

## JAGS SMALLARMS TABLES

*Version 1.1*

**Damage** for firearms is calculated as:

$$\frac{[\text{Muzzle Energy (Ft-Lbs)}] \text{ to the } 0.8 \text{ Power}}{17.66}$$

*Example:* A 9mm round with 340 ft/lbs muzzle energy would do:  
 $(340^{0.8}) / 17.66 = 6.0 \text{ DP}$

**Large Caliber Damage Modifier (LCDM)** is the additional damage a bullet does to a living target (after it penetrates any armor) because of the large diameter of the round.

**ALL ROUNDS <= 9MM IN DIAMETER WILL HAVE A LCDM VALUE OF 1.0 !**

To calculate **LCDM** compare use bullet diameter in the formula table below. The **LCDM** value is multiplied by any damage that penetrates armor:

$$\text{LCDM} = ((\text{Bullet Dia. in mm}) / 9)^{0.76}$$

In English, this is: Divide the Bullet diameter (in mm) by 9,  
then take the result to the 0.76 Power.

*Example:* a .45ACP bullet has a LCDM of:  
 $(11.43\text{mm} / 9)^{0.76} = 1.2$

Round all **LCDM** values to the nearest tenth.

**Range** is based off the examples given in the basic JAGS firearms list, and are adjusted for weapon ballistic accuracy and other factors. Note that this value is the **NET** range in Yards, not an addition to the base ranges given in the basic list.

To calculate the JAGS range value, take the weapon's "Effective Range" in yards, and divide it by a factor based upon the weapon type:

$$\text{Pistol/SMG} = 10 \qquad \text{Rifle/Machinegun} = 6$$

*Example:* The US Army calculates the effective range of the M16A2 rifle as 400 yards (the range at which an average soldier has a 50% hit probability).  $400 / 6 = 67$  yards for the JAGS range.

**Control Rolls** were based on the range given in the basic JAGS firearms list, with adjustments based on the weapon's recoil impulse and any recoil reduction devices it has.

**Reload Time** for a weapon is the amount of REF time you have to use to reload either 1 shot "s" or replace the magazine "m" for the weapon.

*Note: This is an **unofficial** firearms expansion for the JAGS system.  
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## PISTOLS

<u>Weapon Name</u>	<u>Date</u>	<u>Muzzle Energy</u>	<u>DP</u>	<u>LCDM</u>	<u>ROF</u>	<u>Reload Time</u>	<u>Base Range(Y)</u>	<u>Clip</u>	<u>Round</u>	<u>Control</u>	<u>Notes</u>
Wheelock Pistol	1520	194	4	1.6	1	300/1s	3	1	17mm Ball	-2	Muzzle Loader
.54 cal Flintlock	1806	155	3	1.4	1	100/1s	2	1	.54 Ball	-2	Muzzle Loader
Styer GB-80	1981	376	7	1.0	2	20/1m	5	18	9x19mm	-1	Auto
Styer SPP	1992	391	7	1.0	2	20/1m	5	15/30	9x19mm	-1	Auto
Browning HP 35	1935	344	6	1.0	2	20/1m	5	13	9x19mm	-1	Auto
Browning .25 Auto	1906	78	2	1.0	2	20/1m	2	6	.25Auto	0	Auto
FN 5.7 Pistol	1995	451	8	1.0	2	20/1m	4	20	5.7x28mm	0	AP rounds
Mauser M1896	1896	374	6	1.0	2	30/1m	5(10)	10	9x19mm	-1(0)	Auto (w/Stock)
P-08 Luger	1908	338	6	1.0	2	20/1m	5	8	9x19mm	-1	Auto
Walther PPK	1930	198	4	1.0	2	20/1m	4	7	.380ACP	0	Auto
Walther P-38	1938	338	6	1.0	2	20/1m	5	8	9x19mm	-1	Auto
Walther P5	1982	340	6	1.0	2	15/1m	5	8	9x19mm	-1	Auto
Walther P99	1996	355	6	1.0	2	15/1m	6	16	9x19mm	-1	Auto
H&K P9S	1966	366	6	1.0	2	15/1m	6	9	9x19mm	-1	Auto
H&K Mk23 Mod 0	1992	389	7	1.2	2	20/1m	5	12	.45ACP	-2	Auto
Beretta M34	1934	190	4	1.0	2	20/1m	4	7	.380ACP	0	Auto
Beretta Model 84	1976	190	4	1.0	2	20/1m	4	13	.380ACP	0	Auto
Beretta M92S	1976	340	6	1.0	2	20/1m	5	15	9x19mm	-1	Auto
Tokarev M1933	1933	367	6	1.0	2	20/1m	5	8	7.62x25mm	-1	Auto
Makarov PM	1952	241	5	1.0	2	25/1m	4	8	9x18mm	-1	Auto
PSM 5.45mm	1975	129	3	1.0	2	25/1m	5	8	5.45x18mm	0	AP round
P-9 Gyurza	1995	464	8	1.0	2	25/1m	6	18	9x21mm	-1	AP Round
Webley .455	1901	250	5	1.2	2	60/1m	5	6	.455Webley	-2	Revolver-"Half-moon" clip
.44 New Model Army	1860	373	6	1.2	2	100/1s	3	6	.44Ball	-2	Revolver
Colt M1873	1873	414	7	1.2	2	20/1s	5	6	.45LC	-2	Revolver
Colt Det Spl .38	1926	219	4	1.1	2	35/1m	2	6	.38Spl	-2	Revolver-Speed loader
Colt M1911A1	1921	378	7	1.2	2	20/1m	5	7	.45ACP	-2	Auto
S&W Model 27	1935	566	9	1.0	2	35/1m	10	6	.357Mag	-2	Revolver- 6" bbl
Colt Python	1955	488	8	1.0	2	35/1m	8	6	.357Mag	-2	Revolver- 4" bbl
S&W Model 39	1956	338	6	1.0	2	20/1m	5	8	9x19mm	-1	Auto
S&W Model 29 .44M	1956	1151	16	1.2	2	35/1m	15	6	.44Mag	-3	Revolver-6.5" bbl
Hi Std Derringer	1963	182	4	1.0	2	30/1s	2	2	.22Mag	-1	2-Shot Derringer
Rem XP-100	1963	780	12	1.0	1	40/1s	30	1	5.56x36mm	0	Single-Shot-w/scope
Hi Std .22 Auto	1964	99	2	1.0	2	25/1m	4	10	.22LR	0	Auto
Mk II GyroJet	1966	652	10	1.3	2	20/1s	10	7	13mmGyro	0	Gyrojet pistol
.44 AutoMag	1972	1433	19	1.2	2	25/1m	20	7	.44Automag	-2	Auto
COP .357	1978	503	8	1.0	2	25/1s	3	4	.357mag	-2	4-Shot Derringer
Ruger Super Redhawk	1982	1209	17	1.2	2	35/1m	15	6	.44mag	-2	Revolver - 8" bbl
Ruger P89	1988	351	6	1.0	2	20/1m	5	15	9x19mm	-1	Auto
Glock 17	1981	377	7	1.0	2	20/1m	5	17	9x19mm	-1	Auto
Glock 20	1989	575	9	1.1	2	20/1m	8	15	10mmAuto	-2	Auto
Glock 22	1990	424	7	1.1	2	20/1m	6	15	.40S&W	-1	Auto
Glock 26 Compact	1991	330	6	1.0	2	20/1m	4	10	9x19mm	-1	Auto
Desert Eagle .50	1990	1607	21	1.3	2	25/1m	20	7	.50AE	-3	Auro
Wildey .475 Mag	1990	1766	22	1.2	2	25/1m	20	7	.475WM	-3	Auto
"The Beast"	1991	10383	92	1.3	1	35/1s	20	1	.50BMG	-4	Single-shot
IMI UZI Pistol	1983	344	6	1.0	2	25/1m	5	20	9x19mm	-1	Auto
SIG-Sauer P226	1981	340	6	1.0	2	20/1m	5	15	9x19mm	-1	Auto
Norinco Type 67	1967	95	2	1.0	2	30/1m	2	9	7.65x17mm	0	Suppressed

## SUB-MACHINEGUNS

<u>Weapon Name</u>	<u>Date</u>	<u>Muzzle</u>				<u>Reload</u>		<u>Base</u>		<u>Round</u>	<u>Control</u>	<u>Notes</u>
		<u>Energy</u>	<u>DP</u>	<u>LCDM</u>	<u>ROF</u>	<u>Time</u>	<u>Range(Y)</u>	<u>Clip</u>				
F1A1	1960	368	6	1.0	10	40/1m	20	32	9x19mm	-1	Top-loading Mag	
Styer Mpi-69	1969	399	7	1.0	9	35/1m	20	32	9x19mm	-1		
Styer 9mm TMP	1993	355	6	1.0	15	35/1m	12	15/30	9x19mm	-1		
American 180	1972	162	3	1.0	20	50/1m	15	177	.22LR	0	Drum Mag	
Vz 26	1952	619	10	1.0	11	35/1m	20	32	7.62x25mm	-1		
Vz 61 Skorpion	1961	175	4	1.0	14	30/1m	5	10/20	.32ACP	0		
MAT-49	1949	344	6	1.0	10	35/1m	18	32	9x19mm	-1	Folding Magazine	
MP18-1	1919	399	7	1.0	7	40/1m	20	32	9x19mm	0	Snail drum	
Mauser M32	1932	374	6	1.0	15	40/1m	5(15)	10/20	7.62x25mm	-3(-1)	(w/stock)	
MP40	1940	399	7	1.0	8	35/1m	20	32	9x19mm	-1		
H&K MP5A4	1972	439	7	1.0	11	35/1m	25	30	9x19mm	-1		
H&K MP5-10	1998	611	10	1.1	11	35/1m	25	30	10mmAuto	-1		
VP-70	1972	356	6	1.0	2(3)	25/1m	5(15)	18	9x19mm	-1	(w/stock)	
H&K MP5SD3	1975	223	4	1.0	11	35/1m	14	30	9x19mm	0	Suppressed	
H&K MP5K	1976	386	7	1.0	14	30/1m	8	15/30	9x19mm	-1	12" length	
H&K 53	1979	933	13	1.0	12	35/1m	32	25	5.56mm	-1		
UZI	1951	439	7	1.0	10	30/1m	20	32	9x19mm	-1		
Mini-UZI	1982	336	6	1.0	20	25/1m	15	20/32	9x19mm	-2		
Micro-UZI	1987	319	6	1.0	21	25/1m	10	20	9x19mm	-2		
Beretta M38A	1938	485	8	1.0	10	40/1m	20	40	9x19mm	-1		
Beretta M12	1959	399	7	1.0	9	35/1m	20	32/40	9x19mm	-1		
Beretta M93R	1980	386	7	1.0	3rb	20/1m	5(15)	20	9x19mm	-2(-1)		
M-45 "K"	1945	366	6	1.0	10	35/1m	18	36	9x19mm	-1		
PPsh-41	1941	489	8	1.0	15	45/1m	18	35/71	7.62x25mm	-2		
PPS-43	1943	489	8	1.0	11	35/1m	15	35	7.62x25mm	-2		
Stechkin	1951	282	5	1.0	13	30/1m	5(15)	20	9x18mm	-3(-1)	(w/stock)	
Sten Mk IIS	1942	255	5	1.0	9	40/1m	12	32	9x19mm	-1	Suppressed	
Sterling L2A3	1943	418	7	1.0	9	40/1m	18	34	9x19mm	-1		
Thompson M1928	1928	437	7	1.2	12	45/1m	20	30/100	.45ACP	-2		
M3A1	1944	430	7	1.2	8	40/1m	15	30	.45ACP	-2		
CAR 15	1968	906	13	1.0	13	35/1m	30	30	5.56mm	-1		
Bushmaster	1970	1056	15	1.0	13	40/1m	20(10)	30	5.56mm	-1(-2)	(1-handed)	
Ingram M10 9mm	1971	368	6	1.0	18	30/1m	10	32	9x19mm	-1		
Ingram M10 .45	1972	430	7	1.2	19	30/1m	10	30	.45ACP	-2		
Spectre	1983	420	7	1.0	16	35/1m	20	50	9x19mm	-1		
Yati	1984	397	7	1.0	10	30/1m	15	20/40	9x19mm	0		
AKR	1982	817	12	1.0	14	35/1m	30	30	5.45x39.5	-1		
FN P90	1995	460	8	1.0	15	40/1m	10	50	5.7x28mm	0	AP Round	
Ares FMG	1992	349	6	1.0	11	30/1m	10	20	9x19mm	-1	Folds-up	
Bushman IDW	1996	341	6	1.0	8	35/1m	8	20/28	9x19mm	-1		
Colt 9mm SMG	1985	458	8	1.0	13	35/1m	25	32	9x19mm	0		
Ruger MP9	1994	415	7	1.0	10	30/1m	20	32	9x19mm	0(-1)	(1-handed)	

## RIFLES

Weapon Name	Date	Muzzle			LCDM	ROF	Reload		Base		Round	Control	Notes
		Energy	DP	Time			Range(Y)	Clip					
.69 Musket	1790	357	6	1.7	1	60/1s	10	1	.69 Ball	0	Muzzle-loader Flintlock		
Styer SSG-69	1969	2648	31	1.0	2	15/1s	165	5/10	7.62N	-1	w/Scope		
Styer AUG	1972	1233	17	1.0	11	40/1m	65	30	5.56N	0			
Styer AMR	1996	27139	199	1.0	2	40/1m	225	5	15.2mm	-2	w/Scope (AP Round)		
FN-FAL	1950	2529	30	1.0	12	35/1m	110	20	7.62N	-1			
Vz-58V	1958	1482	19	1.0	13	35/1m	65	30	7.62x39	-1			
FA-MAS	1974	1235	17	1.0	16	45/1m	50	25	5.56N	0			
KAR-98K	1935	2710	32	1.0	2	40/1m	90	5	7.92x57	-1			
MP-44	1943	1464	19	1.0	8	35/1m	80	30	7.92x33	-1			
H&K G-3	1968	2339	28	1.0	9	35/1m	85	20	7.62N	-1			
H&K G41	1972	1234	17	1.0	12	35/1m	75	30	5.56N	0			
H&K G11	1982	1075	15	1.0	10	45/1m	60	50	4.7mm	0	Special 3RB mode		
H&K G41	1995	1267	17	1.0	13	30/1m	85	30	5.56N	0	w/Scope		
Walther WA-2000	1982	3766	41	1.0	2	45/1m	185	6	.300WMag	-1	w/Scope		
Galil ARM	1970	1208	17	1.0	11	35/1m	100	35	5.56N	0			
Micro-Galil	1993	1094	15	1.0	12	35/1m	55	35	5.56N	0			
SC-70	1970	1259	17	1.0	11	35/1m	65	30	5.56N	0			
Arisaka M99	1939	2014	25	1.0	2	40/1m	90	5	7.7x56mm	-1			
Type 64	1964	2295	28	1.0	8	35/1m	65	20	7.62N	0			
MKS	1976	1273	17	1.0	18	40/1m	70	30	5.56N	-1			
SIG-510-4	1957	2180	27	1.0	10	35/1m	100	20	7.62N	-1			
Mosin-Nag M1891	1930	2690	31	1.0	2	40/1m	130	10	7.62x54	-1			
PTRS-41 AT Rifle	1941	22880	174	1.4	2	50/1m	140	5	14.5x114	-3			
SKS	1945	1587	21	1.0	2	40/1m	65	10	7.62x39	-1			
AK-47	1951	1751	22	1.0	10	35/1m	50	30	7.62x39	-1			
SVD	1963	2989	34	1.0	2	35/1m	180	10	7.62x54	-1	w/Scope		
AK-74	1974	1025	15	1.0	11	35/1m	65	30	5.45x39	0			
Martini-Henry Mkl	1871	1950	24	1.2	1	15/1s	90	1	.45Martini	0			
.600 Nitro Express	1903	8434	78	1.5	2	15/1s	40	2	.600NE	-4			
Enfield No.4	1941	2301	28	1.0	2	40/1m	85	10	.303B	-1			
DeLisle Carbine	1942	735	11	1.2	2	35/1m	50	10	.45ACP	-1	Suppressed		
L42A1	1966	2518	30	1.0	2	40/1m	135	10	7.62N	-1			
L85A1 IW	1986	1242	17	1.0	12	35/1m	80	30	5.56N	0	w/Scope		
.50 Hawken	1840	1331	18	1.3	1	60/1s	30	1	.50Ball	0			
Spencer Carbine	1863	1125	16	1.4	2	90/1m	60	7	.56/50 Sp	-2			
Springfield 1873	1873	1555	20	1.2	1	30/1s	65	1	.45-70	0			
Winchester '73	1873	780	12	1.2	2	20/1s	55	15	.44-40	0			
Sharps .50-140	1874	5035	52	1.3	1	90/1s	135	1	.50/140Bp	0	"Buffalo Rifle"		
Winchester 1894	1894	1934	24	1.0	2	20/1s	35	6	.30-30	-1			
Springfield 1903	1903	2430	29	1.0	2	60/1m	100	5	.30-06	-1			
M1 Garand	1932	2620	31	1.0	2	30/1m	100	8	.30-06	-1			
M1 Carbine	1941	947	14	1.0	2	35/1m	50	15/30	.30Car	0			
M14	1956	2611	31	1.0	12	35/1m	110	20	7.62N	-1			
M21 Sniper Rifle	1962	2611	31	1.0	2	35/1m	165	20	7.62N	-1	w/Scope		
Winchester M70	1956	5036	52	1.2	2	20/1s	100	3	.458Mag	-2	w/Scope		
M16A2	1982	1386	18	1.0	3RB	35/1m	70	30	5.56N	0			
.460 Weatherby	1958	8398	78	1.2	2	20/1s	165	3	.460WM	-3	w/Scope		
Remington 700	1960	2654	31	1.0	2	20/1s	150	5	7.62N	-1	w/Scope		
AR-7	1960	148	3	1.0	2	30/1m	25	8	.22LR	0	Survival Rifle		
Ruger Mini 14	1973	1351	18	1.0	2	35/1m	50	20	5.56N	0			
Barrett Light 50	1983	13700	115	1.3	2	40/1m	225	11	.50BMG	-3	w/Scope		
Beretta AR-70/90	1990	1388	18	1.0	11	35/1m	75	30	5.56N	0			
Bofors CGA5	1987	1370	18	1.0	11	35/1m	80	30	5.56N	0			
Remington M24	1992	2707	32	1.0	2	20/1s	180	6	7.62N	-1	w/Scope		
Aerotech NTW20	1995	21900	168	1.8	2	45/1m	250	3	20x84mm	-4	w/Scope		

## MACHINEGUNS

<u>Weapon Name</u>	<u>Date</u>	<u>Muzzle</u>			<u>LCDM</u>	<u>ROF</u>	<u>Reload</u>	<u>Base</u>	<u>Clip</u>	<u>Round</u>	<u>Control</u>	<u>Notes</u>
		<u>Energy</u>	<u>DP</u>	<u>Time</u>			<u>Range(Y)</u>					
MAG-58	1958	2529	30	1.0	13	55/1m	165	50	7.62N	-1	Bipod	
M249 SAW	1986	1075	15	1.0	16	60/1m	100	200	5.56N	-1	Bipod	
AAT-52	1952	2360	28	1.0	12	55/1m	130	50	7.5x54	-1	Bipod	
MG-08	1908	3780	41	1.0	7	60/1m	180	250	7.92x57	0	Tripod	
MG-42	1942	3044	35	1.0	20	55/1m	130	50	7.92x57	-2	Bipod	
HK-21	1973	2295	28	1.0	14	55/1m	160	50	7.62N	-1	Bipod	
SG-43	1943	2784	32	1.0	11	60/1m	170	350	7.62x54	0	Tripod	
DshKM 38	1946	13066	111	1.3	10	65/1m	225	50	12.7x108	0	Tripod	
RPD	1953	1676	21	1.0	12	60/1m	120	100	7.62x39	-1	Bipod	
KPV	1954	23741	179	1.3	10	65/1m	250	100	14.5x114	0	Tripod	
RPK	1964	1662	21	1.0	11	60/1m	130	75	7.62x39	-1	Bipod	
PKM	1964	2961	34	1.0	11	60/1m	150	50	7.62x54	-1	Bipod	
Vickers Mk1	1912	2300	28	1.0	8	60/1m	200	250	.303B	0	Tripod	
Lewis Mk 1	1914	2300	28	1.0	9	50/1m	100	47	.303B	-1	Bipod	
Bren Mk II	1938	2300	28	1.0	9	35/1m	100	30	.303B	-1	Bipod	
1874 Gatling Gun	1874	1555	20	1.2	7	65/1m	120	40	.45-70	-1	Tripod	
M1919A4	1922	2611	31	1.0	8	60/1m	150	250	.30-06	0	Tripod	
M2HB	1933	13570	115	1.3	8	65/1m	225	105	.50BMG	0	Tripod	
BAR M1918A2	1940	2392	29	1.0	9	35/1m	125	20	.30-06	-1	Bipod	
M60E3	1966	2582	30	1.0	9	55/1m	150	100	7.62N	-1	Bipod	
M134 Minigun	1967	3517	39	1.0	100	120/1m	170	1500	7.62N	0	Tripod	
M-214 "6-Pac"	1975	1313	18	1.0	67	100/1m	125	500	5.56N	0	Tripod	
IMI Negev LMG	1989	1077	15	1.0	15	60/1m	100	30/100	5.56N	0	Bipod	
Daewoo K3	1990	1119	16	1.0	14	60/1m	110	30/200	5.56N	0	Bipod	
GeCal 50	1988	14,950	124	1.3	50	120/1m	225	500	.50SLAP	0	Tripod	

**Notes:** Any "Bipod" mounted weapon may be hip-fired, the control roll is increased by "-1".