

**List of Contents**

1. Guns.....	2
2. Gun Pods.....	4
3. Air to Air – Short Range.....	5
4. Air to Air – Medium Range.....	6
5. General Purpose Bombs (Unguided)	8
6. Laser Guided Bombs.....	11
7. GPS Guided Bombs.....	12
8. Cluster Munitions.....	13
9. Guided Air to Ground Missiles.....	15
10. Anti Radiation Missiles.....	18
11. Unguided Air to Ground / Air to Air Missiles.....	19
12. Special Equipment.....	22



1. Guns

M61 VULCAN**TYPE:** 20 mm 6-barrel gatling cannon**AIRCRAFT:** F-15C Eagle**ROUNDS:** 940**EFFECTIVE RANGE:****NOTES:****GAU-8/A AVENGER****TYPE:** 30 mm 7-barrel gatling cannon**AIRCRAFT:** A-10C Warthog, A-10A Thunderbolt II**ROUNDS:****EFFECTIVE RANGE:****NOTES:** Ammo:


- PGU-14/B API Armor Piercing Incendiary (DU)
- PGU-13/B HEI High explosive incendiary
- PGU-15/B TP Target Practice


Armor penetration:

- 69 mm at 500 meters
- 38 mm at 1,000 meters

M-134 MINIGUN**TYPE:** 7.62x51 mm 6-barrel machine gun**AIRCRAFT:** UH-1H**ROUNDS:****EFFECTIVE RANGE:****NOTES:****M60 MG****TYPE:** 7.62x51 mm machine gun**AIRCRAFT:** UH-1H**ROUNDS:****EFFECTIVE RANGE:****NOTES:****GSh-30-2****TYPE:** 30x165 mm dual-barrel autocannon**AIRCRAFT:** Su-25A, Su-25T**ROUNDS:****EFFECTIVE RANGE:** >800 m**NOTES:**



GSh-30-1 / 9A-4071K		
	TYPE: 30x165 mm single-barreled, recoil operated cannon	
	AIRCRAFT: Su-27, Su-33, MiG-29A, MiG-29G, MiG-29S	
	ROUNDS:	
	EFFECTIVE RANGE:	
NOTES:		

2A42		
	TYPE: 30x165 mm autocannon	
	AIRCRAFT: Ka-50 Black Shark	
	ROUNDS:	
	EFFECTIVE RANGE: 2500 m	
NOTES: 240 AP-rounds, 230 HE-rounds		



2. Gun Pods

SPPU-22



TYPE: Gun Pod

GUIDANCE: Unguided

Aircraft: Su-25T

NOTES: Contains the twin-barreled 23mm autocannon GSh-23L, 260 rounds of 23x115 mm ammunition. Effective against infantry, soft skin vehicles and light armored vehicles. It has the ability to lower its armament up to 30 degrees.

UPK-23-250



TYPE: Gun Pod

GUIDANCE: Unguided

Aircraft: Ka-50 Black Shark, Mi-8 MTV2

NOTES: Contains the single fixed twin-barreled 23mm autocannon GSh-23L, 250 rounds of 23x115 mm ammunition. Since the cannon is fixed it is aimed by pointing the aircraft in the direction of the target. Effective against infantry, soft skin vehicles and light armored vehicles. Much lighter than the SPPU-22.

GUV-8700 9-A-800



TYPE: Gun Pod

GUIDANCE: Unguided

Aircraft: Mi-8 MTV2

NOTES: Single AP-30 30 mm automatic grenade launcher.

GUV-8700 9-A-624/622



TYPE: Gun Pod

GUIDANCE: Unguided

Aircraft: Mi-8 MTV2


NOTES: Single YakB-12.7 12.7 mm four barrel machine gun and two GShG-7.62 7.62 mm four barrel machine guns.



3. Air to Air – Short Range


AIM-9M Sidewinder



	TYPE: Short-range-air-to-air missile	WARHEAD: Annular blast-frag (9 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 2.5
	RANGE: 11 km	WEIGHT: 85 kg
	EFFECTIVE RANGE: 3 km	G-LIMIT: 22
NOTES: All-aspect capability, higher performance, improved capability against counter measures, "Fox Two"		


CATM-9M



	TYPE: Training version of the AIM-9M	WARHEAD: Inert Warhead
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 2.5
	RANGE: 11 km	WEIGHT: 85 kg
	EFFECTIVE RANGE: 3 km	G-LIMIT: 22
NOTES:		

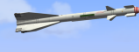
AIM-9P Sidewinder



	TYPE: Short-range-air-to-air missile	WARHEAD: Annular blast-frag (9 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 2
	RANGE: 11 km	WEIGHT: 85 kg
	EFFECTIVE RANGE: 1.6 km	G-LIMIT: 22
NOTES: "Fox Two"		


R-60M / AA-8 Aphid



	TYPE: Short-range-air-to-air missile	WARHEAD: Proximity (3 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 2.7
	RANGE: 5 km	WEIGHT: 43.5 kg
	EFFECTIVE RANGE:	G-LIMIT: 18
NOTES:		



R-73 / AA-11 Archer







	TYPE: Short-range-air-to-air missile	WARHEAD: Proximity (7.4 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 2.5
	RANGE: 15 km	WEIGHT: 105 kg
	EFFECTIVE RANGE:	G-LIMIT: 30
NOTES: All-aspect, all weather, day/night and jamming environments, fire and forget		







4. Air to Air – Medium Range



AIM-120B AMRAAM 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: High expl. blast fragment. (22.7 kg)
	GUIDANCE: Active radar homing	MAX. SPEED: Mach 4 (4947 km/h)
	RANGE: 55 km	WEIGHT: 152 kg
	EFFECTIVE RANGE: 16 km (9 NM)	G-LIMIT: 22
NOTES: BVR-missile, fire-and-forget, all weather day and night, "Fox Three"		

AIM-120C AMRAAM 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: High expl. blast fragment. (22.7 kg)
	GUIDANCE: Active radar homing	MAX. SPEED: Mach 4 (4947 km/h)
	RANGE: 55 km	WEIGHT: 152 kg
	EFFECTIVE RANGE: 16 km (9 NM)	G-LIMIT: 22
NOTES: BVR-missile, fire-and-forget, all weather day and night, "Fox Three"		


AIM-7M Sparrow 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: High expl. blast fragment. (40 kg)
	GUIDANCE: Semi active radar homing	MAX. SPEED: Mach 3
	RANGE: 55 km	WEIGHT: 230 kg
	EFFECTIVE RANGE: 25 km	G-LIMIT: 20
NOTES: BVR-missile, "Fox One"		

R-27T / AA-10 Alamo-B 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: Blast/Fragmentation (39 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 3
	RANGE: 40 km	WEIGHT: 254 kg
	EFFECTIVE RANGE: 25 km	G-LIMIT: 18
NOTES: T=Infrared homing		


R-27ET / AA-10 Alamo-D 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: Blast/Fragmentation (39 kg)
	GUIDANCE: Infrared homing	MAX. SPEED: Mach 3
	RANGE: 70 km	WEIGHT: 343 kg
	EFFECTIVE RANGE:	G-LIMIT: 18
NOTES: T=Infrared homing, E=Extended-range version		

R-27R / AA-10 Alamo-A 		
	TYPE: Medium-range-air-to-air missile	WARHEAD: Blast/Fragmentation (39 kg)
	GUIDANCE: Semi-active-radar homing	MAX. SPEED: Mach 3
	RANGE: 50 km	WEIGHT: 253 kg
	EFFECTIVE RANGE: 25 km	G-LIMIT: 18
NOTES: R=Radar guided		


R-27ER / AA-10 Alamo-C

	TYPE: Medium-range-air-to-air missile	WARHEAD: Blast/Fragmentation (39 kg)
	GUIDANCE: Semi-active-radar homing	MAX. SPEED: Mach 3
	RANGE: 70 km	WEIGHT: 350 kg
	EFFECTIVE RANGE: 25 km	G-LIMIT: 18
NOTES: R=Radar guided, E=Extended-range version		

R-77 / AA-12 Adder


	TYPE: Medium-range-air-to-air missile	WARHEAD: 30 kg
	GUIDANCE: Inertial, command and active radar	MAX. SPEED: Mach 3
	RANGE: 50 km	WEIGHT: 175 kg
	EFFECTIVE RANGE:	G-LIMIT: 30
NOTES:		



5. General Purpose Bombs


Mk-82 LDGB



	TYPE: Low-drag general-purpose bomb		WARHEAD: Tritonal (87 kg)
	GUIDANCE: Unguided		WEIGHT: 227 kg (500 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points		
	NOTES:		


BDU-50LD (Mk-82 Low Drag Training Bomb)



	TYPE: Training vers. of the Mk-82 with low drag		WARHEAD: Inert warhead
	GUIDANCE: Unguided		WEIGHT: 227 kg (500 pounds)
	TARGET: Training		
	NOTES: Low Drag		


BDU-33 (Mk-82 Training Bomb)



	TYPE: Training vers. of the Mk-82		WARHEAD: None
	GUIDANCE: Unguided		WEIGHT: 25 pounds
	TARGET: Training		
	NOTES: A small bomb to simulate on their aerodynamic characteristics of the larger Mk-82.		


Mk-82AIR



	TYPE: High-drag general-purpose bomb	WARHEAD: Tritonal (87 kg)
	GUIDANCE: Unguided	WEIGHT: 227 kg (500 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points	
	NOTES: This version of the Mk-82 is an aerodynamically retarded BSU-49 / B. This allows the bomb to quickly slow after release, which enables use at low altitudes. This bomb can also be dropped in low drag mode depending on the DSMS fuze setting.	


BDU-50HD (Mk-82AIR Training Bomb)



	TYPE: Training vers. of the Mk-82AIR with high drag		WARHEAD: Inert warhead
	GUIDANCE: Unguided		WEIGHT: 227 kg (500 pounds)
	TARGET: Training		
	NOTES: High Drag		

Mk-84 LDGB



	TYPE: Low-drag general-purpose bomb		WARHEAD: Tritonal (429 kg)
	GUIDANCE: Unguided		WEIGHT: 925 kg (2000 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points		
	NOTES:		

**AN-M64**

TYPE: General-purpose bomb	WARHEAD: TNT (274 pounds)
GUIDANCE: Unguided	WEIGHT: 535 pounds
TARGET: Wide variety of targets, including artillery, trucks, bunkers, surface-to-air missile sites, antiaircraft artillery sites, ammunition dumps, railway engines, light surface vessels and supply points.	

NOTES: WW II era

FAB-100

TYPE: General-purpose bomb	WARHEAD: HE 45 kg
GUIDANCE: Unguided	WEIGHT: 100 kg
TARGET: Wide variety of targets, including artillery, trucks, bunkers, surface-to-air missile sites, antiaircraft artillery sites, ammunition dumps, railway engines, light surface vessels and supply points.	

NOTES:

FAB-250

TYPE: General-purpose bomb	WARHEAD: HE 120 kg
GUIDANCE: Unguided	WEIGHT: 249 kg
TARGET: Defence industry facilities, light armoured vehicles, railway junctions, fortifications and personnel.	

NOTES:

FAB-500 M62

TYPE: General-purpose bomb	WARHEAD: HE 240 kg
GUIDANCE: Unguided	WEIGHT: 506 kg
TARGET: Defence industry facilities, light armoured vehicles, railway junctions, fortifications and personnel.	

NOTES:

BetAB-500

TYPE: Concrete-piercing / penetration bomb	WARHEAD: 350 kg
GUIDANCE: Unguided	WEIGHT: 424 kg
TARGET: Concrete piercing, bunkers, concrete runways.	


NOTES:

BetAB-500 ShP

TYPE: Penetration bomb with rocket / parachute system	WARHEAD: 350 kg
GUIDANCE: Unguided	WEIGHT: 477 kg
TARGET: Concrete piercing, bunkers, concrete runways	



NOTES: Boosted BetAB-500.







KAB-500Kr			
TYPE: Electro-optical TV-guided fire and forget glidebomb		WARHEAD: 380 kg	
GUIDANCE: TV-guided		WEIGHT: 560 kg	
TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points.			
NOTES: Analogous to the GBU-15, based on FAB-500.			



6. Laser Guided Bombs



GBU-12 Paveway II			
	TYPE: Laser-guided general-purpose bomb		WARHEAD: Tritonal (87 kg)
	GUIDANCE: Laser-guided		WEIGHT: 230 kg (510 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points		
	NOTES: Laser-guided bomb variant of Mk-82		


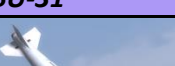
BDU-50LGB (GBU-12 Training Bomb) 		
	TYPE: Laser-guided training bomb	WARHEAD: None
	GUIDANCE: Laser-guided	WEIGHT: 230 kg (510 pounds)
	TARGET: Training	
	NOTES: Laser-guided bomb training variant of Mk-82	

GBU-10 Paveway II 		
	TYPE: Laser-guided general-purpose bomb	WARHEAD: Tritonal (429 kg)
	GUIDANCE: Laser-guided	WEIGHT: 934 kg (2055 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, antiaircraft artillery sites, early warning radars, and supply points	
	NOTES: Laser-guided bomb variant of Mk-84	





7. GPS Guided Bombs


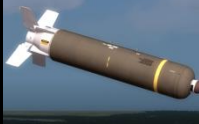
GBU-38			
	TYPE: GPS guided general-purpose bomb		WARHEAD: Tritonal (87 kg)
	GUIDANCE: GPS guided		WEIGHT: 227 kg (500 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, anti-aircraft artillery sites, early warning radars, and supply points		
	NOTES: Standard Mk-82 with a GPS-guidance set		



GBU-31			
	TYPE: GPS guided general-purpose bomb		WARHEAD: Tritonal (429 kg)
	GUIDANCE: GPS guided		WEIGHT: 925 kg (2000 pounds)
	TARGET: Wide variety of targets, including artillery, trucks, bunkers, Scuds, surface-to-air missile sites, anti-aircraft artillery sites, early warning radars, and supply points		
	NOTES: Standard Mk-84 with a GPS-guidance set		







8. Cluster Munitions


CBU-87			
	TYPE: Cluster Bomb	WARHEAD: 202 bomblets	
	GUIDANCE: Unguided	WEIGHT: 430 kg (950 pounds)	
	TARGET: Armor, personnel and softskin targets		
NOTES:			

CBU-97			
	TYPE: Cluster Bomb		WARHEAD: 10 BLU-108 submunitions
	GUIDANCE: Unguided		WEIGHT: 450 kg (1000 pounds)
	TARGET: Armor, personnel and softskin targets		
	NOTES: Each BLU-108 submunition contains four hockey-puck-shaped sensor-fused projectiles called Skeets. These detect targets, such as tanks, armored personnel carriers, trucks and other support vehicles, and fire an explosively formed penetrator.		



CBU-103			
	TYPE: CBU-87 Cluster Bomb with WCMD	WARHEAD: 202 bomblets	
	GUIDANCE: WCMD	WEIGHT: 430 kg (950 pounds)	
	TARGET: Armor, personnel and softskin targets		
	NOTES: When the CBU-87 is used in conjunction with the Wind Corrected Munitions Dispenser (WCMD) guidance tail kit, it becomes a precision-guided weapon.		


CBU-105			
	TYPE: CBU-97 Cluster Bomb with WCMD	WARHEAD: 10 BLU-108 submunitions	
	GUIDANCE: WCMD	WEIGHT: 450 kg (1000 pounds)	
	TARGET: Armour, personnel and softskin targets		
	NOTES: When the CBU-97 is used in conjunction with the Wind Corrected Munitions Dispenser (WCMD) guidance tail kit, it becomes a precision-guided weapon.		



AO-2.5RT			
	TYPE: High Explosive (Anti-Personnel) Fragmentation Bomblet	WARHEAD: 303 g / Bomblet	
	GUIDANCE: Unguided	WEIGHT: 2.5 kg / Bomblet	
	TARGET: Each bomblet has a kill radius of 30m against material, 20m against unsheltered personnel and 10m against entrenched personnel.		
	NOTES: KMGU-2=Submunitions dispenser, 96 bomblets per dispenser		

PTAB-2.5KO		
	TYPE: High Explosive Submunition	WARHEAD: 200 g / Bomblet
	GUIDANCE: Unguided	WEIGHT: 2.5 kg / Bomblet
	TARGET: Anti-tank and anti-personnel capability.	
	NOTES: KMGU-2=Submunitions dispenser, 96 bomblets per dispenser. Once armed an inertia striker initiates the primary detonator which should explode the main charge, if this fails a short pyrotechnic delay detonates the bomblet in 7 to 10 seconds.	





RBK-250 PTAB-2.5M			
	TYPE: Multipurpose Cluster Bomb	WARHEAD: 94 kg	
	GUIDANCE: Unguided	WEIGHT: 275 kg	
	TARGET: General purpose, armoured targets		
	NOTES: Cluster freefall 30 x 2.5 kg anti-tank bomblets		



RBK-500 PTAB-10-5		
	TYPE: Multipurpose Cluster Bomb	WARHEAD:
	GUIDANCE: Unguided	WEIGHT: 504 kg
	TARGET: General purpose, armoured targets	
NOTES: Cluster freefall 30 x 10 kg anti-tank bomblets		



RBK-500U PTAB-1M			
	TYPE: Multipurpose Cluster Bomb	WARHEAD:	
	GUIDANCE: Unguided	WEIGHT: 504 kg	
	TARGET: General purpose, armoured targets		
	NOTES: Cluster freefall 352 x 1kg anti-tank bomblets		







9. Guided Air to Ground Missiles



AGM-65D Maverick 		
	TYPE: Air to surface tactical missile	WARHEAD: WDU-20/B shaped-charge (57 kg)
	GUIDANCE: Imaging infrared	MAX. SPEED: 620 kn (1150 km/h)
	RANGE: >22 km	WEIGHT: 220 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		

TGM-65D (AGM-65D Training Missile) 		
	TYPE: Air to surface tactical training missile	WARHEAD: None
	GUIDANCE: Imaging infrared	MAX. SPEED: Not flyable
	RANGE: Not flyable	WEIGHT: 220 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		



AGM-65G Maverick 		
	TYPE: Air to surface tactical missile	WARHEAD: WDU-24/B penetrating blast-fragmentation (140 kg)
	GUIDANCE: Imaging infrared	MAX. SPEED: 620 kn (1150 km/h)
	RANGE: >22 km	WEIGHT: 306 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		



TGM-65G (AGM-65G Training Missile) 		
	TYPE: Air to surface tactical training missile	WARHEAD: None
	GUIDANCE: Imaging infrared	MAX. SPEED: Not flyable
	RANGE: Not flyable	WEIGHT: 306 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		



AGM-65H Maverick 		
	TYPE: Air to surface tactical missile	WARHEAD: WDU-20/B shaped-charge (57 kg)
	GUIDANCE: Charge-coupled device	MAX. SPEED: 620 kn (1150 km/h)
	RANGE: >22 km	WEIGHT: 210 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		


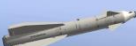
TGM-65H (AGM-65H Training Missile) 		
	TYPE: Air to surface tactical training missile	WARHEAD: None
	GUIDANCE: Charge-coupled device	MAX. SPEED: Not flyable
	RANGE: Not flyable	WEIGHT: 210 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		







AGM-65K Maverick 		
	TYPE: Air to surface tactical missile	WARHEAD: WDU-24/B penetrating blast-fragmentation (140 kg)
	GUIDANCE: Charge-coupled device	MAX. SPEED: 620 kn (1150 km/h)
	RANGE: >22 km	WEIGHT: 306 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		

CATM-65K (AGM-65K Training Missile) 		
	TYPE: Air to surface tactical training missile	WARHEAD: None
	GUIDANCE: Charge-coupled device	MAX. SPEED: Not flyable
	RANGE: Not flyable	WEIGHT: 306 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES:		


Kh-29T / AS-14 "Kedge" / 9M721 		
	TYPE: Medium range air to surface missile	WARHEAD: 317 kg
	GUIDANCE: Passive TV guided	MAX. SPEED: Mach 2.5
	RANGE: 12 km	WEIGHT: 685 kg
	EFFECTIVE RANGE:	G-LIMIT: 24
NOTES:		

Kh-29L / AS-14 "Kedge" / 9M721 		
	TYPE: Medium range air to surface missile	WARHEAD: 317 kg
	GUIDANCE: Semi-active laser guided	MAX. SPEED: Mach 2.5
	RANGE: 10 km	WEIGHT: 657 kg
	EFFECTIVE RANGE:	G-LIMIT: 24
NOTES:		

Kh-25ML / AS-10 "Karen" 		
	TYPE: Medium range air to surface missile	WARHEAD: 90 kg
	GUIDANCE: Semi-active laser guided	MAX. SPEED: Mach 0.72
	RANGE: 20 km	WEIGHT: 300 kg
	EFFECTIVE RANGE:	G-LIMIT: 24
NOTES:		

S-25L 		
	TYPE: 340 mm aircraft rocket	WARHEAD: 190 kg
	GUIDANCE: Laser guided	MAX. SPEED: 2520 km/h
	RANGE: 3 km	WEIGHT: 480 kg
	EFFECTIVE RANGE:	G-LIMIT:
NOTES: It is launched from the O-25 Pod which can hold one rocket.		




9A4172 "Vikhr" / AT-16 "Scallion" / 9K121			
TYPE: Medium range air to surface AT missile		WARHEAD: HEAT charge (12 kg)	
GUIDANCE: Semi-active laser guided		MAX. SPEED: Mach 1.8	
RANGE: 10 km		WEIGHT: 45 kg	
EFFECTIVE RANGE:		G-LIMIT: 20	
NOTES:			




10. Anti Radiation Missiles

Kh-58U / AS-11 "Kilter"

	TYPE: Medium range anti radar air to surface missile	WARHEAD: 150 kg
	GUIDANCE: Inertial and passive radar	MAX. SPEED: Mach 4
	RANGE: 70 km	WEIGHT: 640 kg
	EFFECTIVE RANGE:	G-LIMIT: 16
NOTES: It is designed to be used in conjunction with the Su-25T's L-081 "Phantasmagoria" target acquisition system.		

Kh-25MPU / AS-12 "Kegler"


	TYPE: Medium range anti radar air to surface missile	WARHEAD: 90 kg
	GUIDANCE: Inertial and passive radar	MAX. SPEED: Mach 0.76
	RANGE: 25 km	WEIGHT: 640 kg
	EFFECTIVE RANGE:	G-LIMIT: 16
NOTES: It is designed to be used in conjunction with the Su-25T's L-081 "Phantasmagoria" target acquisition system.		



11. Unguided Air to Ground / Air to Air Rockets


M-151 HE HYDRA



	TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: 1.0 kg High explosive fragmentation
	GUIDANCE: Unguided	MAX. SPEED: 739 m/s
	RANGE: 10.5 km	WEIGHT: 4.2 kg
	EFFECTIVE RANGE:	TARGET: Unarmored and soft targets, suppression
NOTES: 10 pound high explosive charge with an impact fuse.		


Mk-61 (M-151 Hydra training rocket)



	TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: Inert warhead practice rocket
	GUIDANCE: Unguided	MAX. SPEED: 739 m/s
	RANGE: 10.5 km	WEIGHT: 3.9 kg
	EFFECTIVE RANGE:	TARGET: Training
NOTES: Inert practice "warhead" with no payload. Shares the same ballistic properties as the M151, but does not produce any flash or smoke on impact.		


Mk-1 (M-151 Hydra training rocket)



	TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: Inert warhead practice rocket
	GUIDANCE: Unguided	MAX. SPEED: 739 m/s
	RANGE: 10.5 km	WEIGHT: 3.9 kg
	EFFECTIVE RANGE:	TARGET: Training
NOTES: Inert practice "warhead" with no payload. Shares the same ballistic properties as the M151, but does not produce any flash or smoke on impact.		


WTU-1/B (M-151 Hydra training rocket)



	TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: Inert warhead practice rocket
	GUIDANCE: Unguided	MAX. SPEED: 739 m/s
	RANGE: 10.5 km	WEIGHT: 4.2 kg
	EFFECTIVE RANGE:	TARGET: Training
NOTES: Inert practice "warhead" with no payload. Shares the same ballistic properties as the M151, but does not produce any flash or smoke on impact.		

Mk-5 HEAT HYDRA

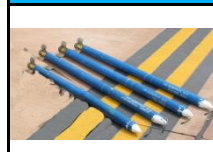


	TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: High explosive anti-tank
	GUIDANCE: Unguided	MAX. SPEED: 739 m/s
	RANGE: 10.5 km	WEIGHT: 3.9 kg
	EFFECTIVE RANGE:	TARGET: Armored targets
NOTES: Without a direct hit the warhead still maintains a blast and fragmentation effect on targets in close proximity, although it is less pronounced than that of the M-151.		

**M-156 WP HYDRA**

TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: 1 kg White phosphorous
GUIDANCE: Unguided	MAX. SPEED: 739 m/s
RANGE: 10.5 km	WEIGHT: 4.38 kg
EFFECTIVE RANGE:	TARGET: Target marking

NOTES: On impact the WP charge bursts showering the area with pellets of WP resulting in an immediate, highly visible smoke cloud.

M-274 TRAINING SMOKE

TYPE: Folding Fin Aerial Rocket (FFAR)	WARHEAD: 57 g of potassium perchlorate and aluminum powder
GUIDANCE: Unguided	MAX. SPEED: 739 m/s
RANGE: 10.5 km	WEIGHT: 4.2 kg
EFFECTIVE RANGE:	TARGET: Training

NOTES: Provides a "flash, bang, and smoke" signature on impact.

HVAR

TYPE: High Velocity Aircraft Rocket	WARHEAD: 3.4 kg
GUIDANCE: Unguided	MAX. SPEED: 419 m/s
RANGE:	WEIGHT: 61 kg
EFFECTIVE RANGE:	TARGET: Unarmored and soft targets, suppression

NOTES: WW II era

S-5KO

TYPE: HEAT Fragmentation Rocket	WARHEAD: 1.36 kg High explosive fragmentation
GUIDANCE: Unguided	MAX. SPEED: 2422 km/h
RANGE: 3 km	WEIGHT: 4.2 kg
EFFECTIVE RANGE:	TARGET: Armored and soft targets

NOTES:

S-8KOM

TYPE: AT Fragmentation Rocket	WARHEAD: 3.6 kg shaped-charge fragmentation
GUIDANCE: Unguided	MAX. SPEED: 610 m/s
RANGE:	WEIGHT: 11.3 kg
EFFECTIVE RANGE:	TARGET: Tanks, lightly armored and soft-skinned combat materiel



NOTES:



S-8OFP2



TYPE: HE Fragmentation Rocket	WARHEAD: 9.2 kg Blast-fragmentation
GUIDANCE: Unguided	MAX. SPEED: 610 m/s
RANGE:	WEIGHT: 16.7 kg
EFFECTIVE RANGE:	TARGET: Lightly armored and soft targets

NOTES:



S-130F			
	TYPE: APAM Fragmentation Rocket	WARHEAD: 32.5 kg APAM Fragmentation	
	GUIDANCE: Unguided	MAX. SPEED: 2700 km/h	
	RANGE: 1.6 – 3 km	WEIGHT: 68 kg	
	EFFECTIVE RANGE:	TARGET: Lightly armored and soft targets	
NOTES: Designed for strikes against fortified and hardened objects (pillboxes, shelters, airport aprons and runways).			

S-24B			
	TYPE: Blast Fragmentation Rocket	WARHEAD: 123 kg Blast Fragmentation	
	GUIDANCE: Unguided	MAX. SPEED: 2520 km/h	
	RANGE: 2 – 3 km	WEIGHT: 235 kg	
	EFFECTIVE RANGE:	TARGET: Armored targets	
NOTES: It features an impact fuse with time delay – the delay ensures that the warhead detonates after its heavy-duty metal shell penetrates the roof or wall of a target structure.			

S-25OFM			
	TYPE: Ultra heavy FFAR	WARHEAD: HE Fragmentation (190 kg)	
	GUIDANCE: Unguided	MAX. SPEED: 2520 km/h	
	RANGE: 3 km	WEIGHT: 480 kg	
	EFFECTIVE RANGE:	TARGET: Hardened targets	
NOTES: It is launched from the O-25 Pod which can hold one rocket.			



12. Special Equipment

610 GAL EXTERNAL FUEL TANK



TYPE: External fuel tank

AIRCRAFT: F-15C

NOTES: 610 gal = 2309 l

TK 600 GAL EXTERNAL FUEL TANK



TYPE: External fuel tank

AIRCRAFT: A-10C Warthog, A-10A Thunderbolt II

NOTES: 600 gal = 2271 l

800 l EXTERNAL FUEL TANK



TYPE: External fuel tank

AIRCRAFT: Su-25A, Su-25T

NOTES:

550 l EXTERNAL FUEL TANK



TYPE: External fuel tank

AIRCRAFT: Ka-50 Black Shark

NOTES:

1500 l EXTERNAL CENTERLINE FUEL TANK



TYPE: External fuel tank

AIRCRAFT: MiG-29A, MiG-29G, MiG-29S

NOTES:

1150 l EXTERNAL WING FUEL TANK



TYPE: External fuel tank

AIRCRAFT: MiG-29A, MiG-29G, MiG-29S

NOTES:



75 GAL DROP TANK



TYPE: External fuel tank

AIRCRAFT: P-51D

NOTES: 75 gal = 284 l, WW II era

MXU-648 TRAVEL POD



TYPE: Travel Pod

AIRCRAFT: A-10C

NOTES:

AN-AAQ-28



TYPE: Targeting Pod

AIRCRAFT: A-10C

NOTES: Enables aircrews to detect, acquire, auto-track and identify targets at extremely long ranges for weapon delivery or nontraditional intelligence, surveillance and reconnaissance missions.

L-081 "Phantasmagoria"



TYPE: ELINT Pod

AIRCRAFT: Su-25T

NOTES: Radar target acquisition system. *ELINT=Electronic Intelligence.*

"Mercury" LLTV Pod



TYPE: Low light level target acquisition system

AIRCRAFT: Su-25T

NOTES:

LUU-2B/B Flare



TYPE: Air-deployed high-intensity illumination flare

GUIDANCE: Unguided


PURPOSE: Battlefield illumination

WEIGHT: 13.6 kg

Descent Rate: 8.3 ft/sec (2.5m/sec)


NOTES: The LUU-2 has a burn time of approximately 4 minutes while suspended from a parachute.


M257 Parachute Illumination


	TYPE: Parachute illumination rocket	
	GUIDANCE: Unguided	
	PURPOSE: Battlefield illumination	WEIGHT: 5 kg
		Descent Rate: 15 ft/sec


NOTES: The M257 warhead provides one million candlepower for 100 seconds or more and can illuminate an area in excess of one square kilometre at optimum height (approx. 8000ft AGL).

SAB-100


	TYPE: Illumination bomb	
	GUIDANCE: Unguided	
	PURPOSE: Battlefield illumination	WEIGHT: 100 kg


NOTES: Dispense seven LUU-2B/B Flares at 1 sec. intervals

S-8TsM


	TYPE: Marker rocket	
	GUIDANCE: Unguided	
	PURPOSE: Target designation (Smoke)	WEIGHT: 11.1 kg

NOTES: This rocket is intended to mark ground targets, routes of movement and landing areas in daytime.

S-8OM


	TYPE: Illumination rocket	
	GUIDANCE: Unguided	
	PURPOSE: Battlefield illumination	WEIGHT: 12.1 kg

NOTES: