

USCM REFERENCE MANUAL

4TH COLONIAL MARINE BRIGADE
1ST SPEC OPS COY

1 4th Colonial Marine Brigade 2 Firearms

The brigade is a part of Marine Space Force Hercules. The MSF is headquartered at the Chinook 91 GSO station. The MSF is comprised of the 4th Colonial Marine Division, the 4th Colonial Marine Brigade and the 4th Aerospace Wing. The MSF is deployed throughout the Anglo-Japanese arm at a number of UA colonies. The brigade operates together with the Aerospace Wing, providing transportation through space as well as planetary landing capabilities through the UD-4 "Cheyenne" dropship, heavy-lift shuttles and strikeships.

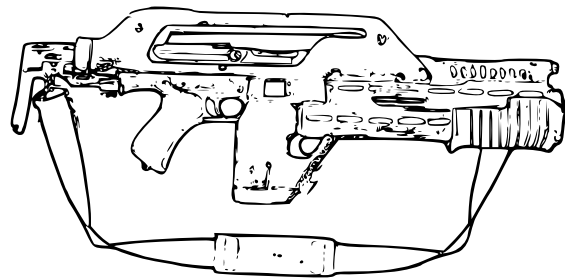
1.1 USCM Platoon TO&E

The USCM doctrine calls for small autonomous infantry units, capable of operating with or without higher level support on the battlefield. This forces the rifle units to carry its own heavy equipment, to move great distances rapidly using by foot and concentrate heavy firepower quickly. The current organization of the Colonial Marines reflects this doctrine.

The rifle squad consists of four Marines, which divides into two-man fireteams. One fireteams carries M41 rifles and the other fireteam operates one M56 Smart Gun and a M41 rifle. The squad is led by a Corporal and a Lance Corporal. Two squads makes up a section which is lead by a Sergeant, and forms a section. The section has a M577 Armored Personnel Carrier with a driver, and if involved in a drop operation the section is attached with a UD-4 dropship from the aerospace team.

Two or three sections is lead by a Lieutenant and form a rifle platoon, and is comprised of 25 to 37 Marines, including dropship and APC crews. The platoon commonly carry one or two synthetic humans to aid in technical or scientific matters, as well as to assist as medics or backup drivers/pilots. Each platoon carries support weapons, such as M240 flamethrowers, UA-571 Sentry guns, M78 PIG plasma guns, M5 RPGs, M83 SADARs and M227 Infantry mortars. The platoon also has sufficient sensor equipment to cover an 1000 meters of frontage.

2.1 M41A1 Pulse Rifle



This is the standard issue rifle for all Marines. It's a durable weapon using case less 10mmx24 ammunition, which comes in pre filled magazine of 100 rounds. The rectangular shaped round has a 210 grain (13.6 gram) projectile embedded and the propellant is comprised of Nitramine 50, which generates a muzzle velocity of 840 meters per second. The M41A1 is fitted with a 30mm grenade launcher with can fire a wide array of grenades.

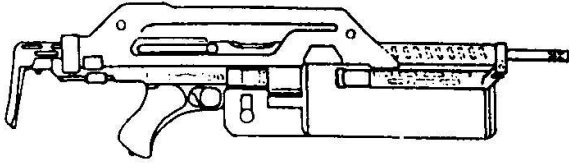
Technical data:

Weight:	4.9 kg
Magazine:	100 rounds
Muzzle velocity:	840 m/s
Ammunition:	10mmx24, 30mm grenades
Effective range:	500 meters, 180 meters
Maximum range:	2100 meters, 400 meters
Rate of fire:	900 rounds per second

2.2 M41AF1 Pulse Rifle with Flame Thrower

The M41AF1 is the same weapon as the standard M41, but instead of the grenade launcher incorporates a flame thrower. This flame thrower uses cartridges with fuel which can sustain a burst of 10 seconds.

2.3 M41AE2 Assault Rifle

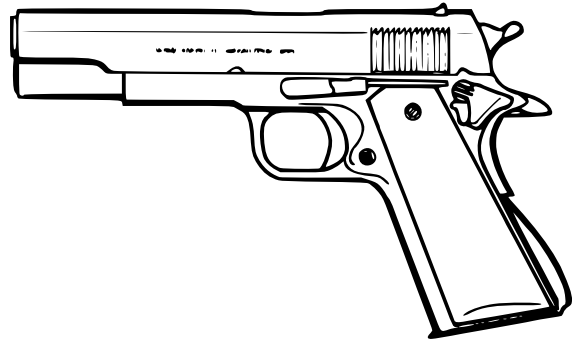


This weapon is a modification of the standard M41 to equip the squads with a lightweight machine gun. The M41AE2 is equipped with a bipod and a 300 round magazine. The mechanism has been slightly modified to endure the more intense usage of the gun and allow for a slightly higher rate of fire, and the grenade launcher has been removed.

Technical data:

Weight: 5.7 kg
Magazine: 300 rounds
Muzzle velocity: 840 m/s
Ammunition: 10mmx24
Effective range: 600 meters
Maximum range: 2100 meters
Rate of fire: 900-1200 rounds per second

2.5 M43 Pistol



The M43 Pistol is the old army issue weapon that has gone through few changes since it was introduced in the 20th century. Despite its age this weapon still keeps the competition at bay, although more and more soldiers prefer to use the newer VP70 which is capable of firing bursts

Technical data:

Weight: 0.95 kg
Magazine: 12 rounds
Muzzle velocity: 282 m/s
Ammunition: 9mm
Effective range: 50 meters
Maximum range: 1500 meters

2.4 M43A1 Submachine gun

To come

Technical data:

Weight:
Magazine:
Muzzle velocity: m/s
Ammunition: 9mm
Effective range:
Maximum range:
Rate of fire: rounds per second

2.6 VP70 Pistol



The new VP70 would probably be the standard weapon in the armed forces if it weren't for the inability for the VP70 to mount a red point sight. When combined with the arm rest, this gun is fairly accurate when using the burst mode.

Technical data:

Weight: 0.95 kg
Magazine: 14 rounds
Muzzle velocity: 310 m/s
Ammunition: 9mm
Effective range: 50 meters
Maximum range: 1500 meters

2.7 VP55 Low Recoil Pistol

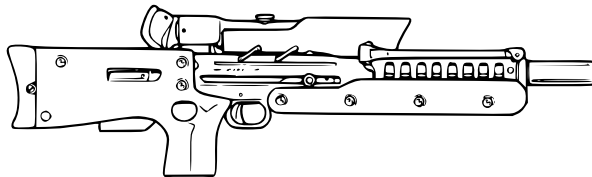
The VP55 was developed for use in sensitive environments, such as a space ship or a airplane. The ammunition used is a special kind with lower gun powder charge and a softer projectile, which reduces muzzle velocity and most importantly impact energy of the bullet so as not to penetrate the hull of the fuselage.

Technical data:

Weight:
Magazine:
Muzzle velocity: 200 m/s
Ammunition: 9mm low recoil
Effective range: 45 meters
Maximum range: 1000 meters

2.8 Dart Gun

2.9 M42A Sniper Rifle



The standard issue sniper rifle of the corps. It's a 10mm semi-automatic rifle with much of the components in common with the M42 to ease repairs. Ammunition is fed from a 15 round magazine located behind the hand grip. The gun can be operated with a variety of different rounds ranging from the M252 10mmx28 HEAP round, to the sub caliber M252 10mmx28 AP. Even the M250 ammunition used to the smartgun can be utilized with a degradation in performance.

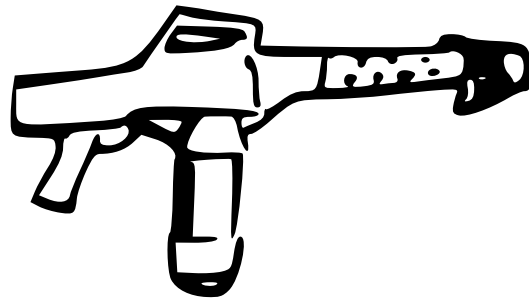
The scope is a multispectral 20 power passive sensor which combines and displays an image composed of visual, infrared and electromagnetic emissions. The scope can also be connected by

wireless or optical link into a sensor grid. The scope can also, when connected, direct the fire of the local sentry gun matrix.

Technical data:

Weight: 4.3 kg
Magazine: 15 rounds
Muzzle velocity: 940 m/s
Ammunition: M252 10mmx28 HEAP,
M252 10mmx28 sub caliber,
M250 10mmx28
Effective range: 2800 meters,
3800 meters,
1700 meters

2.10 M240 Flamer



A flame thrower is a fearsome weapon in close combat and the M240 has proven what it can do. The M240 has a reservoir with thickened naphtal which is a further development of the old napalm. The reservoir holds enough fuel to sustain a 20 second burst. The range of the M240 is 30 meters, but can be extended to 50 meters if fired at an angle but this reduces the performance greatly since the fuel disperses at this range.

Technical data:

Weight: 2.7 kg
Magazine: 20 seconds
Muzzle velocity: 940 m/s
Ammunition: M240 Naphtal
Effective range: 30 meters

2.11 M56A2 Smartgun

Technical data:

Weight:	17.8 kg
Magazine:	100 rounds (cartridge), 400 rounds (box)
Muzzle velocity:	940 m/s
Ammunition:	M250 10mmx28
Effective range:	600 meters
Maximum range:	1500 meters

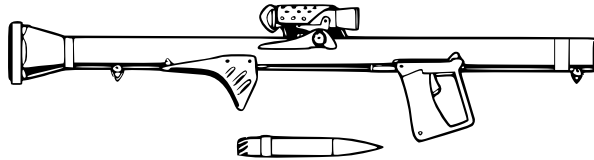
2.12 M21A Shotgun (Benelli)



The Smartgun is the mainstay machine gun of the Marine corps. It consist of the M56A2 machine gun mounted on a stabilized mount with is attached to a harness which the operator wears. The stabilization system includes steering which allows the targeting computer to manouver the gun towards the target, ensuring first hit capability. The system has a targeting computer which utilizes a infrared sensor with a 30° search cone and displays an overlay image onto the operators head mounted eyepeice. The M56A2 utilizes the M250 round which is a 10mmx28 230 grain (14.9 grams) caseless projectile encased in a rectangular block of Nitramide 50. When HE ammunition is used, this round can be programmed for impact detonation or delayed detonation.

3 Support Weapons

3.1 M5 Rocket Propelled Gun

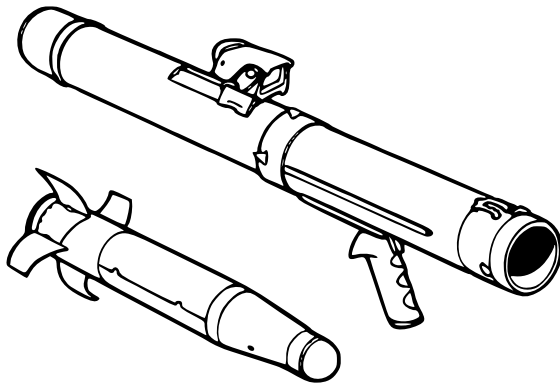


The M5 fires RPG rockets which carries a devastating warhead. Each rocket weighs in at 2 kg and can be of a regular high explosive charge design for taking out infantry units, or a shaped charge anti-armor charge designed to penetrate armored vehicles. The drawback with this weapon is that it takes quite some time for the rocket to travel from the firing position to the target, which makes it harder to hit moving objects and also possible for infantry to take cover. The M5 RPG has an effective range of 400 meters at stationary targets.

Technical data:

Weight: 2.3 kg, Rockets 2.2 kg
Ammunition: M5 HE, M5 AP
Minimum range: 20 meters
Maximum range: 400 meters

3.2 M83A2 SADAR



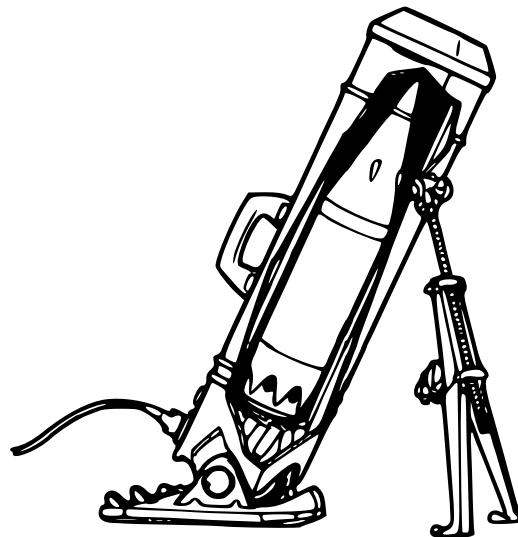
The SADAR is corps main anti armor weapon for the infantry units. The SADAR is comprised of a launch tube with a targeting computer and the missile. The missile utilizes top striking technology to hit where the armor is the thinnest and also steer to follow the motion of the target. However, if the weapon is fired without getting a lock in the targeting computer, the missile will travel in a

straight line and explodes on impact. The weapon is of a non-reloadable type and is discarded when used.

Technical data:

Weight: 3.1 kg
Minimum range: 20 meters
Maximum range: 1000 meters

3.3 M112 HIMAT

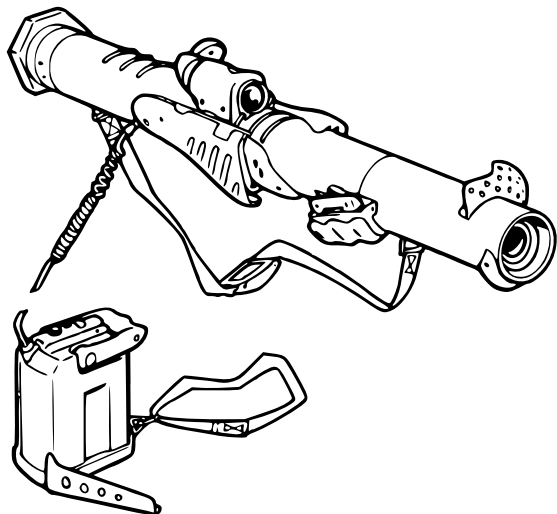


With the M112 the corps can withstand an enemy assault with armor. The HIMAT is comprised of a targeting system, gun mount and the missile. The gun mount is of a one time use type. The targeting system can be connected to several gun mounts. When fired, the missile quickly gains altitude, from where it will strike down on the target at a high velocity ensuring high probability of kill.

Technical data:

Weight: 11.3 kg,
targeting system 1.1 kg
Minimum range: 35 meters
Maximum range: 5000 meters

3.4 M78 Phased Plasma Infantry Gun



The PIG is an antitank weapon which utilizes a Cadmium-Tellurid pellet which when fired is heated to the point where it forms a plasma and is then accelerated to a high speed. When impacting the plasma will vaporize the armor, melting the metal and creating a pressure wave and shrapnel which disables the vehicle and its crew.

Technical data:

Weight: 15.2 kg
Rate of fire: 20 rounds per minute
Magazine: 30 rounds
Maximum range: 1000 meters

3.5 M227 Infantry Mortar 60mm

This small sized mortar can be carried in combat by a team of Marines. Although its firepower isn't that great it packs considerable punch with regard to the normal weapons Marines usually carries. The mortar have a effective range of 8 kilometers in normal gravity and can fire regular high explosive shells as well as anti-tank, smoke and illumination rounds.

The mortar is comprised of four parts. Barrel, tripod, baseplate and sight. The mortar can be equipped with a trigger incorporated in the breach or with a fixed pin causing firing immediatly upon loading.

Technical data:

Weight: 10 kg
Ammunition: HE, ATH, Smoke, Illumination
Minimum range: 200 meters
Maximum range: 8000 meters

3.6 SIM118 Hornet

The SIM118 Hornet is a anti-aircraft missile capable of destroying both fixed wing aircrafts as well as helicopters. The SIM118 missile relies on impact energy to destroy its target and carries no explosive charge. Due to its speed and reliable tracking system it performs very well in its role as an anti-aircraft missile, and is a light weapon system thanks to it lacking a explosive charge.

The missile can engage targets at ranges up to 10 kilometers and heights up to 6 km, and has a speed of nearly mach 3. The weapon is of the fire and forget type, and the launcher module is of a reusable type. When deploying the weapon on a vehicle or in a fixed position, a launch system can be used where four missile tubes are mounted on a launch ramp. This system can be plugged in to the local defense matrix giving operators the ability to fire the missiles remotely, or even automatically when a air threat is detected.

Technical data:

Weight: 2.1 kg (launcher)
3.4 kg (missile)
Ammunition: Hornet missile
Maximum height: 6km
Maximum range: 10 km

4 Mines and Automatic Weapons

4.1 UA571-C Sentry Gun

The UA571-C is an automatic system for guarding areas without human presence. The weapon system is comprised of gun mount, weapon, sensor box, magazine and control unit. Using the sensor systems integrated, the system can be programmed to open fire in a wide variety of ways. The system can be used against infantry and unarmored vehicles. The system can be linked together with other units and into the local sensor matrix.

Technical data:

Weight: 19.6 kg
Magazine: 500 rounds
Ammunition: M250 10mmx28
Rate of fire: 1100 rounds per minute
Maximum range: 1000 meters

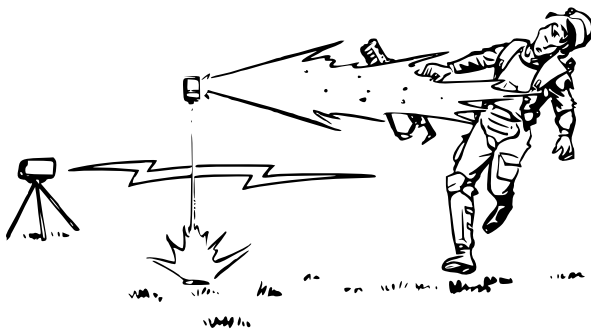
4.2 M20 Claymore

This oldtimer is still in service in the corps and still does a good job. The Claymore can be triggered by tripwire, as a controlled mine or with sensor trigger M21. The mine is mostly used against troops and unarmored vehicles.

Technical data:

Weight: 1.2 kg
Maximum range: 50 meters

4.3 M5A3 Bouncing Betty



The M5A3 is a bounding mine which triggers with a seismic sensor. The mine can be programmed to trigger in a wide array of ways. The mine determines what the target is when triggered and from this sensor data determines the field of fire. This way an enemy soldier sneaking into a camp with friendlies can be taken out by the mine without harming anyone else beside the enemy soldier.

Technical data:

Weight: 2.2 kg
Maximum range: 50 meters

4.4 M860 Vehicle Mine

This mine is designed for penetration of armored or unarmored vehicles. The mine can be utilized as either an shape charge mine or high explosive, and

can be fitted with clearing protection. The sensor of the mine reacts on magnetic anomalies or by a direct force of 125 kg. When triggered the mine can direct its shaped charge up to 3 meters to any side, disabling vehicles even when they don't drive directly above the mine.

Technical data:

Weight: 6 kg
Maximum range: can direct sideways
up to 3 meters

4.5 Iarmmina

5 Vehicles

5.1 M119 ATVL

The All Terrain Vehicle Light is a small four wheeled vehicle which is very versatile. It has capability for multiple fuels, and has a modified suspension which can take the beating of a air drop.

Technical data:

Weight: 165 kg
Maximum load: Driver and passenger,
or 175 kg of cargo
Is capable of pulling
a tow with another
175 kg of cargo
Maximum speed: 80 kmh
Maximum range: 400 km

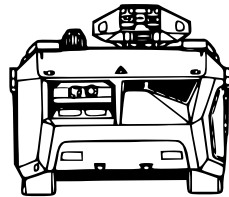
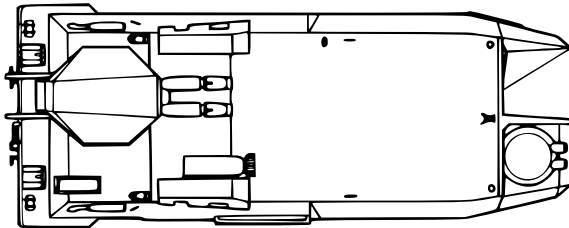
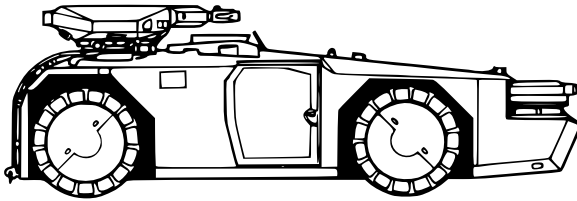
5.2 M421 Firefly VTV

This small Vectored Thrust Vehicle is an un-armored vehicle mostly used for fire control, reconnaissance and messenger service. It is also used as a small cargo lifter.

Technical data:

Weight: 800 kg
Maximum load: Driver, passenger and
800 kg of hanging cargo
Maximum speed: 240 kmh
Maximum range: 5 hours

5.3 M577 APC



This vehicle can transport a battle ready group of marines. It is lightly armored to withstand small arms fire and shrapnel. The vehicle is equipped with an advanced tactical operations center and communications equipment. The M577 is armed with a 20mm DLP twin machine gun mounted in the front. The DLP has three different ammunition types, HE, HEAP and APF. The turret of the M577 can mount a dual phased plasma cannon. The guns is fired in sequence and can achieve a cyclic rate of fire of 40 rounds per minute, and the maximum range at ideal conditions is 4 000 meters. The APC is a 4x4 construction to allow for a lower weight and has a normal ground clearance of 22 cm. The chassi can however be raised another 30cm by the hydro-pneumatic suspension.

Technical data:

Weight:	800 kg
Maximum load:	Driver, commander and 12 soldiers Total load 14 500 kg
Maximum speed:	150 kmh
Maximum range:	500 km

6 Personal Equipment and Armor

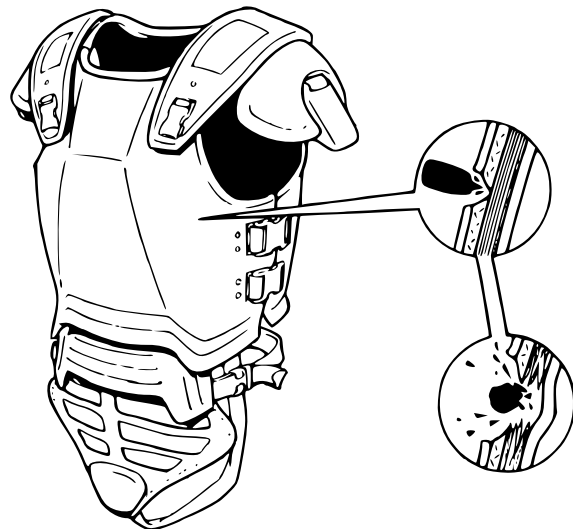
6.1 Uniform

The Marine uniform should consist of:

- Battledress utilites
- Boots
- Gloves
- Compass
- First Aid Kit
- Combat Knife

6.2 Combat Equipment

- M10 Helmet
- M3 Body Armor



- Water cantine
- Gasmask
- Ammunition