

# *Gyrojet Weapons "Hissers"*

**History:** Gyrojet weapons were tried in our history, but the advantages that were promised were never achieved. Due to numerous reasons, gyrojet weapons were never practical enough to supplement standard projectile weapons. In the Star Frontiers Universe, these hardships were overcome and is a popular sidearm across the frontier.

**Description:** Gyrojet weapons fire miniature rockets of a standardized caliber. Gyrojet ammunition has slightly angled nozzles directing the thrust to cause the rocket to spin during flight. Their simple construction does not require heavy construction as the reaction is not completely in the weapon. Gyrojet weapons have gained popularity with police and special forces because of their versatility. Gyrojet weapons use the Gyrojet Weapons skill. Effectively recoilless, they are not silent as the rockets make a loud hissing noise (hence the nickname) and the rockets create a small sonic boom when passing the sound barrier.

Gyrojet weapons are available in different configurations, but the different weapon types only affect the weapon's ammo capacity and weight; damage and range of a Gyrojet weapon depends on the ammunition being used. Gyrojet weapons are not effective at very short range, because the rocket is still accelerating. Damage is at -2 per die at point blank range.

Skinsuits and Inertia screens absorb half the damage from a gyrojet rocket.

**Why hissers rule (advantages):** Gyrojet weapons have effectively no recoil and have a longer range than typical projectile weapons. Gyrojet weapons are a common shipboard weapon, as their lack of recoil makes them excellent zero-gravity firearms. They are capable of utilizing multiple munitions making them very adaptable to changing situations. Since the ammunition has more mass, due to higher calibers, damage is slightly higher than other projectile weapons. Since the length of the barrel of gyrojet weapons has no effect on the effectiveness of the ammunition, they tend to have a shorter overall weapon length.

**Why hissers suck (disadvantages):** Gyrojet ammunition suffers from most of the same disadvantages as Electrochemical ammunition, with non-reusability and ease of detection. While Gyrojet weapons are shorter, they are bulkier and heavier when loaded. With gyrojet ammunition being large, weapons carry less shots than other weapons.

## **Common Weapon Descriptions:**

### **Gyrojet Pistol**

This weapon is a large handgun firing small rockets. Essentially just a tube with a loading and ignition mechanism, it is very simple and rugged. It uses standard gyrojet ammunition.

### **Gyrojet Carbine**

Similar to the gyrojet pistol, this stubby rifle carries more ammunition. It uses standard gyrojet ammunition.

### **Hold-out Gyrojet**

This derringer-sized gun breaks open to fire single shots. For double cost, these can be disguised as drug inhalers, pneumatic hypods, pens, wallets and so on. It uses standard gyrojet ammunition.

### **Under-barrel Gyrojet**

An alternative to grenade launchers, this pump-action Gyrojet launcher must be attached under the barrel of any reasonably large gun. The Gyrojet launcher is fired using its own statistics. The Gyrojet's trigger is located next to the slide action for the pump. In a given turn a shooter can fire either the Gyrojet or the host weapon, or both. If both are fired, it counts as shooting with two weapons. It uses standard gyrojet ammunition.

### **Rocket Launcher**

Even simpler than a gyrojet pistol, it is tube with only an ignition mechanism. This type of weapon is generally issued to infantry to give some effectiveness against armor. It uses rocket ammunition.

### **Heavy Rocket Launcher**

Just a larger version of the Rocket Launcher above. It is used as a vehicular or emplaced weapon. It fires Heavy Rocket Ammunition.

## **Statistics**

[Star Frontiers]

	Damage	Range					Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
		Close	Short	Medium	Long	Extreme									
Gyrojet Pistol		By Ammo					10	-5	-5	-0	100	2	By Ammo	1kg	200
Hold-out Gyrojet		By Ammo					2	-25	-5	-0	100	2	By Ammo	0.5kg	100
Gyrojet Rifle		By Ammo					15	+20	-10	-0	100	2	By Ammo	3kg	300
Underbarrel Gyrojet		By Ammo					4	+5*	-5*	-0	100	1	By Ammo	1kg	200
Rocket Launcher		By Ammo					1	N/A	-20	-0	100	1	By Ammo	3kg	700
Hvy Rocket Launcher		By Ammo					1	N/A	-25	-0	100	1	By Ammo	25kg	5000

\* = Adds bonus/penalty to the mounted weapon

## [Frontier Space]

	Damage	Range Inc.	Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
Gyrojet Pistol	By Ammunition Type		10	-5	-5	-0	100	2	By Ammo Type	1kg	200
Hold-out Gyrojet	By Ammunition Type		2	-25	-5	-0	100	2	By Ammo Type	0.5kg	100
Gyrojet rifle	By Ammunition Type		15	+20	-10	-0	100	2	By Ammo Type	3kg	300
Underbarrel Gyrojet	By Ammunition Type		4	+5*	-5*	-0	100	1	By Ammo Type	1kg	200
Rocket Launcher	By Ammunition Type		1	N/A	-20	-0	100	1	By Ammo Type	3kg	700
Hvy Rocket Launcher	By Ammunition Type		1	N/A	-25	-0	100	1	By Ammo Type	25kg	4000

\* = Adds bonus/penalty to mounted weapon

## ***Standard Gyrojet Ammunition Types:***

**Slug rounds** – essentially just large bullets

**Extra Range (ER)** – these rounds sacrifice some of the slug's mass for extra propellant giving them longer range than slugs

**Armor-piercing (AP)** – these rounds have ultra-dense cores that will penetrate armor and skisuits. Inertial screens affect damage as normal (reduce to half).

**High-explosive (HE)** – these rounds carry a small amount of explosive. They explode on impact causing concussive force and fragmentation damage. It is a heavier round with less propellant to make room for explosives.

**Incendiary (In)** – these rounds carry a small amount reactive chemical. They burst into flames on impact causing burn damage and causing fires. Like the explosive above, it is a heavier round with less propellant to make room for chemicals. An incendiary round causes 2d10 points of damage on the turn it hits. The burning liquid sticks to the victim, causing an additional 1d10 points of damage on the second, third and fourth turns after the explosion. Anyone in a spacesuit takes no damage from an incendiary round.

**Stinger rounds (St)** – the rounds carry a small highly-charged capacitor that shocks the target stunning them. A stun can knock a creature unconscious for d100 turns. Anyone hit by a stingray round can resist the stun by rolling a number less than or equal to its current Stamina. Anti-shock implants will negate the effect.

**Tangler (Ta)** – the rounds carry a small glob of strong, sticky polymer threads that wrap around the target. An entangled individual cannot move until the threads decay (in 30 minutes) or until solvaway is spread over the threads. Any creature with more than 100 stamina points can break out of tangler threads in one turn.

## ***Rocket and Heavy Rocket Ammunition Types:***

**Extra Range (ER)** – these rounds sacrifice some of the rocket's payload for extra propellant giving them longer range than other rockets.

**Armor-piercing (AP)** – these rounds have ultra-dense cores that will penetrate armor. Inertial screens affect damage as normal (reduce to half).

**High-explosive (HE)** – these rounds carry an explosive charge. They explode on impact causing concussive force and fragmentation damage. It is a heavier round with less propellant to make room for explosives.

[Star Frontiers]

	Damage	Range					Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
		Close	Short	Medium	Long	Extreme									
<b>Gyrojet Ammunition</b>															
Slug	3d10	10	30	60	120	240			By Weapon Type			Inertia	-	1	
Extra Range	2d10+2	15	50	100	200	400			By Weapon Type			Inertia	-	2	
Armor Piercing	2d10	10	30	60	120	240			By Weapon Type			Inertia	-	2	
High Explosive	4d10/1d10	5	15	30	60	120			By Weapon Type			Inertia	-	5	
Incendiary	2d10/1d10	5	15	30	60	120			By Weapon Type			Albedo	-	5	
Stinger	N/A	5	15	30	60	120			By Weapon Type			Gauss/AS	-	3	
Tangler	N/A	5	15	30	60	120			By Weapon Type			None	-	3	
<b>Rocket Ammunition</b>															
Extra Range	10d10	25	75	150	300	600						Inertia	2.5kg	25	
Armor Piercing	10d10	20	60	120	240	500						Inertia	2.5kg	25	
High Explosive	12d10	15	50	100	200	400						Inertia	2.5kg	20	
<b>Heavy Rocket Ammunition</b>															
Extra Range	3d10X10	70	200	400	800	1600						Inertia	10kg	150	
Armor Piercing	3d10X10	50	150	300	600	1200						Inertia	10kg	150	
High Explosive	4d10X10	50	150	300	600	1200						Inertia	10kg	100	

[Frontier Space]

	Damage	Range Inc.	Ammo	Conceal	Snap Shot	Recoil	Reliability	Defense	Weight	Cost
<b>Gyrojet Ammunition</b>										
Slug	3d10	30			By Weapon Type			Inertia	-	1
Extra Range	2d10+2	50			By Weapon Type			Inertia	-	2
Armor Piercing	2d10	30			By Weapon Type			Inertia	-	2
High Explosive	4d10/1d10	30			By Weapon Type			Inertia	-	5
Incendiary	2d10/1d10	20			By Weapon Type			Albedo	-	5
Stinger	N/A	20			By Weapon Type			Gauss/AS	-	3
Tangler	N/A	20			By Weapon Type			None	-	3
<b>Rocket Ammunition</b>										
Extra Range	10d10	100			By Weapon Type			Inertia	2.5kg	25
Armor Piercing	10d10	75			By Weapon Type			Inertia	2.5kg	25
High Explosive	12d10	75			By Weapon Type			Inertia	2.5kg	20
<b>Heavy Rocket Ammunition</b>										
Extra Range	3d10X10	500			By Weapon Type			Inertia	10kg	150
Armor Piercing	3d10X10	400			By Weapon Type			Inertia	10kg	150
High Explosive	4d10X10	400			By Weapon Type			Inertia	10kg	100

## Nuts and Bolts

This section will delve into the way I created the statistics above and how to use templates to create new weapons. All Gyrojet weapons were created from the first two weapons: the Gyrojet pistol and rifle. By placing templates on those weapons, new weapons can be created for your universe. If this is not your style, feel free to disregard and use the weapons provided. Due to most of the statistics coming from the ammunition, there are not as many templates for Gyrojet weapons.

### Description of templates:

#### “Calibers”:

The term caliber doesn't really apply as each series of weapons, while all based on the same principal, are almost separate classes. The use of this term is just to help differentiate the classes of gyrojet/rocket ammunition. In addition, a bewildering array of sizes and payloads could be mounted on rockets and gyrojet ammunition, some were left out or simplified to keep this from becoming too complicated.

**Standard Gyrojet** – a very small rocket that propels itself through the use of chemical reaction. It is different than electrochemical weapons in that it releases the propellant force over an extended time instead of all at once. Rounds are approximately 20mm in diameter. For reference, that is about the diameter of an average index finger.

**Rocket** – A larger projectile with more payload than standard gyrojet ammunition. Approximately 65mm in diameter, this ammunition usually plays more of an anti-armor role. It is also used by some sadists who just want to see things blow into pieces. For reference, this is about the diameter of an average aluminum can.

**Heavy Rocket** – Weapons firing this size rocket are generally firing at vehicles or emplacements being fired by a vehicle or emplacement. This represents about a 150mm diameter. Any larger leaves the realm of infantry combat.

### Pistol Templates:

Hold-out – A small sized weapon designed for concealment. It trades ammo capacity for concealment.

Compact – In between the hold-out and a standard pistol is the compact pistol. It also trades ammo capacity for concealment and lighter weight.

### Rifle Templates:

All rifles are considered short. No other rifle templates make sense.

### Generic

Cheap – Made from inferior materials or craftsmanship, these weapons cost less at the expense of reliability.

Very Cheap – Made of absolute junk or hastily thrown together with shoddy craftsmanship. Generally, these weapons are made for individuals who cannot otherwise acquire better weapons (such as criminals or subjects in authoritarian regimes) or are used weapons that were not maintained well.

	Damage	Range					Ammo	Conceal	Snap Shot	Recoil	Reliability	ROF	Defense	Weight	Cost
		Close	Short	Medium	Long	Extreme									
<b>Pistols</b>															
Hold-out							▶ -66%	▶ -20	▶ +5					-0.5kg	--
Compact							▶ -33%	▶ -5	--					-0.25kg	-50
Cheap															-50
Very Cheap															-100

## Specific Weapons

This section uses the above statistics to create specific named weapons to use in an individual's campaign.

The generic weapon above can be used with no problems, so use of named weapons is purely an option depending on the personal tastes of the GM.

[Star Frontiers]

## Armax Arsenal Viper Gyrojet Rifle

*Armax Arsenal brings you the premier weapon when you cannot afford recoil. Used by space forces everywhere, it really packs a punch and doesn't cause you to spin out of control. More versatile than a laser, different ammunitions can allow more flexibilities when possibly facing opponents in armored spacesuits. A laser sight is added to make those shots count.*

This weapon is a standard weapon for shipborn and spaceborn forces.

Templates: None

Accessories: Laser Sight

Damage: 3d10

Range: 10/30/60/120/240

Ammo: 15

Conceal: +15

Snap Shot: -5

Recoil: 0

Reliability: 100

ROF: 2

Defense: Inertia

Weight: 3kg

Cost: 350Cr

## H&K Protector Gyrojet Pistol

*Hahne-Kedar introduces a new pistol for law enforcement. Able to change ammunition to suit different situations, the Protector will send a powerful message to criminals and citizens alike, that the law can adapt to any crisis that presents itself. Officers typically have one magazine loaded with standard rounds, one with AP rounds (for those armored criminals or vehicles), and one with stinger rounds (when the suspect needs to be taken alive). Officers can rest assured that the weapon will not be used against them as a special glove must be worn to operate the weapon.*

This unique weapon has three 6 round magazines that feed into a single barrel. This allows different ammunition types to be carried in the same rifle. Switching between magazines lowers the ROF to 1 for that turn only and must be announced before taking the shot.

Templates: None

Accessories: Extended Magazine, Security

Damage (Standard ammo): 3d10

Damage (AP): 2d10+2 (skeinsuits only protect 1/4)

Damage (Stinger): Stun (STA check or be stunned for 1d100 turns)

Range (Standard and AP): 10/30/60/120/240

Range (Stinger): 5/15/30/60/120

Ammo: 18 (3 magazines of 6 rounds)

Conceal: -0

Snap Shot: -5

Recoil: 0

Reliability: 100

ROF: 2 (only ROF of 1 during a turn that the magazines are switched)

Defense: Inertia

Weight: 3kg

Cost: 325Cr

## Elanus Risk Control Blackjack Wrist-Mounted Gyrojet Bracer

*A favorite of explorers, this weapon gives piece of mind that it cannot be dropped in adverse conditions. Included are other items of use to a rugged adventurer.*

This item is a large bracer worn on the wrist with built in accessories. These accessories are a compass, a flashlight, a toxy-rad gauge, and a chronocom.

Templates: Hold-out

Accessories: Flashlight, compass, toxy-rad gauge, chronocom

Damage (Standard ammo): 3d10

Range: 10/30/60/120/240

Ammo: 2

Conceal: +25 (to notice the gyrojet weapon, bracer is noticeable)

Snap Shot: -5

Recoil: 0

Reliability: 100

ROF: 2

Defense: Inertia

Weight: 3kg

Cost: 235Cr