows him as the Shooting Star, the one the Blue Magus defeated, considered the second Magus. He was a prodigy, sent to train in a military academy and coming back with an innate knowledge of tactics and mechanized warfare — and the weaknesses thereof. He was a talented soldier and pilot, and bore Colonial Heavy Industries' prototype Shooting Star APU, bringing it to the final battles as his home burned.

Though he may not have agreed with the aims of his family, he would defend their honor to the end. He saw the scourge of the Colonies, the Variable Helicopters that scoured the streets in the name of 'order', and knew that the Union wasn't as spotless as they wanted everyone to believe they were. His death was never officially confirmed, and it's a common assumption that he survived the final battle, but even if he did, the original Shooting Star has made no more appearances on the battlefield. His red and gold color scheme continues to be imitated, and the Shooting Star APU has undergone limited mass production and is the choice of several special forces squads in the Union military.

A Few Other Notes

These are just miscellaneous history facts, to help you get more of an accommodation into the setting.

- » There is no Internet. During the 21st century, mounting national and corporate pressure, as well as a severely congested network, began a process known as the Network Dismantlement. Digital information became borne onto different, incompatible networks that each required their own payment and equipment to use. Though private, and illegal, networks still existed, they were never able to bring back what was lost. International communication on Earth is offered through Neucom's Global Communication System (GCS), providing voice, text, video, audio, news, and other services at low cost. Most cellphones work through this.
- » Everything is electric. Over time, electric cars came into vogue as the technology became far more viable. Everything from stylish Ferraris to tiny little commuter cars are electric, as are trains, bikes, manufacturing machines, everything that used to run on a combustion engine. Fossil fuels are still in use for many purposes, mostly manufacturing or aviation, either natural or artificial.
- » Airships are very common. Airborne aircraft and APU carriers as well. The advent of fusion power created a glut of lighter-than-air gases that could be used in this purpose. It's not uncommon to see people take trips by airship where they would earlier take them by jetliner, particularly when they're not in a hurry. They're usually not truly lighter-than-air, using aerodynamics, engines, and in some cases antigravity to support themselves.

- » Pretty much everyone's equipped with a mind-link implant. They link with entertainment computers and the like that broadcast sound and images into the mind, of course, but controlling a computer with your mind is not as easy as you might think, since it only reads nerve impulses and not thoughts — it's more practical to predict when your hands will hit something or when they'll move, or otherwise how you'll react physically. Or you could just be controlling a humanoid form. Technology for perfect simulation doesn't exist yet, though most think that once quantum processing is viable, it'll be possible and more.
- » The armed forces of the Union are divided into four branches: The Earth Sphere Armed Forces (ESAF), which serve in the area around the Earth-Moon system; Mars Security (MarsSec), which provides terrestrial policy control and military defense across Mars; the Terran-Lunar Open-space Navy (the OSN, or just the Navy), which provides patrol across the solar system and beyond; and the Jovian Air-Space Force (JASF), a group dedicated to the defense of the Jovian colonies and the resource gathering efforts beyond there. Space exploration is handled through the Navy, and civilian explorers fall under the Solar Expeditionary Fleet (SEF).

"Scramble! Scramble! All mechs on alert! Morant is under attack!"

Within the underground hangars of Oncari Industries, dozens of pilots ran amok trying to get to their machines. Technicians worked to quickly fuel, reload, and prepare the company's APUs, and prepare the elevators for deployment. The numbers were huge, the commanders said, and the Blue Magus was in another territory on a different mission. There was no room for calm, no room for error.

Behind all this, in the lockers, the man known to the world as Darker Star undressed without hurry.

Darker Star was a veteran, through and through. There was no doubt in his mind of Oncari's success here. Their numbers were greater, their equipment was better, their pilots were faster. His role, then, would not be to win the battle — for the battle was already won — but to defend the innocents of the city, those who did not choose to die.

The trace suit he bore, pitch black and bearing his symbol on the left breast, was skintight, yet eminently comfortable, plugs across his body, a holster for his sidearm and survival knife both upon its surface. It clung to him, and the familiar feeling of impending battle returned to his senses, the suit sealed and a small pump taking the air out.

Calmly, the Magus walked out of the room, salutes following him despite the panic of his fellow pilots. He didn't blame them for this. Few of them had seen battle, after all. Once the battle began, their training would ensure they had the resolve to fight...that, or their will to survive.

The machine, as always, stood at the ready, shining black, the Darker Star always eager for combat. It was his tool, his weapon, his friend. The front hatch was open, the cramped seat within padded but uncomfortable. Two control sticks were at each side — unlike the fixed throttle controls on a normal APU, his flight type had proper sticks for the times when he needed to take to the sky.

First, he attached the cables to himself. Two to his left shoulder, to provide a supply of drugs through the skin when needed in combat. One to the base of his neck where his mindlink implant sat, allowing him to control the APU's limbs with thought alone. They sat flush with his suit, hooking onto him perfectly, as he placed himself into the APU's cockpit.

Few know how frightening an APU is in the moments between the hatch closing and the neural link activating, the artificial nerve cable pulsing in the back of Darker Star's neck. Darkness bathed him as the hatch closed, the airtight seal blocking all light. His optic nerve then slowly faded back into vision as a scroll of diagnostic text took over from the darkness. After a moment, the text overlaid the sensor data of his APU, letting him see outside of his new body, control brought to him in layers.

Every part of him linked to the corresponding parts of the APU. The machine's hands gripped the machineguns they held that much tighter in anticipation of the coming battle. The monoeye on the machine's head moved as he looked from side to side, watching other APUs being loaded onto the elevators toward the ground.

Of all the machines there, Darker Star stood apart. The others were in desert camouflage, light and dark patterns of brown mixing to confuse visual sensors. The others were ordinary Warriors, Thieves, Mages. The shining black of his machine showed that it was meant to be seen, not hidden. The frame was unique, as well, a Shooting Star type, the wings on its back the surest sign that it was no ordinary APU.

Even for all that, the changes were most significant inside. Safety tolerances were lowered. Components were tweaked and replaced. Computer systems were optimized. Materials were of the utmost quality. Everything about this machine, the machine of a Magus, stood apart. The stead of a soldier without peer.

But for all this mechanical trickery, for all this superior technology, it was still the man inside that made it all worthwhile. And as Darker Star's monoeye flared green, the pilot willed his machine to walk toward the elevator. "Be careful out there, Darker Star," a familiar voice buzzed in his ear, and the pilot within closed his eyes, breathing sharply just once.

"Hmph...it is of no consequence. I have survived harsher battles than this."

The APU And A History Of Mechanized Warfare

The Armored Personnel Unit is the most widely deployed military machine in history. Hundreds of millions of them have been manufactured since CE 2154. Almost all mainline infantry units in the Union military utilize APUs as their sole or primary infantry force. The purest possible representation of mechanized technology, the APU has captured the hearts and minds of a generation, like the sailing ships of the Age of Discovery or the jet fighters of the Information Age. This is the machine you will pilot as a Magus, and its history is tied with that of the world, through peace and war alike.

Early Developments

The history of the APU is tied intrinsically with the history of robotics and science in general. At the time the earliest attempts at mecha were developed, Kabuto and Saotome were working toward the first Newtonian theories, robotics labs across the world were experimenting with carbon nanotubes and what would become the first examples of artificial muscle, militaries continued to develop lighter and more durable ceramic armors, and the first fusion reactors came online and began an age of ever decreasing reliance on fossil fuels.

Mechanized technology game about first as a civilian endeavor, and the first mass production 'mecha' was created by Neucom. Known as the Sportwalker, it was a four-legged electric machine capable of long-range offroad operation, explicitly designed to capture the imagination of a mech-obsessed generation. The four legs had free-spinning wheels within powered by the electric motor, and the legs themselves made heavy use of artificial muscle — the first use of this technology in a widely deployed vehicle. The Sportwalker cost around two million United States dollars, a considerable figure, but it also created a considerable profit for Neucom, and imitation vehicles began to be manufactured alongside the original. Sportwalker became a genericized name, and these machines continue to be popular today, often seen striding across empty suburbs and warehouses in the abandoned ruins of old Earth cities.

The first military mecha, of a sort, was known as the Variable Tank. In an effort to put this technology to good use and to increase the capability of self-propelled guns, these machines could shift from an ordinary, rapid-travel tank or wheeled chassis to a tall, well-grounded, heavily armed machine utilizing its main armament on an arm swivel. Though the deployed form couldn't move, eventually so-called 'mobile VTs' were

made in which the deployed form had a limited wheel movement as well. Many models of VTs were deployed, particularly during the ATLAS wars — the vast majority were ballistic artillery or experimental railgun types, but many mounted anti-air guns or missiles, or even ballistic missiles.

VTs, as well, had the advantage of requiring only a single operator, and requiring no gunners for its equipment, all of which was autoloading using robotic systems. It took many years for other vehicles to catch up to VTs in this regard. Their popularity led to much greater development in mechanized technologies.

It was around this time that the term 'mechanized unit' came into vogue. Military engineers, often being of a somewhat whimsical sort, realized that they couldn't simply call these new machines 'mechs' if they wanted to be taken seriously. Mechanized unit became a statement of intent on budget lists and evaluations, but it was a term that lent itself very easily to being shortened to 'mech' or 'mecha'. Soon enough, VT battalions, usually called 'mechanized battalions', became known as 'mech units' in military jargon.

The General Purpose Worker Suit

Most further development of mechanized technology would be in the construction industry, where artificial muscle greatly increased efficiency and operational time of machines formerly powered exclusively pneumatics and hydraulics. The growing need for construction vehicles in space colonization led to a shift from wheels to legged machines.

At first, most construction was performed in space by larger construction pods and smaller spacesuits, and on surface colonies by retrofitted machines. Cost overruns involved in the construction of these machines led to a project to create a machine that could be used in multiple roles much more cheaply, as well as reduce the costs of training new workers in performing new roles. What was created became known as the General Purpose Worker Suit, or GPWS.

The GPWS was originally more of a very small colony work pod with arms that would hold tools rather than exchange them, and wheels in addition to rockets. Over the years, increasing technological developments, and the need for more sturdy vehicles on Mars, led to a more humanoid shape, with a bipedal arrangement. The standardized form eventually became fully humanoid with the development of the mindlink implant, which allowed for the movement of limbs as though they were the pilot's own, severely reducing training equipment complexity and allowing for a truly versatile machine.

The GPWS model 2139, the final major change in the GPWS production line, was a nine-foot humanoid machine utilizing a mindlink control system. The unit was powered by a battery that allowed for a twenty-four hour charge, and propulsion systems along the body — main thrust in the back, supplementary under the feet and in front of the torso. The general layout was somewhat stocky, arms rather large and long compared to a human-scale, legs shorter as well. Within the head, a pilot light in red covered the lenses of the many cameras that hooked into the electron-surface displays on the pilot's helmet.

A variety of hand-held and mounted tools were designed to work with the GPWS chassis, as well as some back-mounted equipment (often small crane arms or docking equipment with some transports). The wide popularity of the yellow-painted GPWS among its pilots led to the 2139 model being largely retained until the breakout of the Lunar Independence War in 2154.

The wide deployment of GPWS, particularly on Mars, spread the use of mindlink implants, and greatly improved the efficiency of colony construction. Though more expensive than spacesuits, the returns were more than sufficient to keep GPWS in circulation.

And when the Jovians came to Mars...this would have far-reaching implications, beyond what anyone could predict.

The Jovian Occupation

ATLAS' economic resources were concentrated on Mars — as was a great deal of military production and R&D. By locking down Mars, it was hoped that ATLAS would be more open to an early end to the war. The task fell to the Jovian Dominion, and their occupation was

one of the first major acts of the war. Jovian VTs filled the cities, their fighters patrolled the skies, and all the while their fleet hung overhead, keeping anything from coming in and out of Mars.

But the Jovians thought that they could convince the Martians to join the crusade, to become part of an association that could break down ATLAS for good. Had Luna waited to begin the revolution, had the Jovians not made such an overt expression of hostility, the Martians may have agreed — but most of the Red Planet were supporters of ATLAS' efforts, and once the occupation began, no Martian would consider joining their oppressors.

With this in mind, the Jovians allowed terraforming and construction activity to continue unabated. Any factory producing military supplies was immediately destroyed, but civil factories continued to operate. While the Martians could continue to create small arms underground, MarsSec found its supply of military vehicles continually draining.

The ingenuity of Martian engineering now came into play. Assuming everything went well, the Jovians would never suspect a thing.

The Armored Personnel Unit, Warrior

GPWS manufacturing was vital to construction efforts on Mars, and continued unabated despite the Jovian occupation. Engineers in the city of Elysium had a simple plan — use the GPWS as a military machine. If everything went well, the Jovians wouldn't suspect a thing...and virtually every potential soldier already had at least rudimentary training in GWPS use.

Most of the MarsSec forces were rerouted into missions to allow for supplies to be sent to the factories. As the soldiers fought to secure ceramics and ammunition for Elysium, the engineers drafted up a hasty design specifically optimized to take down the VTs, the biggest threat to MarsSec counterattacks.

APU-01 Warrior		LR 69 Manufacture	
Armor Points	100 AP	Plasma Projection Blade	
		Location	Left Forearm
Laminate Points	100 LP	Attack Dice	3d6+6
Stun Threshold	20 ST	Damage Step (Laminate)	4d6
Full Stun Threshold	65 FST	Defend Base Damage	0
Evasion Bonus	+6	Defend Damage Range	0/+6
Initiative Bonus	+6	Counter Base Damage	16d6
Initiative Increase	+6	Counter Damage Range	-3/+2
Melee Defense	+6	Armor Damage	x1/2
Missile Launch Limit	2	Defense Actions	Defend, Counterattack
Total Unit Cost	\$230,000		
Anti-Armor Missiles		Location	Missile Mounts
		Attack Bonus	+6 +12 with high Initiative
Base Damage (Armor)	12d6	Damage Step	12d6
Damage Range	0/0	Laminate Damage	x1/2
Ammunition	3		
Service Rifle, 12.7x99mm MarsSec		Location	Right Hand
Attack Roll	3d6+6	Base Damage (Armor)	6d6
Damage Step	3d6	Damage Range	-1/+1

The use of a fusion reactor would allow for plasma to be shunted into an exhaust system, replacing the fuels that were ordinarily only used in space, and significantly extending operation time. The neosteel would be replaced by ceramic armor, thick enough to stand up to small arms fire while still remaining mobile. For the primary armament, they chose to modify a popular semi-automatic anti-materiel rifle — the GPWS, under test conditions, was able to fire this modified rifle one-handed with a high rate of accuracy, and more importantly, without suffering any ill recoil effects. As a stopgap measure, they added hardpoints to the hull, allowing the GPWS to attach genera-purpose micromissiles. These would be able to stop aircraft and hardened vehicles, and greatly expanded the firepower available to the average soldier.

The engineers dubbed this new vehicle the Armored Personnel Unit, in comparison to an armored personnel carrier, similar in its role of adding mobility to a force. The model was named Warrior, and an initial production run of 50 units joined a platoon of troopers in Elysium. The first mission would make or break the unit's performance — if successful, they could retake their anti-orbit weaponry and break the blockade in time for ESAF ships to arrive. If they failed...then Mars was lost.

The first battle, by all accounts, was a resounding victory for Mars forces.

The Jovians had seen retrofitted construction vehicles before. But what they couldn't predict was the capability of these new vehicles. Expanded magazines allowed fairly rapid fire of the antimateriel rifles, and the VTs — especially deployed — were highly vulnerable to this ammunition. Pilots, some of them given no more than a day's training in the use of the APU, managed to

avoid retaliating fire extremely quickly, enemy soldiers falling easily to the fire they laid down. The missiles they delivered kept Jovian reinforcements down, and the MarsSec troopers soon invaded Jovian command centres.

The story was clear: the Martians were retaking their planet, and on the front line, their Warriors would cut down any opposition.

Mass Production And Deployment

As ATLAS broke the blockade and Mars was allowed to export its developments once more, tests of the Warrior's performance were done in several situations. While the performance in terrestrial situations was impressive enough, it was not considered worth the expense nor that much more capable than ordinary soldiers. However, the GPWS was designed for space use, and the Warrior proved much, much more capable than any combat spacesuit that ATLAS was using at the time. Its ability to maneuver, maintain inertia, keep its velocity while firing, and recover itself was so much greater, that the Warrior was immediately declared APU-01 and ordered into mass production and deployment. The vast majority of early Warriors were simply converted GPWS units, equipped with upgraded IWACS systems and generally more dedicated equipment, but eventually demand became so great that dedicated factories were opened to manufacture the APU-01 model.

The Lunar Republic didn't ignore this. As ESAF deployed APUs, they too converted GPWS units into similar combat machines in order to counter this new threat. Virtually identical to the enemy APUs, they declared their model the GPCS-A ('General Purpose Combat Suit'), but Lunar pilots still referred to it as the APU and as Warrior. Both sides equipped a modified tool for close combat, dubbed an 'impact hammer' by the engineers who developed it.

APU-02 Thief		LR 69 Manufacture					
Armor Points	75 AP	High Frequency Blade		Anti-APU Missiles		Machine Gun, 7.62x51mm ATLAS	
		Location	Left Forearm	Location	Missile Mounts	Location	Right Hand
Laminate Points	150 LP	Attack Roll	3d6+9	Attack Bonus	+6 +15 with high Initiative	Attack Roll	3d6+6
Stun Threshold	10 ST	Damage Step (Armor)	2d6	Base Damage (Armor)	6d6	Base Damage (Armor)	4d6
Full Stun Threshold	32 FST	Defend Base Damage	0	Damage Step	6d6	Damage Step	1d6
Evasion Bonus	+9	Defend Damage Range	0/+6	Damage Range	0/0	Damage Range	-3/+2
Initiative Bonus	+9	Counter Base Damage	8d6	Laminate Damage	x1/2		
Initiative Increase	+9	Counter Damage Range	-3/+2	Ammunition	3		
Melee Defense	+3	Defense Actions	Defend, Counterattack				
Missile Launch Limit	3						
Total Unit Cost	\$200,000						

It should be said that APUs were not instrumental in the war effort. Neither side won or lost due to them, save for the Martian assault that proved their worth. Nevertheless, the number of APUs manufactured ensured that they would stay quite a while longer — as did the fact that they could easily be converted back into construction machines.

During the war, ATLAS and Luna went into completely different directions in APU development. On the Lunar surface, the ESAF required a fast attack vehicle to counter the Guardian-type units that the LRA deployed. For this purpose, the APU-02 Thief was created. Being based on a combat chassis, all effort was taken to increase thrust output and decrease weight. A machine-gun was used instead of the service rifle, as the high rate of fire was far more successful in taking out the fast but lightly-armored Guardians. As a melee weapon, they used an unsuccessful energy weapon design, and created the world's first arc projector. The Thief quickly became something to be feared, particularly on the Lunar surface, though later developments made the Warrior dominant after the war.

The LRA, however, required heavy fire support. While the LRA was experienced in guerilla tactics and had high mobility in general, it soon found itself fighting a far more symmetrical war — without the proper weaponry to fight it. Their new unit, the GPCS-B Magus (which would become the APU-03 after the war), equipped a purpose-designed sniper rifle with a powerful 20 millimetre round, and a heavy back cannon that

could break through even the heaviest defenses. The Magus had a distinctly more organic look than the rugged Warrior or the slimmed-down Thief, with extremely tough armor to enhance its role. The Magus, too, was feared by ESAF just as the Thief was feared by the LRA, as the Magus could operate at extreme range with very heavy firepower.

It was designed, as well, for what might be a far more important role: IWACS support. Sporting external targeting and radar, jamming ability, highly sophisticated sensors, and high survivability, the information gathering capability of the Magus is as important, if not moreso, than the firepower it delivers.

Further Developments

The APU found itself being far more widespread with the formation of the Union. Asymmetrical conflicts, which ATLAS would have handled with extreme prejudice and the use of very heavy weaponry, increased greatly in number, as the destabilization the war caused amplified the dissatisfaction of certain segments of society. A new war doctrine began, one which emphasized political negotiation with any who would accept it, while at the same time firmly defending free society without use of extraordinary firepower. The APU's ability to deliver precise firepower made it very well suited to that role, and over the next few decades, it became the basis of infantry forces rather than a supplement.

APU-03 Magus		LR 69 Manufacture							
Armor Points	150 AP	Casting Rod		Sniper Rifle, 20x110mm Luna		Anti-Aircraft Missiles			
Laminate Points	75 LP	Location	Left Forearm	Location	Right Hand	Location	Missile Mounts		
Stun Threshold	30 ST	Attack Roll	3d6+3	Attack Roll	3d6+6 3d6+5 with two weapons	Attack Bonus	+6 +9 with high Initiative		
Full Stun Threshold	99 FST	Damage Step (Laminate)	2d6	Base Damage (Armor)	12d6	Base Damage (Armor)	18d6		
Evasion Bonus	+3	Defend Base Damage	0	Damage Step	6d6	Laminate Damage	x1/2		
Initiative Bonus	+3	Defend Damage Range	0/+9	Damage Range	-1/0	Ammunition	3		
Initiative Increase	+3	Counter Base Damage	10d6	Linear Cannon		Jamming Module			
Melee Defense	+9	Counter Damage Range	-4/+4	Location	Right Back Slot	Location	Left Back Slot		
Missile Launch Limit	1	Armor Damage	x1/2	Attack Roll	3d6+6 3d6+5 with two weapons	Add Ability	Enemy does not get attack bonus with Missiles for having a high Initiative		
Total Unit Cost	\$327,500	Defense Actions	Defend	Base Damage (Armor)	12d6				
		Damage Step	12d6	Damage Range	0/0				
		Damage Range	0/0						
		Damage Step	12d6						
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The Martian engineers who invented the Warrior formed Oncari Industries, and through its close relationship to the Union led to the improvement of APU technology, and mechanized technology in general. And when an APU is no longer needed, it can be refitted for construction so that it may have use in the movement toward a just society.

Of course, the 'swords to plowshares' approach the Union has taken has an unfortunate side effect — said plowshares are rather easily beaten back into swords. Opposing forces utilize mechanized units as readily as the Union forces do, and it seems that there's no effective way to stop them, especially with machine shops across the solar system churning out pristine machines for whoever has the cash.

The major advancements in APU technology have been tied toward directed energy weaponry and information warfare. Mindlink implants have advanced, eliminating the need for spare space within the APU for ESD screens or audio equipment, providing feedback directly up the brainstem into the pilot's optic nerves and auditory cortex. Energy weaponry grew into a slower-than-light charged-packet paradigm, and arc-type weapons shrunk in size, though they're only beginning to see truly wide deployment. IWACS has improved, giving a team of APUs mutual battlefield awareness — assuming no opposing IWACS systems. A wide variety of minor improvements abound, and though the APUs of today may look like the ones of years ago, they differ a great deal within.

APU/T-01 Shooting Star

Mass Production Type

Armor Points	90 AP	Superheated Blade		Wingtip Missiles		Anti-APU Machinegun	
Laminate Points	90 LP	Location	Left Forearm	Location	Missile Mounts	Location	Right Hand
Stun Threshold	20 ST	Attack Roll	3d6+6	Attack Bonus	+6 +15 with high Initiative	Attack Roll	3d6+6
Full Stun Threshold	65 FST	Damage Step (Armor)	2d6	Base Damage (Armor)	6d6	Base Damage (Armor)	5d6
Initiative Bonus	+9	Defend Base Damage	0	Damage Step	6d6	Damage Step	1d6
Evasion Bonus	+9	Defend Damage Range	0/+8	Damage Range	0/0	Damage Range	-4/+4
Initiative Increase	+9	Counter Base Damage	10d6	Laminate Damage	x1/2		
Melee Defense	+6	Counter Damage Range	-4/+3	Ammunition	6		
Missile Launch Limit	2	Defense Actions	Defend, Counterattack	Wingpack			
Total Unit Cost	\$375,000			Location	Back Slots		
				Add Ability	Flight Mode (see APU Construction)		

NKS/V01 Vulcan Venture

Mass Production Type

Armor Points	150 AP	High Quality Rifle		Superheated Blade		VTOL Lifter	
Laminate Points	100 LP	Location	Right Hand	Location	Left Forearm	Location	Back and Engine Slots
Stun Threshold	10 ST	Attack Roll	3d6+6 (both two-weapon and single fire)	Attack Roll	3d6+6	Add Ability	Evade twice, Evade melee attacks (see APU Construction)
Full Stun Threshold	38 FST	Base Damage (Armor)	9d6	Damage Step (Armor)	2d6	Vertical Launch Missiles	
Evasion Bonus	+3	Damage Step	3d6	Defend Base Damage	0	Location	Missile Mounts
Initiative Bonus	+3	Damage Range	-2/+1	Defend Damage Range	0/+8	Attack Bonus	+6
Initiative Increase	+2	Lightweight Burst Rifle		Counter Base Damage	10d6	Base Damage (Armor)	12d6
Melee Defense	+6	Location	Left Hand	Counter Damage Range	-4/+3	Damage Step	12d6
Missile Launch Limit	2	Attack Roll	3d6+6 (both two-weapon and single fire)	Defense Actions	Defend and Counterattack	Damage Range	0/0
Total Unit Cost	\$385,000	Base Damage (Armor)	6d6			Laminate Damage	x1/2
		Damage Step	3d6			Ammunition	6
		Damage Range	-1/+1				

The most important advancement — and the one that makes the custom APUs Mages use possible — is that of modular construction. Oncari's success with a modular VT platform that could exchange weaponry to fulfill different mission platforms led to them researching the same technology for APUs in order to reduce costs and increase versatility. While APUs always had exchangeable weapons equipment, this development would allow the entire frame to be modified as needed. This project directly led to the emergence of the Blue Magus, and stolen documents regarding this technology were the impetus for the development of the Shooting Star — now under limited mass production as the APU/T-01.

New APU models continue to be developed, and the needs of Mages drive the market toward ever more sophisticated technologies. Based on the layout and combat style of the VTOL-using Magus known as Vulcan Venture, Neucom has begun manufacturing, for the Megafloat defense and police forces, the new pre-production NKS/Vo1 Vulcan Venture — which uses VTOL lifters and dual guns, and is exclusively battery powered, a great departure from standard APU design.

Anatomy Of An APU

The APU, like any machine, is too complex to describe in full detail without taking up the entirety of a very large, very thick technical manual. Nevertheless, the raw basics are described here for your convenience, so that you can know the nature of your machine and how it's flown.

Main Frame

The APU is a piloted robotic machine made of artificial muscle mesh over a sturdy skeletal structure, layered overtop with ceramic composite armor. The use of artificial muscle gives the APU a range of motion very similar to that of a human being, but with many more times the tensile strength.

Very early attempts at constructing mechanized units utilized pneumatics and hydraulics almost exclusively, which required considerable expense for a very limited range of motion — artificial muscle can be layered and balanced in the same way as a human's. Some universal joints are used in certain places, such as the arm mounts, giving the arms a greater modular capability and range of motion, but the APU is very deliberately designed to be humanlike in as many respects as possible.

The armor layer provides a great deal of structural support as well — this is necessary to ensure that it can take the force of blows and that there is no undue stress placed on the pilot's body. It can be considered to be similar to an insect's body structure in this regard. The ceramic composite used is highly resistant to small arms fire, making the APU virtually immune to rifles and other guns not specifically designed to penetrate its armor. However, it's not designed to withstand heavier weaponry — it would be impractical, and probably impossible, to do so while maintaining any kind of mobility.

Atop the armor is laminate coating. Laminate is a development of the Lunar Independence War, used by both sides specifically to counter long-range directed energy weaponry and forcing much closer confrontations. Laminate coating absorbs electrical energy and heat, spreading it along the surface and allowing it to evaporate. This makes laser weaponry virtually useless (save for electrolasers, which have their own weaknesses) and adds an extra layer of defense against modern energy weapons.

Laminate does not bond well to the best armor materials, and tends to be better protection on smaller, more concentrated areas. Lighter, less armored APUs and machines will have stronger laminate relative to their armor versus heavier or more well-protected ones.

The color of an APU may be changed at-will, due to computer-controlled pigments. Within a few minutes' notice, an APU can change its camo to match its combat environment. Not all APUs do this — the obvious would be Mages who use their own distinct colors, but police machines and prototypes also use high-visibility schemes, and construction machines are almost always painted yellow.

By tradition, the right shoulder of an APU contains the symbol of its employer or association (ESAF, for instance, or the symbol of a local SWAT force), and the left shoulder contains the pilot's squadron symbol or their personal symbol (if a Magus).

Reactor and Boost Assembly

The fusion reactor is the heart of the APU. If anyone tells you that the difference between an APU and a GPWS is academic, show them the fusion assembly. The fusion reactor within an APU provides reliability and a long operating time. Contrary to popular belief, the use of a fusion reactor gives no risk of explosion; the nuclear reaction is designed to shut down in less than a second if an impact is imminent. Such impacts almost always kill the pilot, but if they do not, then battery power will allow the pilot time to retreat.

The boosters are arranged across the body. The main assembly is in the back, providing the main delta-v output. In the front are the engines usually known as 'braking jets', which are used for quick stops and high-speed turns, as well as backwards motion. In the feet are the hoverjets required to keep boost velocity despite friction, letting the machine work somewhat like a hovercraft while using its boosters to skim along the ground. Extra output may be placed here to boost an APU's jumps, allowing the machine very high jump capability and limited flight.

The fusion reactor provides excess plasma that is used as fuel for the boosters. APUs can boost at a fairly constant rate without consuming plasma faster than replenished — the act of evasion and acceleration involves pumping excess plasma into the boosters to keep them active and to increase delta-v past normal limits. Energy weapons use plasma in some way or another to catalyze their reactions. This is what EN represents, in game terms. Systems that merely use electrical energy, like linear weapons, do not consume plasma. (Arc weapons use plasma to fuel and accelerate the arc reaction, and thus require EN.)

The boost assembly has an additional side effect. Within space, and to a limited extent within gravity and atmosphere, recoil will send the APU flying back. With very high recoil weaponry (like linear weapons), the APU fires its boosters for a brief moment to counteract the energy. This is a vital feature that made the APU attractive for space combat, as the combat spacesuits of the time did not have this capability available, requiring complex manouvering rules to preserve velocity.

Control Systems

The cockpit of an APU is notably claustrophobic for first-time pilots, but due to the mindlink control system, they quickly grow used to it. The cockpit of the Warrior opens from the front, the cockpit of a Thief opens from the top, and the cockpit of a Magus opens from the back. Within, one connects through their mindlink implant to the control system. The implant hooks into the pilot's mind, letting the APU become their body, the machine's sensors becoming their eyes and ears, without any need for screens to provide that information.

Pilots wear a skin-tight suit designed for g-compensation, containing ports on the left shoulder for the use of combat drugs, intravenous feeding systems, and other life support requirements. The suit is an iconic image in the media, and much has been written over the years over how much it...emphasizes the looks of attractive pilots. The suit and APU, in tandem, feeds and supports the pilot, allowing for very long deployments — some pilots have even been known to sleep inside!

At the front of the machine are two control grips. These grips helped close the hatch on the GPWS, but in the Thief and Magus they are purely control systems. These grips originally activated more functions, but today, they're used exclusively for switching and firing weapons. The currently selected weapon is immediately fired once the APU's arms are in position.

Due to the neural control system, the APU has an eerily human-like gait. The APU walks and runs like a human, moves its arms like a human, motions its hand like a human, and even appears to breathe and wince in pain, head turning with the pilot's. The APU doesn't transfer pain back to the pilot, so they are always at peak combat condition, even if the machine is not.

Sensor Systems

The APU's primary sensors are held within the head. Secondary sensors are placed around the body in case of damage, but they're far less sophisticated than the main sensors. While an obvious target, it's a holdover from older engineering, and is difficult to fully eliminate.

APUs use a common technology known as active scanning. Instead of being a passive camera lens, an active scanner scans through the infrared and ultraviolet, uses radar, sonar, and heat sensing, and actively attempts to home in on radio sources. The main disadvantage of an active sensor is that it sends out a photon burst in the visible spectrum — or, to put it bluntly, the sensors glow.

This, however, is not considered enough of a disadvantage to prevent adoption. The wavelength can be adjusted, allowing for a range of colors, and it gives a distinctive look to the APU very popular with the public and pilots — light trails follow the head sensors as the machine boosts, or shines in the dark as the machines stalk the night, colors battling as units duel with shining blades.

Computer Systems/Fire Control

The HUD of an APU is highly customizable, and no two squadrons or pilots share the same one. Generally they show available ammunition, damage reports, targeting information, and other such vital statistics, while hiding that which is currently unnecessary. The HUD is a 360 degree view, overlaid on wherever the pilot chooses to look.

Targeting utilizes a dual-camera system for most unguided weapons. One camera, on the gun, checks the target and identifies range. This is double-checked with the head sensors, which provide a stereoscopic target check and a ballistic trajectory tracking, linked in with the fire control system inside the main computer. If the pilot obeys this check, their accuracy is raised considerably — but combat is unpredictable, and no computer can replace the instinct of a well-trained soldier.

The computer systems of an APU are vital, and though well-hardened, they can be disrupted. Basic operation is virtually impossible to disrupt through EM damage, but boosting, targeting, and complex movement can be limited by damage to the machine's systems. CPUs are manufactured by a variety of companies under licence, though the vast majority are manufactured by Western Microprocessor. Light Labs is particularly popular among Mages, but CPUs are considered interchangeable equipment and even tiny firms can get contracts for a batch.

IWACS (Information Warfare And Control System)

A development of many ideals of EWACS and information warfare, IWACS is the pinnacle of this technology. Integrating radar, jamming, target identification, early warning systems, and information sharing, IWACS combines all aspects of the information side of battle into a single package.

In practical terms, IWACS allows any single picture of the battlefield from a single soldier to be shared with all other soldiers in the area. If there's a large IWACS facility or ship to provide further information, this is shared with that ship, and then with other IWACS sources as far as the signals will travel. A team with good IWACS support will always have one another's back.

However, IWACS is a constant battle between signals availability, between jammers and counter-jammers, trying to determine between true and false information. All of this is heavily automated, with only dedicated personnel handling signals intel manually. Dedicated IWACS platforms like the Magus APU are often the turning point in a long-fought battle.

Neutrino Carrier Communications

Developed in the post-war period, neutrino comms is a secure voice communications link. Using a brief radio signal to synchronize the transmission, a team gains a voice channel that cannot be detected among the neutrino activity that constantly surrounds the solar system. Though the range is short, it is extended considerably when one target is stationary or moving in a predictable velocity (such as a ship). The main issue is low bandwidth — if anything more than voice needs to be sent, normal radio (which can be jammed or intercepted) must be used.

It should be noted that enemies constantly talk to one another using normal radio, which would seem to make neutrino moot. However, when private communication is required, neutrino comms is still the most useful option.

Combat

A Magus' life, whether they like it or not, revolves around conflict. Decisive action must be taken. When it comes time to inhabit the steel body of an APU once again, all combat is decided through one die, the d6. Combat is designed to be deadly, with only a few short rounds between you and death, your only way out to keep boosting and make sure that you always have the upper hand — or the armor to take the blows.

The Basic Rundown

In general, you will have knowledge of the battlefield and any enemies, though reinforcements may appear without warning. Your first step in combat is to take an Initiative roll ($3d6 + \text{Initiative Bonus}$) to determine your place in the battle order. In the case of any ties in the order, the one with the highest Initiative value acts first. If there is still a tie, the player may choose to reroll or force the NPC to reroll; otherwise, if they're both NPCs, they may act essentially simultaneously.

Battle proceeds in descending order of Initiative. Each turn, you increase your Initiative, and then you may make a single attack against an enemy with one of your weapons. Roll for attack, and add the relevant attack values. The enemy rolls Evasion, and the difference between Attack and Evasion is compared, dealing Base Damage plus or minus Damage Steps as determined by the difference. Once the number of damage steps to be added or subtracted is determined, roll damage dice, and deduct it from their Armor or Laminate, as designated.

Once everyone in the combat has acted, the turn ends. On the beginning of the new turn, each machine's Initiative increases, and the battle order is redetermined after Initiative Increase is applied. The battle proceeds in this way until one side is unable to battle or otherwise retreats.

Initiative

Initiative can be considered the combination of velocity, positioning, and reaction time that allows one the first strike. Many weapons have special properties relating to Initiative. Melee combat lives or dies by a high Initiative. Several support actions require high Initiative. Unlike most games, Initiative is not simply the order of battle — it is the lifeblood of combat.

The initial Initiative is determined by $3d6 + \text{Initiative Bonus}$. In the case of a tie, the unit with the higher Initiative Bonus goes first. If their Initiative Bonus is equal, the player character goes first. If both are NPCs or PCs, reroll for both.

Increasing Initiative

Each round, your Initiative increases by a fixed amount based on your reactor and the energy usage of your machine. (The exact mechanics are described in APU Construction.) This increase happens without intervention, and after all Initiative increases are performed, the battle order is predetermined for the next round.

Increasing Initiative isn't just building velocity and kinetic energy. It's in positioning, in tracking advantage, formation, manouvering, and anything else which allows you to gain the first strike. A machine that is sluggish to change direction and evade attacks may nevertheless have high quality instrumentation and absolute thrust.

Dropping Weapons

You may also increase Initiative by dropping a weapon (or another part). The immediate boost in velocity and acceleration allows you to gain a manouvering advantage without draining your energy reserves.

All Hand, Forearm, and Back weapons may be dropped. Obviously, the best advantage is to drop weapons which have no ammo remaining. Missile mount weapons may not be dropped, as they don't have a housing to be dropped, and their weight is considered 'additional' — the APU's balance is not significantly affected by parts on the auxiliary mounts.

Dropping a weapon is declared during the Initiative-building phase and increases your Initiative by the total WP of the dropped weapons. This amount is also added to your Initiative Increase, which allows you to gain more Initiative on subsequent rounds.

Attack Action

Movement is implied as a part of your actions. Though the only actions taken, in dice terms, are attacks and evasive manouvers, your APUs are always moving. They may be boosting, jumping, walking, running, whatever they need to do to avoid fire, or get into position. An immobile APU is quickly a dead one.

It's important to remember that everything in this game is an abstraction. Your 6d6-damage light ballistic weapon is not literally making 6 shots — it may be a machinegun firing a burst, a shotgun pumping shells into enemy armor, or whatever else you want to think of. Similarly, weapons with limited numbers of attacks do not have literally that number of shots; they may be firing more than one shot at a time, or a volley of them.

Each weapon has its own personality, even within its own category. A sniper rifle makes a powerful mechanical click as it loads a new round into the action, linear weapons make a distinctive electrical whine as they charge to fire and crackle after the projectile has left, missiles leave trails of smoke as they fly, and every energy weapon has a distinctive color making each shot immediately recognizable. The players are encouraged to make every one of their weapons unique, to give them an identity beyond the sum of their statistics.

The basic attack action is to roll attack against an enemy's evasion. Each weapon has a **Base Damage**, a **Damage Step**, and a **Damage Range**, which determines maximum and minimum damage. One compares the difference between an Attack roll and an Evasion roll, and adds or removes Damage Steps accordingly.

An attack roll can be expressed as **3d6 + Aiming Accuracy + Slot-Dependent Stat**. If the weapon is a **Hand or Forearm weapon**, it uses **Reaction Speed**; if it's a **Back or Missile slot weapon**, it uses **Radar Strength**. Damage rolls are always a straight number of d6 to be applied for each Damage Step.

Example

Rising Seraphim is armed with an Automatic Revolver, a Light Ballistic weapon. This weapon has a Base Damage of 4d6, a Damage Step of 1d6, and a Damage Range of -3/+2. Rising Seraphim attacks an enemy Thief, and her attack roll is 16, same as the defender's Evasion roll. The difference is 0, so she deals 4d6 damage.

Next round, Rising Seraphim gets a 15 on attack and the Thief gets a 17 on Evasion. The difference is -2, so she only deals 2d6 damage. If she had gotten a 19, she would deal 6d6 damage, the maximum this weapon can deal.

Energy Weapons

Energy weapons are powerful. Though they don't deal as much direct damage to Armor, something which turns off many pilots, once laminate is gone, they cut through even the strongest foes. And the heavier the foe, the weaker their laminate in relation to their armor. And many of them deal systems damage, allowing even more damage to be dealt.

The most important thing to remember is that energy weapons will slow down an APU's reaction speed. Energy weapons take up valuable EN, which means that an APU's potential Initiative Increase is similarly lowered. Careful management of an APU's Energy Supply during construction is paramount to ensure that energy weapons can be put to their best use.

Missile Weapons

Missiles are equipped on most mass production APUs. Even a small number of missiles can take out armor and aircraft, and ensures that APUs can hold ground. Mages do not always rely on missiles, but many choose to equip them either as a backup, or even as a primary attack method.

The tracking method of missiles is considered irrelevant to the firing method. Feel free to describe how they track, whether it be radar, IR, or anything else.

Missiles, however, though they may seem powerful, can be evaded easily by a faster foe. If the target's Initiative is currently lower than the shooter's, the shooter gains a bonus to their attack roll equal to their Initiative Bonus. If the target's Initiative is higher, however, then the target gains a bonus to their Evasion roll equal to their Initiative Bonus. (If their Initiative is equal, there is no bonus to either.) The danger of missiles ensures that a large amount of other equipment is available to defend against them.

A player may fire as many missiles from a single launcher as they wish, up to their Missile Launch Limit. When firing multiple missiles, roll 3d6 for each missile fired, and add your attack bonus and Initiative Bonus (if applicable) once each for each missile fired. This number is divided by your opponent's Evasion roll or Passive Evasion. This is known as the 'divide rule'.

Example

The Magus Perennial is targeting a Sportwalker with his Light missiles. The Initiative of Perennial's APU, Duelist of the Rose, is 24; the Sportwalker's is 19. Perennial gains his +12 Initiative Bonus to his attack roll with his missiles. He launches 2 missiles, rolling 9d6 and adding 3 times both his initial attack bonus and his Initiative Bonus. This result, 50, is divided by the Sportwalker's Passive Evasion of 16. He easily hits the Sportwalker with all three missiles.

The round following, the enemy Sportwalker, on its last legs, releases a missile volley against the Duelist in retaliation. Perennial, due to his high Initiative, gains his +12 Initiative Bonus to his Evasion roll and manages to avoid the micromissile attack.

MIRV Weapons

MIRVs, otherwise known more accurately as multi-missiles, fire only one missile at a time. However, each of these missiles split into multiples. **Each of these multiples may hit any enemy that the player designates, or all of them may hit a single target. When targeting a single opponent with multiple projectiles, the missile divide rules are used.**

MIRVs are affected by the same bonuses that standard missiles are.

Electrolaser Weapons

Electrolasers are a special case. Due to the amount of time it takes to acquire and keep a target locked, the shooter must have a higher Initiative than the target.

Critical Hits (and Misses)

Luck is always a factor. Mages live or die by luck, and as it happens, so do ordinary pilots. This luck, however, tends to apply more when you're actively trying to avoid attacks.

Whenever you roll triples on an attack, you miss automatically. The shot may have gone wide, the gun may have jammed, the tracking system may have bugged out, but whatever the case, you missed and lost your chance.

Whenever you roll a straight (a sequence of three numbers in a row, ie, 4,5,6), you automatically hit for the maximum damage steps your weapon can deal. If you would already hit for any amount of damage, roll on the critical table. You cannot get an autohit or a critical with missiles or MIRVs.

Critical Hits are brutal. A Torso hit makes armor burst open and laminate melt so fast it creates steam. Sparks leap from exposed spots as your systems struggle to take the hit. Any specific hit first rips open huge holes in the part and heavily damages the artificial muscle, and the second hit, if you're unlucky enough to get that far, blows away most of the part. Fluids leak from your damaged frame, and your machine will have to spend a lot of time in the repair bay.

Autoevasion

Luck applies in evasion as well. Sudden bursts of acceleration or an otherwise skillful piloting technique can allow for seemingly inevitable attacks to miss completely. However, booster shortouts or bad terrain can make what seemed like a flawless move turn into a pilot's last day.

APU Critical Table

On a d6:	
1-3 – TORSO	Roll double the damage dice for this attack.
4 – ARM	Lose the part's Reaction Speed and Melee Attack Bonus. If this effect has taken place already, one arm is lost entirely, along with any weapons attached. (Choose the arm at random.) If this effect takes place again, the other arm is lost.
5 – LEG	Lose the part's Initiative Bonus, Evasion Bonus, and Melee Defense Bonus. If this effect has taken place already, the APU's Initiative is set to 1 and does not increase, and any remaining Evasion Bonus (from engines or add boosters) is halved.
6 – HEAD	The part's Radar Strength is lost and Stun Threshold is halved. If this effect has taken place already, the head is lost, Stun Threshold is reduced to one quarter, and Aiming Accuracy is halved.

On a straight with Evasion, you automatically evade. On a triple with Evasion, the opponent automatically hits for maximum damage.

Autohits negate autoevasion (and vice versa). In this case, the attack is resolved normally.

Spotting Attacks

This special action allows a very fast ally to perform 'scouting' for very heavy hitters whose Initiative is lower. Through IWACS systems, an APU can concentrate all its efforts on keeping track of a single enemy and send all telemetry to an ally.

To perform this action, **the machine must have a higher Initiative than both the ally it's spotting for and the target.** Your Initiative isn't modified in any way, however. You may not attack this round, but in return, **the ally you are spotting for may make an additional attack action.** They must attack the same enemy with both their own actions, and **if the enemy is destroyed, they lose the extra attack.** You may spot for only one machine at a time, and an individual machine may only gain one spotting bonus at a time.

Evasion

You may note that the only way to defend against attacks is to evade. This is because armor only takes you so far. Weaponry has long since outpaced the ability to defend against it, even within ceramic-plated mechs, and so, as the Red Comet once said, the best way to avoid an attack is to avoid it being pointed at you.

The base defense is known as Passive Evasion. This represents the constant searching for cover, weaving movements, and other defenses that pilots know by heart. Passive Evasion is rarely sufficient for most generic soldiers, but a Magus may have Passive Evasion so high, they rarely need to perform active defense. Someone avoiding an attack with Passive Evasion may not even know they did it. Passive Evasion is equivalent to your Evasion Bonus.

But when your foes are more accurate and punch through your PE (and it will happen often), and you don't want to suffer the damage, it's time to give in to the need for speed and make an active Evasion. Even the worst possible value, a 1, is better than Passive Evasion. One roll is enough to avoid all rolls of a single attack; you don't need to make an evasion roll 63 times to avoid that missile boat's barrage.

If your Evasion is higher than any attack die, that attack die deals no damage. Weapons with more than one attack die may score partial hits, but those with only one will miss entirely.

Evasions should look impressive. Boosting forward as missiles explode on the ground behind you, weaving through rifle rounds, even jumping and flying to avoid unguided rockets. Nothing a Magus does is routine, and avoiding the expert anti-mech sniper teams on the roof should feel just as satisfying as dodging the giant tank cannon at point-blank.

An Evasion roll is **3d6 + Evasion Bonus**. This roll affects your enemy's damage roll, and if you roll high enough, you may take no damage whatsoever.

Shooting Down Missiles

Missiles are generally difficult to evade, especially if launched from a fast enemy. However, missiles have a generally predictable velocity and course, and – most importantly – are vulnerable to sudden impact. While extraordinarily difficult, weapons with high fire volume or system disruption capability are more than sufficient to detonate missiles prematurely.

Any APU equipped with a Ballistic, Linear, or Ion weapon can attempt to shoot down shots from Missiles or MIRVs that are targeting them. Missiles will simply go through plasma shots without significant energy transfer, and arc weapons require that both projectiles hit, which again is difficult for such fast projectiles.

Shooting down a missile is done with a single weapon. Your attack roll is made normally. **You may use your attack roll as your evasion roll if it's higher, and if your attack roll autohits, you autoevade.**

Most 'ordinary' pilots are incapable of this feat. A Magus who successfully shoots down incoming missiles with a standard weapon should feel pride and gain accolades from his companions, curses from his enemies.

Intercepting Attacks

In desperate cases, it may be necessary for an APU to draw off attacks from another. When Mages choose to band together, it is inevitable that one of their team may become too damaged to carry on, but cannot retreat – in this case, one can take the blow and deliberately boost into the path of an attack to prevent it from damaging your ally. This act of sacrifice has turned losing battles into resounding victories, and saved more than one life...though often, in exchange for another.

To intercept an attack, **you must have a higher Initiative than both the attacking enemy (before their Initiative drain, in the case of a melee attack) and the targeted ally**. The action may be declared after Evasion is rolled, but before damage. Your Initiative drops to your ally's value minus one, and all damage that would have been dealt to your ally is dealt to you instead. You do not suffer critical damage or parts damage, if your ally would have suffered it.

Melee Combat

Are they realistic? Hell no. But close combat duels are a time-honored tradition of mechanized warfare. Melee weapons are generally powerful enough to cut down enemies in a very short time, but with the very great risk that you will be a target for retaliation — or destroyed by the enemy that you thought you could take.

The melee specialist lives by the motto, 'there is no reward without risk'. Though their APUs may come home battered and burned, they know that they took the chance and fought, and they won through strife and skill.

Melee Attack

An attack action in Melee is a high-speed approach and full of slashes, feints, and high-speed boosts, as your weapons glow or gleam, trails forming from each cut. It's a risk, and pilots routinely yell *kiais* or battle cries as they take close combat approach, mocking their opponents, or taking this time to trade philosophies as they risk their lives and their machines for their ideology. If there's a single-hit kill, your APU will often simply boost right through for the followthrough before coming to a stop.

To make an attack, **the attacker MUST have a higher Initiative than their target**. Once they make the attack, successful or not, **their initiative is lowered to the target's value, minus 1**, and they cannot act again this round. The exception to this is **if they are retaliating against an enemy that attacked them in melee earlier in the round; in this case, their initiative is not lowered**.

A melee attack roll is **3d6 + Melee Attack Bonus**. Melee attacks are determined in the same way that ranged attacks are, but have a different Base Damage and Damage Range depending on if the enemy is Defending or Countering.

Defending In Melee

There are two ways to defend in Melee — Defense and Counterattack. A Defense is using footwork, feints, parries, and boosts to avoid damage entirely. A Counterattack is trying to deal damage before they can dish it out to you. Both of them continue the song and dance of melee combat, one distinctly evasive, the other distinctly aggressive, and they show in the sort of pilots that use it. Both of them, however, require a melee weapon to deflect direct blows. Some weapons only allow one or the other action for various reasons.

A Melee Defense is essentially just an Evasion roll with different stats. When using Melee Defense, your opponent must roll higher than your Defense to deal any damage at all. A high Melee Defense, then, is useful for those who seek to simply avoid melee combat. One who misses in melee may soon find themselves on the business end of a massive linear cannon.

A counterattack is a different story. This is used by melee combatants locked in a duel who wish it to simply end. In this form of combat, your attack is opposed by the enemy's attack. If the roll is greater than the enemy's roll, then you get the first strike. If they end up destroyed or stunned, then they deal no damage in retaliation.

If the enemy still survives, however, they get to deal damage to you. This damage may very well destroy you if you're weak, so melee combat is rarely advised for those who are on the verge of death.

Some enemies are either nearly or completely defenseless against Melee attacks. Some have a Passive Melee Defense, others have no defense at all. Even so, the enemies without Melee Defense often have weaponry that can punish those in close combat — careful intelligence of enemy capabilities is recommended.

A Melee Defense roll is **3d6 + Melee Defense Bonus**. A Melee Counterattack roll is the same as a Melee Attack roll.

Criticals In Melee

Melee is as luck reliant as ranged combat. **On an attack action, if the roll comes up as a triple, the attack misses regardless of any Defense.** In addition, you gain a **No Guard** condition — if the enemy made a counterattack, it hits for maximum damage steps, and if they did not, they may attack you on their turn with no chance for you to defend or counter.

On a straight, you hit instantly for maximum damage steps and get a critical hit. The enemy deals no damage on a counterattack and cannot defend. You roll on the same table as the ranged criticals, but on the specific part results, you **get both results instantly** — cutting off the part entirely or otherwise irreparably damaging it. In regards to the Arm part, only one arm is cut off.

On a defense action, **if the roll comes up as triples, the enemy hits for maximum damage steps regardless of their roll. On a straight, you successfully defend regardless of the enemy's result and the enemy gains No Guard.**

On a counterattack action, **if triples are rolled, the enemy immediately gets the strike in for maximum damage steps and you deal no damage** — you fumbled so badly you gave them a perfect opening.

If a straight is rolled, you instantly win the roll, deal maximum damage steps, and get the first strike, and they deal no damage to you as you gave them no opening to do so. You do not, however, roll on the critical table.

Two-Weapon Fighting

An APU is not bound by the same rules in terms of sight, targeting, balance, or recoil control that a human would be. Weapons that require two hands to be fired are very rare. Therefore, APUs that use two weapons at once are very common, particularly among Mages.

Two separate non-missile weapons, both on opposite sides of the APU, or two identically-sized missile launchers in any location, may be fired at once. They may both target a single enemy, or two separate enemies. As a consequence, the targeting systems are forced to be split between both weapons. For these attacks, **the specific aiming stat for each weapon (but not Aiming Accuracy) is halved for each attack roll.** You may fire with a single weapon to gain the full bonus with that weapon in a round, foregoing the other gun.

Drawing and sheathing weapons is automatic, allowing melee weapons to be used freely when required. No special action or penalty is taken.

Certain weapons may not be fired at once in this way. Missile weapons may be linked together no matter their position (assuming they're the same size), but only one size of missile may be fired at once. Two MIRV back weapons may be linked together, but only if they are the same size. Electrolasers may not be used in two-weapon combat. And ranged and melee attacks cannot be chained together.

Two-weapon melee combat is another matter. **Both weapons must be of the same type and on the same slot (Hand or Forearm)**. You may choose to attack with one or both. **Your Melee Attack bonus is halved when making such an attack**. However, on an attack action, you gain two chances to break through their defense, and may indeed score two hits — which quite often will take them out of the battle outright.

You may also counterattack with two weapons. Each attack is resolved separately, and the order of damage is determined by the order of attack rolls. So you may get a hit in with the first attack, then have the enemy retaliate, and then destroy them with the next. This applies to melee weapons with multiple dice, as well, so, for instance, an APU dual-wielding impact hammers gets 4 chances for a first strike.

Example

Sledgehammer is locked in combat with her rival Pulse. Sledgehammer's Gold Lion equips 2 Impact Hammers, and Pulse's Tekker equips 2 high frequency blades. Sledgehammer attacks and gets 10, 14, 15, and 13 on her attack rolls. Tekker gets 19 and 9 on his. Tekker gets to deal his damage with one blade first, but Sledgehammer gets in all four attacks before Tekker's last — utterly destroying her rival before the last strike!

There is one special case — grenade weapons. Two grenade weapons on the Hand and Forearm slots, if on the same arm and of the same size, can be built to be considered the same weapon, each of their ammo counts combining to form a single pool.

Chaining Attacks

Combat's momentum is maintained the most by defeating an enemy. The rush of adrenaline that comes with a successful attack allows pilots to quickly react and make further offensive rushes, continuing the ebb and flow of combat further. This quality makes skilled melee combats particularly deadly, as they may make multiple attacks in a single rush, cutting swaths through entire armies.

When an enemy is destroyed, retreats, or is otherwise defeated, a **chain** is started. You may immediately make another attack action against another enemy. This action is unrestricted; it may be a melee or ranged attack against any valid target, and you may spend manoeuvres as normal. **If you down another enemy, you gain another attack action, and continue to do so until you either run out of enemies or an enemy survives your attack**. You can only gain one chain per attack action; **if you destroy more than one enemy in a single attack action, you only get the one bonus**.

If you make a melee attack on a chain, your Initiative continues to be drained. In this sense, you can 'cut through' an entire enemy line, reducing your Initiative each time to reach the enemies in behind through the ones in front.

Example

Darker Star is surrounded by Chickenwalkers. The extremely weak enemies fall very easily to his attacks as he shifts out of Flight Mode and spots the nearest unlucky machine, opening up both guns. Upon destroying one with his dual machineguns, he takes his superheated blade and makes a melee attack against the next, his Initiative dropping to 14. He gets a critical and destroys that enemy in a single blow, so he gets another attack and targets the next machine, making another melee attack. His Initiative drops to 10. This one (barely) stands, and his chain has ended, until the next round...

Taking Damage

The APU was never designed to be invincible, merely be able to survive long enough to deliver ordnance. Stronger than the combat environment suits they replaced, they are infantry nevertheless, even if they bear many of the features of armor. A well-trained soldier equipped with an anti-armor rifle or missile can take out an APU. Any Magus who faces a tank gun point-blank won't be able to learn his lesson, but his allies might. APUs can take out aircraft quickly, but aircraft can also take out APUs just as quickly.

Therefore, APUs facing APUs will generally resolve combat quickly, especially if there's a Magus in the equation. It's important to know exactly how best to do the task.

Armor Damage

Armor Points represent the ceramic armor layers. Once AP is depleted, **the APU is considered unfit for combat and must retreat or risk pilot death**. AP is an abstraction, and it can be important to forget that an APU will never remain pristine and intact as it takes fire. Armor will chip off, explode out, leave bullet holes, laminate scars, and impact deformations as the APU continues in combat. APU armor is very easy to replace, which is good, because it never survives a battle intact.

Armor damage is probably the most important overall, as taking out AP will directly take a machine out of combat. The most common APU weapons deployed by militaries are still weapons which deal damage to armor. However, ballistic weapons become less effective at larger bore sizes, linear weapons are unpopular among pilots, explosive weapons are too heavy to carry large amounts of ordnance, and missiles are expensive. Cost concerns see militaries moving further to energy weapons.

Laminate Damage

Laminate Points do not directly represent any sort of structural integrity, but they represent the laminate coating layer to protect against energy transmission and insulate vital systems. Energy weapons primarily deplete this layer. As laminate damage is taken, scorch marks tend to appear where damage is dealt, and the APU seems to lose some of their luster — they look less 'new' and more metallic. Steam comes off of impact points as the laminate melts.

Once Laminate is depleted, **an APU takes all laminate damage directly to Armor**. Heavyweights with lower laminate may find their armor quickly disappearing.

Systems Damage

System Points are a different story. An APU has vital computer systems, artificial muscle nerves, transmission lines, comm systems, and all sorts of other things vital to its operation. Systems damage represents disruption of their activities.

Taking **Systems Damage equal to your Stun Threshold** causes a **Stun** condition. If the enemy that stunned you has a lower Initiative than your current value, your Initiative immediately drops to the shooter's minus one. You cannot actively evade attacks or counterattack in melee, but your Passive Evasion remains the same, you may still shoot down or intercept missiles, and you may still defend against melee attacks if able.

If you haven't already acted this turn, when your turn is reached, you recover from the condition, but you cannot attack (though you can evade for the rest of the turn). If you have, the condition lasts until your turn next round, and you do not raise your Initiative.

Taking **Systems Damage equal to your Full Stun Threshold** causes a **Full Stun**. Your Initiative drops to 1. If you haven't already acted this round, you may not act. You may not evade, defend, counter, or shoot down or intercept missiles, and all melee and ranged attacks against you automatically hit. On the beginning of the next round, you are considered Stunned until your turn comes (when you recover as normal).

Naturally, Full Stun is a death sentence.

As you take Systems Damage, your APU visibly stutters in its movements and sparks. The pilot may feel the joints seize up and become unresponsive, stuck inside a body no longer under their control. For a moment, they may experience perceived paralysis as their limbs completely stop. Avoiding Systems Damage is priority one for any APU, but luckily, few weapons deal a considerable amount of it.

A Note About Damage

APUs are resilient machines. Above all else, they are designed to protect the pilot, even at the cost of every single other part of the machine. As such, while attrition rates of APUs are high, the pilots very often survive to fight another day. While death is certainly not uncommon (especially with airstrikes or artillery charges), an APU pilot facing another APU will generally not die unless the enemy pilot deliberately chooses to kill them. They may be injured, even gravely so, but life support within the mech and the pilot's suit will deliver painkillers, defibrators, pressure to stop bleeding, and anything else required to keep the pilot alive until evac can be received.

The rules of engagement for mechanized warfare are such that pilots are not to chase after a retreating enemy, unless they performed an atrocious and unforgivable act (using weapons of mass destruction, putting civilians in danger, etcetera). Mages who constantly kill their retreating enemies or cause huge amounts of collateral damage are only hired by only the most desperate or unscrupulous of commanders. Death is a part of war, but there are few who wish to deal more death than necessary.

Magus Against Magus

Duels between Mages are the stories told of in the barracks, in the movies, battles of incredible force and intensity, of ideology and knowledge as much as steel and plasma. Mages will speak to their opponents, taunt them, try to find out why they fight, who hired them. As their machines battle, they battle with words, knowing that the true fight is one of philosophy.

Mages often engage in close combat against one another, finding blades crossing. Often a Magus battle is a go-between, constantly boosting back and forth to alternate between shots and slashes, the ground showing the trails of their flight path. They can be over in a flash or long, drawn-out affairs. So often, a Magus is hired to 'hold the line' against another Magus.

Mages have their own code of honor. They will fight one another individually when they can, leaving the rest of the battle to the soldiers. They will not kill a defenseless rival. Often they will fight on the same side of the battlefield only to see themselves as opponents the next time they meet. If a Magus invites their opponent to settle the battle in close combat, rarely does the opponent refuse.

Of course, every rule can be and has been broken, but rare is the Magus truly devoid of honor. Even a duplicitous opponent won't kill their enemy if they don't have to. And trickery and deceit are time-honored tactics, the best of Mages — including the Blue Magus herself — making it their calling card.

It's important to be conservative in these duels. Like the player characters, NPC Mages will have Magus Points. Their ability to take damage and to dish it out is much greater than those of cannon fodder opponents, naturally, but at the same time, customized Magus machines often have weaknesses, glaring or subtle, that can be exploited. Always remember to know your enemies, and should you face them more than once, use your prior knowledge.

They had nearly dozens of 'official' names, but most, both in Neucom and out, called them the Architects. Their facilities lay under the ocean, in the subsurface structure of the hulking, aging Megafloat, and within they tirelessly developed tools for new generations of mechanized warfare.

The Architects' skunk works contained most of Neucom's military secrets; only their rival development team, the Cabal, was comparable. Most Neucom employees would never see the proving grounds, let alone an outside mercenary, but one Architect had a favor to repay.

That man, aged, but sharp, brilliant, stood next to the young man the world knew as Vulcan Venture. The Architect had not asked his name; it was a rule that had developed quickly among Mages. It was as much a matter of practicality as tradition. Mages who used their real names in battle quickly found themselves the targets of assassins. Civilians who asked for their names had a tendency of getting into accidents.

"The next generation of APUs are being developed here. Oncari believes the design is mature, that minor updates to old series will do. The Cabal believes the APU will soon be a forgotten relic. That is a traditional view, both are. This is the beginning of an era of Mages. We need the next generation of APUs, both to fight Mages...and arm them." This was the Architect's view, one that Venture agreed with. Oncari didn't want to introduce new models to replace the old, as the surplus of old ended up in the hands of opposing forces, but it happened either way. Even good men needed sharper blades. "So the job's a test flight, then? You don't need a Magus for that."

"It isn't quite that, no," the Architect said. A -clunk!- sound accompanied a jolt to their spines as the elevator stopped, in front of the transparent underwater tunnel to the proving ground's hangar. As they walked, Venture looked out at the tropical fish darting around submersibles, the glow of distant running lights, white-grey upside-down buildings hanging down from the artificial surface layer. "Three years ago, you saved my daughter's life, Vulcan Venture," the Architect said as the reinforced door opened. "It is now time for me to return the favor."

A single machine stood, dormant, pristine. Its armor gleamed in pure polycarbonate white, mixed with the dark grey of exposed machinery. It held two rifles, a standard one in the left hand and a new type model in the right, and under a port on the left forearm was the unmistakable focusing element of the MOONLIGHT high output projector, the Architects' most famous achievement. It was a heavyweight model, but bore no resemblance to the Zero-Three; the design was curved, organic, unmistakably Neucom and completely unlike Oncari's militaristic, utilitarian look. But Vulcan Venture's eyes went wide when he saw what was on the machine's back — twin ducted fans,

VTOL lifters, the trademark of his custom APU. Even before the Architect spoke, Venture knew that it was meant for him. "This is the flight type APU, Neucom's Vo1", the Architect said. "She belongs to you now."

"She's beautiful." It was all he could say, but Venture meant it. His hand brushed the machine's ceramic, its rifles, all of it an evolution of his current machine. It was more than he deserved. Everything about 'her' seemed perfect, seemed right, a monument to his style, his methods, and Neucom's philosophy.

"Of course, this is not just all for you," the Architect continued. "We are a business, after all, and this is an opportunity. By analyzing your battle data, we believe your fighting style can be mimicked by ordinary pilots, without compromising their battle potential. With most Mages, if an ordinary pilot imitated their style, their battle potential would be severely reduced at best, even in an identical machine. The Vo1 uses new technology to increase the capability of your unique piloting method — and make imitating it easier."

Venture closed his eyes and nodded, as he could not refuse the man who built this for him. He already understood what he had to do. "Then it's settled. I'll train a team of angels for you and show the ESAF what a VTOL mech can do." And he looks up, at the machine's head, the inactive sensors, and smiles. He can't wait to see what she can do...

"It's the least I can do, since you built her for me."

APU Construction

This is it, true believers — time to build your very own Armored Personnel Unit. Construction is a fairly simple matter, at least for the player — just pick and choose parts, and so long as there aren't any weight problems, add all the stats together. So just sit back, relax, and start dreaming of mechanized fury. You'll have your robot before you know it.

Parts And Slots

There are six main categories of parts for the frame, known as **Motive Parts**. They are the Head, the Torso, the Arms, and the Legs. Each of these parts has their own unique statistic to add to the unit, and may be mixed and matched in any combination.

Then, you choose the two **Internal Parts**, the Reactor and the Engine. Again, any combination may be chosen. Certain specialist equipment takes up these slots, however.

Once the Motive and Internal Parts are chosen, you may choose **Offensive Parts** — that is to say, weapons and auxiliary equipment. You have nine slots on which to equip Offensive Parts — four Hands, two Forearms, two Back Mounts, and one Missile Mount.

Hand weapons may be either handheld or stored on the hip armor — this enables backup weapons to be stored, but only **two Hand weapons may be active at a time**. Forearm weapons are self-explanatory. The Back Mounts are two hardpoints on the back of the unit that allow for external equipment. The Missile Mount is a series of hardpoints along the unit that allow for missiles and rockets to be attached.

Weapons and Weight Class

There are a wide variety of weapons to choose from, each of them with their own advantages and disadvantages. Many of them have limitations on which slots they can be equipped on. Each weapon type represents a diverse category of weapons (though it may be more or less diverse, depending), and the exact nature of the weapon is up to the player. Feel free to describe fully your weapons particular quirks.

A weight class represents overall firing rate and calibre characteristics rather than just weight alone. A heavier version of a weapon in a certain weight class is represented by additions, ie, 'Light+Light' for a Light weapon with a weight of 2. They obviously weigh more, but have advantages in terms of damage, and should be seriously explored. Remember that though they may seem far more powerful than typical APU weapons, your typical APU is built with concern for deployment cost as well as power.

Magus Points

Magus Points are the elite tweaks to your machine, above and beyond the chosen parts. Spending Magus Points represents the amount of money and tailoring that goes into your machine.

Magus Points cost \$30,000 each. Depending on what your GM decides, you may start with a fixed amount of Magus Points, or you may start with nothing but a cash budget. **Magus Points may be reassigned, but they may never be sold.** Be careful when spending your hard-earned money!

For 1 MP, you may do any of the following:

- » Increase your Armor by 10% of its initial value.
- » Increase your Laminate by 20% of its initial value.
- » Increase your Initiative Bonus, Evasion Bonus, Energy Supply, Stun Threshold, Radar Strength, Reaction Speed, Melee Attack, or Melee Defense by +1.
- » Increase your damage by 1 for every damage die on a single weapon. (i.e., 6d6 becomes 6d6+6.) **This costs 1 more MP for each additional use on an individual weapon** — 1 MP for +1, 2 more MP to get to +2, 3 more MP to get to +3, etc. Other weapons are unaffected. Identical Missile weapons are treated as the 'same' weapon when being increased (i.e., all launchers with Light 6d6 missiles get the increase).
- » Increase your Missile Launch Limit by 1. Just like above, **this costs 1 more MP for each additional increase.**
- » Add 1 extra ammunition to any weapon with limited ammunition.

Magus Manouvers

The capability to turn the tide of battle is dependent on more than just simple mechanical superiority. Magus Manouvers are special abilities that allow the Magus using them to take decisive action a limited number of times during battle. The cause of it could be anything – simple luck, precision-trained skill, a burning heart of justice, or even additional equipment that ‘only works once’.

These abilities defy explanation, at least to the shell-shocked enemy pilots encountering them. So, too, do they defy the game mechanics. Magus Manouvers are exclusive to the PCs and NPC Mages – and even then, the NPCs should use them very sparingly, as the players are the star of the show...or maybe just to give them a surprise when they unleash their final decisive blow.

Magus Manouvers are bought with Skill Points. **Skill Points and Magus Points are not interchangeable.** Each individual ability costs 1 SP, and comes free with one use per battle. One additional use for that ability may be bought with an additional 1 SP. Afterward, add 1 SP for each use you wish to purchase – 2 for the third use, 3 for the fourth use, etcetera. You may, however, buy as many abilities as you like.

The first sort of Manouver is the **Defensive** type. **These Manouvers may be used at any time after being attacked by an enemy, even after damage has already been determined** – the ‘last line of defense’.

- » **SPLIT-SECOND DODGE** – Double your Evasion bonus if Evading a ranged attack, or your Melee Defense Bonus (if Defending against a melee attack). The original roll is unaffected (i.e., a result of 5+10 becomes a result of 5+20), and the damage is recalculated from the new result. *This ability can also be used to negate I Never Miss at any time; the enemy makes an attack roll and the attack is resolved as though no Manouvers were used (you don’t get the Evasion increase).*
- » **INVINCIBLE** – Halve any and all damage dealt to you by a single enemy attack action. *This ability may be used to negate One-Shot Kill at any time.*
- » **BREAKTHRU** – If you are about to be Stunned, you are not stunned. If you are about to suffer a Full Stun, you become Stunned instead.

The second type is the **Offensive** type. These Manouvers modify attack-type actions. **Only one of these Manouvers may be used per attack action, and must be declared before rolling, unless otherwise noted.**

- » **ONE-SHOT KILL** – Deal maximum damage for this action. All damage rolls you make are considered 6. If you gain a Torso critical, all additional dice are still considered 6s. If you gain any other part damage critical, you destroy that part immediately instead of doing partial damage. *This ability may be used to counter Invincible, negating the half-damage effect.*
- » **I NEVER MISS** – All ranged attacks you make this action automatically hit, dealing their Base Damage. You may not use this attack with Missiles or MIRVs. You do not roll attack (and do not gain the chance to gain criticals). If the enemy autoevades, you roll attack normally and negate the autoevade. *This ability may be used to counter Split-Second Dodge, negating their Evasion increase.*
- » **STRIKE AND FADE** – You may perform a melee attack against a target without losing Initiative. The target must still be otherwise valid. The enemy may not retaliate on its turn, but may still Counterattack. *This ability may be used to counter No Defense, allowing you to defend.*
- » **NO OPENING** – You may perform a melee attack that cannot be Countered. The enemy may still Defend if it is able, and may still retaliate on its own turn. *This ability may be used to counter Opening Move, denying the opening ranged attack.*
- » **NO DEFENSE** – You may perform a melee attack that cannot be Defended. The enemy may still Counter if it is able, and may still retaliate on its own turn. *This ability may be used to counter Strike and Fade, forcing the target to lose Initiative and allowing a retaliation.*
- » **OPENING MOVE** – You may make a ranged attack before you make a melee attack against the same enemy. (The enemy must still be a valid melee target.) Both attacks are resolved normally. *This ability may counter No Opening, allowing you to counter the attack made.*
- » **ALL-OUT ATTACK** – You may attack with all of your ranged weapons this action. Each weapon may target a different enemy without penalty, including Missiles. Each attack is made with full bonus, even two Hand, Forearm, or non-identical Back weapons. Stored Hand weapons may also be used in the same round. Two Back weapons, including double weapons, may target individual enemies. *This ability may be used on the same action as Burst Fire.*

- » **BURST FIRE** – You may fire multiple rounds of MIRV or grenade ammunition this action from any launcher, up to your Missile Launch Limit. *This ability may be used on the same round as All-Out Attack.*
- » **CALLED SHOT** – You may get a critical on either a straight or a sequence, and may get a critical even if you would ordinarily only autohit. You choose the critical result. *This ability may also be used if you get a normal critical to choose the result instead of rolling on the critical table. (In this case, the ability can be used at the time you get the critical, rather than before you attack.)*

The final type is the **Special type**. These abilities have their own specialties, and are either more situational or more general than other types. The time of use is indicated below.

- » **THE BEAST** – Declare after taking partial parts damage. This ability, when used, negates the effects of that damage for the rest of the battle. (The part is still damaged, and may still be destroyed if another critical is scored.) Damage to other parts is treated normally (unless this ability is used again.) For the rest of the battle, any melee attack rolls you make against the enemy that caused the damage may be rolled twice, taking either result.
- » **PRESS THE ADVANTAGE** – Declare before the Initiative building phase ends. Double your Initiative growth for this round. May only be used once per turn. *If the enemy uses Advantage Denied, using this ability lets you use your normal Initiative Growth value. Using this ability twice lets your entire party gain Initiative and restores the normal doubling effect for you.*
- » **ADVANTAGE DENIED** – Declare before the Initiative building phase ends. No enemy machines may gain Initiative this turn.
- » **FIRST STRIKE** – You hit first with your melee attack or counterattack, even if the roll is lower than that of the enemy. The rolls are still made normally to determine critical hit or miss. If counterattacking, you may declare after the enemy's roll, but before your own.
- » **TRIUMPH OF DETERMINISM** – Negate any automatic success or failure. Resolve the roll normally. This ability may be used at any time, to negate either an enemy's roll or your own.

- » **ONE OF MY MANY SKILLS** – Whenever you make a 3d6 roll, you may roll one additional die. Take away any die you wish after rolling, and calculate the result from the dice that remain. You may only use this ability before you roll.

Pilot Traits

Pilot Traits are your pilot's specific style. While Magus Points represent piloting skill with your custom machine, Pilot Traits are more general, a representation of your general training and instincts. While Pilot Traits are minor in game terms, their combination gives you a general overview of the way a pilot fights, or perhaps how he makes up for his machine's deficiencies with his own skill.

You choose **one Pilot Trait from each category below**. Each Pilot Trait gives you a minor game advantage.

The first type of Pilot Trait is the **Defensive Style**, which represents the way you defend from enemy attacks.

- » **TOUGH** – You take more of a beating before getting knocked down. Increase your Armor by 10% of its initial value.
- » **REFLECTIVE** – You're skilled in anti-energy weapon techniques, such as turning away from an attack to reduce its drain on your laminate. Increase your Laminate by 20% of its initial value.
- » **EVASIVE** – You like to avoid taking damage entirely, using fancy manouvers to avoid attack. Add +1 to your Evasion Bonus.
- » **QUICK** – You prefer to end battles before they begin. Add +1 to your Initiative Bonus.
- » **CLOSE** – In close combat, you're highly skilled at turning away blows. Add +1 to your Melee Defense.
- » **STUBBORN** – You're nearly impossible to stop once you get going. Add +1 to your Stun Threshold.
- » **CAREFUL** – You're more careful with the throttle than most pilots, giving you an edge in energy consumption. Add +1 EN.

The second type of Pilot Trait is the **Offensive Style**. This represents the type of weaponry you prefer using.

- » **ENERGY** – New types of weaponry are quite effective in your hands. Add +1 to ranged attack rolls using energy weapons.
- » **BALLISTIC** – You prefer tried and true Newtonian physics to deal damage with. Add +1 to ranged attacks using Ballistic or Linear weapons.
- » **EXPLOSIVE** – High explosives are something you're quite familiar with. Add +1 to ranged attacks using Missile, Grenade, or MIRV weapons.
- » **TWO-WEAPON** – Give a man one gun, he's Superman. Give a man two, he's God. Add +1 to all attacks using two weapons (ranged OR melee).
- » **MELEE** – You like getting in close to take your foes out. Add +1 to your Melee Attack.

The third type of Pilot Trait is the **Piloting Style**, which is essentially whether you prefer to rely on raw statistical advantage, or using Manouvers to turn the tide.

- » **SYNCHRONIZED** – You are one with your machine, able to eke out the best performance from it. Add 1 Magus Point to your total.
- » **SKILLFUL** – You have a whole library of special tricks, moves, and distractions to use to your advantage in battle. Add 1 Skill Point to your total.

The last type of Pilot Trait is the **Specialization**, representing what types of machines you are most skilled at fighting against.

- » **GUERRILLA** – You are particularly skilled at taking out self-built machines. Add 1d6 damage, or 2d6 when using an energy weapon, to any successful hit against guerrilla-type machines.
- » **MILITARY** – You know the best strategies to take out enemy armor and aircraft. Add 1d6 damage, or 2d6 when using an energy weapon, to any successful hit against military machines other than APUs.
- » **APU** – You're at your best when fighting other mechs. Add 1d6 damage, or 2d6 when using an energy weapon, to any successful hit against non-Magus APUs.
- » **MAGUS** – Against other Mages, your skills show through. Add 1d6 damage, or 2d6 when using an energy weapon, to any successful hit against another Magus.

Legend Dice

Legend Dice represent those moments of extreme luck and skill that form a true legend. Legend Dice are those single events that change the life of a Magus, forging him from a young upstart into a true warrior. Legend Dice are rewarded **once per battle**, an additional Legend Dice may be gained for **exceptional roleplay, or otherwise working toward a character's goals**. A Magus with exceptional battle banter, impeccable strategy, and great luck should be rewarded for this with Legend Dice. **Only two Legend Dice should be given out per session.**

All player characters start with one Legend Die. The use of Legend Dice is simple – one Legend Die may be added to any 3d6 roll made. When all four dice are rolled, the player may remove one of the dice and calculate the result from what remains. Unlike One Of My Many Skills, Legend Dice **may be used after the initial roll.**

Only one Legend Die is given at character creation, and only five Legend Dice may be 'stored' at any one time – additional dice are wasted. And Legend Dice are exclusive to player characters. No matter their skill, **NPCs can never gain Legend Dice or use them in any way.**

Weight Points

Weight Points represent your machine's ability to carry equipment. Every Motive Part except the Head provides WP. As long as you have enough WP to equip a part, you may equip it with no ill effects, as long as you have free slots. Motive Parts add WP, while Internal and Offensive Parts decrease it.

If you're using more WP than you have available, your APU is overloaded. You must spend 1 MP for each WP that you're overweight. If you cannot do so, then your design is too imbalanced to enter combat, and any attempt to do so will lead to it being unable to move or fire weapons.

Cosmetic Modifications

Cosmetic modifications cost nothing. Assuming that they aren't major (making the heavysset Magus look like a featherweight, for instance), appearances can be changed in any way the pilot likes — especially the head.

And Finally, The Parts

What follows is a listing of each part available to you. Statistics are described when they are not self-explanatory, and special limitations are noted when they come. Choose carefully! Remember to keep in mind how you want to fight as you choose how to build.

A brief note about model numbers – the **'APU-XX' model parts are Oncari-designed** (though manufactured under licence, save for the APU/T-01). **The 'NKS' and 'NKD' parts are made exclusively by Neucom, the Vo1 series being the Vulcan Venture parts.** Neucom also makes special model reactors and engines under their own designations. NKS stands for 'Neucom Kidou Senshi', translating roughly to **'Mobile Warrior'** or **'Mobile Soldier'**, while NKD stands for **'Neucom Kidou Dokata'**, or **'Mobile Worker'**, Japanese idioms for the APU and GPWS respectively.

The Neucom Vo1 parts are not widely available. They require special connection to Neucom, exceptional Magus work for them, or must be stolen. Keep this in mind when constructing units. **Other Neucom parts may be used freely.**

Torso

The heart of the APU, this will determine most of your defensive properties, and also the quality of the main targeting computer. This has special weight limitations, described along with the Legs, where the effect takes place.

Stun Threshold – Your APU's overall resilience to electrical damage. Both values, on Head and Torso, are added together. Any damage surpassing your Stun Threshold causes a Stun condition. **Your Full Stun Threshold is three times your Stun Threshold.**

Aiming Accuracy — Your main fire control computer coordinates all targeting systems and derives the chance to hit from there. The efficiency of this computer relies heavily on the strength of auxiliary equipment, as well as the amount of insulation it can be given. This determines the base attack bonus for all your ranged weaponry (but NOT melee).

Cost – How much the part costs in Union Dollars. Relevant for game types in which you are given money. If you are not playing in this type of game, ignore this section. Parts may be bought and sold at will, and are sold for the same price that they are purchased for. It is assumed you are always able to find a buyer for your spare parts, or otherwise are able to dispose of them for profit.

Head

Most of your APU's personality, and its effectiveness with back weapons, comes from here. It also determines your rate of system recovery. It uses a small amount of WP.

Full Stun Threshold Bonus — Auxiliary systems, discharge capacitors, and other such features decrease the burden on systems recovering from electrical damage. This bonus is added to your Full Stun Threshold after it's determined from your Stun Threshold.

Radar Strength — The strength of your APU's radar sensors. This is added to your attack bonus for Back weapons and Missile Mount weapons.

Missile Launch Limit – The number of missiles per launcher this APU can launch at once. This is related to the shape, quality, and latency of the visual sensors and certain radar qualities. Note that this is per launcher – an APU can increase the number of missiles it can launch per attack by adding more launchers to its frame (ie, two Light missile launchers with the APU-02[H] could launch 6 missiles at once). This also affects the use of Burst Fire.

Torso

Name	Weight Class	Armor Points	Laminate Points	Stun Threshold	Aiming Accuracy	Weight Supplied	Cost
APU-01[T]	Medium	40 AP	40 LP	16 ST	+3	6 WVP	\$50,000
Front-loading torso unit with good auxiliary equipment.							
APU-02[T]	Light	30 AP	60 LP	8 ST	+2	3 WVP	\$10,000
Torso designed for a high volume of laminate coating. Poor equipment, but lightweight.							
APU-03[T]	Heavy	60 AP	30 LP	24 ST	+4	9 WVP	\$62,500
Top-line torso unit with high performance FCS and insulation. Energy defense suffers.							
APU/T-01[T]	Medium	36 AP	36 LP	16 ST	+1	4 WVP	\$15,000
Flight-type model. Equipment is sacrificed for thrust-vectoring braking jets.							
NKS/V01-T	Heavy	60 AP	40 LP	8 ST	+5	7 WVP	\$60,000
Prototype which uses new technology for better energy defense and target acquisition.							

Arms

These hold stuff, and determine a small proportion of your Weight Points. A decent amount of armor is determined here, as is your ability to aim and use melee weapons effectively.

Reaction Speed — The ability to maneuver your arm while holding a weapon. This is added to your attack bonus for Hand and Forearm weapons (except melee weapons).

Legs

Your ability to stand, and maneuver, relies on these. Perhaps most important, as if these are taken out, well, you aren't going anywhere. Provides a large amount of armor and a great deal of your locomotive properties, as well as most of your WP.

Legs have a special limitation. **If the weight class of your Legs is lower than the weight class of your Torso, then you lose 1 WP for each difference in step** — a Light pair of legs carrying a Heavy torso loses 2 WP, for instance. (The opposite is not true.)

Head

Name	Weight Class	Armor Points	Laminate Points	Stun Threshold	Full Stun T. Bonus	Radar Strength	Missile Launch Limit	Weight Used	Cost
APU-01[H]	Medium	10 AP	10 LP	4 ST	5 FST	+3	2	2 WP	\$10,000
Basic head model with average performance specs. Good for a variety of units.									
APU-02[H]	Light	7 AP	15 LP	2 ST	2 FST	+4	3	1 WP	\$50,000
Head unit with a wide-angle search radar. Poor defense and recovery.									
APU-03[H]	Heavy	15 AP	7 LP	6 ST	9 FST	+2	1	3 WP	\$37,500
Sacrifices radar performance for low-latency communication and system recovery.									
APU/T-01[H]	Medium	9 AP	9 LP	4 ST	5 FST	+5	2	2 WP	\$30,000
Head model with special roving monocular sensor and high quality tracking radar.									
NKS/V01-H	Heavy	15 AP	10 LP	2 ST	8 FST	+1	2	3 WP	\$20,000
New model early in development. Highest recovery and better laminate than APU-03[H].									

Arms

Name	Weight Class	Armor Points	Laminate Points	Reaction Speed	Melee Attack	Melee Defense	Weight Supplied	Cost
APU-01[A]	Medium	20 AP	20 LP	+3	+3	+3	4 WP	\$20,000
Arms with balanced close combat performance and capacity.								
APU-02[A]	Light	15 AP	30 LP	+4	+6	+1	2 WP	\$20,000
Offensive type arm model with high blade tracking and response time.								
APU-03[A]	Heavy	30 AP	15 LP	+2	+2	+3	6 WP	\$12,500
Slow response time, but defense and carrying capability second to none.								
APU/T-01[A]	Medium	18 AP	18 LP	+5	+3	+3	3 WP	\$15,000
Modified APU-01[A] that sacrifices load capacity for better target acquisition.								
NKS/V01-A	Heavy	30 AP	20 LP	+1	+3	+3	6 WP	\$20,000
Heavyweight arms with the close combat performance of a middleweight.								

Legs

Name	Weight Class	Armor Points	Laminate Points	Initiative Bonus	Evasion Bonus	Melee Attack	Melee Defense	Weight Supplied	Cost
APU-01[L]	Medium	30 AP	30 LP	+3	+3	+3	+3	10 WP	\$10,000
Perfectly average in every respect. Robust and popular.									
APU-02[L]	Light	23 AP	45 LP	+3	+6	+3	+2	5 WP	\$10,000
Leg units with top maneuverability. Very low weight capacity and balance.									
APU-03[L]	Heavy	45 AP	23 LP	+2	+1	+1	+6	15 WP	\$37,500
Heavyweight legs put all possible performance into defense and capacity.									
APU/T-01[L]	Medium	27 AP	27 LP	+6	+3	+3	+3	8 WP	\$45,000
Flight-type unit with transformation equipment. Engines are designed for maximum output.									
NKS/V01-L	Heavy	45 AP	30 LP	+3	+3	+3	+3	9 WP	\$100,000
Next generation heavy type improves offensive and mobility stats.									

Reactor

The fusion reactor provides plasma to the engines and weapons of your APU. Reactor design is a balance between stored plasma (Energy Supply) and plasma flow (Engine Output). As weight decreases, supply to the auxiliary equipment decreases and output to the engines increases.

Energy Supply — An APU's ability to supply plasma to auxiliary equipment. This number cannot be exceeded by an APU's total Energy Drain, but may be increased by special parts or Magus Points.

Engine Output — Multiply your Initiative Bonus by this number. This is your base Initiative Increase. Any surplus Energy Supply after assembly is added to this base number.

The NKD-B — A battery model, the NKD-B is not designed for combat use. Units using the NKD-B cannot Evade, gain Initiative, use energy weapons or any equipment that requires EN. Their Energy Supply will always be 0, even if they equip auxiliary equipment. The NKD-B should only be used with a VTOL Lifter, as seen in its description.

Example

Sigma Star has an Initiative Bonus of +16 and uses the APU/T-01 reactor. His base Initiative Increase is 3/4 of that, at +12. His APU-02[E] boosters use 3 EN out of the 6 supply. He equips no more energy weapons, nor does he have additional Energy Supply, and he ends up having a +15 Initiative Increase from the 12 base and the 3 surplus EN.

Engine

This is the boost assembly, primarily the back boosters, which makes up the primary method of locomotion for the APU. Each of them is tuned for specific performance, but efficiency can and does suffer in some cases.

Output Color — The color of the engine's boost output. This is modified by specific fuel mixes and properties of the exhaust plume, and serves as a recognition guide for APU spotters and Mages as to which type of engine is being used.

Reactor

Name	Weight Class	Energy Supply	Engine Output	Weight Used	Cost
APU-01[R]	Medium	9 EN	x1/2	2 WP	\$30,000
First-generation APU fusion reactor. Good energy supply for the weight.					
APU-02[R]	Light	7 EN	x2/3	1 WP	\$30,000
Reactor unit intended for mobile combat engagements.					
APU-03[R]	Heavy	11 EN	x1/3	3 WP	\$25,000
Designed expressly for equipping large amounts of energy weaponry.					
APU/T-01[R]	Light	5 EN	x3/4	1 WP	\$75,000
Specialized reactor. Almost all output is directed to engines.					
NKS-R/SOL	Heavy	12 EN	x1/4	3 WP	\$60,000
APU-03[R] competitor. Pushes the boundary on energy supply.					
NKS-R/BRAUN	Heavy	15 EN	None	3 WP	\$60,000
New type reactor. All output is utilized to power auxiliary equipment.					
NKD-B	Light	None	None	0 WP	\$0
Battery unit for worksuit models. Not designed for combat use.					

Engine

Name	Type	Weight Class	Initiative Bonus	Evasion Bonus	Energy Drain	Output Color	Weight Used	Cost
APU-01[E]	Engine	Medium	+3	+3	2 EN	Orange	2 WP	\$30,000
Famed first miniaturized combat-type fusion engine block. Still a good performer.								
APU-02[E]	Engine	Light	+6	+3	3 EN	Blue/White	1 WP	\$30,000
Extremely high drain, but low equip weight and best peak output.								
APU-03[E]	Engine	Heavy	+1	+2	1 EN	Red	3 WP	\$12,500
Engine designed for high efficiency and the carrying of large loads.								
APU/T-01[E]	Engine	Light	+3	+6	3 EN	Green/White	1 WP	\$45,000
Tweaked version of the APU-02[E]. Peak output is lowered for better evasive capability.								
NKS-E/FLARE	Engine	Medium	+2	+1	1 EN	Blue	2 WP	\$40,000
Reduced weight version of the APU-03[E]. Modified for quick turns and course changes.								
NKS-E/SATURN	Engine	Heavy	+6	+6	4 EN	White	3 WP	\$40,000
Cutting-edge prototype. Heavy and inefficient, but incredible power in all respects.								

Ranged Weaponry

Without weapons, an APU is little more than an armored worksuit. A wide variety of weaponry is available for use; not all of it is in wide deployment with the Union military, and some of it is experimental, but in terms of game rules, the players are assumed to have access to anything on this list regardless of its cost. Remember, however, that unusual weaponry has its own complications — the Union uses normal guns for a reason. Each weapon lists which slots it can be equipped on in its description.

Weapon stats are important to keep in mind, as they're not all self-explanatory. A list of them is found below.

- » **Base Damage** – The amount of damage dealt when the difference between Attack and Defense is 0.
- » **Damage Step** – The amount of damage added or removed when the difference between Attack and Defense is not 0.
- » **Damage Range** – The range of minimum and maximum possible damage that the weapon can deal. The positive range is used when Attack is greater than defense, and the negative range is used when Attack is lower than Defense.
- » **Additional Damage** – Many weapons deal damage to multiple defenses at once. This is expressed as x1, x1/2, x1/4. For the multipliers, the total damage of each hit is taken into account and then multiplied into the additional damage.
- » **Energy Drain** – This weapon requires Energy Supply to operate. You may only equip this weapon if you have enough Energy Supply remaining.
- » **Ammunition** – The number of attack weapons one can make with a weapon before it must be restocked (which, under normal circumstances, cannot be done mid-combat). Most weapons are assumed to have enough ammunition to make it unnecessary to define in game terms, but some weapons have more significant limitations.

Remembering the rules under Combat for damage and two-weapon fighting is recommended while choosing weapons.

Ballistic Weaponry

Tried and true gunpowder weaponry of all types, the simple and easy-to-use weapons with no muss and no fuss. The use of caseless ammunition and helical magazines allows for high ammunition capacity in small spaces without undue waste, and the electrical priming system allows for reliable operation in all environments. While these types of weapons have become somewhat limited in the modern age, physics ensures that they will never become truly obsolete.

Light ballistic weapons can represent a machinegun, a shotgun, a slug gun, or perhaps a pistol of sorts. Medium ballistic weapons generally represent the wide variety of service rifles and their variants, commonly employed for their versatility and reliability. Heavy ballistic weapons represent sniper rifles or anti-tank rifles, or perhaps artillery or other cannons (though this crosses over with Grenade weapons).

Ballistic weapons may be equipped in the **Hand, Forearm, and Back slots**. Ballistic shots (or rather, their tracers) are generally yellow in color.

Ballistic Weaponry					
Weight Class	Base Damage (Armor)	Damage Step	Damage Range	Weight Used	Cost
Light	4d6	1d6	-3/+2	1 WP	\$10,000
Light+Light	5d6	1d6	-4/+4	2 WP	\$20,000
Light+Light+Light	7d6	1d6	-6/+5	3 WP	\$30,000
Medium	6d6	3d6	-1/+1	2 WP	\$15,000
Medium+Medium	9d6	3d6	-2/+1	3 WP	\$25,000
Heavy	12d6	6d6	-1/0	3 WP	\$20,000

Linear Weaponry

The term 'linear weapon' represents any variety of projectile weapon that is accelerated using electromagnetic energy, usually a railgun or coilgun. Personnel-scale linear weapons are unpopular among military pilots due to their incredible recoil and their perceived lower reliability compared to ordinary guns, but they're getting better all the time and have pinpoint accuracy at long range at any size. Any size category may represent any sort of weapon, from lightweight assault rifles to very heavy assault cannons, though almost all linear weapons fire very small calibre projectiles at very high speed — they're built explicitly for anti-armor and anti-APU combat. Their fire rate is lower than an equivalent-sized ballistic weapon in the same class, but their ballistic trajectory greatly improves accuracy.

Linear weapons may be equipped in the **Hand, Forearm, and Back slots**. Linear shots appear white in color.

Grenade Weaponry

The name is somewhat less than descriptive. This category represents not only grenade launchers and other high explosive artillery, but unguided rockets and other heavy weapons as well. Their power comes at the cost of greatly reduced ammunition stores. For this reason, these weapons are generally not used on mainline APUs, as they require more precise aim than a missile for about the same cost and weight.

These weapons may be equipped in the **Hand, Fore-arm, Back, and Missile slots**; the Missile slot represents unguided rockets mounted to the frame. Grenade cannon shots generally appear to be dull yellow much like normal ballistic weaponry.

Plasma Weaponry

High energy and high density gases encased in magnetic fields, plasma weapons made directed energy viable again. The intense heat that plasma weapons generate deals significant damage to laminate coating and can overwhelm it to deal damage to the armor beneath at the same time. Personnel-scale plasma weaponry is beginning to see wide deployment, but many pilots find it difficult to hit with it. Plasma weapons are almost always handheld in a rifle form factor, though cannons exist. This category could also represent artillery/guns that fire plasma-filled projectiles, or even some types of flamethrowers.

Plasma weapons can be equipped on the **Hand, Fore-arm, or Back slots**. Back plasma weapons are rare, however. Plasma shots appear as glowing, orange-hot spheroids.

Plasma Weaponry

Weight Class	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage	Energy Drain	Weight Used	Cost
Light	8d6	8d6	0/0	x1/2	1 EN	1 WP	\$20,000
Light+Light	12d6	12d6	0/0	x1/2	2 EN	2 WP	\$40,000
Light+Light+Light	16d6	16d6	0/0	x1/2	3 EN	3 WP	\$60,000
Medium	8d6	2d6	-3/+2	x1/2	1 EN	2 WP	\$30,000
Medium+Medium	9d6	3d6	-2/+2	x1/2	2 EN	3 WP	\$50,000
Heavy	9d6	1d6	-8/+7	x1/2	1 EN	3 WP	\$40,000

Grenade Weaponry

Weight Class	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Weight Used	Cost
Light	6d6	6d6	0/0	x1/2	3	1 WP	\$20,000
Light+Light	6d6	6d6	0/0	x1/2	6	2 WP	\$40,000
Light+Light+Light	6d6	6d6	0/0	x1/2	9	3 WP	\$60,000
Medium	12d6	12d6	0/0	x1/2	3	2 WP	\$30,000
Medium+Medium	12d6	12d6	0/0	x1/2	6	3 WP	\$50,000
Heavy	18d6	18d6	0/0	x1/2	3	3 WP	\$40,000

Linear Weaponry

Weight Class	Base Damage (Armor)	Damage Step	Damage Range	Weight Used	Cost
Light	4d6	4d6	0/0	1 WP	\$10,000
Light+Light	8d6	4d6	-1/0	2 WP	\$20,000
Light+Light+Light	8d6	4d6	-1/+1	3 WP	\$30,000
Medium	6d6	6d6	0/0	2 WP	\$15,000
Medium+Medium	12d6	6d6	-1/0	3 WP	\$25,000
Heavy	12d6	12d6	0/0	3 WP	\$20,000

Ion Weaponry

Ion weapons utilize a similar principle to plasma weapons, but instead use electrical energy for damage purposes. Unlike unwieldy plasma weaponry, ion weapons have achieved widespread popularity among pilots for their ease of use and nonlethal properties. These weapons are very common among armored police forces, as they can bring down worksuit riots or fleeing lawbreakers without risking the death of vehicle occupants. Heavier military grade ion weapons are designed to deplete laminate. Again, much like plasma weapons, back-mounted versions of these weapons are rare.

Ion weapons may be equipped on the **Hand, Fore-arm, or Back slots**. Ion shots appear circular, having a bright blue glow with a white core.

Arc Weaponry

Arc weapons have been in use since the Lunar Independence War, and have endured in popularity. Their expense keeps them from being widely deployed, but pilots find them to be eminently useful against all types of foes. Firing two projectiles and a plasma primer that creates an arc between them (thus the name), arc weapons devastate laminate and systems. A high quality arc rifle was the choice weapon of the Blue Magus, and thus, in her image, countless Mages utilize arc weaponry as well.

Arc weaponry may be equipped on the **Hand, Fore-arm, and Back slots**. Back arc weaponry is rare. The shot appears as a 'beam' of light, the color and glow much like natural lightning.

Electrolaser Weaponry

Laser weaponry was once a mainstay of large emplacements for both defensive and offensive purposes. Laminate coating killed the usefulness of most military lasers in the offensive role (though defensively, they remain prominent), but electrolasers remained. While an obsolete technology, electrolasers are still in use in some situations. They create a plasma bloom channel and transmit electricity down this channel. While the laser itself is lightspeed (and thus cannot be dodged), electrolasers require contact for several seconds to fire — which is highly impractical in APU combat. *(As stated in Combat, firing these weapons requires an Initiative score higher than the target.)* They can, however, destroy VTs and tanks very quickly if they aren't properly insulated or defended. Electrolasers are the ancestors of arc weaponry, working on a similar principle.

Electrolasers can only be equipped on **Back slots**, as they require a direct connection to the reactor and electrical systems. The shot and the bloom it creates may be any one of many colors, but a green laser and bloom shot is the tradition.

Ion Weaponry							
Weight Class	Base Damage (Systems)	Damage Step	Damage Range	Laminate Damage	Energy Drain	Weight Used	Cost
Light	3d6	3d6	0/0	N/A	2 EN	1 WP	\$30,000
Light+Light	6d6	3d6	-1/0	N/A	4 EN	2 WP	\$60,000
Light+Light+Light	6d6	3d6	-1/+1	N/A	6 EN	3 WP	\$90,000
Medium	3d6	3d6	0/0	x1	2 EN	2 WP	\$45,000
Medium+Medium	6d6	3d6	-1/0	x1	4 EN	3 WP	\$75,000

Arc Weaponry							
Weight Class	Base Damage (Laminate)	Damage Step	Damage Range	Systems Damage	Energy Drain	Weight Used	Cost
Light	6d6	6d6	0/0	x1/4	3 EN	1 WP	\$15,000
Light+Light	12d6	6d6	-1/0	x1/4	6 EN	2 WP	\$30,000
Light+Light+Light	12d6	6d6	-1/+1	x1/4	9 EN	3 WP	\$45,000
Medium	12d6	12d6	0/0	x1/4	3 EN	2 WP	\$22,500
Medium+Medium	24d6	12d6	-1/0	x1/4	6 EN	3 WP	\$37,500
Heavy	18d6	18d6	0/0	x1/4	3 EN	3 WP	\$30,000

Electrolaser Weaponry								
Weight Class	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage	Systems Damage	Energy Drain	Weight Used	Cost
Heavy	18d6	18d6	0/0	x1/2	x1/2	3 EN	3 WP	\$50,000

Missile Weaponry

Ever since their creation, guided missiles have ruled warfare. APUs can carry a large number of them. Modern IWACS countermeasures, combat mobility, and (on larger vehicles and structures) anti-missile laser defenses have made them less useful than they once were, but no one can deny that they still have a great influence on warfare. As described in Combat, one may fire missiles up to their Launch Limit from two launchers at a time, and each launcher may target an individual enemy, but they must keep mindful of the Initiative rules. (For this reason, Attack Dice are not listed.)

Missile warheads and tracking systems generally vary by target. Smaller missiles use thrust-vectoring propulsion and explosive warheads, while heavier missiles may rely more on a large target and use heavier explosives, or even microfusion warheads. Some very exotic missiles may use antimatter, but these are generally only used in space combat between huge capital ships, as even tiny amounts of antimatter cost more than an entire Magus custom APU. (Fission weaponry is not used, due to the limited yield compared to fusion-type weapons — and the fallout they can cause.)

Missiles leave smoke trails in their wake, and will dance toward their target until they hit something. Firing in enclosed spaces or near civilians is not advised, particularly if a large number of missiles are used. They may be equipped on **Hand, Forearm, Back, and Missile slots**. (Handheld and forearm launchers are very rare, but do exist, particularly on some 'missile boat' units.)

MIRV Weaponry

Multiple missiles, these are well-renowned for their tracking and destructive capability. In terms of popularity, pilots love them but the military brass tends to consider them sloppy and too expensive. As described in Combat, each MIRV shot can hit multiple targets, but they suffer from the same Initiative properties as missiles do. They may only be mounted on the **Back slots** — MIRVs are too large to be mounted on external hard-points or in hand launchers.

Missile Weaponry

Weight Class	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Weight Used	Cost
Light	6d6	6d6	0/0	x1/2	3	1 WVP	\$30,000
Light+Light	6d6	6d6	0/0	x1/2	6	2 WVP	\$60,000
Light+Light+Light	6d6	6d6	0/0	x1/2	9	3 WVP	\$90,000
Medium	12d6	12d6	0/0	x1/2	3	2 WVP	\$45,000
Medium+Medium	12d6	12d6	0/0	x1/2	6	3 WVP	\$75,000
Heavy	18d6	18d6	0/0	x1/2	3	3 WVP	\$60,000

MIRV Weaponry

Weight Class	Number of Attacks (Per Single Unit of Ammunition)	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Weight Used	Cost
Light	2	3d6	3d6	0/0	x1/2	3	1 WVP	\$50,000
Light+Light	2	3d6	3d6	0/0	x1/2	6	2 WVP	\$100,000
Light+Light+Light	2	3d6	3d6	0/0	x1/2	9	3 WVP	\$150,000
Medium	4	3d6	3d6	0/0	x1/2	3	2 WVP	\$75,000
Medium+Medium	4	3d6	3d6	0/0	x1/2	6	3 WVP	\$125,000
Heavy	6	3d6	3d6	0/0	x1/2	3	3 WVP	\$100,000

Melee Weaponry

Close combat weapons are an important aspect of any APU, particularly as your defenses are limited without them. The wide variety available allows you to gain a quick combat boost, or design your entire strategy around the weapon. Most weapons have only one set of statistics.

By tradition, melee weapons are mounted on the left forearm, and with only one exception, they can only be mounted on **Forearm slots**. Not all melee weapons can perform all kinds of defense actions — be mindful of this when choosing a weapon!

Melee weapons have two types of damage ranges. **Defend Damage** is used when you are attacking an opponent who is defending, while **Counterattack Damage** is used when you are counterattacking or being counterattacked.

Plasma Projector

Most projection blades use plasma to deal damage. Glowing the same orange as ordinary plasma weapons, they create a magnetic field to store the gas that is capable of deflecting other melee blows. While rather unpopular with pilots compared to other melee weapons, they still have great output and no major limitations save for energy drain. They may only be equipped on the **Forearm slot**.

Plasma Projector

Weight Class	Medium
Damage Step (Laminate)	4d6
Defend Base Damage	0
Defend Damage Range	0/+6
Counter Base Damage	16d6
Counter Damage Range	-3/+2
Armor Damage	x1/2
Energy Drain	2 EN
Defense Actions	Defend, Counterattack
Weight Used	2 WP
Cost	\$20,000

High Frequency Blade

Metal blades which resonate at a very high frequency, specifically designed to damage ceramic armor and sharpened to cut straight through artificial muscle. Though raw damage is lower than most other melee weapons, they are the preferred weapons of many skilled melee combatants as they deal damage directly to armor and do not drain any energy, while maintaining a very light weight. They must be mounted on a **Forearm slot**, as the resonance they create precludes handheld versions for the time being.

High Frequency Blade

Weight Class	Light
Damage Step (Armor)	2d6
Defend Base Damage	0
Defend Damage Range	0/+6
Counter Base Damage	8d6
Counter Damage Range	-3/+2
Defense Actions	Defend, Counterattack
Weight Used	1 WP
Cost	\$10,000

Superheated Blade

While considered largely obsolete, a technology that became viable almost as soon as appropriate high frequency blades became available, superheated blades still enjoy a great deal of popularity among close combat pilots for their no-nonsense damage output. Nevertheless, they are heavy, and cannot simply be added on a whim. Unlike all other melee weapons, these can be made to be **Hand mounted**, though most are still **Forearm mounted**.

Superheated Blade

Weight Class	Heavy
Damage Step (Armor)	2d6
Defend Base Damage	0
Defend Damage Range	0/+8
Counter Base Damage	10d6
Counter Damage Range	-4/+3
Defense Actions	Defend, Counterattack
Weight Used	3 WP
Cost	\$20,000

High Output Projector

These very exotic sorts of projectors use a direct link with the reactor and have extremely high-tuned output to deal damage to all aspects of an enemy. They glow in a bright cyan/sky blue-ish color with a white core, constantly seeming to resonate with a hidden power. Any APU that equips one of these means business, and a single hit can end a battle — but its energy consumption is as high as its damage. They can be equipped on the **Forearm**.

High Output Projector	
Weight Class	Heavy
Damage Step (Laminate)	4d6
Defend Base Damage	0
Defend Damage Range	0/+6
Counter Base Damage	16d6
Counter Damage Range	-3/+2
Armor Damage	x1
Systems Damage	x1/2
Energy Drain	6 EN
Defense Actions	Defend, Counterattack
Weight Used	3 WP
Cost	\$100,000

Casting Rod

The famous weapon of the Magus APU, these weapons are unique reactor-connected energy weapons with a distinctive red glow to them. The rods emanate energy that deals damage in much the same manner as a plasma projector. They can also be used for a limited ranged attack. A 'Dual Casting Rod' was the melee weapon of the Blue Magus, and eliminates the major disadvantage of the casting rod, the slow activation time.

Dual Casting Rods get two melee attacks per attack action. (Each attack roll gets full bonus and is resolved separately.) They can be equipped on the Forearm.

Casting Rod		
Weight Class	Medium	Medium+Medium
Number of Melee Attacks	1	2
Melee Damage Step (Laminate)	2d6	2d6
Melee Defend Base Damage	0	0
Melee Defend Damage Range	0/+9	0/+9
Melee Counter Base Damage	10d6	10d6
Melee Counter Damage Range	-4/+4	-4/+4
Melee Armor Damage	x1/2	x1/2
Defense Actions	Defend	Defend, Counterattack
Number of Ranged Attacks	1	1
Ranged Base Damage (Laminate)	6d6	12d6
Ranged Damage Step	3d6	6d6
Ranged Damage Range	-1/+1	-1/+1
Ranged Armor Damage	x1/2	x1/2
Energy Drain	2 EN	4 EN
Weight Used	2 WP	3 WP
Cost	\$30,000	\$60,000

Impact Hammer

The original APU melee weapon. This category also represents such things as pneumatic spikes or even special punching enhancements, but generally represents the venerable retrofitted tool. Impact hammers are surprisingly useful for breaking down ceramic armor, and can attack multiple times in succession. Though blades are much simpler to use, those who use the impact hammer swear by it. The major weakness is that they cannot defend against attacks from blades, making them a purely offensive weapon.

Hammers get two attack and counterattack rolls. (Each attack roll gets full bonus and is resolved separately.) They can only be Forearm mounted.

Impact Hammer	
Weight Class	Medium
Number of Attacks	2
Damage Step (Armor)	2d6
Defend Base Damage	0
Defend Damage Range	0/+4
Counter Base Damage	6d6
Counter Damage Range	-2/+1
Defense Actions	Counterattack
Weight Used	2 WP
Cost	\$15,000

Arc Projector

Arc projectors are the product of early arc weapon research, and found their trial by fire during the Lunar Independence War. Extremely popular among daring pilots who love risking their lives and speeding about the battlefield, arc projectors create a lightning-colored straight blade only long enough for the single slash — making any kind of defense against modern blades impossible.

Arc projectors are very simple technology compared to their rifle counterparts, and drain very little energy. They are Forearm-exclusive weapons.

Arc Projector	
Weight Class	Light
Damage Step (Laminate)	4d6
Defend Base Damage	0
Defend Damage Range	0/+6
Counter Base Damage	16d6
Counter Damage Range	-3/+2
Systems Damage	x1/4
Energy Drain	1 EN
Defense Actions	Counterattack
Weight Used	1 WP
Cost	\$10,000

Auxiliary Equipment

Mass production APUs rarely use auxiliary equipment, save for the Magus' targeting module. However, such equipment, usually specifically made for the APU involved, can grant considerable advantages to those who choose it carefully. Almost all of this equipment is designed to be equipped on the back slots.

Add Booster

Additional boosters and equipment designed to increase mobility — propellant tanks, lifting wingpacks, or simply just extra boosters tied in with the main assembly. Maintenance crews hate them — they get very easily gunked up and tend to cause the APU involved to have structural problems — but for those speed demons out there, there's nothing finer.

Ordinary Add Boosters take up **both Back slots**, and increase both Initiative and Evasion.

Add Booster (Dual Back)

Weight Class	Initiative Bonus	Evasion Bonus	Weight Used	Cost
Light	+2	+2	2 WP	\$60,000
Medium	+3	+3	4 WP	\$120,000
Heavy	+5	+5	6 WP	\$180,000

In addition to the dual back Add Boosters, you may mount smaller auxiliary boosters on your **Missile slot**. These boosters increase either Evasion or Initiative — not both. Boosters which increase Evasion are canted in multiple directions for quick course changes, and are known as **vernier thrusters**. Boosters which increase Initiative are canted in the rear to increase peak output, and are known as **apogee motors**.

Add Booster (Missile)

Weight Class	Initiative Bonus OR Evasion Bonus	Weight Used	Cost
Light	+2	1 WP	\$30,000
Medium	+3	2 WP	\$60,000
Heavy	+5	3 WP	\$90,000

These boosters may be combined with the dual back Add Boosters without penalty. This type of equipment is more popular with maintenance crews, as they do not cause the same level of structural stress and are generally easier to clean.

Aiming Module

Aiming Modules are targeting packages with additional IWACS equipment, visual sensors, radar systems, and other components designed to increase an APU's accuracy. These modules are very common equipment, and most pilots appreciate the extra boost. Any APU with a targeting module should be watched closely, and taken out as soon as possible. An Aiming Module only takes up **one Back slot**, but only one may be equipped per machine, and only affects one of the accuracy stats.

Aiming Module

Weight Class	Reaction Speed OR Radar Strength	Weight Used	Cost
Light	+2	1 WP	\$30,000
Medium	+3	2 WP	\$60,000
Heavy	+5	3 WP	\$90,000

There is an additional type of Aiming Module — this one allows for better placement of Missiles and MIRVs. When this type of module is equipped, the enemy does not gain a bonus to his Evasion roll for high Initiative when they are attacked. (You still don't gain your attack bonus, however.) Such modules are generally known as **Radar Modules** as they consist primarily of a narrow search sensor and little else. These modules may be equipped alongside a true Aiming Module, though doing so leaves little space for missiles.

Radar Module

Weight Class	Add Ability	Weight Used	Cost
Heavy	Eliminate enemy's Evasion bonus for high Initiative against missiles	3 WP	\$90,000

VTOL Lifter

VTOL Lifters are very strange pieces of equipment. Rather heavy, and greatly increasing the APU's bulk, they turn the APU into a sort of attack helicopter, replacing the traditional boost assembly entirely. VTOL-type APUs have seen some limited testing, but no force has yet chosen to deploy them. Most of them are retrofitted models, but some rumors of purpose-built VTOL APUs have emerged — proven true by the appearance of the mass-production Vulcan Venture.

Using a VTOL Lifter takes up **both Back slots and the Engine slot**. In return, the pilot gains the ability to **roll Evasion twice**, taking the higher result. You may also choose to **Evade melee attacks** instead of Defend or Counterattack, but you may only roll once. A powerful ability, it should be used wisely, and with a machine expressly designed to reduce the impact of the elimination of Engine bonuses. In addition, **your Initiative Increase may never drop below 50% of your Initiative Bonus**.

The VTOL Lifter also has the ability to operate alongside the NKD-B (as the mass-production Vulcan Venture does). **Using the VTOL Lifter with the NKD-B automatically sets the unit's Initiative Increase to 50% of its Initiative bonus and allows the unit to roll Evasion twice, instead of not at all**. Energy weapons and equipment are still prohibited.

VTOL Lifter			
Weight Class	Add Ability	Weight Used	Cost
Medium	Roll Evasion twice for ranged attacks, evade melee attacks	6	\$50,000

Heavy Alloy Shield and Conformal Armor

Heavy Alloy Shields are unique pieces of equipment that allow for defense against shell-based damage. Any attack which deals Armor damage targets the shield first. Once the shield is depleted, it may be dropped for an Initiative increase.

Shields take up the **Hand slot**, but any Forearm weapon in the arm holding the shield **cannot be used** until the shield is dropped. However, you may make Melee Defense rolls with your shield equipped, even if your melee weapon (if any) would not allow you to do so — a successful defense deals no damage to the shield. You may even defend with a depleted shield.

Heavy Alloy Shield			
Weight Class	Additional Armor Points	Weight Used	Cost
Light	+15%	1 WP	\$30,000
Medium	+30%	2 WP	\$60,000
Heavy	+45%	3 WP	\$90,000

Conformal Armor is a different type of protection. These additional armor plates go over the **Missile slot** and also serve as an extra layer of protection from shell-based attacks. Just like the Heavy Alloy Shield, Conformal Armor absorbs AP damage first, but unlike the Heavy Alloy Shield, Conformal Armor does not confer upon the user the ability to defend against melee attacks, nor can it be dropped when depleted (as with all

Missile slot items). The statistics of Conformal Armor are identical to the stats above. Conformal Armor and Heavy Alloy Shields may be combined — in that case, **the Heavy Alloy Shield takes damage first**.

In any case, armor from either source is increased with Magus Point spending just like ordinary AP, though it should be tracked separately.

Propellant Tanks

Propellant Tanks are tanks filled with 'pre-plasma' — a mix of fusion fuel designed to increase plasma flow through the APU's systems. Propellant Tanks are a popular way to provide energy to APUs with high consumption or low supply. The use of Propellant Tanks has increased among Mages who desire to maintain both speed and offensive capability, and they also reduce reactor stress, making maintenance easier.

There are two kinds of Propellant Tanks. 'Single' Propellant Tanks can be equipped on a **single Back or Missile slot**. Missile slot Propellant Tanks are also known as Conformal Tanks.

Propellant Tanks			
Weight Class	Energy Supply	Weight Used	Cost
Light	2 EN	1 WP	\$30,000
Medium	3 EN	2 WP	\$60,000
Heavy	5 EN	3 WP	\$90,000

The second kind takes up **both Back slots** and is known as a Double Propellant Tank. They supply substantially more energy, but at the cost of much higher weight and greater space. They may be combined with Conformal Tanks.

Double Propellant Tank			
Weight Class	Energy Supply	Weight Used	Cost
Medium	6 EN	4 WP	\$120,000
Heavy	9 EN	6 WP	\$180,000

Anti-Missile Equipment

Missiles are probably the single greatest threat to an APU. The high velocity and high-powered explosive charges ensure that even the heaviest of APUs fear them. Anti-missile equipment has been developed, used by both Mages and general production machines – the APU-03 Magus equips a Jammer as standard. All Anti-Missile Equipment may be equipped on a **Back or Missile slot**.

Interception Lasers are common among Mages, but less so among cash-strapped militaries. They require a great deal of maintenance and, as chemical lasers, they also require plasma flow. They do, however, have the smallest profile of all interception equipment.

Intercepting missiles is a 50% chance per missile. For each missile targeting you, up to your Interception Limit, roll 1d6 – if the result is even, one missile is successfully intercepted. This is in addition to any Evasion or shoot-down attempts. (You only get to attempt once per missile, no matter your Interception Limit.)

Interception Laser

Weight Class	Interception Limit	Energy Drain	Weight Used	Cost
Light	3	1 EN	1 WP	\$10,000
Light+Light	6	2 EN	2 WP	\$20,000
Light+Light+Light	9	3 EN	3 WP	\$30,000

Midweight anti-missile equipment is distinguished by its limited number of uses. However, a single use has no Interception Limit – it can intercept as many missiles as are in the air at the time. This equipment may be **chaff, flares, ECM pods, or even anti-missile missiles**. These parts are somewhat more common among elite units, as they take little work to maintain, despite the cost of ammunition.

Anti-Missile Shooter

Weight Class	Interception Limit	Ammunition	Weight Used	Cost
Medium	∞	3	2 WP	\$10,000
Medium+Medium	∞	6	3 WP	\$20,000

The final type of anti-missile equipment is **Jammers**. Jammers do not perform interception, but instead reduce the capability of a missile's tracking systems. Jammers only work for the unit they're equipped on, as they have a relatively short range. A unit that equips two Jammers, however, may protect its entire party. Such specialized equipment is often seen amongst elite APU squads requiring protection, and other, larger machines which would otherwise be sitting ducks against missiles.

In game terms, **Jammers eliminate the enemy's attack bonus for having a high Initiative**. The missile must still be Evaded or shot down normally, if it is not otherwise Intercepted. **As stated, a unit which equips two Jammers extends this benefit to its entire party.**

Jammer

Weight Class	Add Ability	Weight Used	Cost
Heavy	Enemy does not get attack bonus with Missiles for having a high Initiative	3 WP	\$10,000

Wingpack

Wingpacks are equipment exclusive to Shooting Star types. If your APU equips both the Torso and Legs of the APU/T-01, then adding a Wingpack allows the machine to enter Flight Mode. The wingpack takes up **both Back slots**.

You may either enter or leave Flight Mode during your turn, but not both. **While within Flight Mode, your Evasion Bonus is doubled, and enemies may not attack you in melee**. The ability to evade attacks so easily comes at a price, however. First of all, **you do not gain a bonus for high Initiative against missiles, and any missile attacks made against you are treated as though the attacker had the high Initiative, even if theirs is lower**. The huge plasma plume generated in flight creates a large radar and infrared signature, allowing missiles to track much more easily than normal. The ability to evade more easily compensates some, but a skilled pilot is still required.

Secondly, the Shooting Star is not designed for sustained flight, but rather short bursts or the ability to descend from the launch point more easily. **While in Flight Mode, your Initiative does not increase during the Initiative building phase, but instead is reduced by 50% of your Initiative Bonus**. Careful management of flight rounds is required to ensure that one's Initiative does not reach an unacceptably low level.

If your Initiative would drop to 1 or lower during the Initiative building phase due to this reduction, **your Initiative drops to 1, you immediately exit Flight Mode, and you are treated as Stunned for this round**. As well, being Stunned means you immediately leave Flight Mode.

Finally, while in Flight Mode, you may not make Melee attacks. This is generally not a significant drawback, as an APU in Flight Mode is immune to melee in any case.

Wingpack			
Weight Class	Requires Parts	Add Ability	Weight Used
Medium	APU/T-01 [T] and APU/T-01 [L]	Flight Mode	4 WP

Laminate Generator

A fairly recent type of addon equipment, laminate generators are capable of providing limited regeneration of laminate through an active fluid layer. As laminate is destroyed, it is replaced from the generator as needed. Generators only hold a finite amount of laminate coating, however. Laminate Generators increase Laminate Points and may be equipped on the **Missile slot**.

Laminate Generator			
Weight Class	Additional Laminate Points	Weight Used	Cost
Light	+30%	1 WP	\$30,000
Medium	+60%	2 WP	\$60,000
Heavy	+90%	3 WP	\$90,000

Grounding Equipment

This is a series of insulators, capacitors, and other such equipment that shields an APU from direct harm to electrical systems. Grounding Equipment increases Stun Threshold, with an appropriate increase in Full Stun Threshold as well. Grounding Equipment is equipped on either a Back or Missile Slot.

Grounding Equipment			
Weight Class	Stun Threshold	Weight Used	Cost
Light	+2	1 WP	\$30,000
Medium	+3	2 WP	\$60,000
Heavy	+5	3 WP	\$90,000

A Practical Example

Now, all this equipment probably seems fairly daunting to you, so it might be helpful for you to walk through the creation of a pilot and their machine, just to see how it all works. For the purpose of this, we'll be following a nameless player as he creates his character Angela, the Magus known as Angel Blade. His GM has decided that they will be using a fixed form of advancement. He has 20 Magus Points and 10 Skill Points to use to create his character and customize his machine.

After deciding on her appearance, personality, and other mannerisms, the player decides on Angela's history. He determines that Angela was part of a special forces team of MarsSec known as the Mars Angels. The Mars Angels specialized in close combat, and Angela was among the best of them. However, a disaster involving a construction protest gone wrong saw the Mars Angels deployed against civilians — ending their career entirely.

Dishonorably discharged from MarsSec, Angela was approached by Oncari to perform test pilot duties for them. While doing so, she was given the chance to acquire APU parts of her own. Soon, she left Oncari and took up the mantle of a Magus to help restore her honor and the honor of her squadron, and to make amends to the innocents whose lives she took.

With her background in mind, the player decides upon what sort of machine Angela should use. He decides that, as a close combat specialist, she would build a machine expressly designed to optimize close combat capability, with limited ranged capability. While an unconventional approach by military standards, he thinks he can pull it off, especially in a team.

He decides upon the **APU-01[T] torso** for its weight and good armor properties — and also, because he won't suffer any penalties when he adds the high-Initiative **APU/T-01[L] legs**. The arms are the high-Melee Attack **APU-02[A]**, and the head is the **APU-03[H]** for its high Stun Threshold, despite its weight.

With all this in mind, he then selects the Internal Parts. He wants to be able to maintain output after he equips his booster and his desired Ion weapon, so he chooses the **APU-01[R]**. As for the engine, again, Initiative trumps everything, and the **APU-02[E]** is chosen. While the drain is a concern, he's willing to make the risk to allow Angela better offensive capability.

The totals of the frame's basic stats are taken.

Armor Points	40+15+15+27 = 97 AP
Laminate Points	40+7+30+27 = 104 LP
Stun Threshold	16+6 = 22 ST
Full Stun Threshold	(22*3)+9 = 75 FST
Engine Output	x1/2
Energy Supply	7 EN
Evasion Bonus	3+3 = +6
Initiative Bonus	6+6 = +12
Base Initiative Increase (from Engine Output)	12*1/2 = +6
Energy Drain (before Offensive Parts)	3 EN
Surplus Energy (before Offensive Parts)	4 EN
Initiative Increase (before Offensive Parts)	+10
Melee Attack	6+3 = +9
Melee Defense	1+3 = +4
Arm Weapon Attack Bonus (Aiming Accuracy+ Reaction Speed)	3+4 = +7
Back/Missile Weapon Attack Bonus (Aiming Accuracy+ Radar Strength)	3+2 = +5
Weight Points Total	6+2+8 = 16 WP
Weight Points Used	2+1+3 = 6 WP

Not too shabby. The armor and laminate is about equivalent to a standard midweight, and all the stats he wanted to concentrate on have been maximized. Next, the Offensive Parts. Angela will be equipping an anti-APU ion rifle designed to stun, statted as a **Light+Light+Light ion weapon**, and a **high frequency blade** to minimize energy use and maximize defensive potential for minimal weight. She'll also be using **Heavy add boosters** to further increase her speed and help shore up her mediocre Evasion Bonus, and **heavy conformal tanks** to add extra Energy Supply. The player has determined that **using auxiliary equipment, even past the WP limit, is more efficient than spending Magus Points to shore up stats**.

The stats for the weapons and the attack bonus with each are recorded, and then the weight points are added — 10 weight points for all remaining equipment, just within the weight limit. 7 surplus Energy Supply remains. With the Add Booster, Angela's Initiative Bonus is +17, and 50% (rounded up) of 17 is 9, with the 7 supply allowing an increase of 15!

He records where Angela's 20 Magus Points go. He'll put one half into statistics, and one half into increasing weapon damage. First, he gives 6 MP to increase the HF blade's damage by +3 per die, and 1 MP to increase the ion rifle's damage by +1 per die. Next, he decides to increase Angela's Reaction Speed and Melee Attack by 5. 2 Energy Supply allows 100% Initiative Increase.

For skills, he buys two uses of Split-Second Dodge, Strike And Fade, Invincible, and No Opening, and one use each of One-Shot Kill and I Never Miss. Although

the latter two are somewhat suboptimal for a melee unit, they are bought specifically to counter the defensive manouvers of other Mages.

After recording the spending of Magus and Skill Points for posterity, Angela's player adds them in to the stats.

And now, Angela's Angel Blade is complete. With some color added, it now looks like this:

Custom Close Combat Type APU							
Angel Blade							
Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Evasive (+1 Evasion Bonus) Melee (+1 Melee Attack) Synchronized (+1 MP) Guerrilla (Additional damage versus Guerrilla machines)	Pilot Name	Angela
Head	APU-03[H]	Reactor	APU-01[R]			Callsign	Angel Blade
Torso	APU-01[T]					APU Name	Angel Blade
Arms	APU-02[A]					Color Scheme	Light grey with navy blue and dull emerald green highlights
Legs	APU/T-01[L]					Engine	APU-02[E]
Offensive Parts				Skill Points	10	Right Shoulder Emblem (Association)	The symbol of Special Forces Armored Squadron, Mars Angels (an APU with glowing angel wings)
Right Hand	Anti-APU Ion Rifle (Light+Light+Light Ion Weapon)			Magus Points Spending	High Frequency Blade +3 – 6 MP Ion Rifle +2 – 3 MP 5 Melee Attack – 5 MP 5 Reaction Speed – 5 MP 2 Energy Supply – 2 MP	Left Shoulder Emblem (Personal)	A winged knight holding a glowing blade
Left Forearm	High Frequency Blade						
Back Slots	Angel Wingpack (Heavy Add Booster)						
Missile Slot	Conformal Fuel Tanks (Heavy Propellant Tank)			Skill Points Spending	Split-Second Dodge x2 – 2 SP Strike And Fade x2 – 2 SP Invincible x2 – 2 SP No Opening x2 – 2 SP One-Shot Kill – 1 SP I Never Miss – 1 SP		
Weight Points						Legend Dice	1
Weight Points Total	16 WP						
Weight Points Used	16 WP						
Game Statistics							
Armor Points	97 AP	High Frequency Blade		Anti-APU Ion Rifle			
Laminate Points	104 LP	Attack Roll	3d6+15	Attack Roll	3d6+12		
Stun Threshold	22 ST	Damage Step (Armor)	2d6+6	Base Damage (Systems)	6d6		
Full Stun Threshold	75 FST	Defend Base Damage	0	Damage Step	3d6+6		
Evasion Bonus	+12	Defend Damage Step	0/+6	Damage Range	-1/+1		
Initiative Bonus	+17	Counter Base Damage	8d6+24				
Initiative Increase	+17	Counter Damage Step	-3/+2				
Melee Defense	+5	Defense Actions	Defend, Counterattack				
Missile Launch Limit	1						

Soon enough, Angel Blade will be ready for combat... and so will you. What are you waiting for? Get building! Get that perfect machine out there and ready to fight!

It was good to be the boss.

The Wastelands of Phoenix had a long history of conflict, stretching all the way back to the Arizona Insurrection. Today, here, it was occupied by several armed gangs carving out a piece of the desert and preying on the goods coming in and out of the megacity. And soon enough, those 'several' would be 'one'.

They were the Wasteland Rangers, one of the newest gangs of the mesas, and he was their leader. A tough son of a bitch, if you asked him. Staging a coup against the Wings of Flame, he had spent a year biding his time and building up mechs to be able to take on the larger forces. On top of the usual Chickenwalker forces he had a few Sportwalkers, VTs, a couple of choppers, and his own personal pride and joy — a shiny new Warrior, fully equipped with an old-fashioned heavy rifle.

He loved this damned gun. It had a nice long stock to keep the shots stable, a custom underbarrel targeting module, a chrome-lined bore, and a heavy autobolt feed system. It was so powerful, in fact, that it had to use old-style brass cartridges just to handle the force of the gunpowder! The new ventilation in the back of his warehouse showed just how good this thing was. Once they captured a few more mechs and showed that they were serious contenders, nothing would stop them.

And today was that day. In an old industrial park far outside the borders of modern Phoenix, the Ranger mechs patrolled and prepared to move out under the auspice of the setting sun. A token force would be left behind in case of counterattack, while they attacked at night, blitzing a nearby outpost to capture their units. The boss oversaw everything under the orange glow of his Warrior's sensors, brandishing his rifle proudly.

"I still don't like it, sir," a sheepish voice sounded on the comm, from a small IWACS command centre within the warehouse. "The Data Angels are bad people to be pissing off. You sure we shouldn't wait? Get some of the other groups on our side?"

"Data Angels...pah!" The boss laughed heartily, looking over at his small army as they roamed the area, glows of red and orange following their movements as they kept watch. "What'd they ever do for the Wingies, anyway? They're just bluffing. No way they'll spend resources on the Wastes." The Data Angels had interests in Phoenix and the rest of the Sonoran Desert, to be sure, but they were political, economic. Secret test sites? Gang unification? An attempt to control the Sonoran region? Ridiculous! They were a bunch of misguided nerds, nothing more.

After a few moments of pointed silence, the operator spoke to his boss again. "Sir, a high speed transport just passed over our position."

"So? It's probably headed somewhere else." The APU quickly looked up into the skies to see, high above them, a dark grey shape streaking past and toward the horizon. Just another Magus heading to another hotspot, probably on the Pacific coast. The Sonoran didn't attract many Mages, for whatever reason. Supposedly it was cursed, of all things...how ridiculous!

"That's the thing, sir. It opened its hatch as it passed over us, then closed it. But there's nothing there..." Expectantly, several Sportwalkers raised their head-cockpits to get a closer look at the nothing mentioned, as though awaiting a heavenly light from above. There was an eerie silence as activity stopped, and the boss was left alone to brandish his gun at those under his employ.

"What are you guys doing? Don't tell me you believe this curse bullsh—"

KA-BOOM! As soon as the boss opened his mouth, a burst of high explosive missiles rained upon several of the Chickenwalkers, blowing the spindly-legged coffins apart before they could react. Other than the missiles, radar and other indicators showed nothing, as thugs ran to their mechs and support staff loaded into what vehicles they could escape from. The first burst, and the following rain of linear cannon shots punching small craters into the earth, sparked a wave of activity — electric cycles speeding out of the area as fast as they could, Sportwalkers firing their head vulcans in the vain hope of tagging an invisible target, VTs unfolding to bring their guns to bear, and Variable Choppers frantically stretching their legs to stand and prepare for a high-speed takeoff.

"Goddamnit! All right, anyone who runs, I'll kill myself!" the boss yelled, lifting his rifle and looking this way and that for the attacker. They had tried to warn him, hoped he had some plan up his sleeve, or believed his boasts that the Data Angels would never find him...for whether it was the Sonoran, or Ibiza, or anywhere else, the Angels had a very efficient method of dealing with betrayal.

Its name was Black Color.

"How do we keep up with this thing?"

A muffled ground impact heralded the invisible machine's arrival, even as all forms of sensory input rendered detection impossible otherwise. All active machines turned and fired on that point, their poor trigger discipline rewarded with near-impacts on the other machines in the firing line. Every so often, one could catch a glimpse of red light, the only sign of an enemy presence...at least, when the machine wasn't attacking.

"What kind of Magus is this?!"

A few more white shots took down another pair of Chickenwalkers, their primitive leg construction putting them out of the battle outright. Electric free-rollers whined as the Sportwalkers moved to overtake, their linear cannons sparking as they charged and fired at the barely-visible target.

"It's like a ghost..."

One lucky shot managed to hit the enemy machine in the shoulder, its camouflage momentarily disrupted before receding entirely, revealing a black and grey Magus APU and putting the machine back on radar. Without missing a beat, it weaved past the immediate reprisal as the deployed Variable Tanks started pelting it with indirect fire, deploying its high frequency blade and cutting open the head-cockpit of the Sportwalker which hit his armor.

"Man down! Man down!"

That was all that happened before the machine went invisible again, more missiles following...the boss shooting his rifle wildly as he saw his troops fall. The Sportwalkers were first, strafing and firing vulcans as they tried to run, before being crippled as Black Color appeared briefly to cut off a leg from the garage-built machines. The VTs were next — after the first was destroyed, the others hurriedly undeployed and drove into the distance...though that distance was cut short as their tires were punctured and then their cockpits shot, executing the pilots.

"It's a massacre! Forget the boss, save yourselves!"

By this time the choppers had deployed and lifted their legs, strafing the positions with rockets. Another lucky blow hit Black Color, but it didn't stop it from performing a booster-fueled leap and sundering the cockpits with its HF blade. And then, the civilians — a rocket seemingly saved for every truck, letting them careen down the desert and take care of the 'cycles, the riders trying to swerve before impacting right onto the overturned transport.

The boss, though, was steadfast to the end. He was in an APU, a real modern military machine, with the best gun dirty money could buy. And this ghost couldn't hide forever. "You don't scare me! Come out and fight me like a real man, coward!" His APU swung its rifle aside as he raised the left arm, a plasma projection blade appearing just before Black Color's red optic filled the pilot's vision.

It was the last thing he would ever see.

Eighteen hours later, an ESAF recon team dropped into the old industrial zone to overlook the aftermath of this battle. As casualty totals were calculated and investigators ran traces on the black market mechs, a few troopers stopped to look at the severed arm of a Warrior, still tightly clutching an oversized rifle embedded into the ground.

The Rogue's Gallery

APUs are only a small part of warfare. Inexperienced officers often make the mistake of not knowing their enemy, and entire battles have been lost due to the overestimation of an APU's capabilities and the underutilization of other forces. This is a selection of a Mage's typical foes.

ESD Troopers

Troopers are, put simply, this age's non-mechanized infantry. The term 'trooper' has its roots in the beginnings of space warfare. ATLAS' elite military forces began with a single infantry squad, the First Mobile Infantry. The First MI used suits of artificial muscle and advanced weaponry to overwhelm both traditional soldiers and tank battalions. Emphasising a doctrine of mobility over firepower, the First MI were known as 'troopers' for the namesake of their squad, the elite soldiers of Heinlein's 'Starship Troopers'. The name stuck, and modern infantry are almost universally known as troopers, or in long form, ESD troopers.

Modern troopers come in two forms. On the ground, they follow the First MI's example, wearing lightweight artificial muscle suits that allow them to move more quickly and carry more equipment without tiring. While not true powered armor, these suits are moderately bulletproof and allow for NBC protection. Troopers wear helmets with electrostatic displays (ESDs) and a variety of sensors and IWACS equipment, allowing them mutual battlefield awareness and other advantages on the individual and fireteam levels. Troopers can also use combat Personal Rotorlift Vehicles (PRVs) to take to the skies for a better vantage point. In space, troopers use bulky 'boarding suits', precursors to APUs used in situations where an APU would be too large, like boarding operations.

While once troopers outnumbered APUs by a considerable margin, their disadvantages, and the advantages of increasingly sophisticated mechanized models, began to cause a paradigm shift. Troopers require exacting training regiments, expensive equipment, and large numbers in order to offer the same firepower, mobility, and versatility that a single APU offers. In space, the problem is compounded, as boarding suits are immensely inferior to APUs in every way possible, and a trooper's training in gravity-borne environments does not carry over into zero-g.

With this in mind, a single trooper, on open ground, is clearly inferior to an APU. An APU carries far more firepower and has immense mobility, something the individual trooper cannot hope to match. Thus, troopers, particularly special ops groups, have adopted tactics to counter APUs. A team of troopers, between six and twelve strong, will take up any available cover and vantage points around the APU, surrounding it with firepower and minimizing the chance of reprisal. While killing or disabling an individual trooper is not a difficult task, taking out the entire team will take time, time which the APU may not have.

Troopers do not suffer damage in the traditional sense. Instead, an individual fireteam's health is measured by its total damage dice — a team of troopers starts with 12d6 armor damage dice (representing a variety of weapons, from incendiary-type assault rifles to large RPGs), which is diminished with each attack on the fireteam.

Whenever a fireteam of troopers would suffer any amount of damage, no matter how small, roll 1d6. The team's base damage is reduced by that amount. While troopers can be autohit, **they can never suffer a critical hit.** When the fireteam's base damage is reduced to 0, the team is destroyed.

Two damaged fireteams of troopers can merge, the merged team taking the lower of the two teams' Initiative values, so long as the new team's damage dice doesn't exceed 12d6.

For the GM: Troopers are an interesting foe. While they are difficult to kill, their threat level is reduced as they are damaged — unlike mechs, they cannot deal their full damage while on their last legs. Use troopers in combination with other types of units to create more exciting battles. Creating 'elite' trooper fireteams is as easy as adding more damage dice. Pair them with a tank or Sportwalker with troop-carrying equipment for extra danger.

ESD Troopers

Passive Evasion	20
Initiative Bonus	+9
Initiative Increase	+9
Passive Melee Defense	20
Trooper Firepower	
Attack Roll	3d6+6
Base Damage (Armor)	12d6 (when at maximum strength)
Damage Step	Equal to current Base Damage
Damage Range	0/0

Chickenwalkers

Vague imitations of APUs, better known as 'walking coffins' among their ill-fated pilots. Little more than a pod for the pilot with legs and guns, the chicken legs are built to use the absolute minimum amount of artificial muscle possible in order to keep costs down. The legs often mount wheels to keep mobility up, since they would never be able to hold fusion reactors. These are built to be as cheap as possible, and should be short work for any real APU — but en masse, their guns can still put the hurt on.

Chickenwalkers, as vehicles with both legs and wheels, have a Passive Evasion score. Despite the legs, they usually use the wheels. (It makes you wonder why they even bothered.) As they are battery powered, their Initiative Increase is equivalent to 50% of their Initiative Bonus. Their lack of arms or true mobility, however, leaves them a sitting duck to melee attack. Though all Chickenwalkers are different, they are generally produced in a 'light/medium/heavy' progression that mirrors the APU models. Despite this, all three models described here have near-identical armament.

For the GM: These guys are cannon fodder through and through. Use them that way. To make them more dangerous, add different weapons to the frame (though remember, as battery-powered units, they can't use energy weapons) or make them more accurate.

Chickenwalker	Typical Model	Mobile Type	Anti-Armor Type
Armor Points	50 AP	38 AP	75 AP
Laminate Points	50 LP	75 LP	38 LP
System Points	20 ST		
System Recovery	65 FST		
Passive Evasion	17	20	14
Passive Melee Defense	6	9	3
Initiative Bonus	+6	+9	+3
Initiative Increase	+3	+5	+2
Missile Launch Limit	2	3	1
Cyclic Vulcans			
Attack Roll	3d6+6		
Base Damage (Armor)	4d6		
Damage Step	1d6		
Damage Range	-3/+2		
Missiles	Anti-Armor	Anti-APU	Anti-Aircraft
Attack Bonus	+6		
Base Damage (Armor)	12d6	6d6	18d6
Damage Step	12d6	6d6	18d6
Damage Range	0/0		
Laminate Damage	x1/2		
Ammunition	3		
Critical Table	1-3		4-6
Location	Torso		Legs
Effect	Double the damage dice for this attack roll		Unable To Combat (AP reduced to 0)

Sportwalkers

In the twenty-first century CE, well over a century before the Lunar Reckoning, the automotive division of the East Asian conglomerate Neucom produced the Sportwalker, considered by historians to be the world's first mass-production mechanized unit. The corporation succeeded where generations of hobbyists and engineers had failed due to the use of the then-new artificial muscle tissue, and the decision to go with a highly stable quadruped design. The unit was designed as a sport vehicle capable of operating on all terrain, and though it cost a considerable amount to purchase — \$2,000,000 United States Dollars, much greater than the \$100,000 Union Dollar present day average — it pioneered technologies that would spread throughout the era and into space.

Sportwalker became a generic term for four-legged walker machines based on the same basic design principle. The machine is laid out with a cockpit 'head' able to seat one, attached on a mobile joint to a main body that provides power, stability, and perhaps storage/passenger bays. The four legs are laid out in an almost insectoid layout, large and set low to skitter rather than gallop. Despite being known as a 'walker', the primary method of locomotion are electric free rollers in the bottom of the feet, with walking given over to difficult terrain. Originally a series of wheels in early Neucom models, this gives the Sportwalker mobility comparable to a muscle car, with considerably more steering capability.

Sportwalkers have been known, since their creation, for being eerily organic in their gait, years before neural interfaces. Precision tuned computer systems regulate the movement of each leg and roller, the muscle reacting instantaneously to assist in course changes and accelerations. The Sportwalker, on ground level, seems more like a monster than a machine, the savage and mobile 'head' only adding to such imagery. A Sportwalker in the hands of a skilled pilot can seem like a true wild beast.

Of course, Sportwalkers are also known to be notoriously difficult to pilot. Neural control can only increase response time by reading nerve endings and predicting piloting input, not allow full mental control like in an APU. And of course, in the old days it wasn't even an option. Controlling four separate legs, dealing with the shock of movement and attempting to make high-speed turns with the large, inertia-borne craft causes most to shy away from the thing. However, it is a mechanized unit, one which a typical garage can easily build and maintain...which has given it a new reputation in the Lunar Reckoning as a mid-range guerrilla machine.

The Sportwalker was never meant to be a military machine, and its basic design has many incredible deficiencies. The use of legs as locomotion is inefficient past near-human sizes, moreso when the legs are large, vulnerable, and easily damaged. While the use of four legs provides a stable firing platform, and artificial muscle can counteract recoil, it is still inferior to the platforms of tanks or VTs. And overall, Sportwalkers are somewhat expensive to produce in large numbers compared to a VT or tank — though in small batches, the price actually works out fairly well, and the wide civilian use of such vehicles means that virtually any machine shop will be capable of constructing and maintaining them.

In the end, the success of a Sportwalker on the battlefield is down to three factors — armor, weaponry, and pilot skill.

In terms of armor, standard Sportwalkers use carbon fibre and other composites used in automobile construction, but neosteel or ceramic can be substituted while still maintaining mobility. Neosteel machines fall quickly even to small arms fire, but machines armored in ceramic can withstand at least as much punishment as an APU, if not more. (A direct hit to the legs, however, will take the Sportwalker out of combat, unlike the robust APU.) Very few Sportwalkers leave the hangar without vertical-launch flares capable of redirecting missiles, as the large vehicles are particularly vulnerable. Laminate is also used, but the complex geometry and large profile means laminate is generally poor.

Weaponry is a more significant matter. A 'typical' guerilla Sportwalker uses twin machineguns mounted on the head, much like the paintball guns used on civilian models for mock mecha combat (a sport that survives to this day, even with spectators and leagues). These 'head vulcans' are usually ineffective against APU armor, let alone anything else, and these models are chunked by the hundreds, used by inexperienced or downright incompetent commanders.

Better options are generally to use the Sportwalker in a fire support role — usually mounting a linear cannon on the main body in this role, which packs the best price-performance ratio and best range. Howitzer and AA types do exist, however, as do deadly missile boats and even such exotic units that use twin electrolasers or plasma cannons. IWACS scouts are also used, ones which equip a large-scale jammer that covers the whole battlefield in an anti-missile sheath.

In the end, however, pilot skill is the most important thing. The Sportwalker's unique mobility creates a craft that can have unprecedented evasive and attack capability, but time must be taken to learn proper operation, much in contrast to the short training time for APUs or Chickenwalkers. A poorly-trained Sportwalker squad will be picked off in mere moments, usually by close combatants. A well-trained squad...creates horror stories of quad-legged monsters surrounded by a city in flames, gunning down troopers and APUs by the dozens.

Typical models are given below; usually garage builds, though Oncari and Neucom brands are also popular. As electric wheeled vehicles, Sportwalkers have a Passive Evasion and a somewhat low Initiative Growth. Sportwalkers are usually about as evasive as an APU, though they will die in two Criticals to the legs. They have somewhat low Initiative values, which makes them ideal close combat targets. A single Sportwalker is an easy target, but in cooperation with other units and with the right equipment, can make a deadly opponent.

Generally, Sportwalkers are classed by 'pattern'. While there are hundreds, thousands of unique Sportwalkers, types used in combat generally hew close to well-proven corporate models. Sportwalker classification is a laybrinthe thing, with arcane model numbers and manufacturing years mixing with well-known brand names and model types. Smaller companies tend to copy the larger ones or work with pre-built parts, so patterns can fit anything from true corporate mass production models to unique garage builds.

Neucom-pattern Sportwalkers are lightweight, dependable, fast, and easy to repair, but very difficult to control, tending toward sleek styling with, somewhat unfortunately for combat types, much exposed machinery. **Oncari-pattern** machines go the opposite route — heavier, with well-covered and protected machinery, and enough artificial muscle to take a very large armor load. In addition, Oncari's experience as a mech manufacturer makes them very easy to control. **Light Labs-pattern** machines are less heavy than Neucom machines, while still remaining easy to control. They are generally the largest of Sportwalkers, despite their weight.

All combat Sportwalkers equip guns on the head, which are almost universally the easy-to-maintain cyclic vulcan cannon. The cheapest of Sportwalker users will equip vulcans alone, and these machines will fall quickly with their inability to defend themselves effectively. Sportwalkers can generally support **one gun assembly (the Weapon slot)** and some auxiliary **equipment on the legs (the Auxiliary slot)**. This equipment is not modular — it must be partially built into and around the walker, and cannot be exchanged without considerable work time and rebuilding. Sportwalkers are, for all intents and purposes, single-purpose machines.

For The GM: Sportwalkers are mid-range foes. Their threat level compared to an APU is minimized by their vulnerability to close combat and the ease at which a few well-placed criticals can take them down, but they are not useless foes. Sportwalkers with no or minimal equipment make good cannon fodder, while high-end equipment makes them deadly...though they are the exclusive purview of non-Union forces.

Sportwalker	Neucom-pattern	Oncari-pattern	Light Labs-pattern
Armor Points	150 AP	200 AP	300 AP
Laminate Points	150 LP	100 LP	75 LP
Stun Threshold	10 ST	10 ST	10 ST
System Recovery Rate	32 FST	32 FST	32 FST
Passive Evasion	20	17	14
Passive Melee Defense	14	17	20
Initiative Bonus	+3	+9	+6
Initiative Increase	+2	+5	+3
Cyclic Vulcans			
Attack Roll	3d6+6		
Base Damage (Armor)	4d6		
Damage Step	1d6		
Damage Range	-3/+2		

Sportwalker Critical Table		
Result (on d6)	Location Hit	Effect
1-3	Torso	Roll double the damage dice for this attack roll.
4	Weapon	Halves the Attack Bonus of the weapon. If a Large-Scale Jammer is used, it now serves as a Small-Scale Jammer. If a Troop Transport is used, damage the troops. If a Boost Assembly is used, the part is considered damaged (though no stats are reduced) and double the damage dice for this attack die. If this effect takes place again, the weapon is entirely destroyed. (If the unit doesn't have a primary weapon, treat as a Torso hit.)
5	Leg	Any auxiliary equipment, if equipped, is destroyed. If none is equipped or the equipment was destroyed, the unit's legs are destroyed and it is unable to combat.
6	Head	Stun Threshold is halved, the Attack Bonus of the Cyclic Vulcans is halved, and the unit is Stunned. (If the unit would already be Stunned by this attack, it is Full Stunned. If it would be Full Stunned, it is completely disabled and unable to combat.) If this effect takes place again, the cockpit is penetrated and the pilot is killed.

Sportwalkers can equip one piece of equipment for both of their slots, but are not required to. This equipment cannot be purged or modified in any way. Equipment can be chosen based on how dangerous you want the Sportwalkers to be. The basic machines are listed below, along with the critical table, and then details on typical equipment are given.

Sportwalker Weapons

RAILGUN — The most common artillery piece, a simple railgun consists of very few moving parts and requires very little in the way of materials or maintenance, while also offering very long range. These linear cannons have an autoloader and targeting system and are mounted on a swiveling arm mount; it can aim up or down for indirect fire, but must turn its body to aim from side to side.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	15d6	15d6	0/0

GUN-HOWITZER — A simple gun-howitzer for firing a variety of artillery rounds. Such systems are generally very primitive and the autoloaders generally cannot supply much ammunition; they offer effective defense and range, but only for a limited time.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
3d6+6	18d6	18d6	0/0	x1/2	6

DUAL AA GUN — Paired-firing anti-air ballistic cannons, usually a gatling type with a very large ammunition supply, mounted on a primitive mechanism to allow limited aim correction. Despite the simplicity, these weapons are far more effective than cyclic vulcans alone, and can act in both an anti-air and anti-personnel role.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	7d6	1d6	-6/+5

ELECTROLASER — A standard model electrolaser, modified to use an external chemical supply instead of fusion plasma. Sportwalkers make very good platforms for target acquisition, but tend to be too sluggish to take advantage compared to a smaller and more responsive vehicle, like an APU. *Like all Electrolasers, this unit requires a high Initiative to fire.*

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage	Systems Damage
3d6+6	18d6	18d6	0/0	x1/2	x1/2

ANTI-AIR MISSILES — Sportwalkers are simply too light to take the strain of a long-range ballistic missile, but larger anti-air missiles from APUs can be mounted without unduly unbalancing the machine. These missiles are meant to be used at long range against hardened targets, but can be used against APUs as well.

Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Missile Launch Limit
+6	18d6	18d6	0/0	x1/2	6	1

ANTI-PERSONNEL MICROMISSILES — Large twin missile burst launchers, these missiles are designed to attack personnel targets with a very large number of projectiles. Despite the expense of ammunition, these are among the most effective weapon variations for the Sportwalker.

Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Missile Launch Limit
+6	6d6	6d6	0/0	x1/2	24	4

VERTICAL LAUNCH MIRVS — Large MIRV launchers positioned to launch from a vertical position. The split projectiles can very effectively deny area from enemy troops, but the ammo load is small, and only one missile can be launched at a time. *Like all MIRVs, each attack die may target any enemy, and obey the same Initiative rules as standard missiles.*

Number of Attacks	Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
4	+6	3d6	3d6	0/0	x1/2	8

BOOST ASSEMBLY — The addition of a fusion reactor and large engines allows a Sportwalker to have higher mobility, and evade attacks more easily. Unburdened by the need to work in all environments like an APU, it can activate this assembly only when electric motors aren't enough. This comes, however, at the price of being completely incapable of adding extra weapons without making the entire machine completely unviable.

With this equipment, a Sportwalker can roll to Evade any attack that gets past its Passive Evasion, at an Evasion Bonus of its Passive Evasion minus 11.

LARGE-SCALE JAMMER — Old-style jamming equipment. While quite old, this equipment provides greater capability in terms of IWACS and reduces the effectiveness of missile tracking in a very wide radius. However, it provides no additional offensive capability, so protecting the jamming unit is priority one.

This Equipment eliminates the enemy's bonus for having a high Initiative when using missiles, and is effective for all the walker's allies as well as the walker itself.

TROOP TRANSPORT — An ill-conceived addition, this makes the Sportwalker a highly ineffectual APC. A team of troopers can attack from the transport, either from firing ports or around the machine. In game terms, the Sportwalker must be destroyed before the troops can be attacked.

Sportwalker Auxiliary Equipment

VERTICAL LAUNCH FLARES — These flares redirect missiles to harmlessly detonate in the air, far away from the walker. Launchers like these are equipped on the legs, and are good for three bursts.

Interception Limit	Ammunition
∞	3

APOGEE MOTORS — Simple apogee motors with standard chemical fuels. This allows a Sportwalker to accelerate much more quickly, making it much less vulnerable to APUs.

Initiative Bonus	Add Ability
+2	Increase Initiative Increase to 3/4 of total Initiative Bonus

VERTICAL LAUNCH AUXILIARY MISSILES — A modified flare launcher which loads small vertical missiles, adding an extra punch to the Sportwalker's anti-air capability. Launchers like these can interlink with main launchers for a true missile boat unit, or otherwise provide deterrent against close-combat APUs.

These missiles may be launched at the same time as the Anti-Air Missiles, the Anti-Personnel Micromissiles, or the Vertical Launch MIRVs. You must target the same enemy.

Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Missile Launch Limit
+6	6d6	6d6	0/0	x1/2	9	3

SMALL-SCALE JAMMER — Smaller-scale jammers can be used on a Sportwalker, allowing the walker itself, but not its allies, to be protected from missile attacks.

This has the same effect as the Large-Scale Jammer, but only for the walker equipping this part.

GROUNDING EQUIPMENT — Electrical equipment that conducts electricity down into the ground through the legs, while also adding capacitors to speed up system recovery. This greatly increases the capability of a Sportwalker to resist internal damage and computer failure.

Additional Stun Threshold	Additional Full Stun Threshold
+10 ST	+2 FST (for a total of 64 FST)

'cycles

Motorcycles, hovercycles, and Guardians. The latter are a class of hovercycle with mobile, leg-like engines and mobile swivel weapons, a primitive sort of mechanized unit that still sees limited use with the Union. Combat cycles are another favored guerrilla weapon, and usually used where they fit best — the hit and run role. Though fragile, they can avoid plenty of fire and put the hurt on besides.

Variable Helicopters
(VHs, Variable Choppers)

Variable Helicopters are the modern version of what was once known as the attack helicopter. Like the original vehicles, VH units are capable of vertical takeoff and landing, and are highly manoeuvrable in the air, at the cost of the absolute speed of a fixed-wing aircraft. They offer the same fire support role for infantry, are similarly armed and armored, and are about the same size.

The main difference between an old-model attack helicopter and a Variable Helicopter is simple — the latter has legs.

These legs are not designed for walking — an inefficient method of locomotion for most purposes — but rather to roll. These legs, turning a four-metre helicopter into an eight-metre mechanized unit, have on their 'feet' heavy, all-terrain wheels, capable of rolling on both rough terrain and roads. In this way, a Variable Helicopter can serve in an urban support role. The loss of the legs, unlike a guerrilla Sportwalker, does not destroy the VH — it simply takes off again.

The first VH was created in LR 15, and quickly replaced traditional attack helicopters as fast as old models were decommissioned. While many models exist for multiple environments, including plasma-powered VTOLs for Mars, the most common is the venerable Aircraft Holding Industries VH-101, a variant of the H-101 attack helicopter of 2101. Both military and guerrilla forces use Variable Helicopters, but the military types are generally more advanced.

The most famous use of the VH was during the Colonial Wars, when VH units patrolled the streets and skies of the closed-in environments. The sight of choppers on the streets still burns in the memories of those who lived through the war. For this reason, the VH has another name, especially for those who reside in space — 'The Scourge of the Colonies'.

Variable Helicopters have the ability to **roll Evasion twice and to Evade melee attacks (though with only a single roll)**, due to their flight capabilities. Each Variable Helicopter has **one Gun slot and one Missile slot**, each of which can equip a single weapon. These slots are modular, and can be swapped with similar weapons designed for a similar model of VH with little difficulty.

For the GM: Variable Helicopters are more capable than their statistics suggest. Their ability to evade twice gives them better defenses, but their meagre AP and LP, and lack of missile defense, ensure that they go down quickly when they are hit. Use them in groups for maximum effectiveness, and give them more AP and LP to make them more effective – but remember to be careful when raising its Evasion!

Variable Helicopter	
Armor Points	75 AP
Laminate Points	75 LP
Stun Threshold	20 ST
System Recovery Rate	65 FST
Evasion Bonus	+6
Initiative Bonus	+6
Initiative Increase	+3

Variable Helicopter Critical Table		
Result (on d6)	Location Hit	Effect
1-3	Fuselage	Roll double the damage dice for this attack die.
4	Weapon Mounts	The attack bonus for all weapons is halved. If this effect takes place again, these values are reduced to one-quarter of their normal value.
5	Legs	Roll double the damage dice for this attack die. The legs are destroyed, which has no game effect. (Environmental conditions should be considered by the GM, if appropriate.)
6	Cockpit	The unit is immediately Stunned. If it would already be Stunned, it is Full Stunned. If it would already be Full Stunned, it crashes and is destroyed.

Missile Slot Weapons

DUMBFIRE ROCKET POD – A standard dumbfiring high explosive rocket. These rockets are not disrupted by IWACS and are good for strafing runs against mobile targets. These rocket pods fire in pairs.

Number of Attacks	Attack Roll	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
2	3d6+6	12d6	12d6	0/0	x1/2	3 per launcher

GUIDED MISSILE – While guided missiles are less useful in an age of high mobility, they are immensely useful against tanks and other airborne targets. These missiles fire in pairs.

Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Missile Launch Limit
+6	12d6	12d6	0/0	x1/2	6	2

BREAKAWAY MIRV – A high-quality missile weapon, these are generally used for clustered APU or other mechanized targets. Due to the guidance required, these weapons only fire singly.

Number of Attacks	Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
4	+6	3d6	3d6	0/0	x1/2	6

Gun Slot Weapons

AUTOCANNON – A standard-quality autocannon, this weapon is used for interdiction of soft targets and aircraft. While it does less damage than dedicated AA gun platforms, a Variable Chopper can go places that self-propelled guns cannot.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	5d6	1d6	-4/+4

PLASMA PULSER – Generally used when armored targets are expected to be a factor, this plasma pulser, powered by a small attached fusion reactor, can deal damage to tanks, unlike the standard autocannon.

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage
3d6+6	8d6	2d6	-3/+2	x1/2

ION PULSER – A recent weapon type, ion pulsers like these have proved immensely capable in police interdiction situations, capable of disabling fleeing subject vehicles without causing undue harm to the operators.

Attack Roll	Base Damage (Systems)	Damage Step	Damage Range
3d6+6	6d6	3d6	-1/0

Variable Tanks

The venerable machine that set off a history of mechanized warfare. VTs come in all shapes and sizes with all kinds of weapons, but they all share two modes — a mobility mode for traversing terrain, and a deployed mode that lets loose the firepower. Some terms might be tossed around — 'mobile VTs' are those that can move in some way while being deployed, and 'modular VTs' refers to the standard Oncari design that allows weapons to be exchanged between deployments. Despite what the name would suggest, VTs aren't designed to withstand firepower, and a one-to-one confrontation between a VT and APU will end with the APU on top — but they're always used behind the lines, so it's hardly an issue in the least.

Main Battle Tanks

First invented in the early twentieth century CE, long before modern mechanized warfare emerged, tanks once ruled the battlefield as the king of armored warfare. Using the most advanced armor materials available for their time, tanks and other armored self-propelled vehicles formed the backbone of armed forces the world over for two and a half centuries.

Today, the tank is no longer as dominant as it once was. As the doctrine of war has moved from heavy armor toward mobility, and the strength of weaponry has grown faster than the capability of armor, modern war doctrines lead with APUs instead of tanks. Still, no other vehicle is capable of carrying as much ordnance or suffering as much damage in return — not fighters, not helicopters, not VTs. The tank, when used correctly, can take down an APU, although it is vulnerable to APUs and troopers in groups.

The word 'tank' has changed in use, now being used to describe any armored self-propelled gun which travels along the ground, including artillery and tank destroyers. Modern tanks now use a variety of propulsion methods besides the classic tread layout, including wheels, free rollers, and hover-type mechanisms. Modern tanks are driven by a single soldier, and their guns are operated by an autoloader; no intervention is needed from the operator, who uses the turret as a point-and-shoot type system. Aiming is handled by a computerized FCS and the training to operate a tank is only slightly more complex than that needed to operate an automobile.

Tanks are not invulnerable. Though their armor is tougher than an APU's, they are much less mobile, and make prime targets for energy weaponry due to their limited laminate. A group of APUs, properly armed with missiles, high-calibre rifles, or energy weapons, will be able to take down a tank working in tandem. A group of tanks is a trickier prospect, but in this case, the faster APUs use IWACS spotting to send target telemetry to APUs carrying more and heavier weaponry, allowing them to attack more frequently than their own targeting would allow.

All tanks have a chassis, a propulsion system, a main cannon (which, despite the name, is not always a cannon), and a side cannon. The main cannon is extremely powerful, often capable of destroying an APU in one shot. However, it has one key weakness — **the cannon cannot attack unless the tank has a higher Initiative than its target**. As tanks are fairly slow compared to an APU, especially a Magus model, this is a fairly important issue. The side cannon, however, can fire at any target regardless of Initiative.

Tanks also have another ability, perhaps its most important — **they deflect low-powered attacks to Armor**. **Any weapon that deals primarily Armor damage deals no damage if its Damage Step (NOT Base Damage) is less than the tank's Armor Threshold**. This restriction does not apply to weapons which deal primarily Laminate or Systems damage, which are unaffected and still deal additional Armor damage if applicable.

The third and final ability tanks have is to Cover another target. **Tanks may choose during the Initiative Building phase to Cover a target that is not another tank**. If this target is attacked in melee, **the tank may use its cannon on the attacker**.

For the GM: Use with caution. Tanks are extremely capable vehicles and most of them will tear apart unprepared Mages. Never use a tank that will overwhelm your players, never use a tank your players cannot damage, and never let them into a tank battle without letting them know of the special restrictions involved with tanks. Still, for those who seek a challenge, there's not much better out there other than a Magus.

While tanks have a Passive Melee Defense of 0, your players should not be attacking tanks in melee unless they're close to death.

Main Battle Tank

	Light	Medium	Heavy
Armor Points	150 AP	200 AP	300 AP
Laminate Points	75 LP	50 LP	38 LP
Stun Threshold	30 ST		
Full Stun Threshold	99 FST		
Passive Evasion	17	14	13
Passive Melee Defense	0		
Initiative Bonus	+6	+3	+2
Initiative Increase	+3	+2	+1
Armor Threshold	4d6	6d6	7d6

Main Battle Tank Critical Table

Result (on d6)	Location Hit	Effect
1-4	Fuselage	Roll double the damage dice for this attack roll.
5	Turret	Halves the Attack Bonus of the weapon. If this effect takes place again, both weapons are entirely destroyed (as is, effectively, the unit).
6	Propulsion	Passive Evasion is halved. If this effect takes place again, Passive Evasion is reduced to one-quarter.

Propulsion Types

TREAD TYPE – The most common type of tanks use treads. Treads are able to conquer even the most difficult of terrain. Though an APU's hover mechanism is faster, it is also more vulnerable to damage and requires relatively even ground to operate. **Tread types have +3 to all attack rolls**.

WHEELED TYPE – Not usually used for tanks in the twenty-first century sense, but some self-propelled artillery and APCs use wheels. Slightly faster than a tread type, but vulnerable to precision strikes, as wheels can be more easily taken out. **Wheeled types get +3 to Initiative Bonus, +2 to Initiative Increase, and +3 to Passive Evasion. However, AP is reduced to 75% of its normal value**.

FREE ROLLER TYPE – Uses electric free rollers to travel along the ground. This allows it to change direction quickly and respond well, but makes it a substantially less versatile vehicle and a less stable firing platform. However, the shape involved covers all locomotive drives, so all hits are to armor. **All free roller types have +3 to Passive Evasion**.

HOVER TYPE – Uses atmospheric hovering technology with fuel provided by a fusion reactor. This sort of technology is not commonly used in tanks, because it provides a very unstable firing platform. Most tanks of this type are plasma tanks, but missiles and rockets can also be delivered this way. **Hover types gain +3 to Initiative Bonus, a 100% Initiative Increase, and, most importantly, roll Evasion with a bonus equal to Passive Evasion minus 8 (effectively a +3 bonus). AP is reduced to 50% of its normal value**.

Main Cannon Types

RIFLED CANNON – A rifled cannon, firing slugs. Designed specifically to destroy APUs and other lightly armored materiel. What it lacks in raw strength it makes up for in accuracy, range, and ammunition storage.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	12d6	6d6	-1/+1

SMOOTHBORE CANNON – The quintessential tank cannon, this smoothbore cannon bets it all on a single shot. A single hit from a smoothbore cannon's shell destroys most APUs and will even cripple other tanks.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
3d6+6	24d6	24d6	0/0	x1/2	6

LINEAR CANNON – A large linear cannon. Tanks using these weapons were extremely common during the Lunar Revolution. Occupying a role in between the rifled cannon and the smoothbore cannon, it fires a single high-velocity solid slug.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	18d6	18d6	0/0

BALLISTIC ROCKET – These multi-launch rockets give a tank a more versatile weapon than a regular cannon by increasing the potential hit ratio. These types of tanks are particularly effective at taking down APUs.

Number of Attacks	Attack Roll	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
2	3d6+6	12d6	12d6	0/0	x1/2	6 per launcher

ANTI-AIR BALLISTIC MISSILE – These missiles can shoot choppers and even fighters straight out of the sky, while also being effective against tanks and APUs.

Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition	Missile Launch Limit
+6	18d6	18d6	0/0	x1/2	6	2

ANTI-AIR MIRV – Used for softer targets when enemy armor is not a concern, these MIRVs open up with a veritable cloud of projectiles. Ammunition storage is an issue.

Number of Attacks	Attack Bonus	Base Damage (Armor)	Damage Step	Damage Range	Laminate Damage	Ammunition
12	+6	3d6	3d6	0/0	x1/2	6

ANTI-AIR AUTOCANNON – A six-barreled autocannon of the heaviest type, the hit ratio of this weapon is truly awe-inspiring when it gets a bead on an enemy. Cannot harm tanks, however, due to the relatively low calibre.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	8d6	1d6	-7/+7

LARGE PLASMA FLAMER – The modern version of the archaic flame tank, plasma flamer tanks devastate enemy mechs and armor alike at close range. The cost is that the tank is somewhat ineffective against infantry and fixed emplacements.

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage
3d6+6	11d6	1d6	-10/+9	x1/2

ELECTROLASER – Heavy but devastating, a tank-type electrolaser is truly a battlefield terror. Tanks, however, are equally vulnerable to enemy electrolasers.

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage	Systems Damage
3d6+6	24d6	24d6	0/0	x1/2	x1/2

TROOP TRANSPORT – Also known as an Armored Personnel Carrier, troop carrying tanks are often the most effective of all, as the troops within can escape the tank if it is sufficiently damaged. *In game terms, the tank carries a team of troopers that operates independently, and the tank must be destroyed before the trooper team can be attacked.*

Side Cannon Types

HEAVY MACHINEGUN – The most common type of secondary tank weapon, this is a coaxial-mounted machinegun designed for soft target interdiction. Useless against heavy armor.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	7d6	1d6	-6/+5

ANTI-APU PLASMA PULSER – This kind of weapon is generally equipped for anti-APU operations rather than general operations, using heavy pulses to disable enemy mechs.

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Armor Damage
3d6+6	16d6	16d6	0/0	x1/2

COAXIAL ARC GUN – A lighter arc rifle, these sorts of weapons are multipurpose and among the earliest types of energy weapons known.

Attack Roll	Base Damage (Laminate)	Damage Step	Damage Range	Systems Damage
3d6+6	12d6	6d6	-1/+1	x1/4

ANTI-ARMOR COILGUN – Designed for dedicated tank destroyers, these weapons are designed to punch through light and medium armor. Light guns like these, however, cannot take down the heaviest of armor.

Attack Roll	Base Damage (Armor)	Damage Step	Damage Range
3d6+6	12d6	6d6	-1/0

KN Model Powered Armor

The APU dominates for a reason. Experiments in powered armor, by and large, have found that creating an armor that is both useful and does not kill the pilot through normal operation is a task far beyond current technology. While troopers do use suits of artificial muscle, this is not 'powered armor' in a sense that could compete with an APU. The closest analog would be space 'boarding suits', armored spacesuits that provide little more than a smaller size compared to a mech, allowing them to board enemy craft.

The KN Model changes all that, but at a considerable price.

Neucom's KN Model powered armor is an experimental type designed for use exclusively by pilots with altered physiology – the 'kaizo ningen', or 'altered humans'. These humans use a cybernetic skeletal structure allowing for much greater tensile stress on the human body, as well as other minor enhancements. According to Neucom, all the pilots for the KN Model were volunteers, who knew what would happen to their bodies. The KN Model is designed as an experiment in downsizing technologies, and in hopes of developing an armor for unmodified humans.

Few believe that Neucom is entirely above-board in this matter, but thus far, the Union has seen no reason to investigate, and the identities of all the altered humans has been made public knowledge.

Having very similar capabilities to an APU in a much smaller package, KN Models are generally more mobile than a similar APU model. Their size, however, makes them more fragile overall. New developments in laminate technology, and the KN Model's small profile, allow the unit to be particularly resistant to energy weapons. Their firepower is generally equivalent to an APU's, but their close combat weaponry is weaker overall.

There are four general production types of KN Model armor. All of them share the same general profile – armored helmet with active sensor (usually in either red or blue, depending on operation area in the Megafloat zone), thick layered grey-white armor plating over artificial muscle, and (usually) rollers in the feet for high mobility. Their weapons are custom-built by Neucom, made to be able to effectively combat APUs and other larger threats despite their size, and carry more ammunition than an ordinary trooper.

The **Trooper Type** is the standard model, equipping anti-APU firepower with good mobility and decent armor, putting its automatic battle rifle and back-mounted micromissiles to good use. The Trooper Type is complemented by the fast-attack **Scout Type**, sacrificing a small amount of armor for more efficient rollers and very high laminate, using an advanced bullpup-layout personal defense weapon with small-scale anti-armor rounds. Unlike the typical high-speed type, it also has a powerful weapon – a recoilless rifle, complete with autoloader.

Two other types are intended for non-terrestrial environment. The **Space Type** is a low-cost all-environment type that has a backpack with transatmospheric VTOL plasmajets to supplement its rollers, allowing for long space operations and short-lived operations on land as well. To suit its role, the type equips a long-range linear rifle appropriate for space. The **Multirole Type** is a monster of a machine, however – its rear section has been extended to install a microfusion reactor and boost engines, adding hoverjets to replace the rollers in the feet, making it essentially a downscaled APU, complete with energy weapons. Its primary attack method is a rack of anti-aircraft missiles and a back-mounted 12.7mm machinegun, with an ion rifle to provide support for its faster but more vulnerable brethren.

For The GM: These foes are APU-grade through and through, and are even faster than a normal machine of equivalent weight. Caution is advised when inflicting these on your players...they should never be a random foe. The pilots are radically altered to use these machines and as far as anyone knows, only Neucom can make both the armors and their pilots.

...as far as anyone knows, anyway...

Only the Multirole type can equip energy weapons, as the others are electrically powered.

KN Model

Standard Types	Trooper Type	Scout Type
Armor Points	75 AP	56 AP
Laminate Points	150 LP	225 LP
Stun Threshold	20 ST	10 ST
Full Stun Threshold	65 FST	32 FST
Passive Evasion	20	23
Melee Defense	+6	+3
Initiative Bonus	+9	+12
Initiative Increase	+5	+6
Right Hand Weapon	Anti-APU Battle Rifle, 7.92x107mm	Anti-APU Bullpup PDW, 5.7x28mm
Attack Roll	3d6+6	
Base Damage (Armor)	6d6	4d6
Damage Step	3d6	1d6
Damage Range	-1/+1	-3/+2
Dual Back Weapon	Anti-APU Micromissile Launchers	Long-Range Recoilless Rifle
Attack Roll	N/A (Bonus +6, High Init +15)	3d6+6
Base Damage (Armor)	6d6	12d6
Damage Step	6d6	12d6
Damage Range	0/0	
Laminate Damage	x1/2	
Launch Limit	4 (2 per launcher, 2 launchers)	N/A
Ammunition	12 (6 per side)	3
Left Forearm Weapon	Small-Scale Superheated Blade	Small-Scale High Frequency Blade
Attack Roll	3d6+6	3d6+9
Damage Step (Armor)	2d6	1d6
Defend Base Damage	0	0
Defend Damage Range	0/+6	0/+9
Counter Base Damage	8d6	5d6
Counter Damage Range	-3/+2	-4/+4
Defense Actions	Defend and Counter	

KN Model

Specialist Types	Space Type	Multirole Type
Armor Points	68 AP	113 AP
Laminate Points	135 LP	113 LP
Stun Threshold	20 ST	30 ST
Full Stun Threshold	65 FST	99 FST
Evasion Bonus	+12	+6
Melee Defense	+6	+9
Initiative Bonus	+12	+6
Initiative Increase	+12	+6
Right Hand Weapon	All-Environment Linear Rifle	Military-Grade Ion Rifle
Attack Roll	3d6+6	
Base Damage	8d6 (Armor)	6d6 (Systems)
Damage Step	4d6	3d6
Damage Range	-1/0	
Laminate Damage	N/A	x1
Right Back Weapon	N/A	Anti-Aircraft Missiles
Attack Bonus	N/A	+6
Base Damage	N/A	18d12
Damage Step	N/A	18d12
Damage Range	N/A	0/0
Laminate Damage	N/A	x1/2
Launch Limit	N/A	1
Ammunition	N/A	3
Left Back Weapon	N/A	Heavy Machinegun, 12.7x108mm
Attack Roll	N/A	3d6+6
Base Damage (Armor)	N/A	7d6
Damage Step	N/A	1d6
Damage Range	N/A	-6/+5
Left Forearm Weapon	Small-Scale Superheated Blade	Small-Scale Plasma Projection Blade
Attack Roll	3d6+6	3d6+3
Damage Step	2d6 (Armor)	3d6 (Laminate)
Defend Base Damage	0	0
Defend Damage Range	0/+6	0/+6
Counter Base Damage	8d6	12d6
Counter Damage Range	-3/+2	-3/+2
Armor Damage	N/A	x1/2
Defense Actions	Defend and Counter	

KN Model Critical Table

Result (on d6)	Location Hit	Effect
1-3	Torso	Roll double the damage dice for this attack roll.
4	Arm	The Attack Bonus for any weapons on the arms is halved. If this effect takes place again, one arm is lost entirely and the unit must leave combat.
5	Leg	Initiative Bonus, Initiative Increase, Melee Defense and either Passive Evasion or Evasion Bonus is halved. If this effect takes place again, these values are reduced to one-quarter of their normal value.
6	Head	Stun Threshold and the Attack Bonus for any weapons on the back are halved. If this effect takes place again, the operator is killed.

Customizing Rogues With Magus Points

While the focus of the game is the APU, you or your players may decide that customizing another vehicle might be ideal, or you may need an 'elite' enemy that goes above and beyond small customizations. The Magus Point system may be used for this as well, with minor tweaking. Unlike a modular APU, other vehicles are not designed to be able to be easily modified and tweaked, and they may be inferior to an equivalent APU – but in some areas they may be superior, by having unique abilities.

When piloted by a Magus, all vehicles gain the standard benefits of that station – a selection of Pilot Traits, a pool of Skill Points, and, if a player character, Legend Dice. Vehicles work best in a fixed advancement system, or for NPCs. One Magus Manouver has a special case for certain vehicles. **When using Split-Second Dodge with a vehicle with Passive Evasion or Passive Melee Defense, subtract 11 from the PE or PMD and add the result to the stat for this round (if positive).**

Magus Points have a special restriction where Initiative Bonus and Initiative Increase are involved, which is far less efficient than that of an equivalent APU. **When MP are added to Initiative Bonus, Initiative Increase does not go up. Additional MP must be spent to increment Initiative Increase, and Initiative Increase may not go past your Initiative Bonus.**

You live in New York City, one of the largest of the Megacities. Your family has lived in New York for centuries, since before the city was known as New York. Your family has watched it change from a mere harbour to one of the shining gems of the twentieth century world, has seen it devastated twice — once at the turn of the third millennium, and once just before the Lunar Reckoning. And yet it survives.

You reside in one of the most prestigious superstructures of the megacity, right in the middle of Manhattan, close to historical skyscrapers. Part of you wonders how such things could have ever been called 'skyscrapers', but you remember that people in the past didn't have the advanced materials available today. Today, it is 7 AM when you are awoken by a shrill alarm from the control panel in your room, and you yawn as you slowly sit up and try to face the day. Sunlight filters through light tubes at the corners of your room, providing natural light in a shadowed level of the city.

At your level, you can look out to the transparent aluminum window and see the top of the Chrysler Building, one of the skyscrapers the RKVs preserved. It's a pretty-looking building, you think, somehow more vibrant than the neosteel that surrounds you. But you remember your history classes again, remembering that such buildings were fraught with faults compared to modern, self-sufficient superstructures. Beautiful yet fragile, you think. Shadowed by the tips of much smaller buildings, it requires its own lighting to remain visible here.

In the kitchen, you cook eggs and bacon — the real stuff, from Harvest Earth, not the synthetic stuff most people eat. As you do, you check your tablet and look through the latest podcasts. You skip over your shows and movies, groan at the weekly Marina Aquamar scandal, and glance at a story about work on the Ibiza Mass Driver before your eyes stick to a story — '459th Tactical Eliminated by Rogue Magus'.

It's hard to believe, you think, that just one person can eliminate an entire squadron of APUs on their own. Should one person be allowed to have that much power? It's hard to judge Mages, you think, as they're all so mysterious. They're a wildcard in a world with enough instability, and you doubt that any of them are truly heroic, even the ones in the Grand Magus Tour fights.

But those thoughts are quickly dismissed, as you have a job to get to — 100 levels up. As you leave your apartment, you pass by other residential structures and commercial structures, each with their own elevators separate from the main transit line. Luckily, you have a Personal Rapid Transit pass from your job, so you get to use a small elevator in relative comfort, and it's rarely a long wait. Still, even when you have to use regular transit, either from levels to levels or superstructure to superstructure, you find it's never a problem waiting.

As you go up, you look at the agricultural strips, vertical greenhouses across every superstructure. Light, power, water, and food are all self-sufficient, enough to house 100 million people. You remember your father's tales of the Unsung War, of shortages, destruction, and then the fall of the RKVs...and you are safe in the knowledge that such chaos will never happen again.

When you arrive, you quickly head to Western Microprocessor's main structure. You're a quantum researcher looking for that breakthrough that will allow practical quantum computing. It's taken so long, you think, with so little to show for it, and part of you thinks it's probably impossible.

Still, humanity has accomplished so much, even after it all seemed like it was going to end. Surely they can come up with just one more advance.

...right?

Life in the Lunar Reckoning

Though you are Mages, mercenaries, soldiers, you had a life before, and you will have a life after. The Lunar Reckoning is not an era of constant war and darkness, even if you will be fighting most of the time. This chapter exists to help explain life in this era, and to help give you an idea of where your characters fit into everything.

Earth

Life on Earth is life in the megacities. Megacities or megacities-in-progress now house 80% of Earth's population, with 18% in 'ordinary' cities and only a tiny 2% in permanent residence in rural areas. Megacities are able to provide every need of their citizens within their superstructures — entire skyscrapers dedicated to factories, vertical farms upon the sides of residence buildings, and waste reclamation systems for every floor. Soon, an entire generation will have lived and died there.

In terms of global stability, the world is more stable than it was during 21st and 22nd centuries. However, due to globalization, there are fewer constant 'hotspots'. Opposing forces can strike any location in the globe. This is not a new development — in the middle of the 21st century, the Arizona Insurrection showed the 'first world' that it was no longer safe from civil war and terrorism. This fact is one of the reasons the Union is hard pressed to position its forces, as flashpoints pop up faster than the ESAF can react.

Travel across Earth has changed considerably. Within a city, automobiles are rarely used, though highways are sometimes used for long range. Instead, incredibly complex transit systems are used, ones which move vertically as well as horizontally — your best friend's neighborhood may very well be simply twenty stories above you! These transit systems most often combine personal transit and mass transit. Automobiles are still the first choice for short-ranged freight, however, and expensive cars like the Neucom Raven or the Oncari Corsair are still status symbols.

For intercity travel or long-range freight, one is likely to use a high-speed train, as tunnels spread throughout the Americas, as well as linking Eurasia and Africa. To get across continents, one usually takes a suborbital flight, but for glamour, one might take a trip on a luxury airship from city to city on a tour. These ships share the skies with airborne carriers, floating, helium-filled military bases holding dozens of fighters and mechs. Because helium is a byproduct of nuclear fusion and artificial fossil fuels are expensive, airships are much more economically viable than they were in previous centuries.

The end of nation-states has triggered a new kind of identity, based primarily on city. A person is no longer 'American', they are a 'New Yorker' or a 'Bostonian'. Nationalism survives, however, often taking the form of demonstrations against the Union, or, in extreme cases, terrorist action. Though there is nominal local government in forms which generally reflect old nation-states, this government's powers are more limited than a traditional nation's, as higher levels of Union government take charge of economic, environmental, and military concerns.

By far, the most common career on Earth is construction worker. Employed by Oncari and subcontractors, as well as the Union directly, yellow-painted work mechs (or 'labors') are an incredibly common sight everywhere in a megacity, and GPWS training is mandatory in many high school programs. Agriculture also takes up many workers. Some of the more unusual careers include scavengers, who dig through ancient landfills for archeological and resource gathering purposes, and archivists, who attempt to examine, recover, categorize, and preserve digital data in a variety of old and undocumented formats.

All in all, though mankind has spread into space, Earth is still considered their home. As it slowly recovers from the RKVs, even the most extreme of anti-Union, anti-establishment, anti-social subversives agree that Earth must be protected, and cherished, and that they must prevent anything like the Lunar Revolution from ever occurring again.

Luna

Life on the moon is much like living one's entire life in a box of steel and concrete. Though there are greenspaces on Luna, most of the structures are very much claustrophobic. The crime rate on Lunar settlements is very high, and it is a prime spot for smuggling. Still, Lunarians are known for being fun-loving, exciting, vibrant people, often taller than the norm, tending toward exciting and dangerous pursuits. Common stereotypes in movies and games for Lunarians are the perky, violent girl, or the roguish smuggler growing up in the back streets.

Unlike the megacities, the Lunar cities are designed with great underground hollow structures, to use the lunar regolith as a protection against radiation. These structures are filled with highways, crossing the entire moon in belts, most of Luna's valuable resources having been stripped. The cities themselves often seem like malls, with little exposure to sunlight due to the requirements of the settlements. Stalls are open for every service, and even hospitals have storefronts, transit from place to place being a constant problem due to the

age of the settlements.

Most work on Luna is related to spacedocks. Luna's ports see the most traffic of any settled area of the solar system, and the processing of cargo and customs is a daunting task. Without efficient management of Luna's space traffic, intrastellar trade would fall apart. Often Lunar ports are targets for rebel forces, as shutting down a port deals considerable economic damage to the Union.

The Orbital Colonies

Intended for the masses, the orbital colonies, with their perfectly maintained weather patterns, became a symbol of the aristocracy. The average income in the Colonies is the highest anywhere in the system, and even after the war, the colonies are dominated by families such as the Alphonses. These families own the businesses, the buildings, and in some cases even the colonies themselves. Occasionally, family conflicts erupt in violence, bringing innocents into the crossfire and forcing the intervention of the ESAF.

Life on the colonies was meant to be perfectly planned, from the streets to the water and food and everything in between. At times, colonies suffer from over- and underpopulation, forcing migrations. The practice of forced migrations, though a major factor in anti-Union sentiment in the colonies and the Colonial Wars, has not ended as of yet. Supporters agree that the Union's constitution makes forced migration illegal, while opposition points to the immense cost required to modify colonies for greater population capacity.

Still, the colonies have their own working class, often in envy of the palatial pleasures of the great families and their mansions. Like Earth, construction and agriculture are common, but manufacturing is also a large part of the workforce. Gillian Manufacturing and other shipbuilders use colonial labour in the process of ship construction, as larger starships can only be reliably constructed and launched from zero gravity environments.

Mars

The act of bringing life to a planet is one that every human on Mars is proud to be part of. Martians are hardy, as they must be to live on a planet with little atmosphere. Outside the domed cities and structures, one must wear breathing masks, lest they suffocate in a thin atmosphere that, though now livable without space suits, is still mostly composed of CO₂.

The planet is criss-crossed with highways, alongside suburbs, cities, terraforming structures, and military bases. Supervised by Mars Administration, the people of the red planet most often work in terraforming, a job which requires most of the planet's population. Despite this, however, Martian life is far less crowded than Ter-ran megacities, making it an appealing option for those overwhelmed by megacity life.

MarsSec is hard-pressed to keep order on Mars. MarsSec is primarily a police force, despite having military strength, and so its procedures are different than that of the other militaries. Gangs on the highways, or terrorist action, are a risk of life on Mars, and MarsSec is often considered the modern equivalent of 'cowboy cops' for the tactics they use against criminals.

Jupiter

The beginnings of the Jovian colonies are shrouded in mystery, as is the end of the Jovian Dominion. Its legacy lives on, however, as the genetic engineering the Dominion practiced spreads through the solar system. The most visible sign is a variety of rare and unusual hair colors — red, blonde, even green and blue hair becoming a perfectly normal thing to encounter in everyday life.

Jovians have a reputation as being self-sufficient and aloof, one that is not entirely undeserved. Life in space can be harsh, as the risks of zero gravity and radiation exposure are not entirely mitigated by modern technologies, and during resource gathering operations, one can be far away from others for long periods of time.

Life around Jupiter is hardly ascetic, however. Natural and processed resources are in abundance, and Europa's biosphere provides food for human consumption. Visitors to the orbital superstructures and ships, the European and Ganymedian submarine habitats, the Callistonian underground cities, and the Iotian research stations, are shown incredible delights and wonders that demonstrate the best of human ingenuity.

But for most Jovians, their life is spent in space, in mining ships and work mechs around Jupiter and the asteroid belt. The resources of Jupiter, including the rare and valuable fuel helium-3, are an utter necessity for modern civilization to function. The JASF and OSN constantly patrol, but given the size of space surrounding Jupiter and the belt, piracy is a threat that can never truly be ended.

And Beyond The Infinite

Despite the predictions of early science fiction, mankind's travels have not taken them far beyond the solar system. The resources of the solar system are more than enough to maintain mankind's current and estimated population levels for thousands of years yet, and the construction of Megacities and space colonies has considerably expanded the system's population capacity. Therefore, extrasolar colonies have been constructed primarily for scientific endeavor.

The first FTL ship, the *Ad Astra*, proved the theory of faster than light travel through instantaneous velocity increase, also known as the *neonewtonian slingshot drive*. While requiring a huge amount of energy, it was the only method promising enough to construct a ship for. Captured by ace pilots Allfather Seven and Diana One during the Lunar Revolution, it was used — without being fully tested — to warn Earth of the approaching RKVs. Without the *Ad Astra*, all life on Earth would likely be extinct.

Following the success of *Ad Astra*, the first colonies, all O'Neill types, were constructed in LR 10 in proximity to Alpha Centauri, Van Maanen's Star, and Gliese 682. The first extrasolar planet suitable for colonization was much further, around 51 Pegasi. This colony, known as Tsiolkovsky's Cradle, is one of only five currently in existence, their populations all less than one million.

First contact with an alien civilization was achieved in LR 3, with the Darkarans, a humanoid species with subtle reptilian features. The Darkarans, commonly perceived as warrior-philosophers, allowed humans free passage through their system, limited trade, and diplomatic relations, but closely protected their technology from prying eyes.

Through the Darkarans, the Union learned of the political situation in known space — that Earth is sandwiched between two great powers in a small buffer zone. To the galactic west are the Intians, political leaders in a free association known in English as the Freesphere, a sort of ultimate democracy. To the east is the Celestial Sphere, a more oligarchal power ruled by the Ornith. Little is known about either species, save that they are humanoid and uninterested in Earth.

It is unknown why the buffer zone exists, but most agree that the Darkarans have some interest. The Darkarans hold only one system, but they have incredibly advanced technology — most notably, the ability to create artificial wormholes. Because of this, however, the great powers leave Earth alone, and due to their advanced technology, the Union is not eager to break this silence. Earth has enough problems without being destroyed in galactic war.

The closest in terms of position to humans are the Lorath, a species which appears uncannily like human conceptions of angels. The Lorath are technologically similar to humans, and also practice similar methods of mechanized warfare — from small spider tanks to huge twenty metre behemoths known as Standing Tanks. They are highly mercantile, highly religious, practice genetic engineering and cloning, are interested in reverse engineering technology, and practice slavery, with a genetically engineered slave race known as the Helashio under their control. (Both evolved on the same planet, but human researchers believe an advanced species interfered in Lor's development.) Because of this, though the Union and the Lorath Matriarchy have official relations and limited trade, there is distrust between both species. The most common war game in the OSN is a simulation against Lorath fleets.

Human exploration is limited. Not only do political borders make it impractical, but FTL speeds are limited by current computer technology. A breakthrough in quantum computing could greatly increase safe FTL speeds far past the current red line. Therefore, most exploration beyond the earthsphere takes place with lone explorers associated with the Solar Expeditionary Fleet. It is unknown what they do when they leave the system, but few, if any, have ever returned.

In any case, most humans (known as 'Terrans' to most aliens) have little concern for what goes on outside the solar system, and Mages find themselves little concerned with it. The affairs of humanity are limited to the solar system, and it is not yet time for them to find their place within the stars. Therefore, in general, no one who leaves the earthsphere is considered a Magus, no matter if they were before they left.

Campaigning

This chapter's focus is mainly for the Game Master, but players can also get an experience of what sort of campaign they might like to play in — or what sort of Mages they'd like to be. A campaign is a set of battles and interactions that forms an overall storyline, from the beginning stages of a Mage's career to a climactic battle to finish it all.

Advancement Type

One of the primary concerns of a campaign is the sense of advancement. There are two methods of advancement in *Lunar Reckoning* 69 — Union Dollars and Legend Dice. Union Dollars form the equivalent of 'experience points' found in many other popular systems, and Legend Dice allow players to manipulate the odds. All campaign types allow player characters to gain Legend Dice, but cash is not always a concern. It's up to the GM to decide what sort of advancement the players will gain.

Fixed Design

For shorter campaigns and one-shots, a fixed design makes the most sense. In this form of advancement, if it can be called that, cash is not a concern, and the only advancement is in the form of Legend Dice. A fixed amount of Magus and Skill Points are provided (usually 20 and 10 like the Magus Record), and no more can be gained. Legend Dice are still gained on a session by session basis.

The key for this kind of campaign is to think big. Big battles, big rivalries, big climaxes, to keep players interested without the carrot-and-stick of Union Dollars. Allow your Mages to shape the future of the world with their power. If your players are really good roleplayers, consider lots of non-combat scenes to keep things interesting, exploring the world of the *Lunar Reckoning* outside of the cracked lens of war. Keeping the campaign short is also key — a long campaign without advancement will wear thin.

Cash-Based Advancement

Cash-based advancement is where you gain Union Dollars on a mission-by-mission basis. Players start with a budget of \$300,000 (or more) to build an APU from, are given a maximum number of Magus Points they are allowed to purchase (usually 20), and may spend money on equipment or Magus Points. Pilot Traits remain as they are, Skill Points are gained from the beginning at a fixed amount, and Legend Dice can never be bought or sold.

Parts are bought and sold at-will, and parts are sold for the same cash value that they are purchased for. While unrealistic, this allows designs to be changed at-will as players gain more cash, or otherwise for mission parameters. Magus Points, however, can never be sold.

This form of advancement allows for longer campaigns. Each mission should have a cash value between \$20,000 and \$50,000 upon completion. This is an abstraction — the actual pay is higher, but operating expenses and personal expenses are deducted before the 'actual' payment received. Once every player starts having a fixed design and reaches their maximum Magus Point level, the campaign should wrap up as soon as possible.

In this sort of campaign, the players should start out fighting single Sportwalkers or APUs, or small groups of Chickenwalkers, and slowly move up to more high-level foes and larger number of foes. Mages should be rare and difficult encounters requiring teamwork and cunning to take down. At the same time, they should never feel ashamed to retreat from a losing battle. This allows for the slow progression from young pilot to powerful Magus, and should be the primary mode of play for most groups.

Hybrid

A hybrid-based approach could take any number of forms. Starting with a larger than normal budget of cash, or perhaps starting with a fixed design and gaining Magus and/or Skill Points along the way, a hybrid-based approach is flexible and makes an ideal mid-sized campaign seed. While it may require somewhat more planning than a fixed-design and more ad-hoc rulings than cash-based, it may provide a satisfying experience for players uninterested in calculating parts costs.

Group Type

Mages as often work in groups as alone, but no Magus can operate without a proper support network to repair, maintain, and transport their APU. Regardless of whether your game involves a party or an individual, it is a good idea to choose ahead of time what sort of group you have.

PMC Associate

Many Mages choose to become associates of private military corporations. PMCs have the resources to support Mages in terms of equipment, repairs, and transportation, while also having a non-regimented command structure and the freedom to decide which missions to take on. PMCs also offer support forces, most often using Mages in a first strike or rapid attack capacity. While Horizon is the prototypical player character PMC of the setting, other PMCs big and small can be created to fill the void.

PMCs have interesting loyalties — do you have scruples? Do your player characters have a conflict with the PMC's mission selection? Are they directly in the chain of command or somewhat removed as independent operators? PMCs also are flexible for advancement — larger ones might offer a fixed design, while smaller ones might force Mages to foot their own bills, going for one of the other campaign types.

Corporate Associate

This form of group is generally more confined to NPCs whose loyalties need not change. However, this sort of group may be interesting for a darker campaign in which the PCs are forced to choose between corporate loyalty and the greater good. This sort of idea could be used as a campaign seed or a long-haul campaign, and can use any sort of advancement type, although it fits quite well with the hybrid type.

Rebellion Associate

Similar to corporate associate, this sort of group is ideal for NPCs more than PCs. However, guerrilla forces are generally more flexible, and your PCs may in fact be the leaders of the group rather than simply a portion of a much larger organization. The advantages in terms of storytelling are obvious — how far are your players willing to go for their cause? Like corporate associate, the hybrid advancement type is ideal, but it works with any advancement type.

Independent Mercenary Company

A wide support network has emerged for mercenaries in this era, including Mages, and this kind of group, ideal for a cash-based advancement type, lets you take charge and choose your own missions and your own path. Without a large PMC to back the players up, they may need to rely on local mercs for assistance, but your players will appreciate the freedom this type of campaign gives them. For the quintessential, backwater, fight-for-your-next-meal type of mercenary, use a cash-based advancement.

Police Squadron

While not 'Mages' per se, special police forces like the Hellhounds of New Berlin use custom units to operate in special missions that ordinary mechanized police cannot. Such a force makes an ideal campaign for those who wish to avoid the complications of war — with the right sort of enemy, even a humorous campaign could be created.

A police campaign works best with both a fixed design and a group of NPCs as support. A long-haul campaign using the police motif would probably wear thin, but for short sessions or one-shots, this sort of style might just be a fresh change of pace.

Special Forces

Thanks to Modular APU technology, special forces units are capable of using custom APUs in order to get an edge on opposing forces. Again, special forces are probably not Mages in the traditional sense, and freedom goes out the window, but it makes for an exciting short campaign. A mission to take down a group of Mages or a campaign against a guerrilla group, for instance, are exciting ideas that make for a memorable experience, and there's always the chance for conflicts in the chain of command — forming a seed that might take your players into a whole new kind of campaign.

Transportation

While an APU is a powerful machine, it is reliant on other vehicles for transportation over long distances. There are a few ways for an APU to get from place to place when simply travelling over land is not an option, some of which are listed below.

Airborne Carrier

The skies of Earth are filled with airships, and the king of the airship is no doubt the airborne aircraft carrier. Inventions of the 21st century, airborne carriers are highly capable vehicles which operate wings of fightercraft, and today, are capable of dropping APUs as well. While a mainstay of the ESAF in the form of the Forever class, they are also operated by PMCs, usually refitted 21st or 22nd century models like the American Reciprocity class or the European Union's Europa class.

An airborne carrier is more of a mobile base than a mere transportation method, and is often combined with other methods, particularly for recovery. Due to its immense size, an airborne carrier makes for a great mission complication — or support fire. The crew of an airborne carrier makes for a great group of NPCs, from the commanding officer to the mission operator and support crew.

Supersonic Transport

In cases where speed is key, supersonic transports can be used. Supersonic transports are small planes generally capable of only holding one or two APUs at a time, and dropping them from high altitude where boosters can be used for descent and attitude correction. Though conspicuous, a supersonic transport plane is generally far less vulnerable to ground defenses than a carrier or a chopper is.

Heavy Lift Chopper

The most common type of APU transport, heavy lift choppers are used when speed is not a concern, but locations cannot be reached by road. Transport choppers like these are generally open-body, so that an APU can be loaded and unloaded far faster than a transport plane. Most often used in recovery or missions where anti-air defenses are minimal, the chopper pilot's job is a dangerous one, as they are highly vulnerable to attacks from mobile SAMs or other anti-air defenses.

APU Transport Truck

When stealth is a concern, transport trucks are used. While actually slower on land than an APU is, even in long-haul land cruising, they are far less conspicuous, appearing the same as a heavy lift transport truck in most cases. They also allow APUs to save their fuel for later use. While this sort of transportation method is not always appropriate, it can be used to good effect in some types of missions.

Creating Missions

Mission creation is fairly straightforward. A good rule of thumb is to have only two more enemies at any given time than your group has members — less if one of the enemies is a Magus. The system is designed for lethality, and high-level foes like tanks should be used sparingly, especially with cash-based advancement. Using a mix of low-level and high-level foes is ideal, with perhaps one big threat in the middle of several smaller threats. Troopers are always useful, and APUs make a good benchmark threat. And if a mission is too easy for your players or they're getting bored, there's always...

Mission Complications

Mission complications are things that make missions less simple than destroying all enemies. While they can be a source of frustration for players, they also make for memorable encounters. A few ideas for complications are listed below, but there are others that can be considered, whether they have game mechanic effects or not.

Time Limits

A time limit is useful, though should be used sparingly. If your players need to defend a position for X rounds, or defeat all enemies in X rounds, it can be as much an annoyance as it can be a good nail-biter. Always remember to work within your means for how many rounds are needed to defeat an enemy, and perhaps have only a certain fraction of the targets be time limit targets.

Employer Standing

The world you create for your players should never be static. This isn't a single-mission complication so much as one that involves multiple missions and actions toward missions. When an employer instructs its Mages, it may require certain codes of conduct...or the Mages may choose to betray an employer for the sake of the greater good. Such actions should always have repercussions.

Another sort of employer standing is useful when multiple warring factions are involved, all hiring Mages. A sort of ad-hoc 'points' system should be used in this case, keeping track of player behaviors and who your players choose to support the most. In this case, allowing for multiple mission selections is a good rule, as long as you're willing to put up with the extra planning.

Civilian Targets

Often, civilian worksuits or other vehicles will be caught in the crossfire, or used as hostages. Assuming your players have any sense of honor or decency as Mages, they will likely try to protect these targets. In some cases, however, such targets may indeed be the mission target, whether your Mages are good guys or not.

Civilian targets should be treated like troopers. Determine the number of targets (12 is a good number) and have damage be determined in the same way as reduction of trooper dice. When the number is 0, the targets have all been killed. Encourage your players to intercept attacks that would otherwise hit civilians — an interception of this type does not reduce their Initiative. In case it is relevant, civilians always have an Initiative of 0 and cannot attack in any way.

Support Units

Mages do not always fight on the battlefield alone. Whether PMC machines or independent mercs hired for assistance, support units can allow for much larger battles to take place, whether using the dice or with the allied forces fighting in the background.

In the former case, consider assigning some of the dice rolling for the support units to the players. It should give them a change of pace, and allow them the excitement of participating in larger battles. Just don't lose track of AP counts!

In the latter case, the momentum of the battle in the background should be described every round, during the Initiative building phase. Such a battle can be used while you calculate Initiative growth and the new action order, in order to keep your players pumped up for the next round. Mages control the tide of battle — when they're winning, their allies are winning, and when they're losing...so too are those they fight alongside.

Recurring Foes

The APU's resilience, and the general doctrine of war in the Lunar Reckoning, allows for enemies to make continual appearances. Generally, this may end up being an enemy Magus, but it could just as easily be a particular tank commander or squadron leader. As AP reduction to 0 does not mean death but rather loss of combat capability, if your players have honor or the enemy still has threats remaining, the ability for an APU or other machine to retreat allows for more meetings — and even if the machine is destroyed, the pilot can often escape the machine, and few are willing to shoot such a defenseless enemy.

The best recurring foe is the kind of enemy the players love to hate, one that gives them a run for their money or dangerous situations whenever they meet. They should be memorable, powerful, never boring and never simple. The Magus Record provides a ready supply of pre-made Mages for this purpose. But don't be afraid to dump a recurring enemy you feel is getting on the players' nerves, and always let them get the chance to kill them for good by the end of the campaign.

Recurring foes do not need to be simply a Magus or a group thereof. You may be fighting a rival mercenary company, a particular guerrilla group, or even a military that is hunting you down. For instance, Horizon's greatest rival is fellow PMC Aurora, a PMC with no scruples and no honor. This type of recurring foe is ideal if your players are the type to shoot to kill, particularly as such Mages often find themselves incurring the wrath of larger organizations.

Dealing With Large Dice Rolls

At times, Lunar Reckoning 69 asks its players to roll large amounts of dice. While for some players this is part of the excitement, other players may choose to use other options to reduce the amount of rolling needed to have a satisfying roleplay experience.

Using A Dice Roller

If you have a laptop or other computer or electronic device at the game table, you may wish to use a dice rolling program. Such programs are ideal for large damage rolls, and are the only option for playing over the Internet in any case. If you wish to use such a program for attack rolls, you should go to the effort of finding one which displays the original rolls rather than just the results, so that you can check for straights and triples.

Using Dynamic Range Compression

Dynamic Range Compression is essentially using less dice to roll for more damage. Simply divide your normal dice roll by whatever number you like, roll that many dice, and then multiply the result. For instance, if you have an attack that deals 18d6 damage, you can divide that by 9 and roll 2d6, or by 6 and roll 3d6.

In cases where you have an indivisible number, subtract dice from that number until you have a divisible number, then roll the extra dice afterward. For instance, if you have 11d6 as your attack and want to compress it, take 1d6 away, divide the 10d6, and add on the extra 1d6 after multiplying the 10d6 back.

While average damage is unaffected, the range of results possible is both wider on average and narrower in terms of raw possible numbers when using DRC. If this bothers you, using a dice roller is a better option. For best results, never divide such that you roll less than 3d6 for an attack, as anything less than that may result in unacceptable spreads of values.

Magus Record

One must always know their enemies, and knowing one's allies is always a good idea as well. This is a public record of Mages known and unknown, for use as allies, enemies, or even player characters or inspiration. Full statistics are listed along with each machine, as well as known history of their pilots.

This is by no means meant to be a comprehensive list of all Mages operating, nor a comprehensive list of their histories. GMs are encouraged to explore the background of the characters here and how they might factor into the histories of the PCs, or otherwise make good mysteries for them to solve.

Blue Magus

"Let them know who you are. Let them know your name. Let them know who it is that is about to end their life. Let them know, and those who survive will never forget."

The first Magus, the one who gave the name to the mercenary class she led into being. Little is known of her true identity, though most records agree that she was once a member of the Jovian Air-Space Force who joined Oncari's Modular APU test program shortly before the Last Colonial War. Whatever the case, the tales of her battlefield prowess are legendary, and most consider that she, through both direct and indirect influence, singlehandedly ended the war months, perhaps years before it would have ended otherwise, and with far less death and slaughter on either side.

After her defeat of the Shooting Star and the capture of the masterminds behind the war, Blue Magus did not return to the ESAF, nor did she strengthen her ties with Oncari. She chose to become a mercenary, to keep her machine and be loyal to an ideal, instead of a government. With Oncari's blessing, she became independent, and with her followed many of her allies and wingmen in the war. Like her, their machines bore recognizable symbols and color schemes, and were tuned for their pilots' exclusive use.

They were the first Mages, but not the last.

The Blue Magus considers herself a teacher, an example. Her cause was, at first, dedicated to Oncari and the Union, but as a new order of mercenaries dawned, she feels she must protect the fragile culture, threatened as it is on all sides by society, government, and corporation alike. She speaks in terms of philosophy, but like the best of teachers, prefers practical examples most of all, unafraid to perform seemingly contradictory actions to prove a point. She takes the long view, and considers the ideal to be more important than the

consequences of the actions needed to achieve it...but at the same time, she is unwilling to endanger those who have not chosen to fight.

As the first Magus, her ideals of honor and duels between Mages, and the use of Mages as a symbol of ideals and leadership, have taken hold quickly. The Blue Magus speaks several languages, including alien tongues, and is, judging from her thoughts on battle, suspected to have studied xenophilosophy, in particular the doctrines of the distant Darkarans. Despite all of this, she keeps her true identity – and goals – a well-protected secret.

The actual Blue Magus machine pioneered universal mountings; until the Modular APU project, the three mass-production APU models had back and missile mounts only compatible with the same model, and no capacity to change reactor or engine blocks with another model. The thought of adding the arms of a Thief to a Magus frame, or any of the myriad combinations Mages can produce today, was laughable. The advantages of Modular APU technology, be it for repair, tactical capability, or simply fast layout changes, were so great that aftermarket kits to 'modularize' earlier production runs were used throughout the Union's military.

The Blue Magus used the arms of a Thief and the legs of a Warrior, requiring false armor plating to protect the ruse that this was 'only' an ordinary Magus with an unusual weapon layout. The weapons were greatly modified; instead of a sniper rifle, the Blue Magus used an extraordinarily powerful custom-built arc rifle. The jamming unit, relatively useless in a model of much greater speed and agility, was replaced with a targeting module for the back-mounted linear cannon, whose fire rate was raised. Instead of a single casting rod, two were installed in the left arm, the first dual casting rod and the Blue Magus' signature weapon. The anti-air missiles were replaced with lighter anti-armor missiles, but the tweaks made to the Blue Magus' systems compensated for this considerably. The Blue Magus had speed, defense, and offense — incredibly advanced for the time and still so today.

Indeed, the Blue Magus itself was modified continually throughout the Last Colonial War. The pilot's stringent specifications and need for a machine that met her needs meant that the machine was tweaked in both mechanical and computer response, specifically to achieve such ends. But in the end, the unit's greatest asset was its pilot, a woman who came from nowhere and used her strength to change the world.

Modular APU Test Model

Blue Magus

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Evasive (+1 Evasion) Energy (+1 to ranged energy attack rolls) Synchronized (+1 MP) APU (Add damage against non-Magus APUs)	Callsign	Blue Magus
Head	APU-03[H]	Reactor	APU-03[R]			APU Name	Blue Magus
Torso	APU-03[T]		APU-02[A]			Color Scheme	Cobalt and navy blue
Arms	APU-02[A]	Engine	APU-02[E]			Sensor Color	Pure blue
Legs	APU-01[L]		APU-01[L]			Right Shoulder Emblem (Association)	None
Offensive Parts				Magus Points	21	Left Shoulder Emblem (Personal)	Symbol of Oncari's Modular APU project
Right Hand	Custom-built High Output Arc Rifle (Medium+Medium Arc weapon)			Skill Points	10		
Left Forearm	Dual Casting Rod (Medium+Medium Casting Rod)			Magus Points Spending	Evasion Bonus +6 (-5 MP) Reaction Speed +3 (-3 MP) Radar Strength +2 (-2 MP) +30% AP (-3 MP) High Output Arc Rifle +2 (-3 MP) Dual Casting Rod +1 (-1 MP) Modified Linear Cannon +1 (-1 MP) +3 EN (-3 MP)		
Right Back	Targeting Module (Medium Aiming Module, Radar Strength)						
Left Back	Mod Linear Cannon (Light+Light+Light Linear weapon)						
Missile Slot	Conformal Tanks (Heavy Propellant Tank)						
Weight Points				Skill Points Spending	Split-Second Dodge x2 (-2 SP) Invincible x2 (-2 SP) One-Shot Kill x2 (-2 SP) I Never Miss x2 (-2 SP) Opening Move x2 (-2 SP)		
Weight Points Total	21 WP						
Weight Points Used	22 WP						

Game Statistics									
Armor Points	156 AP	Dual Casting Rod (melee attack)		Dual Casting Rod (ranged attack)		Custom-built High Output Arc Rifle			
Laminate Points	98 LP	Number of Attacks	2	Attack Roll	3d6+11 (3d6+8 w/two weapon attack)	Attack Roll	3d6+11 (3d6+8 w/two weapon attack)		
Stun Threshold	30 ST	Attack Roll	3d6+9	Base Damage (Laminate)	12d6+12	Base Damage (Laminate)	24d6+48		
Full Stun Threshold	99 FST	Damage Step (Laminate)	2d6+2	Damage Step	6d6+6	Damage Step	12d6+24		
Evasion Bonus	+12	Defend Base Damage	0	Damage Range	-1/+1	Damage Range	-1/0		
Initiative Bonus	+9	Defend Damage Range	0/+9	Armor Damage	X1/2	Systems Damage	x1/4		
Initiative Increase	+9	Counter Base Damage	10d6+10	Mod Linear Cannon					
Melee Defense	+4	Counter Damage Range	-4/+4						
Missile Launch Limit	1	Armor Damage	x1/2	Attack Roll	3d6+11 (3d6+8 w/two weapon attack)				
			Defense Actions	Base Damage (Armor)	8d6+8				
				Damage Step	4d12+4				
				Damage Range	-1/+1				

Shooting Star

"For my family and the Colonies. No matter their cause, I fight for them."

Unlike the Blue Magus, the late Shooting Star's identity is very well known. Young prodigy of the Alphonse line, a child of privilege given the best possible education. When the time came for war, he took up the battle for his family. Given recorded quotes and testimony from the last battle of the war and the historical records, it is unknown if Shooting Star truly knew the extent of his family's plans, though either way he is painted as a man who believes in the Colonies and his family, even if their aims are distasteful.

Perhaps, in this sense, the confrontation between him and the Blue Magus was more than a battle between two skilled pilots...but a battle between Blue Magus' philosophy of freedom of cause and Shooting Star's philosophy of cause above all else.

Shooting Star is known to have operated in nearly every theatre of war, first on the ground as a guerrilla fighting against occupation forces, then in the air and space under the callsign 'Bandit'. His talents truly shone through when given an APU, but by that point, the war was already a losing endeavor for the Colonists.

But it was enough for him to be chosen to operate the last resort of Colonial Heavy Industries — the next-generation Armored Personnel Unit Shooting Star.

Colonial Heavy Industries, when they split off from Oncari, only had time to take one of the two current next-generation APU projects for use. They chose the New Type APU documents and prototype, leaving Oncari with the Modular APU, later known as the Blue Magus. However, on paper, the Shooting Star, as it became known during development, was more than a match for any APU currently operating.

The Shooting Star had an overall thrust which was 33% greater than a standard Thief. Its standard armament was optimized specifically and near-exclusively for an anti-APU role, with a secondary anti-chopper role. Its greatest innovation was the capability of transformation — through advancement in APU reactor thrust and materials technology, the Shooting Star could change from a standard machine into a machine capable of limited level flight for short periods. While this mode necessitated the addition of more manual controls than a standard machine, and greater training time, in the hands of an expert dogfighter the Shooting Star was theorized to be invincible.

And so the machine was given to a dogfighter, the pride and joy of the family. The machine was painted in red with highlights in gold, and its monocular-type optics glowed green — the Blue Magus' influence was enough to make this machine high-visibility as well, and this machine was meant to be the one to take her down.

The final confrontation between the Blue Magus and the Shooting Star was the last battle of the war. By that time, the colonies at Lagrange Point 3 were the only ones not under Union control. The two machines fought through ruined, burning streets and structures as Shooting Star attempted to justify his actions in the war, and Blue Magus explained her own. The recording of the conversation is one of the most well-known historical podcasts in recent memory, and though Shooting Star fell, he is remembered as a Magus, and he is known as the man who very nearly brought down the greatest APU pilot in history.

Shooting Star was cremated at the request of the Blue Magus, still within the prototype, within his native colony Anatolia. Despite this, he was simply listed as 'missing' in official records. Though many think he has survived, the original Shooting Star has never reappeared, and most believe that he died with his machine. In any case, the Shooting Star plans were brought back to Oncari when CHI was folded back into their company, and the unit went into limited mass production, as a highly successful special forces unit.

Sledgehammer

*"Let me be your...**Sledgehammer!**"*

Once operating in a combat engineering capacity within the Jovian Air-Space Force, Sledgehammer's Gold Lion is sluggish, heavy, and unmanouverable. Despite this, it has gained reputation as a living wall — and one of Sledgehammer's mottos is 'thrust over aerodynamics'. Sledgehammer herself is a jovial woman who delights in heavy weaponry and armor, but she recognizes well that the best weapon is one that never has to be fired. Both on and off the battlefield she revels in excess, rarely sober for long and never concerned with rank or experience — showing great respect to anyone who has demonstrated that they can get the job done.

Sledgehammer's combat style is based on getting the first kill — the Gold Lion is tuned completely for thrust and reaction time, further enhanced by apogee motors along its surface offering no room for error in her boost path. The machine has a two-stage strategy — her heavy bazooka and shield are quickly tossed away once depleted, the machine's weight considerably reduced and allowing her to go close-in with her dual impact hammers. A back-mounted autocannon provides extra firepower for when her bazooka is inevitably depleted, and a jamming unit helps keep the unit's low mobility from becoming a total liability.

Since her career as a Magus began, she has been attached with Horizon's space operations beyond the asteroid belt, called in to intercept enemy ships and raid asteroid bases. Her greatest rival is the Magus Pulse, and the two had their greatest confrontation during a battle to destroy the Data Angel asteroid base Moshka.

Osiris

"Come with me. Soldiers like you need a better path to follow than this."

An old soldier from days gone by, Osiris was a mercenary long before the Blue Magus. Among the most prominent members of the PMC Horizon, Osiris serves a command and back-line role, evaluating new potential candidates for the company's services. He is gruff, harshly spoken, but quite willing to give a chance to even the weakest of soldiers to prove themselves worthy of being known as Magus.

When Osiris enters the battlefield, many are surprised to see that he is not among the most skilled of pilots, certainly nothing compared to the legendary Blue Magus. Indeed, the reason he stays on the back line is because he is not an extraordinary operator — his skills lie in command and morale, in assisting those who fight the battle and finding the right soldier for the job. Despite this, however, his machine is designed to make up for his deficiencies, and he is still an above-average pilot.

The Osiris APU is a mid-heavy machine, well-armed and accurate with a variety of weapons. Its close-range arc projector discourages opponents from coming in close, while its impressively large back cannon is doubled with an aiming module for increased accuracy. Its refined linear rifle is the primary armament, making the best possible use of its high load capacity.

Sledgehammer

Heavyweight Custom APU Gold Lion

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Quick (+1 Initiative Bonus) Synchronized (+1 MP) Melee (+1 Melee Attack) Guerrilla (Additional damage against self-built machines)	Callsign	Sledgehammer
Head	APU-03[H]	Reactor	APU/T-01[R]			APU Name	Gold Lion
Torso	APU-03[T]					Color Scheme	Golden yellow
Arms	APU-03[A]	Engine	APU-02[E]			Sensor Color	Red
Legs	APU-03[L]					Right Shoulder Emblem (Association)	PMC Horizon, Jupiter Division
Offensive Parts				Skill Points	10	Left Shoulder Emblem (Personal)	A lion woman holding a sledgehammer
Right Hand	Anti-APU Bazooka (Heavy Grenade weapon)			Magus Points Spending	+3 Bazooka Ammo (-3 MP) +7 Evasion Bonus (-7 MP) +2 Melee Attack (-3 MP) +3 Initiative Increase (-3 MP) +2 Energy Supply (-2 MP)		
Left Hand	Heavy Shield (Heavy Heavy Alloy Shield)						
Left Forearm	Impact Hammer						
Right Forearm	Impact Hammer						
Right Back	Autocannon (Light+Light+Light Ballistic weapon)						
Left Back	Jamming Module (Heavy Anti-Missile Equipment)			Skill Points Spending	Invincible x2 Strike and Fade x2 I Never Miss x2 No Defense x2 Press the Advantage x2		
Missile Slot	Heavy Apogee Motors (Heavy Add Booster, Initiative)						
Weight Points							
Weight Points Total	30 WP						
Weight Points Used	26 WP						

Game Statistics							
Armor Points	150+68 AP	Impact Hammer x2		Anti-APU Bazooka		Jamming Module	
Laminate Points	75 LP	Attack Roll	3d6+9 3d6+5 two-weapon	Attack Roll	3d6+6 3d6+5 two-weapon	Add Ability	Enemy does not get attack bonus with Missiles for having a high Initiative
Stun Threshold	30 ST	Number of Attacks	2	Base Damage (Armor)	18d6	Heavy Shield	
Full Stun Threshold	99 FST	Damage Step (Armor)	2d6	Damage Step	18d6	Add AP	45%
Evasion Bonus	+10	Defend Base Damage	0	Damage Range	0/0	Add Ability	Defend against melee attacks, cannot use Left Forearm until dropped
Initiative Bonus	+17	Defend Damage Range	0/+4	Ammunition	6		
Initiative Increase	+17	Counter Base Damage	6d6	Autocannon			
Melee Defense	+9	Counter Damage Range	-2/+1	Attack Roll	3d6+6 3d6+5 two-weapon		
Missile Launch Limit	1	Counter Damage Range	-2/+1	Base Damage (Armor)	7d6		
		Defense Actions	Counterattack	Damage Step	1d6		
				Damage Range	-6/+5		

Pulse

"Can you feel it, Sledgehammer? The Pulse of the Network?"

Pulse was a programmer by trade, operating on a consultation basis for military contractors. He was damned good at it, too. Unfortunately, he wasn't good enough to hide the backdoor access he put into one of his clients' financial management systems, so he quickly found himself a pariah in the industry, barely escaping criminal prosecution for his actions.

He always did have a talent for getting in the right place at the right time, and with the money he already managed to steal, he built up an APU for himself and operated as a Magus against the very people he once worked for. Despite having no military background, he has managed to find himself a very good niche operating for anti-establishment organizations—particularly his favored Data Angels, who always give him a good cut.

Pulse is always quietly smug, and his machine concentrates on energy weaponry heavily, as well as the capability to evade attack. An ion pistol on one arm, an arc rifle on the other, and an electrolaser in the rear. But he too is a close combatant, and a damned good one, his dual HF blades somewhat clashing with his preferred loadout of weaponry but putting the hurt on those who seek to come close.

He shares a strong rivalry with Sledgehammer, seeing her as a brute and destroyer, one who seeks to preserve a broken order...but she sees *him* as little more than a smug, slimy opportunist, without the most basic of decencies and only looking out for himself—no matter how many corpses he leaves behind him.

Murakumo

"Try to flee! You can't run from the Gathering Clouds!"

Ama-no-Murakumo ('Gathering Clouds of Heaven') is a veteran of mechanized police and security operations for Neucom's Megafloat, a dedicated public servant, a skilled soldier and an inspiring commander. Under the leadership of this man, even before his Magus identity was taken on, the Megafloat has seen law and order flourish in the often chaotic environment of the aging structure. Murakumo has gained some of the highest honors the Union can attest to, and is the highest-paid security provider in Neucom's history. He is one of the most public Mages in the earth sphere, one of the few of this burgeoning class the public trusts unconditionally, and his image used in Neucom advertising materials regularly.

If the man has any flaw, it is this: he is completely and utterly insane.

Murakumo sees himself as a self-styled superhero, a guardian for truth and justice, a true believer in his own cause and his own hype. He speaks with the dialect of an old samurai, no matter the language he chooses, and is constantly acutely aware of wrongdoing, seeking to punish it wherever he goes. He considers his APU to be a 'super robot', and its layout bears out this claim—extraordinarily heavy armor and a very wide variety of heavy weapons allow Murakumo to take on a wide variety of threats at once. An APU-scaled samurai sword, a blade known as Ama-no-Murakumo-no-Tsurugi, is his primary and favored weapon, and with his other weapons he constantly calls his attacks out on loudspeakers or public radio.

These traits, combined with the somewhat overequipped nature of his machine and the seeming incongruity of his archaic weapon, cause enemies to underestimate Murakumo. This is the last mistake they ever make. Murakumo's allies allow his eccentricities specifically because he is among the best close combatants alive, and he is truly dedicated to his cause of justice for all. The performance records of the Murakumo APU would seem to bear out that his 'super robot' is quite capable indeed, shrugging off blows that would destroy lesser mechs and capable of acting in a diverse variety of roles with incredible kill potential.

Murakumo often works with the younger Vulcan Venture when the latter is operating in the Megafloat zone, and the two are close friends and allies. Murakumo's leadership is such that he has chosen to become an altered human, bearing a customized KN Model multirole type very similar to his APU, in hopes to inspire his allies and subordinates in Neucom to undergo the process. Murakumo is the oldest man to have undergone the surgical procedure, which appears to have had no ill effects on the man whatsoever, and may increase his lifespan as well.

Vulcan Venture

"For me? There is simply nothing left to lose."

A test pilot and guardian of Neucom, Vulcan Venture's background is little known. It isn't mysterious per se, as Venture is known to be a quite open, friendly person, but he isn't always forthcoming with details. What is known is that he has no military history, so where his skills came from, no one can guess. Though he works for Neucom as a test pilot, he is still an independent operator, and has assisted the ESAF in numerous Southeast Asian battles. Friendly to a fault, Vulcan Venture is soft-spoken and doesn't seem much like a fighter; even on the battlefield, there is the distinct sense that he's haunted, constantly chasing ghosts and unable to let go of the past.

His history as a Magus is brief, but already he has one great distinguishment under his belt – he is the only Magus with an APU class named after him. Vulcan Venture's own personal prototype version of the NKS/Vo1 differs mostly in the details — it carries, in addition to the standard armament, a high output projector and a true APU reactor instead of a battery pack. The unit, in fact, is armed almost identically to his previous machine, which was also a VTOL type.

Vulcan Venture is a master of the two-gun style, his APU's targeting computer allowing near-perfect accuracy even when firing both guns. He isn't afraid to get in close with his high-output projection blade when the situation requires it, either. His capability as a dogfighter suggests he has experience as a chopper or fighter pilot, and his APU is easily the most famous VTOL type of all. The white machine makes a distinct impression no matter the battlefield, and is able to operate with minimal support – not even a transport chopper! Though many yet surpass him, he has left an undeniable mark on the burgeoning culture of mercenaries.

Deep Striker

"No one's going to take me down!"

Neucom has made a recent habit of acquiring promising young pilot candidates and training them to provide security to the Megafloat, Geofront, and their various space stations and facilities. Deep Striker was part of the JASF's basic training program, and had apparently done well enough in aptitude tests to be assigned for training in Shooting Star operation, a notoriously difficult task. Neucom picked up the pilot during a brief period of hospitalization, offering him a much better deal than the JASF would ever offer. He accepted without hesitation.

The young man was placed under Vulcan Venture's care, but it became quickly evident that the pair had little in common. Deep Striker was rash, judgemental, headstrong, obsessed with glory and kill counts. While he has natural skill, he is unwilling to listen to his superior officers or his mentor, and often finds himself stuck in unfavorable situations. His teacher's patience is often worn thin, and more often than not Deep Striker is kept on a tight leash in order to keep him from becoming a liability.

Perhaps the reason for his survival, or even the reason that Neucom has not sacked the belligerent pilot, is because of Deep Striker's propensity for creating various gadgets that, when equipped in an APU, provide one-time benefits that greatly improve its survivability. Essentially, he has replaced instinct and training with technology. Essentially, his Manouvers are based not on skill or training, but on one-use devices like afterburners and such. While Vulcan Venture chides him for his reliance on external technology and the capability of his machine, even he admits that this works quite well for him. Even if Deep Striker does not become a great Magus, he might one day become a great engineer.

Deep Striker took his name from an old Jovian Dominion fighter squadron, the 303rd Tactical Fighter Squadron 'Deep Strikers'. His machine shares its primarily red-orange on white livery, and the reason he chose this name is likely to honor his brethren beyond the asteroid belt. Unusually for a Shooting Star type, the unit uses two energy weapons, requiring the use of a very heavy reactor, a recent Neucom model. This, however, also allows the use of a very heavy engine which makes this unit fast and versatile even when compared against others in its class. Deep Striker's own personal modifications compensate for its issues of energy consumption, allowing it to be quick even with the drainy part layout.

Neucom Variable Flight Test Unit

Deep Striker

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Careful (+1 EN) Energy (+1 to ranged energy attack rolls) Skillful (+1 SP) Guerrilla (Add damage against guerrilla-type machines)	Callsign	Deep Striker
Head	APU/T-01 [H]	Reactor	NKS-R/SOL			APU Name	Deep Striker
Torso	APU/T-01 [T]					Color Scheme	Red-orange on white
Arms	APU/T-01 [A]	Engine	NKS-E/SATURN			Sensor Color	Green
Legs	APU/T-01 [L]					Right Shoulder Emblem (Association)	Neucom's 'N' Logo
Offensive Parts				Magus Points	21	Left Shoulder Emblem (Personal)	Former Jovian Dominion fighter squadron symbol, 303 'Deep Strikers'
Right Hand	High Output Plasma Pistol (Light+Light+Light Plasma weapon)			Skill Points	10		
Left Hand	Heavy Ion Stun Pistol (Light+Light+Light Ion weapon)			Magus Points Spending	-4 penalty for overweight APU +14 EN (-14 MP) Plasma Pistol Damage +1 (-1 MP) Ion Pistol Damage +1 (-1 MP)		
Left Forearm	Arc Projector			Skill Points Spending	Split-Second Dodge x2 (-2 SP) I Never Miss x2 (-2 SP) Press The Advantage x2 (-2 SP) Advantage Denied x2 (-2 SP) One of My Many Skills x2 (-2 SP) The Beast x1 (-1 SP)		
Back Slots	Wingpack						
Weight Points							
Weight Points Total	15 WP						
Weight Points Used	19 WP						
Game Statistics							
Armor Points	90 AP	High Output Plasma Pistol		Arc Projector		Wingpack	
Laminate Points	90 LP	Attack Roll	3d6+7 3d6+5 two-weapon	Attack Roll	3d6+6	Add Ability	Flight Mode (see APU Construction)
Stun Threshold	20 ST	Base Damage (Laminate)	16d6+16	Damage Step (Laminate)	4d6		
Full Stun Threshold	65 FST	Damage Step	16d6+16	Defend Base Damage	0		
Evasion Bonus	+9	Damage Range	0/0	Defend Damage Range	0/+6		
Initiative Bonus	+12	Armor Damage	x1/2	Counter Base Damage	16d6		
Initiative Increase	+12	Heavy Ion Stun Pistol		Counter Damage Range	-3/+2		
Melee Defense	+6	Attack Roll	3d6+7 3d6+5 two-weapon	Systems Damage	x1/4		
Missile Launch Limit	2	Base Damage (Systems)	6d6+6	Defense Actions	Counterattack		
		Damage Step	3d6+3				
		Damage Range	-1/+1				

Darker Star

"Hmph...it is of no consequence. I have survived harsher battles than this."

Darker Star is one of the Mages in Oncari's employ, primarily operating in Morant in the Blue Magus' stead. His capability as a Magus is considerable, as one of the few who choose to bear a fully transforming Shooting Star frame. A stalwart guardian of Oncari's ideals of free enterprise, and a true supporter of the Union, he is known to have government connections, despite being labelled a Magus. His loyalties are strangely expressed and he is known to operate without a mission or an employer for long periods of time, but he will never turn his back on those he has chosen to defend or the ideals he has chosen to represent.

Darker Star is quite well-known, particularly in North Africa and the Mediterranean, and is one of the first Mages, an 'Original', having appeared only a short time after the Blue Magus became a mercenary. He also is the only one of those Mages to still be operating, which speaks for his skill and instinct. Many call him 'the last Original', even if Blue Magus' current operations make this something of a misnomer.

His unit is a matte black with stripes and squad markings, living up well to his name. It is very similar to the stock Shooting Star, but has many minor improvements, and uses heavier arms to sacrifice accuracy for load capacity. Its major weakness is missile attacks, as it equips no anti-missile equipment to compensate for its vulnerability in Flight Mode. There are rumors that it has some kind of stealth technology, as the Darker Star appears and disappears from battle with little warning, but nothing has been confirmed.

Luna Blazer

*"Everything burns. **Everything.**"*

Once a Guardian pilot during the Colonial Wars, the sight of such death and destruction closehand caused something to snap inside the man who would be Luna Blazer. After sexually assaulting his commanding officer he escaped before he could be prosecuted, and worked with subversive groups, no ideology guiding him but the urge to destroy. He took up the mantle of a Magus and works for anyone who will allow him the freedom to obliterate everything in his path. Though he is even known to turn on his employers, Blazer's considerable skill allows him to get premium price for his services – as long as he gets a tight leash.

Blazer's combat style is based on destruction as well. Dual shotguns create a wall of ballistic death for any who approach close, while panzerfaust rockets are used to take on distant targets and plasma cannons allow midrange firing capability. A middleweight, it mixes mobility and armor, bearing dual blades for mixed offense and defense in close combat. He prefers to fight at a distance, however, something of a coward at heart. He tends to retreat at the first sign of trouble, a fact which has kept him alive far longer than he by all rights should have.

Ice Slasher

"I never miss."

Born a child soldier in Reykjavik, Ice Slasher is among those trained by the militant Varnarlið Reykjavíkur (Reykjavik Defense Force), an organization that was dedicated to forcibly ending Megacity development of Iceland and the Nordic regions in general. Trained in APU operation, Ice Slasher found herself without a cause after the collapse of the VR, and could not find peace outside a world of constant war. She became a Magus, immersing herself in the battlefields of Earth in order to fulfill her needs for battle, despite her hatred of war.

Ice Slasher's current history has her supporting the Union for the most part, perhaps in deference to and regret for her actions alongside the VR. Despite this, however, she is not known to have a true ideology of her own, mostly choosing the most difficult missions possible. Most suggest she has a death wish, but little is known beyond her basic history – as in battle, she is as cold as her name. She is known to have some history with certain Mages, among them the Scarlet Fang, but in general she keeps to herself.

Ice Slasher is never in want of employment, as her cold, precision style of combat leaves her with no tolerance of error. Outside of battle, she warms some, but she is still a distant woman of few words, with much mystery to her background and the actions that led her to become a Magus after the collapse of the VR, let alone her actions with the militants. Her machine is a well-balanced unit designed for long-range combat while not sacrificing close-in capability. Her primary weapon is a long-range precision sniper rifle, supported by a vertical mortar launcher and a MIRV rack, while her high frequency blade allows for decent close combat skill as well. Ice Slasher is a killer with the some of the best accuracy of any Magus, and should be treated as a high priority threat whenever possible.

Tears In Rain

"This is no place for the dogs of the Union!"

Tears In Rain believes the Union has, without due process, stripped sovereignty from the nations of Earth. Her cause is nationalism and independence, choosing to fight for all those who seek separation from the Union. Despite this, she shows no particular allegiance to any group, a mercenary who goes where she is needed instead of choosing her own path and becoming corrupt with the power.

Despite her stance, Tears In Rain is intensely honorable. She will not kill civilians, even by proxy. She will not kill a defenseless or surrendering enemy, and will even prevent those on her side from doing so. Though she supports the right to secede from the Union, she is not of the belief that the Union itself is illegitimate, simply that nations have the right to choose whether to take part, and to end their arrangement. This puts her at odds with her own allies, who often are far less discriminate and believe the Union to be entirely illegitimate rather than simply seeking to free itself from it.

Tears' honor has won her the respect of her enemies, and some say her enemies see her more fondly than her allies. That they have accepted her is likely due to her capability as an officer, and indeed, Tears In Rain is primarily a support craft, with high emphasis on easy maintenance and armor. Dual jammers (both on-frame and on a back slot) ensure battlefield protection against missiles, while the use of an ion rifle allows quick opponents to be subdued. Primary attack is through a back-mounted small missile rack, while a machine pistol provides backup attack and an HF blade provides defense. Tears is no lone wolf; while her craft will not win any battles alone, her presence is invaluable for those she fights alongside.

Nationalist Support APU
Tears In Rain

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Evasive (+1 Evasion Bonus) Explosive (+1 to Missiles, Grenade, MIRVs) Skillful (+1 SP) Military (Add damage against non-APU military machines)	Callsign	Tears In Rain
Head	APU-01[H]	Reactor	APU/T-01[R]			APU Name	Tears In Rain
Torso	APU-01[T]				Color Scheme	Blue/cyan/grey aircraft camo pattern Based on old aircraft of 20th century Russian Federation, Su-33 naval fighters of Admiral Kuznetsov	
Arms	APU-03[A]						
Legs	APU-02[L]	Engine	APU-02[E]				
Offensive Parts				Skill Points	11	Sensor Color	Yellow
Right Hand	Machine Pistol (Light+Light ballistic weapon)			Magus Points Spending	Initiative Bonus +1 (-1 MP) Evasion Bonus +1 (-1 MP) Anti-APU Missile Damage +1 (-1 MP) High Frequency Blade Damage +1 (-1 MP) Machine Pistol Damage +1 (-1 MP) Radar Strength +3 (-3 MP) Reaction Speed +3 (-3 MP) Melee Defense +2 (-2 MP) Missile Launch Limit +1 (-1 MP) Anti-APU Missile Additional Ammo +6 (-6 MP)	Right Shoulder Emblem (Association)	Nationalist symbol, emblem of the Russian Federation's 21st century airborne carrier Admiral Vysotsky
Left Forearm	High Frequency Blade					Left Shoulder Emblem (Personal)	Silhouette of a crying woman, against a storm backdrop
Right Back	Anti-APU Missile Rack (Light+Light+Light Missile weapon)						
Left Back	Jamming Module (Heavy Anti-Missile Equipment)						
Missile Slot	Jamming Module (Heavy Anti-Missile Equipment)						
Weight Points				Skill Points Spending	Split-Second Dodge x2 (-2 SP) Advantage Denied x3 (-4 SP) Press The Advantage x2 (-2 SP) Called Shot x2 (-2 SP) Triumph of Determinism x1 (-1 SP)		
Weight Points Total	17 WP						
Weight Points Used	17 WP						
Game Statistics							
Armor Points	103 AP	High Frequency Blade		Anti-APU Missile Rack		Machine Pistol	
Laminate Points	110 LP	Attack Roll	3d6+5	Attack Bonus	+10 (+20 w/high Initiative)	Attack Roll	3d6+10
Stun Threshold	20 ST	Damage Step (Armor)	2d6+2	Base Damage (Armor)	6d6+6	Base Damage (Armor)	5d6+5
Full Stun Threshold	65 FST	Defend Base Damage	0	Damage Step	6d6+6	Damage Step	1d6+1
Evasion Bonus	+11	Defend Damage Range	0/+6	Damage Range	0/0	Damage Range	-4/+4
Initiative Bonus	+10	Counter Base Damage	8d6+8	Laminate Damage	x1/2		
Initiative Increase	+10	Counter Damage Range	-3/+2	Ammunition	15		
Melee Defense	+10	Defense Actions	Defend, Counterattack				
Missile Launch Limit	3						
Jamming Module x2							
Add Ability	Enemy does not get attack bonus with Missiles for having a high Initiative, and this protection is extended to all allied units						

Hitoshura

Once, the man who would be Hitoshura was a hacker in the classical tradition – an extraordinarily skilled coder with a fearsome independent streak. But so too did he have a strong sense of justice, and he soon found himself employed by Neucom; first, in a computer security position, but later, he joined the Megafloat Defense Force. Natural skill found the young man a place as an apprentice of Murakumo, and he soon picked up many – though not all – of the samurai’s peculiarities.

At that time, he was known as Masakado, after an ancient samurai once considered the patron saint of Tokyo, a figure equally heroic and malevolent. Some time ago, however, this all changed, and Masakado found himself questioning his loyalties, the injustices of the world, and the control Neucom had over global communication. Masakado challenged his mentor in single combat in a duel atop the Megafloat’s Central Control Tower, and — officially, at least — was struck down by Murakumo as his unit fell from the tower.

The truth, however, is that Masakado survived, recovered by the Data Angels. He joined their cause and took the new name Hitoshura – ‘Demi-Fiend’ – to reflect his desire to forge his own path against all others. One of the Data Angels’ premier Mages, Hitoshura fights for his own cause, in pursuit of his own twisted vision of ‘justice’. His ultimate goal is the destruction of the Global Communication System and the restoration of an open Internet, the total defeat of his mentor Murakumo, and the creation of data havens to allow the free flow of information once more.

Hitoshura’s greatest flaw is that he is a pawn – In his self-determination, he does not know what the Data Angels truly have in store for humanity, or for him. Blinded by his own need for ‘justice’, Hitoshura’s flaw is also his greatest asset, for he will refuse to stop until his goals are met, goals which even the Angels do not know in totality.

Hitoshura’s combat style includes the use of the superheated katana, but is still ultimately dissimilar from Murakumo’s. Hitoshura eschews the use of energy weapons, preferring a single ballistic rifle to be his main weapon. The use of a jamming module and vernier thrusters makes Hitoshura much faster than Murakumo while still maintaining good armor, and a large number of anti-APU missile launchers allow the unit to surpass its enemies with overwhelming firepower, and then to increase its overall speed once the launchers are depleted to become a close-combat powerhouse. Hitoshura’s machine exemplifies all-range combat, and in many ways is a better unit than Murakumo’s is.

Hitoshura is also an altered human, and has a stolen, customized KN Model armor. The armor is a modified Trooper Type whose main weapon is a double-barreled shotgun. While bearing the same missiles and a katana similar to Murakumo’s, its major threat is on its arms — known as ‘Freikugel’, they are two modified impact hammers of a prototype design produced by Neucom. These impact hammers have reduced overall velocity and impact damage, but deliver a burst of electricity with each blow, causing damage to nearby electrical systems and causing involuntary muscle spasms in APUs and other mechanized units.

Superior All-Range Anti-APU Unit
Hitoshura

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Close (+1 Initiative Bonus) Explosive (+1 with Missile, Grenade, MIRV) Skillful (+1 SP) Magus (Add damage against other Mages)	Callsign	Hitoshura
Head	APU-02[H]	Reactor	APU/T-01[R]			APU Name	Hitoshura
Torso	APU-03[T]					Color Scheme	Grey/black with green patterned lines across the torso
Arms	APU-02[A]	Engine	APU-02[E]			Sensor Color	Green
Legs	APU-01[L]			Magus Points	20	Right Shoulder Emblem (Association)	Variable; either the emblem of the Data Angels or of the PMC Aurora (depending on mission)
Offensive Parts				Skill Points	11	Left Shoulder Emblem (Personal)	An imitation of the torso pattern in miniature
Right Hand	Mod Service Rifle (Medium+Medium Ballistic weapon)			Magus Points Spending	Reaction Speed +1 (-1 MP) Radar Strength +1 (-1 MP) Anti-APU Missile Damage +1 (-1 MP) Service Rifle Damage +2 (-3 MP) Superheated Katana Damage +2 (-3 MP) Melee Attack +3 (-3 MP) Evasion Bonus +4 (-4 MP) Armor Points +40% (-4 MP)		
Right Forearm	Anti-APU Missile Launcher (Light+Light Missile weapon)						
Left Forearm	Anti-APU Missile Launcher (Light+Light Missile weapon)						
Right Back	Anti-APU Missile Rack (Light+Light Missile weapon)						
Left Back	Jamming Module (Heavy Anti-Missile Equipment)			Skill Points Spending	Split-Second Dodge x2 (-2 SP) One-Shot Kill x2 (-2 SP) No Opening x2 (-2 SP) The Beast x1 (-1 SP) Press The Advantage x1 (-1 SP) Advantage Denied x1 (-1 SP) Opening Move x2 (-2 SP)		
Right Hip	Superheated Katana (Superheated Blade)						
Left Hip	Anti-APU Missile Launcher (Light+Light Missile weapon)						
Missile Slot	Heavy Apogee Motors (Heavy Add Booster, Initiative)						
Weight Points							
Weight Points Total	21 WP						
Weight Points Used	20 WP						
Game Statistics							
Armor Points	157 AP	Superheated Katana		Anti-APU Missile Launcher x4		Mod Service Rifle	
Laminate Points	105 LP	Attack Dice	3d6+12	Attack Bonus	+9 +19 w/high Initiative	Attack Roll	3d6+9
Stun Threshold	26 ST	Damage Step (Armor)	2d6+4	Base Damage (Armor)	6d6+6	Base Damage (Armor)	9d6+18
		Defend Base Damage	0	Damage Step	6d6+6	Damage Step	3d6+6
Full Stun Threshold	80 FST	Defend Damage Range	0/+8	Damage Range	0/0	Damage Range	-2/+1
Evasion Bonus	+15	Counter Base Damage	10d6+20	Laminate Damage	x1/2		
Initiative Bonus	+10	Counter Damage Range	-4/+3	Ammunition	6 per launcher		
Initiative Increase	+10	Defense Actions	Defend, Counterattack	Jamming Module			
Melee Defense	+4			Add Ability	Enemy does not get attack bonus with Missiles for having a high Initiative		
Missile Launch Limit	3						

Rising Seraphim

"That won't work, you know. I'm better than you, and now I'll prove it."

It is rumored that this woman is connected with the highest echelons of the Data Angels, perhaps even on the board of directors for their front company Meta-verse. Whatever the case is, Rising Seraphim is one of the most dangerous Mages operating today. Completely dedicated to the goals of her organization, Rising Seraphim will destroy everything she sees as detrimental to that goal...or if she simply feels that it would be fun to do so.

Love of random destruction is not a rare thing among those Mages who operate for suspect organizations, but Rising Seraphim differs in her skill, her calculation, and the utter *sadism* she exudes. She taunts, she challenges, and even in defeat she enjoys the pain and effort. Nothing stops her. If she sees worth in an opponent, she will capture them, attempt to bring them to her side, no matter how dangerous such a task may be. If she sees them as worthless...she will insult them until they have either proven their worth or died. Her appearances are rare, but rarer still is when she leaves anyone standing.

Of course, she is more than willing to hold herself back, as well. Either because of her orders or because it fits whatever twisted plans run through her head, she revels in her insanity enough to know when to cease, and how to hide it. This quality sets her apart from such Mages as the unrestrainable Luna Blazer, the brutish Super Arm, the single-minded Hitoshura.

Rising Seraphim's APU is quite heavy, eschewing mobility for armor. All possible effort is expended on reaction time. Her favored weapon is an electrolaser, and she has the speed to use it against all but the fastest of opponents. Like Murakumo and Hitoshura, she uses a large-scale handheld superheated blade, but she tends only to bring it out against Mages...or troopers, since they bleed when cut. She has two revolver-style weapons – large-scale rocket revolver with six rounds, and when that is depleted, a smaller autopistol styled in the spirit of the outmoded sidearm.

Rising Seraphim is also an altered human. From what limited records there are, she seems to be one of the first, if not the first, furthering the possibility of her high position in either Neucom or the Data Angels. Her KN Model is a modified Space Type, and her weaponry is broadly similar to her APU's. She uses a new type of electrolaser, a very long-barreled handheld rifle which uses chemical canisters to power it. Each of these canisters is only good for one shot, and are ejected when spent. A revolver autopistol and superheated katana are also used, but to make up for the loss of the rocket revolver, leg-mounted missile launchers have been added to the frame.

Black Color

Black Color's name is as contradictory as the evidence of his existence. The machine by that name is known to be capable of mysterious stealth capabilities, but given such, most consider it nothing more than a mirage. That he works for the Data Angels only enhances such thoughts, as they have used such tricks before...

What is known of the machine, as described is that it is very lightweight, using a high-frequency blade and automatic shotgun as its primary weapons, and a linear cannon and aiming module to increase its capability. The pilot is rather quiet, though seems to have a touch of sadism in his actions; the rumors of his operation are often accompanied by a much more public appearance by Rising Seraphim, suggesting a mutual association.

Even more of a mirage is a KN Model of similar specification, using a handheld HF blade, impossible by modern technological conceptions.

Prometheus

The New Berlin Mechapolizei is a force that must deal with constant threats. Despite top-line equipment, they are understaffed and overworked, tasked with defending the capital city of the Union from near-daily opposition, protest, and violence. To help alleviate this problem, special teams have been formed, and since the introduction of the Modular APU, they have taken on the pattern of Mages, equipping the best possible parts to form effective squads.

Prometheus was the second in command of the Hellhounds, the first and last resort for New Berlin. Sharing a yellow body color and green lenses, the Hellhounds have been in decline as they decide that protecting civilians is beneath them, seeking only to deal collateral damage. Hermes and Hecate, the remaining honorable members, were painted into a corner with the rest when Prometheus wilfully destroyed civilian work mechs near the Brandenburg Gate, attempting to blame it on the attacking Children of Bermuda.

Since then, Prometheus has stolen his APU and found it very freeing to be able to destroy civilian targets without being limited by rules and regulations. Prometheus has no particular cause save for amassing a large fortune on which to retire on, and he's willing to take every shortcut possible. Without remorse or shame, money is the only thing that drives him, and he knows none of the honor that tie the diversity of Mages together into a fledgling unified identity.

Prometheus' unit shares the common feature of all Hellhounds APUs, a high output projection blade. Prometheus was the team's heavy assault unit, and is considerably more lethal than most police-type mechs; its primary weapon is a large-scale linear rifle designed for one-shot kills against heavily reinforced targets. Dual MIRV units create a capability to destroy several weaker units at once, emphasizing speed of kills. In police operations, one-shot accuracy is vital to prevent civilian casualties, which is probably why Prometheus' unit overall is not unusually accurate but instead, highly destructive. He wasn't really a very good cop, no.

Fire Storm

"It's just business...but I still don't like you."

Fire Storm is the prototypical mercenary. He goes where the money is, legal or otherwise, but he has a few scruples here and there that keep him honest, and a few soft spots as well. A man with a strong sense of personal honor and justice, Fire Storm's reputation as a pilot is strictly average. While he's not very well known, he has stayed alive for several years through knowing his limitations. His mission success rate, despite his low overall skill, is stellar. Some say he could be one of the best, if he pushed himself, but the man himself claims he's just an old soldier looking for a few final memories before giving up the fight. Well, as long as the cheques clear.

In the heat of battle, Fire Storm prefers to keep as much distance as possible, using his flamers first, but taking any opportunity to unleash his missiles onto the battlefield. His projector, though a last resort, is dangerous to the unprepared. While he's usually a very practical man, detached but dedicated, in pitched battles he is prone to declaring how his heart burns for justice, giving a yell of 'Fire Storm!' as his missiles are released, and declaring his love for the fires he tends to create as a result of his weaponry.

Fire Storm's APU is not particularly unusual, though it shows the typical craftsmanship of a Magus type. As the name suggests, Fire Storm uses plasma weaponry as his main form of attack, with dual plasma flamers and a plasma projection blade forming the bulk of his armament. He uses missiles equipped with high incendiary warheads, and the mass attack he uses them for is said to be the source of his callsign. The machine's odd weapon layout leaves most to believe Fire Storm has a latent case of pyromania. Though heavysset, his APU is surprisingly mobile, and is considered to be a multirole type that is most effective when paired with other units or Mages for support.

Super Arm

"I will crush you and all the children you will never have."

'Erudite but brutish' is the best way to describe Super Arm. It is commonly said he causes more destruction than his pay will cover, in the mercenary game for sport alone. No matter the truth of these allegations, none can deny that Super Arm shows no mercy or honor for his opponents. A raging torrent, a force of nature, Super Arm is not a precise weapon to be relied upon to do his duty, but a behemoth to be pointed at the enemy and let loose, in the hope that he will not cause too much damage to his own side.

Super Arm's loyalties are simple — whoever will let him cause the most damage. Even payment is considered secondary to this goal. Despite all this, Super Arm considers himself something of a poet, consistently musing in battle about his enemies and his goals in life. To him, war is akin to a symphony, a perfectly elegant composition of chaos. Destruction is not a means to an end in his mind, but an end unto itself. This nihilistic outlook ensures Super Arm rarely has allies for long.

The Super Arm unit appears quite heavyset, but do not be fooled. Beneath a heavy layer of conformal armor lies a machine capable of top-class reaction times. Though capable, Super Arm's unit is unsophisticated, using dual back mounted autocannons and dual impact hammers. The autocannons are capable of ripping straight through enemy APUs, and just about anything without heavy armor. The impact hammers are even more brutal, capable of taking out mechanized units in one fell swoop.

Agent of Destruction
Super Arm

Parts Layout				Magus Customization		Personal Data		
Motive Parts		Internal Parts		Pilot Traits	Tough (+10% AP) Melee (+1 Melee Attack) Synchronized (+1 MP) APU (Add damage against non-Magus APUs)	Callsign	Super Arm	
Head	APU/T-01 [H]	Reactor	APU/T-01 [R]		Magus Points	21	APU Name	Super Arm
Torso	APU-03 [T]					Engine	APU-02 [E]	Color Scheme
Arms	APU-02 [A]	Sensor Color	Red					
Legs	APU/T-01 [L]	Right Shoulder Emblem (Association)	None					
Offensive Parts				Skill Points	10	Left Shoulder Emblem (Personal)	The bust of a man displaying his bulging bicep	
Right Forearm	Impact Hammer			Magus Points Spending	+8 Initiative Bonus (-8 MP) 3 EN (-3 MP) +100% AP (-10 MP)			
Left Forearm	Impact Hammer			Skill Points Spending	Opening Move x2 (-2 MP) Strike And Fade x2 (-2 MP) Invincible x2 (-2 MP) No Defense x2 (-2 MP) One-Shot Kill x2 (-2 MP)			
Right Back	Autocannon (Light+Light+Light Ballistic weapon)							
Left Back	Autocannon (Light+Light+Light Ballistic weapon)							
Missile Slot	Heavy Conformal Armor							
Weight Points								
Weight Points Total	20 WP							
Weight Points Used	19 WP							
Game Statistics								
Armor Points	233+50 AP	Impact Hammer x2		Autocannon x2				
Laminate Points	96 LP	Attack Roll	3d6+10 3d6+5 two-weapon	Attack Roll	3d6+9 3d6+7 two-weapon			
Stun Threshold	28 ST	Number of Attacks	2	Base Damage (Armor)	7d6			
Full Stun Threshold	89 FST	Damage Step (Armor)	2d6	Damage Step	1d6			
Evasion Bonus	+9	Defend Base Damage	0	Damage Range	-6/+5			
Initiative Bonus	+20	Defend Damage Range	0/+4					
Initiative Increase	+20	Counter Base Damage	6d6					
Melee Defense	+4	Counter Damage Range	-2/+1					
Missile Launch Limit	2	Defense Actions	Counterattack					

Combat Reminders

This final chapter is simply a series of reminders of various facts, formulas, and combat mechanics. This is a simple reference that should assist you in keeping track of the flow of your actions, and hopefully help you keep track of everything.

Combat Rolls

- » **Ranged Attack Roll** – $3d6 + \text{Aiming Accuracy} + \text{Location-Based Stat}$
- » **Two-Weapon Ranged Attack Roll** – $3d6 + \text{Aiming Accuracy} + (\text{Location-Based Stat}/2)$
- » **Missile Attack Roll (attacker has Initiative)** – $(3d6 + \text{Aiming Accuracy} + \text{Location-Based Stat} + \text{Initiative Bonus}) \times \text{Number of Missiles}$
- » **Location-Based Stats** – Hand, Forearm = Reaction Speed; Back, Missile = Radar Strength
- » **Evasion Roll** – $3d6 + \text{Evasion Bonus}$
- » **Missile Evasion Roll (target has Initiative)** – $3d6 + \text{Evasion Bonus} + \text{Initiative Bonus}$
- » **Initiative Roll** – $3d6 + \text{Initiative Bonus}$
- » **Melee Attack Roll** – $3d6 + \text{Melee Attack Bonus}$
- » **Two-Weapon Melee Attack Roll** – $3d6 + (\text{Melee Attack Bonus}/2)$
- » **Melee Defense Roll** – $3d6 + \text{Melee Defense Bonus}$
- » **Melee Counterattack Roll** – $3d6 + \text{Melee Attack Bonus}$
- » **Two-Weapon Melee Counterattack Roll** – $3d6 + (\text{Melee Attack Bonus}/2)$

Combat Flow

1. **Initiative Phase** – All combatants make an Initiative Roll. Their Initiative is determined by this roll, and turns proceed in this order.
2. **Make An Attack** – You may make one attack action. Roll your attack dice as required. If this is a Melee attack, your Initiative drops to the target's value minus 1 (regardless of success or failure), unless you're retaliating against an earlier Melee attack. You may also perform certain support actions.
3. **Evade Or Defend** – When attacked, you may defend. Ranged attacks are Evaded. Melee attacks may be either Defended against (no damage) or Countered (deal damage to the enemy, but suffer it yourself)
4. **Build Initiative** – All combatants add their Initiative Increase to their current Initiative, and the battle order is determined for the next round. Weapons and equipment may be dropped for an extra increase.
5. **And So On...** – Continue in order until all combatants on one side have ceased combat.

Critical Hits/Misses

- » **Ranged Attack, Straight (sequence of three numbers in order, ie, 4,5,6)** – The attack automatically hits for maximum damage steps. If the attack would hit for any amount of damage normally, roll on the Critical Hit table below.
- » **Ranged Attack, Triples** – Your attack misses.
- » **Evasion, Straight** – Automatically avoid all damage.
- » **Evasion, Triples** – Automatically suffer maximum damage steps.
- » **Melee Attack, Straight** – Hits instantly for maximum damage steps. The enemy is unable to counterattack or defend. Roll on the Critical Hit table. Both effects occur simultaneously in the case of specific parts damage (except for the arm – only one arm is removed).
- » **Melee Attack, Triples** – You miss regardless of any sort of defense, and gain a No Guard condition.
- » **Melee Defense, Straight** – No damage is taken. The enemy has No Guard.
- » **Melee Defense, Triples** – The enemy hits for maximum damage steps.
- » **Melee Counterattack, Straight** – You instantly win the roll, deal maximum damage steps, and the enemy deals no damage to you. You do not roll for Critical.
- » **Melee Counterattack, Triples** – The enemy immediately gets the first strike and you get no chance to retaliate.

Result On d6	Hit Area	Effect
1 to 3	Torso	Roll double the damage dice for this attack.
4	Arm	Lose the part's Reaction Speed and Melee Attack Bonus. If this effect has taken place already, one arm is lost entirely, along with any weapons attached. (Choose the arm at random.) If this effect takes place again, the other arm is lost.
5	Leg	Lose the part's Initiative Bonus, Evasion Bonus, and Melee Defense Bonus. If this effect has taken place already, the APU's Initiative is set to 1 and does not increase, and any remaining Evasion Bonus (from engines or add boosters) is halved. (An arm is lost immediately if a melee weapon is used.)
6	Head	The part's Radar Strength is lost and System Recovery is halved. If this effect has taken place already, the head is lost, System Recovery is reduced to one quarter, and Aiming Accuracy is halved.

Dealing criticals with melee weapons causes both effects to take place at once, for any critical location that has multiple effects. Other machines may have their own Critical tables; this table is for APUs only. (Melee weapons still destroy parts in one hit unless otherwise stated.)

Autoevasions negate Autohits, and vice versa. Always roll both. In case of negation, determine attack results numerically.

Damage Summary

- » **At o AP** – The APU is unable to continue combat. It may not make any more actions. Any further attacks to this APU at this point are considered unprovoked and may result in the injury or death of the pilot.
- » **At o LP** – All damage that would be dealt to Laminate is dealt to Armor instead.
- » **Systems Damage exceeds Stun Threshold** – APU gains a Stun condition.
- » **Systems Damage exceeds Full Stun Threshold** – APU gains a Full Stun condition. Any additional damage is dealt to Laminate.

Condition Summary

- » **Stun** – Drop your Initiative to the shooter’s value minus one (if theirs is lower). You may not make Evasion rolls or a Melee Counterattack, but your Passive Evasion remains the same and you may still shoot down missiles, intercept missiles, or Defend against melee attacks. If you haven’t yet made an action this round, you lose this condition on your turn, but may not attack. If this condition lasts through the Initiative Building phase, you may not raise Initiative, but you recover from your condition immediately and you may attack as normal.
- » **Full Stun** – Your Initiative immediately drops to 1. You may not act this round (if you have not already). You may not Evade, Defend, Counterattack, or shoot down or intercept missiles; all melee and ranged attacks made on you automatically hit for their maximum possible damage steps. On the beginning of the next round, you are under a Stun condition until your next action, when you fully recover.
- » **No Guard** – Any counterattack made hits for maximum damage steps, and then the effect is lost. If one was not made, instead, the next melee attack the target makes against you hits without giving you any chance to defend or counter. (They must take this opportunity before the turn ends, or the advantage is lost.)

Special Actions

- » **Chaining** – Performed after you successfully defeat an enemy. You may immediately make another attack action against another enemy, melee or ranged. There are no target restrictions and manouvers may be used. Continuing to destroy enemies continues the chain, which only stops when you attack an enemy and the enemy survives. (If you destroy multiple enemies with one attack action, you only get one extra action).
- » **Shoot Down Missiles** – Performed with a single Ballistic, Linear, or Ion weapon. May be performed after Evasion. You may use this roll as your Evasion roll if it is higher.
- » **Intercept Missiles** – May be performed after all other defensive actions. Deduct ammunition, if required. Roll 1d6 for each missile targeting you, up to your Interception Limit. If the result is even, the missile is intercepted.
- » **Spot Target** – Performed on your turn, before you attack. You spot a target for an ally. You must have a higher Initiative than both the ally and the target. You do not make an attack this turn, but in exchange, the ally you spotted for gets to perform two attack actions on their turn. Both these attacks must target the spotted enemy; if they are destroyed in one attack, the bonus action is lost.
- » **Intercept Attack** – Performed after an ally attempts Evasion, but before the enemy rolls damage. You must have a higher Initiative than both the ally and the enemy. Your Initiative drops to the ally’s minus one, and you suffer all damage the attack would normally deal, excluding critical or part damage.
- » **Drop A Weapon** – Declared during the Initiative building phase. You may drop any Back, Forearm, or Hand weapons or equipment. When a weapon is dropped, you gain additional Initiative equal to its WP, and your Initiative Increase subsequently is increased by that weapon’s WP value until the end of the battle.

How to Calculate Initiative Increase

1. **Determine Base Increase From Output** – Calculate the basic Initiative Increase from the Output of your Reactor and your Initiative Bonus (including Magus Points). If your reactor has an output of 1/3 and you have an Initiative Bonus of +15, for example, your base Initiative Increase is +5.
2. **Determine Surplus EN** – Count all the EN you have that isn’t being used by your Engine or other parts. This is your Surplus EN.
3. **Add Surplus EN to Base Increase** – After you’ve determined your surplus EN, add that number to your base Initiative Increase. If the number is higher than or equal to your Initiative Bonus, your Initiative Increase is equal to your Initiative Bonus. Otherwise, it is equal to your base Increase plus your Surplus EN, and you can determine from there how much EN you might want to add from your Magus Points.