

SUPPLEMENTARY MATERIAL

Internal study no.	Shot no.	Distance [m]	Weapon	Caliber [mm]	Projectile	Comment	Mass [g]	Velocity [v ₀ ; m/s]	Muzzle Energy [J]	Phantom type
1	37	0	Revolver	10.9	44 Remington Magnum	Semi-jacketed hollow-point (SJHP)	15.6	-	-	3
2	45	0	Revolver	10.9	44 Remington Magnum	Semi-jacketed hollow-point (SJHP)	15.6	-	-	1
3	-	0	Assault rifle	5.56	5.56 mm NATO	Full metal jacketed spire-point (FMJSP)	4.00	-	-	3
4	-	0	Pistol	9.0	9 mm Luger	Full metal jacketed round head (FMJ)	8.00	-	-	1
5	36	0	Pistol	9.0	9 mm Luger	Full metal jacketed round head (FMJ)	8.00	-	-	3
6	-	0	Pistol	9.0	9 mm Luger	Action 4	6.10	-	-	1
7	46	0	Assault rifle	7.5	7.5 x 55 GP11 (Swiss)	Full metal jacketed spire-point (FMJSP)	11.30	-	-	1
8	43	0	Rifle	5.6	22 Long Rifle	Lead round nose (LRN)	2.59	-	-	1
9	39	0	Rifle	5.6	22 Long Rifle	Lead round nose (LRN)	2.59	-	-	2
10	35	15	Test barrel	5.56	5.56 mm NATO	Full metal jacketed spire-point (FMJSP)	4.00	978	1913	1
11	10	15	Test barrel	9.0	9 mm Luger	Full metal jacketed round head (FMJ)	8.00	356	507	1
12	9	15	Test barrel	9.0	9 mm Luger	Full metal jacketed round head (FMJ)	8.00	365	533	2
13	11	15	Test barrel	9.0	9-mm Luger	Action 4	6.10	430	564	1
14	31	15	Test barrel	7.5	7.5 x 55 GP11 (Swiss)	Full metal jacketed spire-point (FMJSP)	11.30	804	3652	1
15	30	15	Test barrel	7.5	7.5 x 55 GP11 (Swiss)	Full metal jacketed spire-point (FMJSP)	11.30	799	3607	2
16	25	15	Test barrel	5.6	22 Long Rifle	Lead round nose (LRN)	2.59	363	169	2



Phantom 1
Head-sphere phantom



Phantom 2
Head-skull phantom



Phantom 3
Head-skull phantom w/ synthetic skin