

Weapons

Weapons are the tools that characters use for personal protection, for hunting, and for violence in pursuit of personal, corporate, and governmental goals.

Weapons are a natural consequence of, and element of, any tool-using sophont society: they are used (ideally) in situations that have escalated beyond non-violent personal interactions.

UNDERSTANDING WEAPONS

Weapons are devices designed to inflict Effects (damage, injuries, wounds, destruction) on targets.

Each weapon has LongName which generally describes its principles and construction, and a Model which is an abbreviation of the LongName.

With an understanding of the principles of Weapons, Armor, Vehicles, and Combat, players can generally understand the relative worth of weapons from their LongNames and Models.

Types of Weapons

Traveller Weapons are differentiated by Type: there are seven different Types of Weapons based more or less on function.

A **Gun** is a relatively large projectile- or energy-firing artillery weapon created for distinctly military purposes.

A **Rifle** is a personal long-arm used by soldiers and by sportsmen.

A **Pistol** is a personal handgun intended to be operated with one hand.

A **Shotgun** is a personal long-arm firing a group of shot pellets rather than single bullets.

A **Machinegun** is a military weapon firing multiple bullets in bursts with each pull of the trigger.

A **Projector** utilizes non-traditional technology not ordinarily or otherwise encountered.

A **Designator** marks or illuminates potential targets so that other weapons may attack them.

A **Launcher** ejects or launches self-propelled projectiles at a target.

USING WEAPONS

Weapons have Effects which inflict hits, wounds, injuries, or damage under the V1 or V2 hit systems.

The Hit System V1. The Basic Hit System (version 1) provides a simple hit mechanic for resolution of combat. V1 is intended for use with non-player characters (and especially hordes of NPCs) when speed of resolution is important.

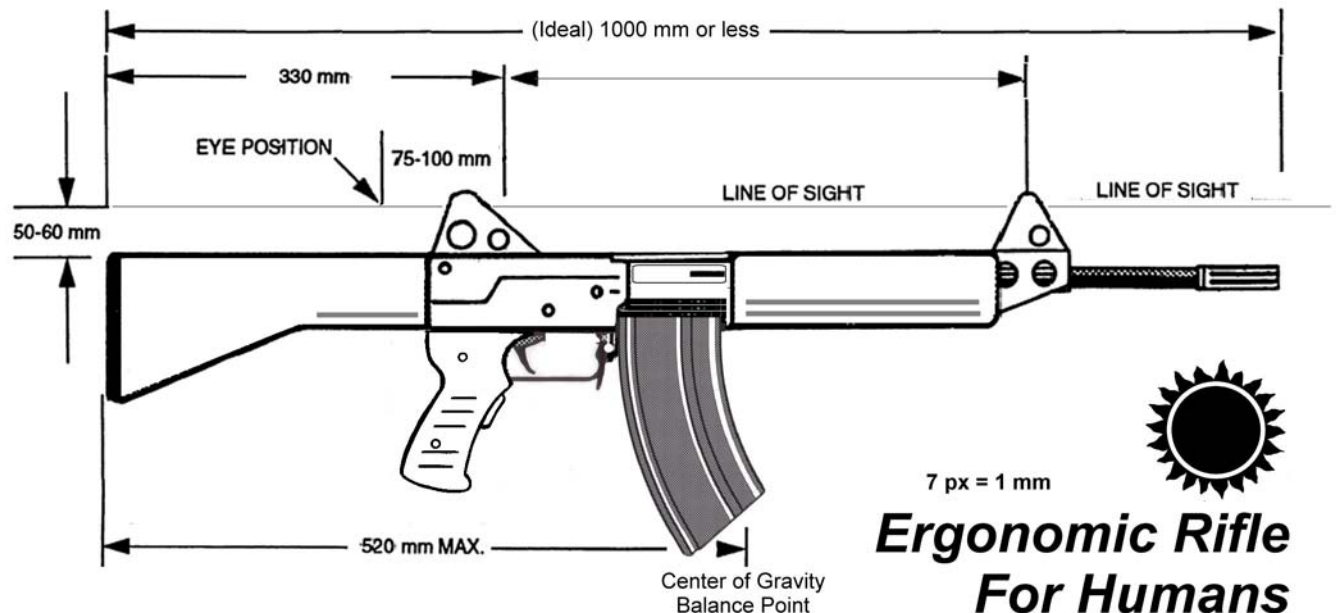
The Hit System V2. V2 Damage inflicts different types of damage based on the specific weapon.

CREATING WEAPONS

Weapons can be created randomly, or by design.

Random Creation. The **GunMaker** system produces weapons based on die rolls. Randomly created weapons can be used in a variety of encounters with adversaries, or to define trade goods.

Design. Weapons can be designed by substituting selections for die rolls in the Gunmaker system.



WEAPON DESCRIPTION

Model	LongName (Stage-Burden-Descriptor-Type-User-Portability-TL)
SnAC-8	Sniper (blank) Assault Carbine-8
The basic information required to <u>describe</u> a weapon.	

Wx: WEAPON EXTENSION

	Range	Cost	Mass	QREBS	Effects		
Wx:	R=5	Cr1200	2.6 kg	B= 0	Bang-1	Blast-2	Bullet-1
The basic information required to <u>use</u> a weapon.							

DESCRIBING WEAPONS

Weapons can be described in many ways depending on the printed format required: any format is possible as long as it provides the information necessary for the situation.

The Weapon Description

Weapons are described in a series of elements to form the LongName or abbreviated to form the Model. The LongName or Model contains enough information to allow a character to describe a weapon.

The LongName consists of the following elements:

Stage - Burden - Descriptor - Type - User - Portability - TL

Stage is the weapons' position in the spectrum of sophistication in the developmental life cycle. It is possible for Stage to be blank. For example, Prototype, Basic, or Advanced.

Burden identifies the relative weight, mass, or bulk of the weapon. It is possible for Burden to be blank. For example, Vlight, Light, Heavy, or Vheavy.

Descriptor elaborates on combat purpose, size, or the form of energy or injury it inflicts. It is possible for the Descriptor to be blank. For example, Laser or Survival.

Type identifies the basic function of the weapon. For example, Carbine. Type is required.

User identifies the intended or designed user, either by sophont, or by manipulator. Blank assumes the user is Human or Man or Hand. For example, Man, Hiver, Tentacle, or Gripper.

Portability identifies the relative size of the weapon.

Tech Level identifies the Technological Level at which the Weapon is commonly manufactured. TL is required.

The **Identifying Weapons Chart** shows the various component names and abbreviations.

Elements of a LongName not necessary for a proper understanding may be omitted; User and Portability are often omitted for basic weapons.

Model. LongName elements have abbreviations which are used to create the weapon Model.

Model is a jargon abbreviated Longname. Once a character is familiar with a specific weapon, references to it devolve to its abbreviation. P-5 is a Tech Level 5 Pistol. When used, Stage and Burden may be enclosed in parens to increase comprehension (some familiarity is required before players can quickly understand aFmLC-12).

Given the restrictions of the alphabet, element abbreviations are not necessarily unique.

The Weapon Extension

The capabilities of a weapon are contained in the Weapon Extension. This string of values details enough information to allow a character to use a weapon. The Weapon Extension is a variable length string: only such information as is needed is included.

The Prefix. The Weapons extension begins with the prefix Wx:

The Elements. Following the prefix, the Weapons Extension includes

Wx: Range - Cost - Mass - qreBs - Effects

Range (R=N) is the maximum effective range of a weapon. Beyond this range, it is impossible to hit a reasonable target. Some weapons have options which increase this Range.

Cost. The cost of the weapon in Credits.

Mass. The mass (more-or-less the weight) of the weapon expressed in kilograms (unless otherwise identified).

QREBS. The QREBS values for the weapon (if known). Various formats are used to identify specific QREBS values, and care must be taken to avoid confusion with Range if Reliability is shown.

Effects. The Hit System effects inflicted by the weapon.

DESIGNING WEAPONS

Weapons are designed using the Weapons Fillform. The Fillform guides the designer through the process with spaces for information and references to the applicable charts.

DELIBERATE DESIGN

The deliberate design process begins with a blank Weapons Fillform. In each step, the Chart Number indicates the Weapons Chart from which the information is selected.

Chart 1 Identifying Weapons, and Chart 2 Weapon Design may be consulted, but are not actually used in Deliberate Design.

These steps include:

Chart 2. Weapon Design FillForm.

Prepare a blank Fillform for the weapon design.

Chart 3. Weapon Type

Select weapons **Type** and **SubType**. Record Model, TL, Range, Mass, qreBs (Burden), H1 (Weapon Effect) and D1 (Effect Dice), and Cost.

Chart 4. Descriptor

Based on the Weapon Type, select the Weapons **Descriptor**. Record TL, Range, Mass, qreBs (Burden), H2 and D2, and H3 and D3, and Cost.

Range. Note that a non-zero Range under Descriptor supersedes Range under Category and Type (cross out Category and Type Range).

Mass. Mass is a multiplier. Entries from this chart should be preceded by x (a times sign).

Chart 5. Burden

Select an appropriate **Burden** and record its TL, Range, Mass, qreBs (Burden), Miscellaneous (usually Mods to QREBS), D2 (Mod to D2), and Cost. Observe the requirements under Comment.

Mass. Mass is a multiplier. Entries from this chart should be preceded by x (a times sign).

Chart 5. Stage

Select an appropriate **Stage** and record its TL, Range, Mass, qreBs (Burden), Miscellaneous (usually Mods to QREBS), D2 (Mod to D2), and Cost. Observe the requirements under Comment.

Mass. Mass is a multiplier. Entries from this chart should be preceded by x (a times sign).

Chart 6. Weapon Special Effects

Review the Weapon Type, Descriptor, and Burden for applicable notes and record this information.

Chart 7. Options

Review the available options and note those selected.

Record the QREBS drawbacks from the Weapons Options.

Chart 5. User

Select an appropriate **User** and record its TL, Range, Mass, qreBs (Burden), and Miscellaneous (usually Mods to QREBS). Observe the requirements under Comment.

Chart 8. Weapon Controls

Review the Weapon Type and note the assigned controls. Review the Weapon Descriptor and add any additional controls.

Chart 5. Portability

Calculate the weight for the weapon. Using this value, determine the Portability for the weapon.

Totals

For each column, compute the totals. Tech Levels sum. Ranges sum. Some entries under Mass multiply. Burdens sum. Combine identical Effects and sum their hit dice. Some costs multiply.

Complete the QREBS entries with the calculated Burden (and add any other QREBS entries dictated by comments).

Finally

Create the Weapon Description and Weapon Extension.

RANDOM CREATION

The random creation process begins with a blank Weapons Fillform and the Random Weapon Creation Chart 9.

Using 1D and 2D as directed, roll for each element of the weapon on Chart 9 from **right to left** in the order:

Type (or SubType), Descriptor, Burden, and Stage.

Simple Weapons. A simple weapon can be created directly from the chart (Tech Levels are included).

Complete Weapons Descriptions. Using the information created from Chart 9, return to Deliberate Weapon Design and determine its details from the Charts.

Some Designs Are Impractical. Some combinations of elements may not make sense (Recoilless Laser) or may seem impractical (Vheavy Carbine). It is the Referee's responsibility to discard a design as nonsensical or to justify the design based on local sophont cultural preferences.

For example, the Carbine element of a Vheavy Carbine produces an EOU Mod not available in a Vheavy Rifle.

UNDERSTANDING THE WEAPON ELEMENTS

Each Element of a Weapon description has meaning. Once a weapon has been created, consult the supporting paragraphs for a better understanding of the weapon function and operation.

WEAPON TYPES

Weapons fall into eight distinct categories or types (there is occasional overlap between types) based on size, function, and use.

Guns

A **Gun** is a relatively large projectile- or energy-firing artillery weapon created for distinctly military (as opposed to hunting, recreation, or sport) purposes.

Includes Gatling, Cannon, and AutoCannon. **Gatling** is a multiple barrel and higher rate of fire version of a **Gun**.

Cannon is a larger version of a **Gun**. **AutoCannon** is a higher rate of fire version of **Cannon**.

Weapons in Category = Gun are capable of Indirect Fire.

Category = Gun is considered Artillery.

Rifles

A **Rifle** is long-arm used by soldiers in combat and by sportsmen in pursuit of game. A rifle is a stable and relatively accurate weapon, and although the term "rifle" implies spiral grooved barrels which spin stabilize projectiles, that feature is not necessarily present.

Includes Carbine. A Carbine is a shorter version of the Rifle usually created to save weight or reduce size.

Alternative terms for Rifle include Fusil and Musket.

Pistols

A **Pistol** is a personal handgun intended to be operated with one hand. In this context, a pistol is semi-automatic (or self-loading). Less accurate and shorter-ranged than a Rifle, a Pistol offers considerable savings in mass and size.

Includes Revolver. A Revolver is a special type of Pistol using a multiple chambered cylinder instead of a magazine.

Shotguns

A **Shotgun** is a long-arm firing a group of shot pellets rather than single bullets (but see **Splat** under Descriptors).

Machineguns

A **Machinegun** is a military weapon which fires multiple bullets in bursts with each pull of the trigger. Firing more bullets theoretically means the weapon can do more damage.

Projectors

A **Projector** is a weapon which utilizes non-traditional technology not ordinarily or otherwise encountered. An alternative term is Projac.

Designators

A **Designator** is a device which marks or illuminates targets (or potential targets) so that other weapons may engage or attack them. Although a Designator is not itself intended to be a weapon, it may inflict harm when in use.

Forward Observers use Designators to illuminate or mark a Target so that it can be attacked by Artillery.

Launchers

A **Launcher** is a device which ejects or launches self-propelled projectiles which then proceed to the target.

A Launcher can fire missiles (guided) or rockets or grenades (unguided).

Includes Multi-Launchers. A Multi-Launcher is a refinement of a Launcher to allow multiple uses before reloading.

WEAPON DESCRIPTORS

Descriptor is a statement of the specific mechanism, purpose, or effect the weapon may have. When paired with a Weapon Type, it provides a basic statement of a weapon and its function.

A Descriptor may apply to several different types of weapons, but Descriptors are not necessarily used with every Weapon Category.

(blank). The weapon has no modifications or effects based on Descriptor.

Accelerator. The weapon fires a projectile at a low initial velocity; after it leaves the barrel, an internal charge accelerates the bullet to greater velocities. Accelerator weapons have low recoil and are well adapted to zero-G environments. For example, Accelerator Carbine.

Acid. The weapon discharges acid at the target. For example, Acid Projector.

Anti-Flyer Missile. The weapon launches a missile which attacks Flyers. Anti-Flyer Missiles are guided. For example, Anti-Flyer Missile Multi-Launcher.

Anti-Flyer. The weapon is intended for use against Flyers, typically through a higher rate of fire than similar weapons. Anti-Flyer refers to some aspect of the weapon's operation (as distinct from Anti-Flyer Missile). For example, Anti-Flyer Gatling.

Anti-Tank. The weapon is intended for use against Tanks and other armored vehicles; it may reasonably be used against any vehicle. Anti-Tank refers to some aspect of the weapon's operation (as distinct from Anti-Tank Missile). For example, Anti-Tank AutoCannon.

Anti-Tank Missile. The weapon launches a missile which attacks Tanks or other Armor. For example, Anti-Tank Missile Multi-Launcher.

Assault. The weapon is designed for use on the battlefield by soldiers. It is characterized by an ability to hit person - size targets at moderate ranges (Range 4 = 500 meters) and by bullets and explosive projectiles. For example, Assault Rifle.

Auto. An abbreviation for Automatic and another term for Battle (used about half the time). When a weapon is designated Battle by the tables or by design, Auto may be used instead. For example, a Battle Rifle may also be called an Auto Rifle.

Battle. The weapon is designed for use on the battlefield by soldiers. It is characterized by an ability to hit -person size targets at the limit of unaided vision (Range 5 = 1000 meters). For example, Battle Rifle.

Combat. The weapon is designed for use in combat by soldiers. It is characterized by an ability to hit person - size targets at relatively short ranges (Range 3 = 150 meters) using explosive projectiles. For example, Combat Rifle.

Dart. The weapon fires a small injector projectile which, on contact, injects a Tranq dose into the target. For example, Dart Rifle.

EMP. The weapon fires a directed electromagnetic pulse which fries electronic circuits and blinds sophonts who have Awareness. For example, EMP Projector.

Fire. The weapon fires or projects flame or fire at the target. For example, Fire Projector (the equivalent of a Flame Thrower).

Flash. The weapon fires a bright, blinding flash of light. For example, Flash Projector.

Freeze. The weapon induces an entropic effect, removing heat from the target. For example, Freeze Projector.

Fusion. The weapon superheats hydrogen fuel to a plasma state and retains it briefly (to allow progression to the fusion state). It fires its beam through a magnetically focused field along the weapon's barrel. The initial beam is approximately 2 cm, but it begins to expand immediately. Fusion weapons have a greater range than Plasma weapons.

Fusion weapons have significant recoil.

For example, Fusion Gatling.

Gauss. The weapon electromagnetically accelerates a projectile and spin stabilizes it through magnetic effects. For example, Gauss Rifle.

Grav. The weapon projects a high frequency gravitic effect onto the target; this rapid gravitic pushing and pulling reduces internal structural strength in objects and induces organic damage in beings. In addition, this weapon effect shuts down grav equipment. For example, Grav Projector.

Grenade. The weapon fires an explosive projectile. For example, Grenade Launcher.

Hunting. The weapon is adapted to game hunting situations. For example, Hunting Rifle.

Laser. The weapon fires a coherent beam of photons at the target. For example, Laser Designator.

Mag. The weapon projects a high frequency magnetic effect onto the target; this rapid magnetic pulsing scrambles electronic circuits and induces temporary disorientation in organic beings. In addition, this weapon effect shuts down magnetic equipment. For example, Mag Projector.

Missile. The weapon fires a missile which is guided to the target. For example, Missile Launcher.

Plasma. The weapon heats hydrogen fuel to a plasma state and fires it as a beam through a magnetically focused field along the weapon's barrel. The initial beam is approximately 2 cm, but it begins to expand immediately.

Plasma weapons have significant recoil.

For example, Plasma Gun.

Poison Dart. The weapon fires a small pointed projectile which, on contact, injects a Poison dose into the target. For example, Poison Dart Carbine.

Poison Gas. The weapon projects a poison gas at the target. For example, Poison Gas Projector.

Psi Amp. The weapon amplifies the natural psionic ability of the user. For example, Psi Amplification Projector.

Rad. The weapon projects radiation effects at the target. For example, Rad Projector.

RAM Grenade. The weapon fires an explosive projectile which has extended range (RAM= Rocket Assisted Munition). For example, RAM Grenade Launcher.

Rocket. The weapon fires an unguided rocket at the target. For example, Rocket Multi-Launcher.

Shock. The weapon applies an electric shock to the target. For example, Shock Projector.

Sonic. The weapon projects a sound-based effect at the target (as distinct from the sound some weapons make when firing). For example, Sonic Projector.

Splat. The weapon is a multi-barrel slightly diverging configuration, with each barrel loaded with several projectiles (and associated propellant). Each use fires one projectile in each of the barrels. For example, Splat Gun.

Splat is distinct from Shotgun: Splat is a multi-barrel multi-projectile Rifle or Carbine.

Stench. The weapon projects a strong foul-smelling or obnoxious effect at the target. For example, Stench Projector.

Sub. The weapon configuration uses smaller (or less powerful) ammunition than normal, resulting in lighter weight and somewhat less power. For example, Sub Machinegun.

Survival. The weapon is adapted to use in survival situations. For example, Survival Rifle.

WEAPON BURDEN

Burden is the spectrum of effects based primarily on weight, mass, and bulk.

(blank). The weapon has no modifications or effects based on Burden.

Anti-Designator. The weapon senses the marking or illumination effects emitted by a Designator. The weapon can sense the Designator's trigger signal and fire automatically, or can fire at the user's command.

Body (applies only to Pistols and Revolvers). The Pistol or Revolver is light-weight and ergonomically designed.

Disposable. The weapon is manufactured from inexpensive materials to reduce cost; it has a usable lifetime measured in days.

Heavy. The weapon is significantly heavier than the standard weapon, but has greater range.

Light. The weapon is significantly lighter than the standard weapon and thus easier to carry, but at a reduction in range.

Magnum (applies only to Pistols and Revolvers). The Pistol or Revolver is heavier than standard and has greater range.

Medium (the term is often omitted). The weapon has no specific enhancements with the Burden classification.

Recoilless. The weapon is designed to have no recoil and is adapted to zero-G environments.

Snub. The weapon is specifically designed to be easy to carry and operate, but at a cost in range and effect.

Vheavy. The weapon is extremely heavy, but has longer range and inflicts greater damage.

Vlight. The weapon is extremely light, but at a reduction in range and effect.

VRF (Very Rapid Fire). The weapon has a very high rate of fire.

WEAPON STAGE

Stage is the spectrum of effects based on the technological product development cycle.

(blank). The weapon has no modifications or effects based on Stage.

Advanced. The weapon is significantly better than the standard version, and features lower weight and excellent ergonomic design. It inflicts increased damage.

Alternate. The weapon uses an alternate technology to achieve its effects.

Basic. The weapon is a stripped down design with greater weight and lower cost.

Early. The weapon is a preliminary design available through mass production with the bugs not yet worked out.

Experimental. The weapon is an early test model.

Improved. The weapon features small improvements.

Modified. The weapon features improvements.

Ultimate. The weapon represents the technological pinnacle of the design cycle.

Precision. The weapon is able to target a specific component of the target. A Precision weapon may specify (rather than roll) the result on a Hit Location Table.

Prototype. The weapon is a hand made model.

Remote. The weapon is designed to be emplaced or installed in a location at some distance from the operator, or emplaced to operate independently. Remote weapons are controlled by a Designator and traverse to track a target which is being designated. The operator can trigger a fire signal from the Designator.

Sniper (used only with Rifles). The weapon is optimized for accuracy at extended ranges.

Standard (often omitted). The weapon has no specific enhancements with the Stage classification.

Target (used only with Rifles and Pistols). The weapon is optimized for accuracy.

WEAPON USERS

User indicates the typical or intended user, either by species or by manipulator type.

(blank). The weapon has no modifications or effects based on User. The default user is Man or Human.

If no User is specified, the weapon is intended to be operated by a Human or similar being.

Universal. The weapon has compromise controls which are usable by most sophonts.

By Sophont

User may be described as a specific sophont.

Man. The intended user is Human (the military user term Man was adopted during the Second Empire to refer to Humans in general; although archaic in other uses, it is the accepted term here). The preferred manipulator is Hand.

Aslan. The preferred manipulator is Paw.

Hiver. The preferred manipulator is Grasper.

Vegan. The preferred manipulator is Tentacle.

K'kree. The preferred manipulator is the Hand.

Vargr. Rarely used. Vargr easily use human weapons. The preferred manipulator is the Hand.

Droyne. The preferred manipulator is the Hand.

Bwaps. The preferred manipulator is the Hand.

<Sophont>. The intended user is a specific Sophont, and various details are custom determined. For example, Plexxan (where Plexxan is a Sophont familiar to the characters, or otherwise described in available data bases).

By Manipulator

User may be specified by the manipulator it is crafted to fit: Hand, Graspers, Grippers, Paws, Sockets, Tentacles.

PORTABILITY

Portability is a measure of the ability of a weapon to be moved or carried.

(blank). The weapon has no modifications or effects based on Portability. If no Portability is specified, the weapon is intended to be a Personal weapon carried and used by one person.

Crewed. The weapon is commonly deployed and operated by a crew of two or more persons. A crew is necessary to carry the weapon and often its ammunition.

Semi-Portable. An alternative term for Crewed. Generally a large bulky weapon which can be carried by two or more persons, but once set up is rarely moved.

Fixed. The weapon is securely attached to an immovable base.

Portable (often Man-Portable). The weapon is designed to be operated by a user in BattleDress (or powered armor). This feature is dictated by the high recoil of the weapon, or by its mass.

Tank Mount. The weapon is mounted in a tank, armored fighting vehicle, or other vehicle (armored or not).

Turret. The weapon mounted in a standard turret on a starship or spacecraft.

WEAPON TECHNOLOGY LEVEL

The weapon Tech Level indicates the relative level of technological sophistication required for manufacture. Any world with the indicated Tech Level and appropriate machinery can produce this item.

QREBS

Any acquired weapon is ordinarily assumed to be QREBS=00000 (no effects under QREBS system).

If the Weapon Design System imposes any QREBS elements (for example, B=-2), that imposed element applies to the weapon.

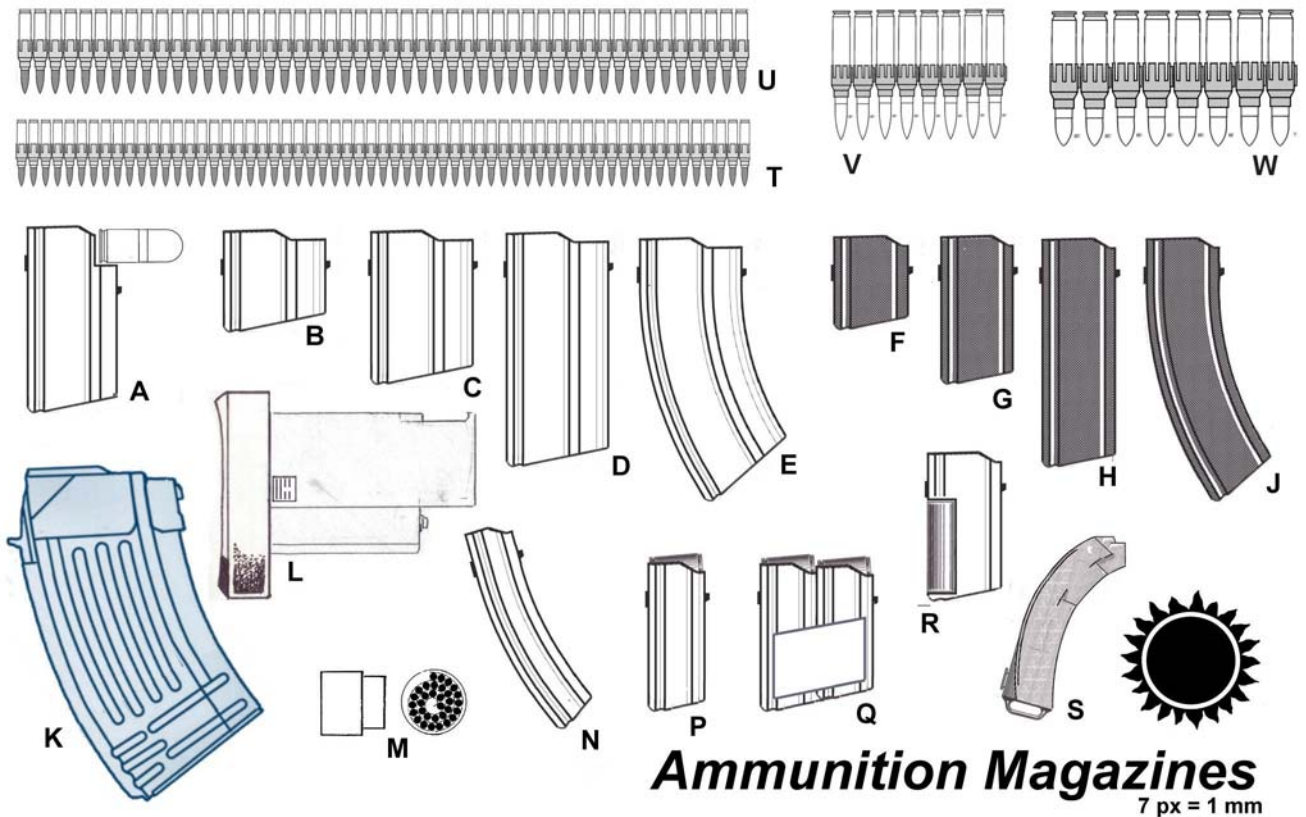
As Issued. A weapon with only the imposed QREBS elements is considered **As Issued**. It is typical of the weapon as used in service. Most weapons are in this state, and any reasonable character can research and determine this information.

Used. Any character may ask for a **Used** weapon instead. The Referee then evaluates the weapon under QREBS and records this information.

For example, a Eneri Dinsha has acquired a Prototype Vheavy Gauss Carbine with QREBS Burden -5. The other elements are all zero. In an attempt have a better weapon, he specifies it is Used. The Referee rolls for all five QREBS elements. -1 +2 -3 +4 -1. The +4 brings the existing Burden up to -1. The Used weapon becomes QREBS -1 +2 -3 -1 -1. Eneri is better served by looking for a better weapon.

AMMUNITION AND MAGAZINES

The creation or design of weapons assumes the creation of suitable ammunition and of magazines or cassettes that will feed munitions to the weapon. The weapon design does not delve into the process in that great a depth. This Ammunition Magazines Image provides some detail for various weapons.



Typical Magazines for Typical Weapons. A. 30mm Grenade Launcher Magazine (= 4 rounds). B. 8mm Battle Rifle Magazine (= 10 rounds). C. 8mm Battle Rifle Magazine (= 20 rounds). D. 8mm Battle Rifle Magazine (=30 rounds). E. 8mm Battle Rifle Magazine Variant (= 30 rounds). F. 6mm Assault Rifle Magazine (= 10 rounds). G. 6mm Assault Rifle Magazine (= 20 rounds). H. 6mm Assault Rifle Magazine (=30 rounds). J. 6mm Assault Rifle Magazine Variant (= 30 rounds). K. 25mm Recoilless Zero-G Vheavy Carbine Magazine (= 12 rounds). L. 5 mm Bullpup Cassette (= 200 rounds plus binary propellant reservoir). M. 4mm Revolver Magazine (removable) (= 32 round internal spiral). N. 9mm Sub Machinegun Magazine (= 30 rounds). P. 15mm Shotgun Magazine (= 6 rounds). Q. 15mm Shotgun Double Column Magazine (= 12 rounds). R. 6mm Gauss Gun Magazine (includes high output power cell and 100-round bullet reservoir). S. 3mm StapleGun Magazine (= 200 rounds). T. 6mm Machinegun Ammunition Belt. U. 8mm Machinegun Ammunition Belt. V. 13mm (the archaic .50 caliber) Machinegun Ammunition Belt. W. 20mm Heavy Machinegun Ammunition Belt.