Damage Rating (Version 3)

Faced with an universe in chaos, where technology can make the difference between life and death, questions rose from SARP roleplayers.

These included, “Can my gun kill this thing?”, and “How much punishment can my shuttle take?”

The Damage Rating system, version 3, is a guideline to help figure that out. Version 2 had values expressed numerically and a kind of hit point system for all targets. Version 3, often called “SADRv3” or just “v3”, was proposed to fix the scaling problem between power armor and mecha (among other issues), and introduced an HP-less solution that would work better with a roleplayed narrative and reduce the tabletop-style number crunching.

Version 3 looks at this from the standpoint of a weapon's purpose. Players will see many weapons listing their purpose in the SARPwiki, going from *light anti-personnel* to *heavy anti-capital*.

The system's base assumption is that a *light anti-starship* weapon is meant to shoot down “light starships.” There's also a matter of scale: if a player shoots the same weapon at something smaller than a starship, it'll likely be far more ruinous. Against a larger starship, it'll likely do much less significant damage.

Version 3 keeps to a “per attack” perspective on weapons, but that doesn't make all weapons equal: a pistol and a submachinegun are in the same *light anti-personnel* tier; both can certainly kill an unprotected human with a well-placed bullet to the head or chest. However, one clearly fires faster and might be a much deadlier weapon.

Keep that in mind as you read this article. Be it weapons, protective means or various vehicles, each article usually has a wealth of information to offer. SADRv3 is meant to add scale and perspective to those articles, but it does not demand — that is up the narrative between Game Masters and the players in their care.

You can also consult the Quick Reference Guide for a more condensed take.

Tiers

The table below lists four columns.

- The first is numbered to help picture scaling.
- The second is the intended nomenclature for the tier, also considered the actual purpose of the weapon (and the term you should see in other articles).
- The third includes examples of targets within that tier, for which the 'per-use' result could be potentially lethal.
- The fourth column are examples of weapons within that tier. *The items mentioned are mostly from the Star Army of Yamatai to provide a stable benchmark.*

You will also notice that there are divisions by categories. They are:

- *Personnel*,
- *Power Armor*,
- *Mecha*
- and *Starships*.

These are for ease of reference and scale, but are not exclusive. For example: an infantryman can carry an anti-mecha bazooka to take down tanks, and fightercraft can load up anti-starship torpedoes to try to take down bigger prey. It's also fairly common for larger starships to carry a complement of weapons to deal with smaller targets.

Tier	Purpose	Defensive Example	Offensive Example
Personnel			
1	Light Anti-Personnel	Flak jacket, riot armor	Smallarms such as pistols
2	Medium Anti-Personnel	Ballistic Vest, bodyarmor	GP-1 Assault Rifle, Nekovalkyrja Service Pistol (standard)
3	Heavy Anti-Personnel	Hardsuits, nonspacy power armor	NSP (Heavy), LASR, SLAG grenades
Power Armor			
4	Light Anti-Armor	M2 Mindy IV, M6 Daisy II	Aether Saber-Rifle (Rapid-Fire), Atmospheric/Space Plasma Rifle
5	Medium Anti-Armor		Aether Saber-Rifle (Beam), Type 32 Dual-Gun Turret
6	Heavy Anti-Armor	Hostile, Ripper	Aether Saber-Rifle (Saber), Offensive Mini-missile
Mecha			
7	Light Anti-Mecha	M9 TASHA, Aggressor, small shuttlepods	50mm Gauss Bazooka, Type 31 Quad-Gun Turret
8	Medium Anti-Mecha	V9 Nodachi, Ravager, most shuttlecraft	Kawarime/Nodachi Turbo-Aether cannon
9	Heavy Anti-Mecha	Larger shuttles	Type 31 Dual-Cannon Turret
Starship			
10	Light Anti-Starship	Corvettes, Yui-7 Scout, Chiaki Escort	Chiaki Mass Driver Gun (Solid round)
11	Medium Anti-Starship	Destroyers, Plumeria Gunship	Chiaki Mass Driver Gun (Antimatter round), Plumeria Positron Railgun
12	Heavy Anti-Starship	Cruisers, Ookami Light Cruiser	Yui-type Aether Array, Sharie Aether Turret, Z1 Torpedoes
13	Light Anti-Capital Ship	Super Eikan Heavy Cruiser	Plumeria-type dual-bladed Aether Array, Eikan Positron Cannon
14	Medium Anti-Capital Ship	Sharie Battleship	Eikan-type Aether Array, AS-7 Torpedoes
15	Heavy Anti-Capital Ship	3km+ Structures, Dreadnoughts	Sharie-type Dual-Pronged Aether Array

Tier 0

Unstated, tier 0 encompasses the unprotected human and means of harm such as bare fists, clubs and knives. As this scope is relatable to us in real life, that's left up to common sense between roleplayers and referee.

Handling Damage

This section reviews how the vertical relationships of the tiers listed above.

Attacks

As alluded to before, using a weapon in the same tier as its target means this weapon is capable of putting it out of combat in a single well-placed attack. It is *potentially lethal*.

Version 3 breaks down the damage a weapon can do along a stepped range, relative to the tiers of the weapon versus the target. The range goes from four steps below and four steps above, with *potentially lethal* considered “zero.”

- The *below steps* are reductions in a weapon's damage because the target is bigger, heavier or otherwise better protected. Those steps are negligible, light, moderate and heavy.
- The *above steps* are increases in a weapon's damage because the target is smaller, lighter or otherwise less protected. Those steps are quite lethal, highly destructive, assuredly lethal and total annihilation.

Put visually, it's going to look like this table:

Weapon vs Target	Descriptor
4 Below	Negligible
3 Below	Light damage
2 Below	Moderate Damage
1 Below	Heavy Damage
Equal	Potentially lethal
1 Above	Quite lethal
2 Above	Highly destructive
3 Above	Assuredly lethal
4 Above	Total annihilation

What you need to take from this is that you cause some damage to harder targets than your weapon was intended to take down, and more damage to targets softer than that. If the gap becomes too wide in disfavor of the weapon, it won't do much of anything; too wide, and the weapon will cause overkill.

Nothing in this article needs to be learned by heart. As long as a reader or GM grasps the general concept and can figure out “my Nekovalkyrja Service Pistol will only do light damage to a Mindy armor,” the player's gleaned what most readers need to from the Version 3 system.

Based on the purpose stated in the weapon article, a player or GM is armed with the knowledge of what to expect from your tools. From there, the GM should be able to determine the result within the story narrative.

At the end of this article are outcomes given as inspiration as to how this might be applied, along with several tips. You can click here to quickly get down to it, or read on to learn more about defenses.

Defenses

There are two universal means of defense against direct harm in SARP: physical armor and energy barriers.

Barrier

Barriers (also called “barrier shielding”, “energy shields” and the like)) are a form of defensive energy screen that can absorb damage before its makes contact with what stands under its protection.

The potency of a barrier always is on the same tier as the unit fielding it.[1)] Destroyers will have destroyer-tier barriers, light cruisers will have cruiser-tiered barriers, and so forth.

However, not all units have barriers. An example:

> The M2 Mindy power armor acquired “bubble barrier” technology through a modular backpack generator in YE 29. Even when the Mindy II was introduced, the “bubble barrier” module was optional; the larger M6 Daisy fielded a new “conformal barrier” system. It wasn't until YE 36 that barrier shielding technology was refined enough that the Mindy II could have an inbuilt “conformal barrier” like the Daisy. In YE 38, the Mindy IV came standard with its own “conformal barrier,” its backpack slot instead dedicated to an inbuilt teleportation unit.

Damaging and depleting Barriers

Barriers don't discriminate against where they are hit. An attack will be intercepted by a unit's barrier regardless of where that target was attacked (a graze on a limb, a shot to the back, a slash along the engines, etc.)

That unit's barrier then will be depleted by the damage it has to stop.

Science fiction commonly refers to the status of energy screens in percentile values. Scientifically, there's no actual way for an energy field to be setback by incoming weapon fire. You cannot hurt energy, but you can deplete stored energy through use.

So, when a unit's barrier is “up”, it's actually on “hot-standby”: you have a minimally powered field that gives your unit the base protections from hazards and energy reserves ready to bolster the barrier with just enough energy to intercept attacks.

In SARP, units commonly have high-powered computers (some quantum-level) and predictive sensors.

When there's an incoming attack, just enough energy gets flushed from reserve power to the barrier to cancel out the attack. A unit's pilot then receives feedback such as, “Barrier at 75%!”, or “Shields at half strength!”

Below is the attack table, now with a third column that shows how much an attack could deplete a barrier.

Weapon vs Target	Damage directly on target	Damage on fully charged barrier
4 Below	Negligible	Barrier undiminished
3 Below	Light damage	around 7% damage to barrier
2 Below	Moderate Damage	around 12% damage to barrier
1 Below	Heavy Damage	around 25% damage to barrier
Equal	Potentially lethal	around 50% damage to barrier
1 Above	Quite lethal	Barrier depleted (100% damage)
2 Above	Highly destructive	Barrier depleted (150% damage), heavy damage to target
3 Above	Assuredly lethal	Barrier depleted (200% damage), potentially lethal damage to target
4 Above	Total Annihilation	Barrier depleted (250% damage), quite lethal damage to target

The notations that go along with excess damage are discussed further in Barrier Facings immediately below.

Barrier facings

Barrier technology comes in a few shapes in terms of deployment and management. The common ones include:

Bubble
This kind of barrier forms an all-around protective bubble for the unit. It's a rudimentary barrier deployment most commonly seen on power armor, mecha and larger civilian craft.

It has only one universal facing. Near-misses can deplete the bubble even though they might not have actually hit the target directly.

Conformal
Slightly more advanced, this barrier lends “skin-tight” protection to its recipient. Near-misses are much less likely to needlessly deplete the barrier.

It is usually seen on power armor, mecha and small fightercraft.

Two-faced
Two-faced has emitters that handle the forward and aft hemispheres of the barrier bubble separately — each facing has its own 100% energy reserve.

There are no double-facing barriers from something not mecha sized.

Six-faced
One of the most complex barrier setups available, this layout divides barrier facings in areas: fore, aft, port, starboard, dorsal and ventral. Each facing has its own 100% energy reserve too. Typically, these will only be seen on state-of-the-art military starships and capital vessels. Six-faced units sometimes will simplify how their facings are managed, with “fore” and “aft” commonly used.

Though “facings” is used here, players and GMs use many other names, including angles, directions, regions, sides, sectors, zones, and so on.

Managing barrier facings:
With multi-faced barrier units, it is possible to transfer power from one facing to another, either to replenish a facing at the expense of others, or reinforce a barrier facing's to absorb damage.

A fightercraft with fore shields as 50% and aft shields at 100% could transfer 50% from the aft shields to bring the fore shields back to 100%. The same fightercraft could instead decide to balance its shields and share reserves evenly: getting 75% on both facings.

Expecting damage on the fore barrier, a captain orders power to be rerouted from aft facing (at 100%) to fore (also 100%). The aft barrier is reduced to 50%, but the fore barrier is boosted to 150%.	Later, that same ship is fleeing a squadron of enemy vessels and the captain orders power to be rerouted from all facings to the aft. Fifty percent is taken from five facings (250% total) and shunted to the aft facing, upping it to 350%. While the ship's aft now extremely well protected, the rear emitter is not made to handle such an energy load and risks quickly overloading.

In SARP, the safe limit to boost a barrier facing is 200%. Going beyond invites malfunctions, equipment failures and unhappy engineers.

Replenishing a barrier

Eventually, damage depletes a barrier's reserves. A craft with multiple barrier facings can juggle its reserves around, but there remains a finite amount of total energy.

As long as a barrier is not fired upon, it is capable of recharging its reserves.

In fact, taking *negligible* damage can mean “taking so little damage that the barrier regenerates from it right away”. With proper power — that usually happens through the actions of roleplayers such as tapping in auxiliary power, choosing not to fire weapons or having a power armor hide behind cover and wait — reserves for any facings available can be safely recovered at a rate of 50% every 10 to 15 seconds (3% to 5% per second, depending on rate of activity).

Depleting a barrier by excess causes an overload which renders that barrier facing inoperable for 15 seconds while the barrier emitter is reset (think of it as reseting a tripped fusebox). Certain systems, such as capacitor reserves on the M2 Mindy and M6 Daisy power armor, are designed to 'hot restart' a barrier.

Armor

Essentially, armor is what gets between something that's vulnerable and what means it harm. Armor that does its job is will mitigate incoming damage, from completely fending it off to at least saving the user from what would have been a killing blow.

An armor's resilience is defined by the tier its unit is part of.[2)]

For ease of reference, anything within the same tier is documented as performing about the same. We won't go in the minutiae of what protects better between 10 mm of Yama-Dura plating and 15 mm of Durandium plating, though from reading article descriptions the GM is certainly free to come to his own conclusions.

Supplemental Armor

Power armors sometimes carry physical shields.[3)] For instance, the M6 Daisy power armor carries on its left forearm a Zesuaium shield.

The performance of supplemental armor is generally played by the ear by Game Masters. They are heavily reliant on the GM's portrayal a user's skill of interposing the shield between themselves and what means to harm them.

Given that shields typically are made of heavier plating than what the user is wearing, its resilience can be treated as going up to one step above the tier of the unit. For example, the M6 Daisy's Zesuaium shield could cope with attacks as a *heavy power armor* would. Damage to the shield is treated individually from the power armor: having a shield does not upgrade a power armor/mecha's defense tier; instead, it is treated as a different location to damage that is tougher than the rest.

There comes a point when a shield has sustained so much abuse that it looks more like an abstract metal representation of Swiss cheese rather than anything capable of granting protection. **How long shields can stand up to damage and deterioration is up of the GM.**

Materials

Materials used in physical armor influence how they perform, but v3 accounts more for their special qualities rather than their resilience. As long as they are within the same tier, Durandium armor and Zesuaium armor handle aether weaponry the same way (as they both don't have any special resistance against that form of damage).

Even though Durandium is supposedly lighter and less dense, someone designing a light power armor and wanting to sheathe it in Durandium plating will put the necessary amount of armor on it to make it fit within its tier.

Here's a list of commonly seen materials in SARP, along with a short blurb of how they stand out.

Armor Material	Properties
Xiulurium	Expensive, counts as Unarmored, grants stealth when energized.
Zanarium	Grants noncombat stealth when energized if barrier and weapons are offline.
Durandium Alloy	Lightweight and inexpensive.
Durandium-T	Transparent Durandium, counts as unarmored against beam-based weapons.
Yama-Dura	Memory metal with minor noncombat regenerative properties.
Nerimium	Heavy, density absorbs well kinetic and heat impacts, inexpensive.
Yamataium	Heavy, expensive, memory metal with significant noncombat regenerative properties.
Zesuaium	Heavy, expensive, cannot be repaired, resists electricity, kinetics, and heat.
Zesuaium-T	Transparent Zesuaium, counts as unarmored against beam-based weapons.
Zesuaium-X	Coated in Xiulurium, confers same properties as long as surface remains intact.

A material's properties give players options as to what they want to do.

Durandium is an extremely widespread material and makes for cheap, reliable armor. The Mindy relied greatly on Durandium because it was lightweight. Since the Mindy's teleportation module could transfer only a limited amount of weight, the lighter armor permitted to bring along a bigger weapon payload.

However, a Mindy plated in Durandium could take some serious damage from a Hostile's vibroblade in the chest. If the Mindy's breastplate was Zesuaium, the vibroblade wouldn't be able to dent it, as Zesuaium has the property of not being able to be reshaped through physical force.

Other aspects of physics remove that potential. If a gauss bazooka is fired directly in the chest of that same Zesuaium-plated Mindy, all the kinetic impact will be transferred directly over to the inner titanium framework. The Zesuaium chestplate will not have bent, but it may still crush the user's ribcage from the impact.

Being "Unarmored"

Most of what is in the tier list as target examples are items that are prepared or designed to endure damage coming *from weaponry*.[4)]

But many other items — especially from the civilian market — that may look like they could fit in those tiers are not actually armored. The guy in his leather jacket (exemplified in Tier 0), a car, an airplane, a communication satellite orbiting a planet, a starliner making passenger runs across Central Yamatai.

These are *unarmored*. They take damage one step worse than usual for their tier.

Setting Submissions

This section is made in the interest of making submissions adhere to SADRv3.

New Submissions

Here we'll discuss prickly stuff that can rise up during the process for making and seeing new submissions approved.

What size do I fit in?

Here's a variant of the Tier table with approximate sizing of what would fit in each category.

Tier	Type	Example	Note
Personnel			
1	Light Personnel	Flak jacket, riot armor	Human-sized, torso or fullbody padding
2	Medium Personnel	Ballistic Vest, bodyarmor	Human-sized, vest or fullbody
3	Heavy Personnel	Hardsuits	human-sized, fullbody, not as thick as power armor
Power Armor			
4	Light Armor	M2 Mindy IV, M6 Daisy II	bigger than human-sized, fits in an office's doorframe (under 6' 8“ tall)
5	Medium Armor		bigger than human-sized, has to bend down to fit in an office's doorframe
6	Heavy Armor	Hostile, Ripper	bigger than human-sized, barely fits in an office's corridor
Mecha			
7	Light Mecha	M9 TASHA, Aggressor, small shuttlepods,	about half a tennis court, around 10x10x3 meters
8	Medium Mecha	V9 Nodachi, Ravager, most shuttlecraft	may fill up to an entire tennis court, around 20x10x5 meters
9	Heavy Mecha	Larger shuttles	Space shuttle-sized, around 40x25x20 meters
Starship			
10	Light Starship	Corvettes, Yui-7 Scout, Chiaki Escort	up to 100 meters long, fits in a football field
11	Medium Starship	Destroyers, Plumeria Gunship	100~250 meters long, as big or bigger than US Navy Destroyers
12	Heavy Starship	Cruisers, Ookami Light Cruiser	250~500 meters long, about as big or bigger than an US Navy Aircraft carrier
13	Light Capital Ship	Super Eikan Heavy Cruiser	500~1000 meters long, can be bigger than the tallest building on Earth
14	Medium Capital Ship	Sharie Battleship	750~1500 meters long, ships this size could bridge a river
15	Heavy Capital Ship	3km+ Structures, Dreadnoughts	Multi-kilometer structures. SARP has gone up to 25km+

How fast can I go?

Anything biped and human-sized usually can't go much faster than 30~45kph (humans probably go lower, nekos cap higher - articulations and muscle can only go so far). Larger mecha, thanks to longer strides and man-machine interfaces, can likely hit 50~90kph. Most inertial control systems go up to 100kph. Airspeed of anything not fightercraft tends to cap at Mach 1.7, actual aerodynes reach up to Mach 5.

SARP's major factions like Yamatai and Nepleslia have a listing of speed standards which should be prime reference for what your sublight and faster-than-light speeds ought to look like for fighters, shuttles and starships.

SADRv2 had this table defining how armor weight would have influence on the top sublight speed that could be reached. See below for its SADRv3 adaptation:

Armor Type	Examples	Spd Bonus	Spd Max
Unarmored	Xiulurium	+.075c	.45c
Light Armor	Durandium	+.05c STL	.425c
Medium	Yama-Dura, Zanarium	+.025c	.40c
Heavy	Yamataium, Zesuaium, Nerimium	None	.375c

More powerful armor and barrier

Aside from how you describe how your unit's armor plating, the materials used and general composition is like, its tier is what the unit is and no higher.

For the barrier, it's the same. You pick the type of technology used to define facings, but then longevity has more to do with power systems and the actions of roleplayers handling the unit.

Basically, don't try to make your baby a special snowflake just with numbers and labels to overshadow other articles and look powerful. Strive for quality and good descriptions, submissions that become larger-than-life for readers are usually seen in better light too, whereas NTSE moderators try to be on the crackdown for anything that might be contentiously overpowered.

Multiple barrier systems

It's possible that ships have multiple systems running their barrier. This typically doesn't make the barrier stronger or more capable of handling more damage, but it can change how it's meant to work.

For example, say I have a ship with 4 gravimetric drives. Each drive is able to raise a barrier to full strength, but usually the share the load of keeping a barrier online. That's an expression of *loadsharing* and *redundancy* - without one of these gravimetric drives, you wouldn't be able to keep a barrier active so in this case, you have 3 spares.

Another example is the Combined Field System used by the Star Army of Yamatai. The Combined Field is exactly that, fields combined to fulfill different functions: one projects a distorsion field that prematurely detonates warheads and bends harmful beams and radiation away, while another offers protection to deflect more physical projectiles from impacting the ship. If the system supporting the distorsion field

took damage, one protective aspect of the barrier may be lost.

Article Templates

Elements of SADRv3 get mentioned in a few places in an article. Any SADRv3 notation can also be linked back to the this article for ease of reference.

Units

Statistical Data / General

Insert the following under “Type”:

```
**SARPv3 Tier:** (target type, i.e.: Medium Starship)
```

Armored Hull

Should include the following line before the description of the armor's composition:

```
The (unitname)'s armor has the defensive profile of a (target type, i.e.:
Light Mecha).
```

Barrier Systems

Also previously known as “Shield Systems” under previous templates. Should include the following line before the description of the Barrier Shielding systems:

```
The (unitname)'s has a (barrier type, i.e.: conformal barrier) rated for
(target type plural, i.e.: Light Mechas).
```

Weapons Systems

The weapons need to be listed with the following nomenclature:

```
  * [[(Wiki link to weapon)|(weapon purpose) (weapon name)]]
example:
  * [[stararmy:weapons:ke-s3-w3020_main_weapon_array|Light Anti-Capital Main
Weapon Array]]
```

Weapons

Purpose

In weapon articles, the first primary entry for “Purpose:” needs to provide information matching the “Purpose” entry of the Tier table.

```
**Purpose:** [[(wiki link back to this article's Tier heading)|(weapon's purpose, i.e.: Light Anti-Mecha)]]
```

Translating from SADRv2

Quick and dirty reading

If you come across an article talking about SP, PDR, ADR and SDR; you're looking after something that matches the way the Damage Rating system worked before, under SADRv2.

To quickly convert:

- SPs and grade (personnel and mecha) can help you figure out broad category of the unit.
  - SP1 is unarmored
  - SP2 is light personnel
  - SP3-4 is medium personnel
  - SP5 is heavy personnel
  - SP5~10 covers light and medium armors.
  - SP10~15 is heavy armor
  - SP15~25 will cover most of what is in the Mecha category. Pay more attention to what the type of unit is.
- SPs for ships is in a different grade
  - SP10~15 is light starship
  - SP20-25 is medium starship
  - SP30~35 is heavy starships, light cruisers and the like
  - SP40-45 was for light capital vessel
  - SP50 was the maximum, about equivalent to medium and heavy capital vessels.
- Personnel grade weapons with PDR translate into:
  - PDR1~2 is light anti-personnel(1)
  - PDR3~4 is medium anti-personnel(2)
  - PDR5 is heavy anti-personnel(3)
- Armor grade weapons with ADR translate into:
  - ADR1 is heavy anti-personnel(3)
  - ADR2 is light anti-armor(4)
  - ADR3 is medium to heavy anti-armor(5~6)
  - ADR4 is around light-to-medium anti-mecha (7~8)

    - ADR5 is around medium-to-heavy anti-mecha (8~9)

- Ship grade weapons with SDR translate into:
    - SDR1 is heavy anti-mecha(9)
    - SDR2 is light anti-starship(10)
    - SDR3 is medium anti-starship(11)
    - SDR4 is heavy anti-starship (12)
    - SDR5 is covered anything in anti-capital (13~15)

Damage per interval

SADRv2 had values like PDR/ADR/SDR calculate the damage potential a weapon could output under 10 seconds, so it tried to abstractly take rate-of-fire into account.

Weapon lethality under SADRv3 is counted “per-use”, or “per-shot”. Unless we deal with very slow-firing weapons, the rough conversion offered above is indeed 'rough'.

Converting from SADRv2

The “rough and dirty” heading above can help, but the spirit of converting weapons into SADRv3 was first meant to encourage it looking dramatic, *cinematic*.

With this said, if a weapon was made to cause damage to a 'light armor' (Tier 4) on multiple hits, it should not be considered a “Light Anti-Armor Weapon”. While the weapon can be described as being used to assault such targets, when it comes to the Class the author should, depending on the intended effectiveness of the weapon, consider whether the weapon will prove lethal on a single hit for a Tier 3 or Tier 2 target and label it as such.

To give an example, the LASR was designed for use near friendly assets where the potential collateral damage of more powerful weapons was not desired. As such, while it has frequently been employed in an anti-armor role the weapon can be better thought of as an “Anti-Heavy Personnel Weapon” (Tier 3) as a single shot to a vital area (head, torso) is likely to incapacitate such a target (or penetrate Mishhuvurthyar carapace), but it'd take longer to chew through power armor.

Examples of use

Below are outcomes for different targets for inspiration, along with a few tips. These aren't absolutes, as in the chaos of combat there can be plenty of mitigating factors. For instance, even though a Nekovalkyrja Service Pistol set on 'heavy' can cause a grenade-like blast, something *very lethal* to a soldier only in uniform, the Game Master would entirely be in the right to judge that if the person dives down in time, perhaps she'd emerge only singed/dazed from the experience.

vs. lightly protected personnel

Practically everything can give a bad day to a *light personnel* target. If someone packing serious heat is motivated in taking down, say, a policeman in riot armor, the following might happen depending on how badly the poor policeman is outgunned:

Weapon vs Target	Descriptor	Examples
Equal	Potentially lethal	Penetration, severe burns, possibly fatal wounds (vital organs, bleeding)
1 Above	Quite lethal	Reliable through-and-through penetration, gaping wounds (exsanguination)
2 Above	Very lethal	Severing limbs, eviscerating torsos, massive traumatic injuries.
3 Above	Assuredly lethal	Explosive separation of body parts/tissues via projectile trauma
4 Above	Total Annihilation	Incineration, being scattered into meaty chunks and fine pink mist

Since most modern handguns are qualified as *light anti-personnel* weapons, they are made to defeat protection like the above policeman's riot armor. That is why policemen usually have ballistic vests in high risk situations - that kind of protection (Tier 2) would prove lifesaving and would result in heavy damage (cracked ribs/severe bruising) instead.

More on that in the next section.

vs. heavily protected personnel

This covers protection confered by padding and plating directly over the human body, such as the full-body hardsuits of Nepleslian Senator Laj Vinross Yu's elite cadre of femme fatale, the 'Uniques'.

Weapon vs Target	Descriptor	Examples
2 Below	Moderate Damage	Notable damage to armor surface, bruising
1 Below	Heavy damage	Partial penetration, minor burns, light wounds
Equal	Potentially lethal	Penetration, severe burns, possibly fatal wounds (vital organs, bleeding)
1 Above	Quite lethal	Reliable through-and-through penetration, gaping wounds (exsanguination)
2 Above	Very lethal	Severing limbs, eviscerating torsos, massive traumatic injuries.
3 Above	Assuredly lethal	Explosive separation of body parts/tissues via projectile trauma
4 Above	Total Annihilation	Incineration, being scattered into meaty chunks and fine pink mist

Weapons striking below the tier of the target's protection aren't ineffective: the armor is just doing its job of protecting the wearer's life against harm. Also of note is that damage implies some level of deterioration on level of the armor. Even though a body-armored 'Unique' could survive being hosed all over by a *light anti-infantry* submachinegun, her armor would deteriorate and become covered in pockmarks. Continued attacks could keep chewing away at the protection until it becomes compromised.

Bear in mind that an Unique being shot a few times over her hardsuit's right shoulder may mean that this area is more vulnerable, but her chestplate and left shoulder would still be pristine and still quite capable of coping with similar abuse.

That kind of deterioration is for the Game Master to describe and take into account. Also bear in mind that even though the damage caused might not to lethal, injuries come with their own hazards such as bleeding.

vs. lightweight power armor

Power Armors in the tier table is the first point where we can fully go four steps above and four steps below in lethality.

Unlike body armor which is directly set over flesh, power armors operate on a more robust foundation: a pressure-proof lining to environmentally protect the wearer, along with an endoskeleton that serves as armature for motor actuators or artificial muscle-fibers, then covered an flexible outer covering, and plating over the less articulated regions.

The M2 Mindy IV Power Armor is one such unit.

Weapon vs Target	Descriptor	Examples
4 Below	Negligible	scratches, ruined paintjob
3 Below	Light Damage	Slight deterioration of armor cover (nicked, dented, carbonized surface)
2 Below	Moderate Damage	Notable deterioration of armor cover (melting off, gouged, pockmarked), possible bruising
1 Below	Heavy damage	Partial penetration, subsystem damage, minor injury (minor wounds or burns, major bruising, cracked bones)
Equal	Potentially lethal	Armor penetrated, possibly fatal injury for wearer (vital organs, burns, bleeding, and broken bones)
1 Above	Quite lethal	Armor deeply penetrated, severe injuries for wearer
2 Above	Very lethal	Through-and-through penetration; limbs severed or ruined; massive injuries for wearer.
3 Above	Assuredly lethal	Significant portion of power armor and wearer blown off or destroyed
4 Above	Total Annihilation	Obliteration likely, even from a glancing hit

Since a power armor is motorized and possesses components to help it operate far beyond the norm of human prowess, sustaining damage can hinder or take out these components (onboard computer, power supply, propulsion system…) and reduce the unit's performance.

State-of-the art power armor commonly include life support functions that can save its wearer from injury. A wearer may be able to ride out injuries thanks to injected painkillers, bleeding up to having a limb severed can be sealed, someone in cardiac arrest could be reanimated.

vs. medium-sized starship

Once the mecha category is reached, the units are no longer conformal to a humanoid's body. At this point, users can go from shuttle pilot to tank driver. Their vehicle may sustain damage, but the injury or death of the crew is collateral damage more than anything else (unless a section like the cockpit is aimed for).

It's much the same for starships, just on a greater scale. Let's cover how a Plumeria medium gunship might cope against harm.

Weapon vs Target	Descriptor	Examples
4 Below	Negligible	dents, heat sears the surface, enough to ruin a paintjob
3 Below	Light Damage	gouges or noticable pockmarks; heat warps the armor as it melts
2 Below	Moderate Damage	armor might crack, fissure or threaten to buckle; heat causes indents from reaching boiling point
1 Below	Heavy damage	armor is twisted, torn or cratered nearly through; heat sufficient to vaporize deeper depressions
Equal	Potentially lethal	Hull breach, possible loss of function on vital system may cripple the ship
1 Above	Quite lethal	Compartment-wide damage, wide sections open to space
2 Above	Very lethal	Loss of major structural component such as main gun and pylons
3 Above	Assuredly lethal	If hit centermass, destruction of the entire ship
4 Above	Total Annihilation	Ship bound to disintegrate even if caught at the edge of the attack

Like power armor, larger vehicles deteriorate from successive damage over the same locations.

Potentially lethal damage is essentially attacks that get past the hull. Just like how a knife can cause damage to different organs in the human body, some of them a human cannot go without, it's the same for vehicles. Such an attack striking the Plumeria's lounge or shuttlebay will impair some functions of the ship, but are unlikely to slow it down in combat. However, strikes to its weapons, engines and shield systems will prove far more telling. Taking out the power supply in engineering will be crippling, forcing the ship to run on backup power. A hit on the bridge could be ruinous to retaining control of the ship. Striking directly at the the armory or the anti-matter storage could result in catastrophic consequences.

Even 'flesh wounds' on a vehicle can come with their share of trouble. On a Plumeria, we could be looking at power surges, severed electrical connections that need to be bypassed, coolant leaks, venting atmosphere, etcetera.

Connecting with an *Assuredly Lethal* attack, or pouring a lot of successive firepower in a ship's centermass can result in dramatic explosions. But, it's not uncommon for a vehicle to be made inoperable without exploding. In the case of airplanes, striking at engines may not make it explode, but it will rob it of its ability to remain airborne. For spaceships, sufficient damage may make them unable to function or to support life before they'll actually blow up.

Capital vessels are in the upper range of the tiers, the point where weapons in this setting become less likely to cause 'overkill' on them. They account for the mightiest machines in our setting.

1)

like with armor, this is to avoid arms races

2)

this is mostly to nip in the bud any potential arms races - we want to encourage better design and quality writing in submissions, rather than one-upmanship

3)

“shields” is the desired nomenclature for additional armor - tangible shields - meant to intercept attacks, as opposed to energy shields, which are barriers.

4)

this goes somewhat beyond crash test dummies