

Osprey Combat 6.5 Super Z



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Developer

7.62mm

5.56mm

6.5mm

7.62mm

7.62mm

5.45mm

5.8mm



7.62

X

51mm

NATO

US

5.56

X

45mm

NATO

US

6.5

SZ

US

7.62

X

54mmR

Russia

7.62

X

39mm

Russia

5.45

X

39mm

Russia

5.8

X

42mm

China

- Must have the optimum small arms and ammunition our nation can provide.
- Weapons and equipment should be based off the infantryman (Army and Marine) for land combat.
- Must have the most efficient and effective rifle and ammunition to outmatch any of our adversaries.

- Development of this ammunition and rifle should be our Armed Forces #1 priority- all else follows.
- It is the moral duty of all commanders.
- The first shot must be reliable.
- Reliability should mean an 800-meter range with the required kinetic energy, to take out the enemy.

- The current weaponry in an organic squad is inferior to that of our enemy.
- The Infantryman's rifle and ammunition lacks what is needed on the battlefield today.
- There is only so much that can be done with the 5.56mm round(>1/2 Century improvements).

- Ammunition is the most important material aspect of a weapon system.
- Take down of the target is the desired end-state of small arms engagement.
- If the target must be defeated beyond 600M due to the operating environment then the bullet must have the terminal effect desired at that range.

- Is the 7.62mm round now considered too heavy?
- Ammunition lethality and range, both at close quarter, urban combat and open-air out to at least 800M.

- What ammunition has the ballistic coefficient, lethality, and acceptable weight required for the battlefield today and against our enemies in the future?
- Major advantages of 6.5mm bullets are that they have very high ballistic coefficients.
- The 6.5mm Super Z is half the size and weight of the 7.62mm and can operate in a much lighter and smaller platform.
- The Super Z will operate within the same pressure restraints of the M16 platform.
- The 6.5 Super Z is an intermediate cartridge designed to operate in a standard M16/M4 size platform.

- Bullets in the 130-140+ grain range will provide improved capabilities in excess of 800 meters from short barrel (M4) weapons.
- This creates overmatch for our warfighters when using small arms against enemy combatants.
- We believe that 6.5mm ammunition will have commonality for both individual and crew served weapons.

- The objective of the 6.5mm Super Z is to create overmatch in small arms against our enemy.
- The 6.5mm 130-140+ grain bullets will offer superior capabilities over our enemy's small arms (ISIS, Taliban, Al Qaeda) and our future, possible enemies (North Korea, Iran, Russia and China).
- The American GI deserves the best in rifle/ammunition overmatch.

Data In Meters Inches	Round	5.8mm 5.8X42 Chinese	7.62mm 7.62X39 Russian	5.45mm 5.45X39 Russian	5.56mm 5.56X45 US	7.62mm 7.62X51 US	6.5mm SZ OC	6.5mm SZ OC	6.5mm SZ OC	6.5mm SZ OC
	Ammo Bullet	DPB10 71 Grains FMJBT	57-N-231 123 Grains FMJBT	7N10 56 Grains FMJBT	M855A1 62 Grains FMJBT	M80 147 Grains FMJBT	B130HAR 130 Grains OTM	B130HAR 130 Grains OTM	B140H 140 Grains OTM	B140H 140 Grains OTM
	Ballistic Coefficient	BC G7 0.191	BC G7 0.138	BC G7 0.176	BC G7 0.152	BC G7 0.209	BC G7 0.288	BC G7 0.288	BC G7 0.317	BC G7 0.317
	Barrel Length Rifle System	16" QBZ-95-1	16" AK47	16" AK74	14.5" M4	14.5" AR10	11.5" AR15E	14.5" AR15E	11.5 Ar15E	14.5" AR15E
Transonic 1340fps	Distance meters	660	325	575	525	540	700	740	750	785
Velocity	Muzzle fps	3000	2350	2900	2944	2557	2345	2411	2300	2366
Kinetic Energy	Muzzle KE	1419	1521	1046	1193	2134	1587	1678	1644	1740
100m	fps	2727	2034	2609	2606	2328	2186	2249	2157	2220
	KE	1172	1130	847	935	1768	1379	1460	1446	1532
	Drop-"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0-0	0.0
300m	fps	2222	1454	2078	1998	1906	1886	1944	1885	1944
	KE	778	577	537	549	1185	1026	1091	1105	1175
	Drop-"	12.3	31.3	14.1	17.3	19.6	21.7	20.2	22.3	20.7
600m	fps	1569	962	1398	1237	1349	1475	1528	1511	1564
	KE	388	253	243	211	594	628	674	709	761
	Drop-"	100.7	256.1	116.7	134.3	144.0	148.1	138.5	148.9	139.2
800m	fps	1192	850	1055	984	1061	1228	1276	1282	1331
	KE	224	197	138	133	367	435	470	511	551
	Drop-"	240.6	618.0	287.0	339.1	336.2	324.3	303.2	321.2	300.2

Weight Comparison 5.55LBS

6.5 Super Z

**5.56NATO
M855**

**264 USA
Intermediate**

**7.62NATO
(M80)**

Brass Case

Brass Case

Brass Case

Brass Case

140gr = **133rds**

130gr = **138rds**

106gr = **148rds**

62gr = **210rds**

106gr = **133rds**

147gr = **104rds**

**Polymer
(estimated 25%)**

**Polymer
(27%)**

**Polymer
(36.5%)**

140gr = **169rds**

130gr = **172rds**

106gr = **185rds**

106gr = **169**

147gr = **142rds**

*All data except Super Z extrapolated from "The Future of the Military Assault Rifle" by Jim Shatz.