

Prototype: Movement & Range System

The flow of combat involves range and positioning as much as speed and reaction time. In an age of mechanized conflict, movement is paramount to maintaining accuracy and damage. This new system requires no battle map whatsoever, and extends the current combat philosophy to create new depth in battle without sacrificing the focus on reaction and speed.

The Range Band

Each unit participating in a battle is placed on what is known as the **Range Band**, which is a one-dimensional representation of relative range. The Range Band centres on the number 0, and extends into both the positive and negative dimensions. Unless the GM says otherwise, units can move infinitely as well, albeit with some restrictions. **The distance between two combatants, and what weapons may be used, is determined by the difference between said combatants.** The ranges are as follows:

Position Difference	Range
0	Melee
1	Close
2	Mid
3	Long
4+	Extreme

The main restriction on range is that **no unit can ever be more than 4 positions away from its closest enemy target.** Deliberately leaving this range is considered to be a disengagement. This has some implications on movement, which will be elaborated on later.

The ranges are deliberately abstracted and not necessarily consistent. A unit operating in space or an open plain will likely have further engagement ranges from those operating in a Megacity. Some units, like Variable Helicopters, tend to be further away than their position would suggest on the band.

Example

Moonlight Butterfly and Pulse are in an arena battle for the Grand Magus Tour. The DM has decided that the arena's just large enough to have a bit of freedom of movement, but not so large that enemies can consistently stay out of range of close combatants. **The dimensions of the arena are given as range band 0 through 6.** Moonlight Butterfly and Pulse **start at Extreme range relative to one another, at positions 1 and 5 respectively.** They **cannot move to positions 0 or 6 right away**, but may be able to on later turns.

Range Categories

Whether a weapon can be fired at an enemy or not is determined by the range from the target and the **Range Category** of the weapon. A Range Category determines **at which ranges a weapon may be fired at full accuracy**, and **whether it may be fired outside of its listed ranges or not.**

The first Range Category is **Kinetic**, applying to Ballistic and Linear weapons. Such weapons are tuned to be most accurate within a certain engagement range, subject to aerodynamic forces and gravity. **Kinetic-type weapons have set ranges listed, usually two, at which the weapon may be fired at full accuracy.** When fired outside of this set range, **the weapon takes a -2 cumulative penalty for each position closer or further from the stated ranges the weapon is fired from.** In addition, the weapon **does not gain autohit or critical effects** when firing outside this range, although it can automiss; you also **cannot use the One-Shot Kill, I Never Miss, Called Shot, or One of My Many Skills maneuvers.** When Extreme range is listed for a Kinetic weapon, it only applies at a difference of 4 — further distances add the -2 penalty, as usual.

The **Energy** Range Category represents weapons which are not as subject to ballistic effects, allowing them further flexibility within its designed engagement range — but leaving them unable to attack from further than this range. **One range** is listed for the weapon, and **the weapon may fire without penalty at any closer range.** However, these weapons are **incapable of attacking outside of their range**, even at a penalty. Once again, when Extreme is listed, it only applies at a difference of 4.

The **Explosive** Range Category applies to Missile and Grenade weapons. In most respects, they work **the same as Energy weapons**, in that they are given a set range, can hit at any closer range, but cannot fire further. However, there are two important differences. One of them is a major advantage — **an Explosive weapon with a range of Extreme can fire further than 4 positions away**, all the way into the back line! However, there is a considerable drawback, in **that firing an Explosive weapon in Melee range will cause the firing unit to suffer half the damage it deals** in backlash.

Melee weapons have the **Melee** Range Category. As expected, melee weapons can **only be used at Melee range**, which requires a fast approach. Under the new system, melee weapons have new advantages and disadvantages that come into play with movement, which will be explained when the movement system is introduced.

Electrolasers have their own unique Range Category, known as **Special**. Special weapons have multiple listed ranges and **may only be fired in their listed ranges** — no closer, no farther. Like Explosive weapons, a Special weapon with Extreme listed **may fire more than 4 positions away**.

Example

Moonlight Butterfly gets a 32 on her Initiative roll, compared to Pulse's 16. Pulse's unit Tekker is equipped with an Electrolaser and several other weapons with a high Stun value — something she wants to avoid, if possible. She moves first, and keeps at Extreme range. **None of Tekker's weapons can hit her right now** — all of them use the Energy Range Category, other than the Electrolaser, and the Electrolaser cannot fire while Moonlight's Initiative is higher.

Her own weapon, a Light+Light+Light Ballistic machinegun, is in the **Kinetic** Range Category, and can fire at this range...but since **its ranges are listed as Melee and Close, and she's at Extreme range**, she takes a **-6 penalty** to her attack roll. She rolls 3d6+0 for her attack roll, and gets an 7 total; even though she got a straight of 1,2,3, **her attack does not auto-hit due to being out of range**, and Pulse's evasion roll of 26 is easily enough to eliminate all damage from the attack.

Range and Spotting

Because units are not always able to attack with their weapons, **spotting is a much more important action now**. None of the requirements for spotting have changed, and you may spot at any range or distance, even at Melee. As additional clarification, the action granted by Spotting **cannot be used for a melee attack**, although the unit gaining the spotting bonus may use its normal attack action for melee purposes.

Range and Interception

Intercepting attacks has also changed somewhat. In addition to the high Initiative requirement, **you must be at the same position as the ally being attacked or as the enemy attacking**; alternately, **you may be between the ally and attacking enemy**. You suffer the damage your ally would have, **even if the weapon would normally have a range penalty**. However, if the weapon is Explosive and you are at Melee range relative to the enemy, it suffers **backlash damage equal to the full damage value of the attack**, rather than half!

Movement

Movement is dependent on two things: absolute velocity and the ability to claim a position without taking enemy fire. Therefore, there are two separate modes of movement: movement **during your turn**, and movement **by spending Initiative during the Initiative Building phase**.

All units start at a position determined by the GM; **no movement takes place when Initiative is rolled**. Units may move **one position per turn** in either direction, **before or after their attack** as long as **their movement does not take them more than 4 positions away from the nearest enemy**. Then, during the Initiative Building phase, after applying Initiative Increase but before recalculating the battle order, **units may spend Initiative to move as well**.

Movement During Your Turn

You get one free position of movement to take during your turn. Some units may have a different movement value, and some Maneuvers may increase or decrease this movement. This movement may be performed **before or after your attack action**, at your discretion. Units which can move more than one position a turn may split their movement up as they desire, moving both before or after their attack action.

When you get an additional attack action from a Maneuver or a Chain, you do not gain additional movement. However, **you may move between attacks gained by a Chain or afterward**, if you still have movement remaining.

Reactive Movement

Instead of moving on your own turn, **you may instead move in reaction to an opponent's movement.** To do so, **you must have a higher Initiative than the opponent you intend to react to.** Only one opponent may be chosen for Reactive Movement. During your turn, **your normal movement does not take place,** though other situations — such as Melee kills (see New Melee Rules) or Maneuvers — may allow you to move during the round.

If your opponent moves during their turn for any reason, you may move one position in any direction. You only move one position, barring Maneuvers or other special circumstances, even if your opponent moves more than one. **If your opponent does NOT move on their turn, however, you lose your movement entirely.** Your Reactive Movement state is lost when the next Initiative Building phase is reached.

Example

When Moonlight Butterfly chose not to move on her turn, **she chooses to move reactively in response to Pulse's next movement.** On Pulse's turn, Pulse moves one position toward Moonlight, to position 2. Moonlight moves backward one position, to position 6. However, Pulse uses the After Burner Maneuver to move an additional position, placing him at position 3; as position 6 is the outer limit of the arena, Moonlight is out of chances.

Movement & Initiative

The Initiative Building phase now has a new stage — **spending Initiative to move!** After Initiative Increase is applied, but **before the battle order is redetermined** by the GM, all units in the battle choose whether to move or not while spending Initiative. This determination is performed in turn, **in the reverse order of the last round's battle order.** While this seems counter-intuitive, it **forces slower and less reactive units to make the first move,** allowing faster units to change their strategy more quickly. Slower units must try to predict what faster units will do!

Moving 1 position costs 6 Initiative. There is no limit to the amount of Initiative that may be spent to **move in a round,** although you cannot go below 1 Initiative. Units with a very high Initiative Increase are at a considerable advantage! In general, APUs have the run of the battlefield due to their fusion engines and neural control system, though this is not always the case. Some units have ways of compensating for their low Initiative Increase (and thus their low movement speed).

Example

After the first round, during Initiative Building, Pulse uses Advantage Denied to prevent Moonlight Butterfly from increasing her Initiative. Pulse's Initiative increases to 25, while Moonlight's stays at 32. **Movement is determined based on the last round's battle order, in reverse:** Pulse chooses to stay where he is, while Moonlight **moves 1 position toward him,** to position 5, bringing them into Mid range. This **reduces her Initiative to 26,** but Moonlight is unwilling to get into range of that Electrolaser, and she knows that he'll likely be using Advantage Denied again next time; she wants to maintain the advantage, **forcing him to move before she does!**

Moving Past an Enemy

Under normal circumstances, **you cannot move past an enemy unit freely.** You may move into Melee range without concern, but if you wish to move *past* an enemy, you must expend extra effort to break away before you move past. With most units, **you must spend 1 extra movement action to move past them when you occupy the same position** — one to break away from their threat area, one to move. (*This also means that you cannot, without Maneuvers, move past an enemy on your turn.*) **You may retreat freely,** however; **record which direction you moved in or the enemy approached you from** so that you remember which directions can be moved in without penalty. In some cases, you may even be hemmed in by enemy units from both sides!

Movement & Stun Conditions

A Stun condition now, in addition to its existing effects, **disables your next movement.** If you recover from your Stun condition on the same turn you receive it, **you may not move on your turn,** but you may still spend Initiative to move on the next Initiative Building phase. If you recover during the Initiative Building phase, **you don't get to spend Initiative to move on that phase,** though you move on your next turn as normal.

While not directly related to the system, a new rule regarding Full Stun conditions has been added: **you may attack a target which is Full Stunned in melee without draining your Initiative**, although all other conditions for a melee attack must be met.

Movement at Extreme Range

When you are at Extreme range or further relative to an enemy, movement becomes tricky. The basic rule is that **no unit may be further than 4 positions away from its closest enemy**. If a unit destroys an enemy and would be further than 4 positions away from the new nearest enemy, **it is immediately moved to be only 4 positions away**, in the shortest distance possible. Movement is limited as much by the threat of enemy fire than as speed and reaction; if there is no immediate threat, you can move to engage at top speed without losing your edge.

However, **there is no limit to how far away a unit may be from its closest ally**! This means that battles between different enemy units may take place at very different positions on the field. For this reason, there is another rule known as the **Pull rule** — you may **move 1 position closer to a distant ally** (an ally more than 4 positions away from your closest enemy) **if there are no enemies between you and it**, and **enemy units that would be more than 4 positions away due to this movement are forced to move along with you**. However, **you cannot Pull if there is an enemy unit between you and a distant ally** — you are surrounded and don't have the run of the battlefield! You also may not Pull if there are no allied units on the field left to Pull toward.

New Melee Rules

Due to this new system, melee is more difficult than it was previously. The basics of melee combat have not changed; you must still have a higher Initiative than your target, and you still lose Initiative and become subject to a retaliatory strike. However, **you must now be at Melee range as well!**

Because of this, new Maneuvers have been added for melee specialist, and others which have been added which are useful to all characters requiring an edge in movement speed. In addition, **any unit that gets a kill using a melee attack, be it on their turn or after Countering, gets to move 1 position automatically, even if it isn't their turn**. (As clarification, it should be noted **that a Counterattack kill does not trigger a Chain**.) This extra move must be used immediately, or it is lost.

New Maneuvers

The following new Maneuvers have been added for Mages to be able to better manipulate the battlefield, with much greater mobility than their frame would suggest. They also add new options in melee, giving close combat specialists that extra edge against long-ranged units and ensuring no one is out of their reach!

As clarification, during a Chain, **any Maneuvers you used in the previous attack action are no longer in effect**. However, you may use new Maneuvers for your new attack action. You also **cannot trigger a Chain with an attack action where you use All-Out Attack and/or Burst Fire**.

Defensive Maneuvers

- » **CLOSE QUARTERS BATTLE** — If you are being attacked by an enemy's ranged attack at Melee range, you may replace your normal Evasion roll with a Melee Counterattack roll. This works in all respects like a normal Melee Counterattack roll.
- » **TARGET IN SIGHT** — You may attack this action with a Kinetic weapon as though it could fire one range closer and/or one range further than your weapon would ordinarily allow. For instance, if your weapon fires at Medium and Long ranges, you may fire it at Close or Extreme ranges without penalty and with normal critical effects. This maneuver will also allow you to fire 5 positions away, in the case of weapons that can fire at Extreme range.
- » **SLIP AWAY** — You must use this Maneuver before the attack roll. If you are being attacked in Melee, use this to instantly move 1 position away from the attacking enemy. The enemy's Initiative is not drained, but it may not attack again this turn. *This Maneuver may be used to counter No Retreat, allowing you to move normally while the enemy remains in its previous position.*

Special Maneuvers

- » **NO RETREAT** — Use this Maneuver when an enemy is moving out of Melee range relative to you, either during the Initiative Building phase, due to Reactive Movement, or on their turn. You move with them; you remain at Melee range relative to the enemy, but you move to the position the enemy was intending to move. *This Maneuver may be used to counter Slip Away, negating the enemy's movement and allowing your attack to be resolved normally.*

- » **AFTER BURNER** — Use this Maneuver whenever you are able to move normally; either during your turn, during a Reactive Movement, or during the Initiative Building phase. You may move one position if you did not move normally, or one additional position if you did. *This ability may be used to counter Covering Fire, allowing you to move normally but not giving you a movement bonus.*
- » **COVERING FIRE** — Use this Maneuver when an enemy is attempting to move, at any time. The enemy is unable to move at this opportunity. (They do not lose Initiative, however.) *When used against an enemy using After Burner, it only denies the additional movement.*

APU Weapons Ranges

The range of a ranged weapon, in general, is dependent on its Weight Class. **All weapons of the same type with the same Weight Class (ie, the Medium and Medium+Medium weapons) will share the same range.** All weapons of the same class will also share the same Range Category.

In general, **weapons with a wider Damage Range have a shorter Weapon Range**, and vice versa. The exception to this is weapons in the Explosive Range Category, which have increased range by weight.

Ballistic Weaponry

Standard ballistic weapons at APU scale are tuned to specific roles, and even the heaviest firearms on an APU cannot fire at the furthest targets. While machineguns and autocannons require very close combat to be most effective, their high rate of fire allows hits at more distant targets as well; the inverse is not generally true.

Weight Class	Range Category	Weapon Range
Light	Kinetic	Melee, Close
Medium	Kinetic	Close, Mid
Heavy	Kinetic	Mid, Long

Linear Weaponry

Linear weapons are generally longer ranged than their ballistic counterparts. The largest linear cannons are almost miniature artillery pieces, capable of firing from the back line. The cost of this, of course, is a lower firing rate and less flexibility. Linear weapons make ideal additions for units who wish to fight at all ranges, but don't want to invest in energy weapons.

Weight Class	Range Category	Weapon Range
Light	Kinetic	Close, Mid
Medium	Kinetic	Mid, Long
Heavy	Kinetic	Long, Extreme

Grenade Weaponry

Unguided explosive weapons are very useful to add long-range punch to any APU. The heaviest of these weapons make great fire support, while lighter versions can be useful for extra reach on a unit normally restricted to a certain range.

Weight Class	Range Category	Weapon Range
Light	Explosive	Mid
Medium	Explosive	Long
Heavy	Explosive	Extreme

Plasma Weaponry

Plasma weapons are interesting in that their range is inversely proportional to their weight. The lightest of plasma weapons are actually fairly effective at long-ranged combat, giving a formidable ranged threat to many APUs without sacrificing close combat capability or weight capacity. The heaviest of plasma weapons, however, are barely more capable than melee weapons — but make up for that with their devastating damage and hit rate, provided by a constant stream of plasma.

Weight Class	Range Category	Weapon Range
Light	Energy	Long
Medium	Energy	Mid
Heavy	Energy	Close

Ion Weaponry

Due to their disabling role and general use in asymmetric warfare and police work, ion weapons have an extremely close-ranged tendency. Even heavier military types aren't useful past a relatively short range. In this sense, for a Magus, they are most effective when paired with a melee weapon.

Weight Class	Range Category	Weapon Range
Light	Energy	Close
Medium	Energy	Mid

Arc Weaponry

One of the major advantages of arc weaponry is its range — arc projectiles are designed to maximize velocity and minimize air resistance, to be as light as possible while maintaining the arc reaction. The heaviest arc rifles are capable of taking down targets at virtually every engagement range, and even lighter weapons have a considerable reach.

Weight Class	Range Category	Weapon Range
Light	Energy	Mid
Medium	Energy	Long
Heavy	Energy	Extreme

Electrolaser Weaponry

Electrolasers are incredibly powerful weapons in mechanized warfare, able to take down even the most hardened targets. They are the choice weapons of many skilled Mages. So why are they considered obsolete, relegated to specialized units? The answer is, of course, their range.

Electrolasers cannot engage targets that move too fast for the pilot or FCS to compensate against, thus the requirement for a high Initiative. However, if a target is too close, the pilot and targeting system is unable to compensate quickly enough to maintain the laser beam long enough for the electric bloom reaction to take place. In an age of APUs and other mechs regularly battling at very high speed, the electrolaser is highly impractical for the average soldier compared to 'weaker' weapons — and its cost, maintenance issues, and complexity keep it from making many appearances in professional armies.

Weight Class	Range Category	Weapon Range
Heavy	Special	Long, Extreme

Missile Weaponry

Missiles generally have the same range characteristics as unguided artillery. The heaviest missiles are even able to take down distant high-altitude aircraft! Smaller missiles make up for their lack of range with their ammunition stores and, often, a rapid fire rate.

Weight Class	Range Category	Weapon Range
Light	Explosive	Mid
Medium	Explosive	Long
Heavy	Explosive	Extreme

MIRV Weaponry

MIRVs are very effective offensive weapons; what they lack in anti-armor capability they generally make up for with their effective success rate at destroying soft targets. Heavier MIRVs will travel further before splitting, though they have the ability to split earlier. A single heavy MIRV can destroy all targets in a very wide swath from the APU's position!

Weight Class	Range Category	Weapon Range
Light	Explosive	Mid
Medium	Explosive	Long
Heavy	Explosive	Extreme

Melee Weaponry

Naturally, **all melee weapons have the Melee Range Category** and can only be used at Melee range. Melee weapons are often paired with ranged weapons which work well at Melee or Close range, to have a better capability for attack on the approach or retreat. The **Cast-
ing Rod**, with its additional ranged attack, is an ideal weapon for a Magus who wishes to keep their equipment loadout compact; **its stats are given below**.

Weight Class	Range Category	Weapon Range
Heavy	Energy	Mid

New APU Equipment Rules

The new movement rules offer new advantages and disadvantages to two pieces of equipment — the VTOL Lifter and the Wingpack.

VTOL Lifter

Because a VTOL-equipped unit is capable of both flying and maintaining threat on the ground, it has a special movement advantage. **A unit using a VTOL Lifter does not need to spend extra movement to move past an enemy unit. The inverse is not true;** other units must spend extra movement to move past a VTOL Lifter user as normal.

Wingpack

The ability of short-term flight is powerful indeed, and in addition to the normal advantages, **you gain an extra move!** During the Initiative Building phase, when your Initiative is drained, **you may move 1 position without expending Initiative,** in addition to spending Initiative to move and moving on your turn.

The use of flight also renders you immune to position threats — **you do not need to spend extra movement to move past an enemy.** Unfortunately, **this benefit is gained by your enemies as well,** and they can move past you as they please! You can transform on your turn as normal, and the gain or loss of position threat takes effect immediately.

Rogue's Gallery Rules

Many enemy units have their own special rules relating to range and movement, due to their combat role or their locomotion method. In general, **electrically driven vehicles,** like most guerilla mechs and tanks, will move **much more slowly** upon the battlefield than APUs do; in this sense, APUs are the units that most often set the terms of the battlefield. Larger vehicles will often have Kinetic weapons capable of operating in **more ranges than equivalent APU weapons,** which often counteracts their lack of speed. Ranges for each enemy unit's weapons are provided, as well.

ESD Troopers

Infantry is simply not fast enough to keep up with APUs and other mecha in a firefight. Infantry's advantage is in positioning, not speed; they can take up positions that mechanized units and vehicles cannot. In a mobile firefight, troopers are completely outmatched, but they may often be placed in built up areas that mechs can't reach, or at least an area that provides cover. This lack of mobility, however, is offset by an impressive awareness and a wide-ranging arsenal allowing engagement at all ranges.

Troopers cannot move during the Initiative Building phase under any circumstances! They only get their free move during their turn. (This also means **they can't move past another enemy unit,** because they can't move two positions at once.) This considerable disadvantage is offset by the fact that they never need to spend Initiative; troopers can react in ways that mechs cannot, usually allowing them the first move. The movement disadvantage can be eliminated by a troop carrying vehicle, giving a first-strike capability nearly unmatched.

Trooper range is determined by the amount of damage dice they have remaining. Despite the range type being 'Energy', Troopers still use mostly kinetic and explosive weapons; their ability to engage depends on their strength and the specific members of the fireteam remaining, and Energy is the best analogue to this.

ESD Trooper Ranges		
Base Damage	Range Type	Weapon Range
10d6 or greater	Energy	Long
7d6 to 9d6	Energy	Mid
4d6 to 6d6	Energy	Close
1d6 to 3d6	Energy	Melee

Chickenwalkers

As expected of the erstwhile Chickenwalker, the cyclic vulcans they normally equip are only truly effective at almost point-blank range. Their rapid fire rate allows them to deal some damage even at range, but only en masse do Chickenwalkers become a threat to the superior mobility of the APU. Heavier models do equip missiles that can bridge the gap, however.

Chickenwalker Ranges		
Weapon	Range Type	Weapon Range
Cyclic Vulcans	Kinetic	Melee, Close
Anti-Armor Missiles	Explosive	Long
Anti-APU Missiles	Explosive	Mid
Anti-Aircraft Missiles	Explosive	Extreme

Sportwalkers

The Sportwalker's versatile nature allows it to be used at almost any range effectively. The Sportwalker usually has enough reaction time for an initial assault, but its free rollers generally can't keep up with an APU's boosters. Faster units can maintain the front line long enough for slower ones to bring artillery to bear; though not the most reactive craft, Sportwalkers can have a surprising versatility.

Sportwalker Ranges		
Weapon	Range Type	Weapon Range
Cyclic Vulcans	Kinetic	Melee, Close
Railgun	Kinetic	Long, Extreme
Gun-Howitzer	Explosive	Extreme
Dual AA Gun	Kinetic	Melee, Close, Mid
Electrolaser	Special	Long, Extreme
Anti-Air Missiles	Explosive	Extreme
Anti-Personnel Micromissiles	Explosive	Mid
Vertical Launch MIRVs	Explosive	Long
Vertical Launch Auxiliary Missiles	Explosive	Mid

Variable Helicopters

Modern VH units have the ability to fight effectively both on the ground and in the air. Because of this, **VHs do not need to spend extra movement to move past an enemy unit, but enemy units must still spend the extra movement to move past the VH.** Choppers make effective front and mid-line units because of this, allowing them to shut down the back line or hang back as they will, weaving in and out of the battlefield, landing and taking off as they please.

Variable Helicopter Ranges		
Weapon	Range Type	Weapon Range
Dumbfire Rocket Pod	Explosive	Long
Guided Missile	Explosive	Long
Breakaway MIRV	Explosive	Long
Autocannon	Kinetic	Melee, Close
Plasma Pulser	Energy	Mid
Ion Pulser	Energy	Close

Main Battle Tank

With the speed of most MBTs being far, far lower than that of an APU, a Guardian, or even guerilla Sportwalkers and 'cycles; and with less flexibility or mobility than mechs or troopers, some armchair generals have questioned their place on the modern mechanized battlefield. However, despite perceptions, and some Mages' famous tank kills, tanks are able to maintain their threat due to their turret, their accuracy, their armor, and their general 'stickiness'. Now, with new advantages, tanks are truly a threat to be feared on the mechanized battlefield!

As stated in the main rules, a tank can only attack with its main gun when its Initiative is higher than its target. The target must now also be in engagement range! However, tanks have additional opportunities to attack. The first, and most important, is that **tanks may fire their main gun at any target that is at Melee range, without penalty, regardless of whether the weapon normally functions at that range or if its Initiative is higher than the tank's!** This means that any unit close to the tank is in immediate danger of being fired upon.

The second advantage is an extension of the first, and makes tanks the best machines available to hold a position — **any unit moving past the tank can be attacked by the tank's main gun on its next turn, regardless of Initiative, as long as it is within the gun's normal, no-penalty engagement range.** This opportunity must be taken on the tank's turn, after which it is lost. If a unit can move out of said range, it's safe, but moving past a tank is not something done on a whim.

One last advantage relates to the covering rules. As stated in the main rules, tanks may Cover another non-tank enemy unit. **This unit must be within the tank's normal no-penalty engagement range for its main gun,** which is a disadvantage compared to the previous rule. But **it gets an attack with its main cannon, regardless of Initiative, on an enemy which either deliberately moves into Melee range relative to the Covered unit, or makes a melee attack on the Covered unit** regardless of whether the melee attacker moved into range themselves. **(The Covered unit can't deliberately trigger this;** the tank doesn't get the extra attack if the Covered unit is the one who moves into Melee range, or if the Covered unit makes a melee attack and is counterattacked by the enemy; a Retaliatory Strike, however, would trigger the Covering attack.)

These advantages do not override the normal Initiative conditions or bonuses/penalties for Electrolasers and Missiles/MIRVs, though they do **override the Range conditions**. However, **Tanks also take only half the normal backlash damage from firing Explosive weapons in melee** (meaning one-quarter the damage dealt to the enemy); to take down a Magus, that damage may well be worth it.

Main Battle Tank Ranges		
Weapon	Range Type	Weapon Range
Rifled Cannon	Kinetic	Mid, Long
Smoothbore Cannon	Explosive	Extreme
Linear Cannon	Kinetic	Long, Extreme
Ballistic Rocket	Explosive	Long
Anti-Air Ballistic Missile	Explosive	Extreme
Anti-Air MIRV	Explosive	Extreme
Anti-Air Autocannon	Kinetic	Melee, Close, Mid
Large Plasma Flamer	Energy	Close
Electrolaser	Special	Long, Extreme
Heavy Machinegun	Kinetic	Melee, Close
Anti-APU Plasma Pulser	Energy	Long
Coaxial Arc Gun	Energy	Mid
Anti-Armor Coilgun	Kinetic	Mid, Long

KN Model Powered Armor

The KN Model armors have a similar engagement range to their larger progenitors, the APU. Despite their weaponry being personnel scale, it's designed for the enhanced human soldiers and doesn't suffer compared to its larger counterparts. The standard models lack somewhat in absolute speed compared to an APU's fusion engine, but the specialists have that and more. These units are not to be underestimated!

KN Model Ranges		
Weapon	Range Type	Weapon Range
Anti-APU Battle Rifle, 7.92x107mm	Kinetic	Close, Mid
Anti-APU Bullpup PDW, 5.7x28mm	Kinetic	Melee, Close
All-Environment Linear Rifle	Kinetic	Close, Mid
Military-Grade Ion Rifle	Energy	Mid
Anti-APU Micromissile Launchers	Explosive	Mid
Long-Range Recoilless Rifle	Explosive	Long
Anti-Aircraft Missiles	Explosive	Extreme
Heavy Machinegun, 12.7x108mm	Kinetic	Melee, Close
Small-Scale Superheated Blade	Melee	Melee
Small-Scale High Frequency Blade	Melee	Melee
Small-Scale Plasma Projection Blade	Melee	Melee

New Magus Record Entries

Provided here are new additions for the Magus Record for the example APUs used. Moonlight Butterfly is an entirely new addition, while Pulse gets a full statblock.

Moonlight Butterfly

"Superior technology is no match for superior skill!"

The Last Colonial War greatly damaged the prestige of the name 'Alphonse'. While not all of the family was involved in the conspiracy that gave rise to the war, the entirety of the colonial dynasty found themselves suffering the blame, trial or no. And when Colonial Heavy Industries collapsed, a small segment of the engineers involved chose not to be reabsorbed into Oncari, forming their own independent company, Alphonse Industrial.

Alphonse Industrial is a typical Oncari subcontractor, manufacturing standard APU parts for various militaries and organizations across the system while spending time designing their own custom parts and generally furthering APU development. For many years, however, their success was limited. While AI's parts were known to be of generally high quality, often pushing the performance envelope, that scarlet letter simply refused to fade away.

When the Grand Magus Tour arrived, Alphonse Industrial knew the potential such an event had, and brought one of their test pilots into the ring. Enter the Moonlight Butterfly.

Rumored to be the daughter of one of AI's top engineers, Moonlight Butterfly is loud, reckless, and very, very fast. Her self-titled APU takes its name from its two key parts — the Neucom-manufactured High Output Projector NKSU-HP/MOONLIGHT, and Alphonse Industrial's own dual back Add Booster BUTTERFLY. The BUTTERFLY is, predictably, shaped much like the wings of said animal, and an incredibly powerful and heavy engine. The unit is also armed with a heavy machinegun for the ultimate in close-combat capability.

However, even though the weight of this equipment is fairly high, the Moonlight Butterfly's frame is based entirely on APU-02 parts. Because of this, the unit has *incredible* structural and energy supply issues. Worse yet, the young pilot loves to perform dangerous high-G maneuvers and revels in melee combat, rarely letting go of the throttle for even a second. The unit and its Add Boosters require constant maintenance, rumored to be at least an hour for every minute of operation, and Moonlight Butterfly is so fast that it cannot maintain its top speed for more than thirty seconds without its Add Boosters **exploding!**

Despite this, Moonlight Butterfly is an incredibly powerful machine in Magus duels, using its speed and powerful melee weapon to end fights in mere moments. And she's popular, too; during battles she's never resting, always taunting her opponents and singing her own praises...but at the same time, she's never a sore loser, taking her defeats in stride and complimenting the skills of her opponents. Some say she's too young, too reckless, that she's never had a taste of real war; whether that's true or not, what *is* true is that Alphonse Industrial's profits have skyrocketed since Moonlight Butterfly began operating.

While Moonlight Butterfly is primarily a fighter in the Tour, she does go on missions every so often. During these missions, she usually swaps the apogee motors for micromissiles (Light+Light+Light), giving her unit more versatility. Though most of her missions are around the Balearic Islands and the Iberian Peninsula, for some reason she has recently been spotted near Morant on more than one occasion, working for Oncari. No one knows whether Alphonse Industrial approves of such missions, or why she would fight so far from the Tour...

High Speed Arena Test Type Moonlight Butterfly

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Quick (+1 Initiative Bonus) Melee (+1 Melee Attack) Synchronized (+1 MP) Magus (Additional damage against other Mages)	Callsign	Moonlight Butterfly
Head	APU-02[H]	Reactor	APU-02[R]			APU Name	Moonlight Butterfly
Torso	APU-02[T]		Engine			APU-02[E]	Color Scheme
Arms	APU-02[A]	Sensor Color				Cyan	
Legs	APU-02[L]					Right Shoulder Emblem (Association)	Alphonse Industrial's logo
Offensive Parts				Skill Points	10	Left Shoulder Emblem (Personal)	The silhouette of a butterfly's wings
Right Hand	Heavy Machinegun (Light+Light+Light Ballistic weapon)			Magus Points Spending	-8 penalty for overweight APU Melee Attack +3 (-3 MP) Energy Supply +7 (-7 MP) MOONLIGHT Damage +2 (-2 MP)		
Left Forearm	NKSW-HP/MOONLIGHT (High Output Projector)						
Dual Back	BUTTERFLY (Heavy Dual Back Add Booster)			Skill Points Spending	One of My Many Skills x2 (-2 SP) Split-Second Dodge x2 (-2 SP) Opening Move x2 (-2 SP) Breakthru x2 (-2 SP) The Beast x1 (-1 SP) Strike and Fade x1 (-1 SP)		
Missile Slot	Apogee Motors (Heavy Missile Add Booster)						
Weight Points							
Weight Points Total	10 WP						
Weight Points Used	18 WP						
Game Statistics							
Armor Points	75 AP	NKSW-HP/MOONLIGHT		Heavy Machinegun			
Laminate Points	150 LP	Range Category	Melee	Range Category	Kinetic		
Stun Threshold	10 ST	Attack Roll	3d6+13	Weapon Range	Melee, Close		
Full Stun Threshold	32 FST	Damage Step (Laminate)	4d6+8	Attack Roll	3d6+6		
Evasion Bonus	+14	Defend Base Damage	0	Base Damage (Armor)	7d6		
Initiative Bonus	+20	Defend Damage Range	0/+6	Damage Step	1d6		
Initiative Increase	+18	Counter Base Damage	16d6+32	Damage Range	-6/+5		
Melee Defense	+3	Counter Damage Range	-3/+2				
Missile Launch Limit	3	Armor Damage	x1				
		Systems Damage	x1/2				
		Defense Actions	Defend, Counterattack				

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.

The Grand Magus Tour

Though the initial emergence of Mages was a positive one—veterans of the Last Colonial War casting off their old allegiances and standing for their own cause—it didn't take long for Mages with far less noble goals to emerge. While public opinion of Mages remained high in some areas of the solar system, particularly the less developed ones, Mages on Earth saw a sharp decline in support. Incidents like the Global Revolutionary System's Shanghai bombing or the slaughter of the 459th Tactical Mechanized Squadron have seen many occupants of the Megacities crying out for these mercenaries and terrorists to be put out of business.

Oncari's position was, and remains, that Mages are ultimately a force for good in modern society. To help public opinion recover on Earth, in LR 68 Oncari began the global motorsport event known as the **Grand Magus Tour**.

Based on the island of Ibiza, known since the 20th century as a mecca of entertainment and tourism as well as bearing its own mass driver, the Grand Magus Tour is a continual exhibition of combat between Mages. A construction project involving clearing a large area of damage remaining from the IKVs produced the *Circulo de los Magos*, the primary venue of the Tour; other arenas exist across the earthsphere, providing many different combat environments for the competitors.

Combat in the Tour is usually exhibition-based, involving duels between two Mages, or teams of up to four per side. Several formats exist, including simple exhibition

matches with no connection, elimination tournaments, and round-robin tournaments. Sometimes, non-APU vehicles are brought on-site for special events. There is talk of bringing in a proper season-long competitive structure for LR 70, but for now, achievements of Mages are mostly tracked unofficially.

The Mages themselves are drawn from legal sources, namely officially established PMCs, corporate security, or independent contractors. Some have slipped through the cracks, however, through indirect association or just plain deception. And some Mages even fight exclusively in the Tour. While a few Mages have made their identities known publically in the Tour, Oncari pledges to protect the identity of any Magus involved if they so choose. Battles are strictly non-lethal and weapons are tuned to match; while injuries have occurred, no Magus has died during a match in the Tour.

The Grand Magus Tour is a hit. The public loves the spectacle and the personalities, although there is a small trend of activism against the so-called 'blood-sport'. The Mages love the ability to train and test their skills, and the exposure to the public. Megacorps like Neucom love the profits their communications and facilities get; smaller companies are able to market their APU parts through their own in-house pilots. Even anti-Union and other subversive groups find the Tour gives them a voice few other venues allow. The only cloud on this silver lining is a disturbing trend, of Mages being attacked on Ibiza and disappearing from the Tour...

Pulse

All-Range Combat APU Tekker

Parts Layout				Magus Customization		Personal Data	
Motive Parts		Internal Parts		Pilot Traits	Careful (+1 EN) Two-Weapon (+1 to attacks with two weapons) Skillful (+1 SP) APU (Additional damage against non-Magus APUs)	Callsign	Pulse
Head	APU-02[H]	Reactor	NKS-R/SOL			APU Name	Tekker
Torso	APU-01[T]					Color Scheme	Crimson
Arms	APU-02[A]	Engine	APU-02[E]			Sensor Color	Yellow
Legs	APU/T-01[L]					Right Shoulder Emblem (Association)	Varies by mission; often JASF or ESAF for false flag operations
Offensive Parts				Magus Points	20	Left Shoulder Emblem (Personal)	White circle with a red line in the shape of electrocardiogram
Right Hand	Heavy Ion Pistol (Light+Light+Light Ion weapon)			Skill Points	11		
Left Hand	Arc Rifle (Medium Arc weapon)			Magus Points Spending	-5 penalty for overweight APU +40% AP (-4 MP) Radar Strength +1 (-1 MP) Reaction Speed +1 (-1 MP) Melee Attack +2 (-2 MP) +3 EN (-3 MP) Heavy Ion Pistol Damage +1 (-1 MP) Arc Rifle Damage +1 (-1 MP) High Frequency Blade Damage +1 (both, -2 MP)		
Right Forearm	High Frequency Blade						
Left Forearm	High Frequency Blade						
Right Back	Heavy Propellant Tank						
Left Back	Electrolaser (Heavy Electrolaser)						
Missile Slot	Apogee Motors (Heavy Missile Add Booster)						
Weight Points				Skill Points Spending	Advantage Denied x2 (-2 SP) After Burner x2 (-2 SP) Covering Fire x2 (-2 SP) Triumph of Determinism x2 (-2 SP) Split-Second Dodge x2 (-2 SP) Close Quarters Battle x1 (-1 SP)		
Weight Points Total	16 WP						
Weight Points Used	23 WP						

Game Statistics							
Armor Points	125 AP	High Frequency Blade x2		Electrolaser		Arc Rifle	
Laminate Points	112 LP	Range Category	Melee	Range Category	Special	Range Category	Energy
Stun Threshold	18 ST	Attack Roll	3d6+11 3d6+7 two-weapon	Weapon Range	Long, Extreme	Weapon Range	Long
Full Stun Threshold	56 FST	Damage Step (Laminate)	2d6+6	Attack Roll	3d6+8 3d6+7 two-weapon	Attack Roll	3d6+8 3d6+7 two-weapon
Evasion Bonus	+9	Defend Base Damage	0	Base Damage (Systems)	18d6	Base Damage (Systems)	12d6+12
Initiative Bonus	+9	Defend Damage Range	0/+6	Damage Step	18d6	Damage Step	12d6+12
Initiative Increase	+9	Counter Base Damage	8d6+8	Damage Range	0/0	Damage Range	0/0
Melee Defense	+4	Counter Damage Range	-3/+2	Armor Damage	x1/2	Systems Damage	x1/4
Missile Launch Limit	3	Defense Actions	Defend, Counterattack	Systems Damage	x1/2		

Heavy Ion Pistol	
Range Category	Energy
Weapon Range	Close
Attack Roll	3d6+8 3d6+7 two-weapon
Base Damage (Systems)	6d6+6
Damage Step	3d6+3
Damage Range	-1/+1