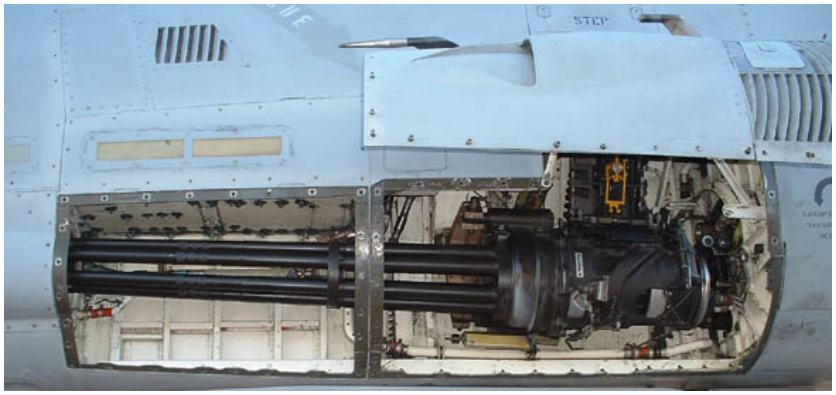
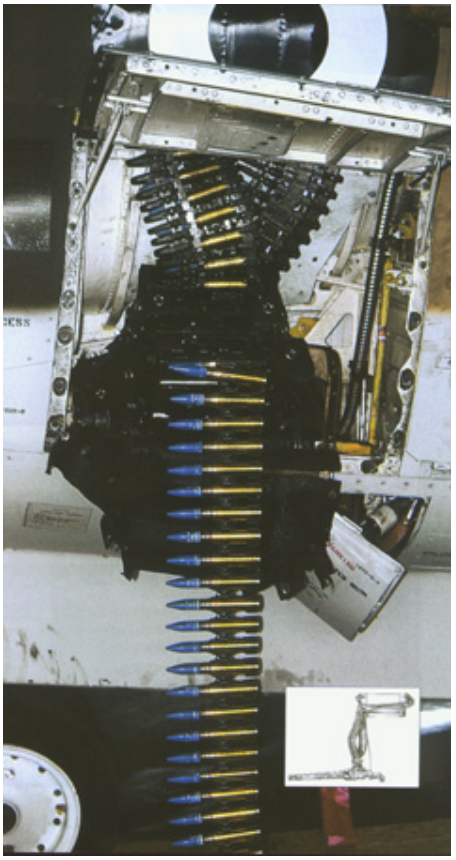
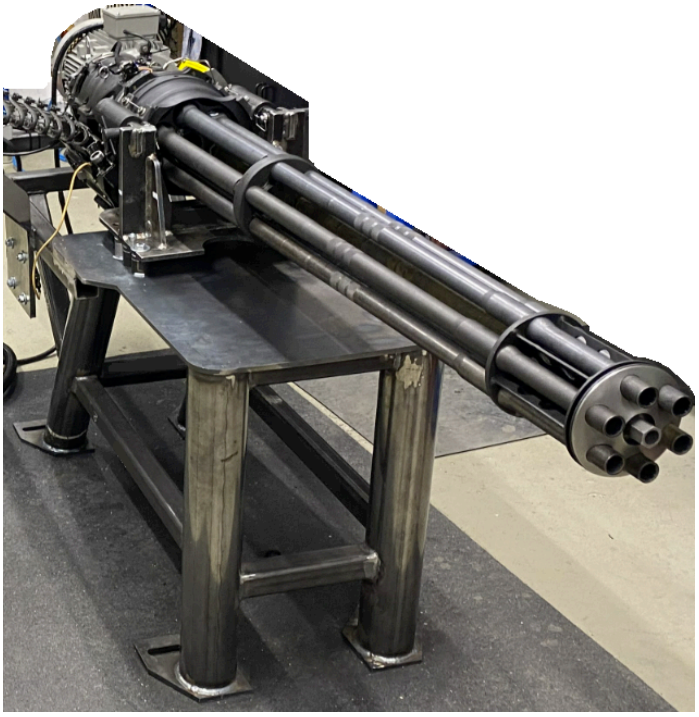
20 X102 MM AMMUNITION

COMPATIBLE WITH CANNONS
M61, M61A1, M39, M167, M168, M621, GAU-4



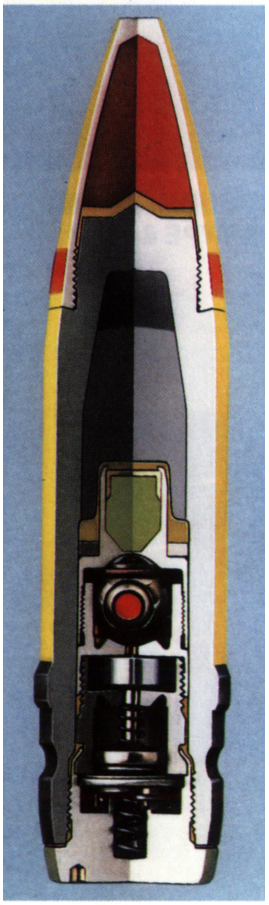




TYPES OF 20X102 MM AMMUNITION & SPECS

	HEI-T	HEI	API	API-T	TP / TP-T
Projectile	Carbon Steel				
Cartridge Case	Brass 70/ 30 M103				
Primer	Electric M52A3B1				
Propellant	Double Base				
Link	M12, M14A2 disintegrating				
Mass (g)	264	257	255	264	255
Mass projectile (g)	102	101	101	102	101 / 105
Length total (mm)	168				
Length case (mm)	102				
Fuze (impact)	M505A3	M505A3	-	M505A3	N/A
V_o mean (m/sec)	1030				
P_{max} (kg/m2)	4253				
Accuracy max (cm)	38.1 at 550 m				
Arm Distance (m)	6 - 10	6 - 10	-	6 - 10	-
Self Destruct (sec)	3.1 - 7	-	-	3.1 - 7	-
Tracer Burn (sec)	3.1	-	-	3.1	3.1
Max Range (m)	7000				
Pack	100 rds in metal box. Box volume 0.36 m3, mass 41 kg				
Hazard Class U.N No.	HEI & HEI-T API TP & TP-T	1.2.2E 1.4G 1.4C	UN # 0321 UN # 0300 UN # 0339		

FUZE M505A3 POINT DETONATING



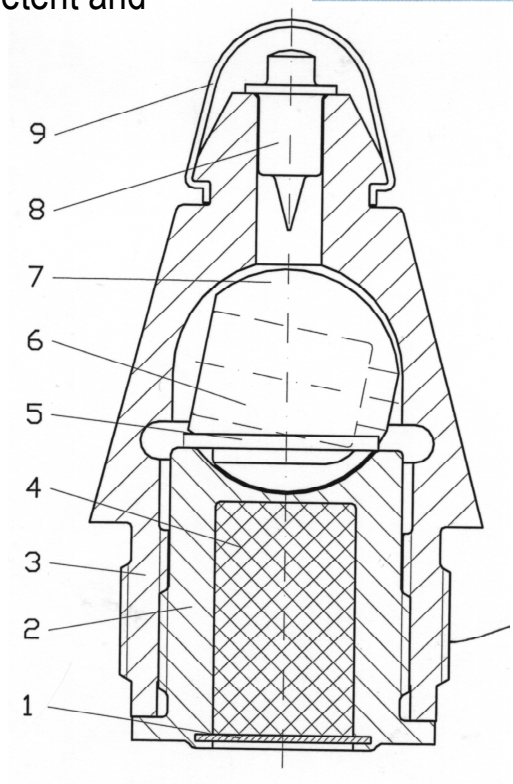
The fuze comprises: a body assembly, a rotor assembly, and a booster assembly. The delayed arming distance varies between 7 m to 12 m after it leaves the muzzle of the cannon.

Before firing the projectile, rotor and firing pin are locked in position by the rotor safety spring.

The rotor contains the detonator, which is out of line with the firing pin. Centrifugal force causes the spring to open, allowing the rotor to move in-line with the firing pin.

The fuze functions when the nose is crushed against the target, forcing the firing pin against the detonator. The detonator, in turn, initiates the booster. The booster detonates and initiates the projectile's explosive charge.

Before firing, the rotor ball containing the detonator is held above it's cradle in the booster by the rotor detent, with the detonator held out of alignment with the firing pin. Upon firing, inertia forces the ball down into the cradle, spreading the rotor detent and releasing the rotor so it is now free to move.



As the projectile moves through the barrel and begins to spin, the gyroscopic effect on the rotor ball makes it stand up, moving into alignment with the firing pin, where it stays as long as the projectile is spinning.

Upon impact, the thin nose cap is crushed, shearing the firing pin from it's fixed position into the detonator. The detonator blows through the thin metal of the cradle, detonates the booster charge, which in turn detonates the main bursting charge in the projectile.