THE WILD WEST

The 19th Century was a time of rapid and dramatic change throughout the world. The Industrial Revolution had begun, the monarchies of Europe were giving way to new forms of government, and the United States was expanding into the Wild West at a furious pace. The weapons of the time were also changing rapidly, developing from the Flintlock Musket of the Napoleonic Wars to the breechloading rifles and Gatling Guns of the American Civil War and later periods.

Despite the progress made, the weapons of the Wild West were far less efficient than modern firearms. The generally lower ranges and velocities, and dramatically lower rates of fire, result in very different battlefields from those seen in the late 20th century. This difference is most pronounced at ranges of 100 yards or less, the scale at which **Phoenix Command** is most often used. Such combat in the modern era is extremely brutal, especially in open terrain. The weapons of the Wild West, however, allow players to step back in time to a period when close combat was more common, when the enemy was not a sudden rain of automatic fire from a distant stand of trees, but men, visible and distinguishable as individual targets. From the battlefields of the Civil War to the dusty streets of the American Frontier, welcome to the Wild West.

1.1

For centuries, the **smoothbore musket** was the standard infantry firearm in the western world. A long, cumbersome weapon, it was also inaccurate, unreliable, and appallingly slow to load. Its only virtue was that it was far superior to any alternative; as clumsy as it seems now, it was the best design available to the military leaders of the time.

Reloading was probably the most difficult aspect of using a musket. The musketeer had to pour a small amount of gunpowder into the weapon's firing pan, and then a full charge of powder into the barrel. Following the powder down the barrel was a three-quarter inch ball of lead, and then the ball and powder were tamped down with the long ramrod which was kept stored beneath the barrel. After replacing the ramrod, the firer shouldered the weapon, cocked the hammer, aimed and fired. The process took 10 to 15 seconds for a trained soldier, during which time he had to remain standing (usually in an open field) and was presumably under fire from similar musketeers in different uniforms who were less than 100 yards away. Add in roving bands of armed and armored cavalrymen, and numerous batteries of bronze cannon which sent 12 pound balls of metal flying, bouncing, and rolling around the battlefield at dangerous speeds, and the battlefield experience of the average infantryman carrying a **Flintlock Musket** is complete.

The Flintlock came into use late in the 17th century, replacing the even more cumbersome Matchlock, and continued to be the primary infantry weapon through the end of the Napoleonic Wars. In the first half of the 19th century, however, technology took a small step forward. Instead of pouring powder into the firing pan, which transmitted the spark from the "flint" to the powder charge in the barrel, the Percussion Cap was used. This

THE DEVELOPMENT OF 19TH CENTURY FIREARMS

"Ma, when I said I wanted a new Cap and Ball, I meant a gun!"

Mean Marc MacMyer

"I Quit."

Ex-Sheriff Axly His Farewell Address, given a few minutes before the MacMyer Gang rode back into town. cap was placed on a hollow nipple connected to the barrel; when hit by the hammer, it exploded and caused the main powder charge to detonate. For the musketeer, the advantage of the Cap and Ball musket was reliability. Where a Flintlock would fail to fire about one time in ten, a Cap and Ball hardly ever misfired.

Cap and Ball technology was far more important when applied to pistols, because it allowed the creation of the first effective Revolvers. Each cylinder was individually loaded with powder and ball, and a cap was placed on the nipple of each chamber. While this was time consuming, it allowed the wielder to fire repeatedly when in combat. Many pistolarmed soldiers carried multiple guns, or spare cylinders which were pre-loaded and placed into the pistol in much the way that magazines are changed today. In addition, since bullets were loaded directly into the cylinder, it was possible for the barrels to be rifled. This made them very accurate for their time, and large revolvers such as the Army Dragoon were equipped with removeable shoulder stocks to maximize their range and precision.

There were some rifled muskets, but until the Civil War their use was limited. The ball had to be forced through the rifling of the barrel, a process which often required using a hammer on the ramrod. As a consequence the rifled musket, while very accurate compared to the smoothbore, took even longer to reload and had only a limited military role. During the Civil War, however, the Minie Ball was invented. This bullet was a smaller caliber lead projectile with a hollow cavity at its base. When fired, gas pressure deformed the base of the bullet, expanding it to catch the barrel's rifling. The smaller, undeformed bullet could be easily dropped down the barrel, which allowed the rifled muskets of the time to reload and fire as quickly as any smoothbore.

This caused a major change in the nature of war, and played a role in the massive casualties of the Civil War. Where smoothbore muskets were of little use beyond 100 yards, the rifled muskets of the Civil War were extremely accurate, and were deadly out to ranges of 500 yards or more. The bayonet charges of the Napoleonic era were no longer practical, and even artillery became secondary to the firepower of the common infantryman. The time of the rifled musket was limited, however, because the next major changes were just a few years away; the breechloading rifle, and the cartridge.

The first cartridges are nearly as old as firearms themselves, but it took centuries of industrial development and technical innovation to produce a cartridge that was truly effective. This was done by Horace Smith and Daniel Wesson, who successfully combined bullet, gunpowder, and primer into a single unit. It could be mass produced, was easy to load and fire, and allowed new levels of accuracy. Smith and Wesson's cartridge was developed in the 1850's and patented in 1860, and quickly made their revolvers famous.

Rifles which used cartridges were the next logical step, and so the Breechloading Rifle was created. Rugged and dependable, these weapons used a release mechanism to open the breech, which allowed a new cartridge to be inserted into the chamber. The breech was then closed, and the weapon was ready to fire. The first breechloaders were very successful during the Civil War, and the rifled musket had been superceded by 1866. The Lever and Bolt action rifles which were developed in later decades were essentially variants of the breechloader, which incorporated a magazine to automatically feed a round into the chamber when the bolt was operated.

The small arms of today are not really very different from the breechloading rifle; bullets are generally made of a copper-zinc alloy instead of lead, gunpowder is smokeless and more efficient, and rates of fire have gone up significantly, but they are all simply modifications of the classic designs of the 19th century.

The 19th century also saw the development of the earliest "machinegun", the **Gatling Gun**. This weapon was introduced late in the Civil War and was used with devastating effect. The Gatling Gun was a multiple barreled machine gun which was manually operated and gravity-fed from a top loading magazine or hopper. As each barrel rotated about the weapon's axis, the spent cartridge was ejected, a new cartridge inserted, the breech closed, and the weapon fired. Because some barrels continued to fire while others were reloaded, the weapon had a much higher rate of fire than any contemporary weapon. This same principle is used to attain rates of fire as high as 8000 rounds per minute in modern miniguns and cannon.

The legendary gunfights of the Wild West focus on people with unique skills; the gunslinger known for his speed, the horseman firing accurately while at a gallop, and so forth. Simulating these abilities requires a few new rules, and the introduction of **Qualified Skills**. Qualified Skills represent an individual's training and expertise in a special area, and include talents as diverse as fanning a revolver or operating a complex piece of equipment. A character now has the option to have one or more of the Qualified Skills described in the following sections. The Skill Levels of these Qualified Skills is identical to the 0 to 20 range used for the basic Gun Combat Skill Level.

INTRODUCTION TO QUALIFIED SKILLS

FAST DRAW

1.3

Fast Drawing a revolver is probably the greatest trademark of the romanticized Wild West. The **Fast Draw Qualified Skill** is combined with the Master Phasing Count of 1st and 2nd Edition **Phoenix Command**, or the Impulse system of 3rd Edition, to determine exactly how fast a character can draw his weapon and fire a Snap Shot (Aim Time 1 AC).

The Fast Draw Qualified Skill determines a **Combat Action Modifier** which increases the speed with which the character can draw his weapon. This CA Mod is found on the following table opposite the Fast Draw Qualified Skill Level. The CA Mod multiplied by the normal CA determines the effective CA for Fast Drawing. For the movement of drawing the pistol and firing the first snapshot, the character is assumed to have this artificially increased number of Combat Actions. The number of Actions required to draw, cock, and fire a Snap Shot is also given in the table opposite the Fast Draw Qualified Skill Level.

Fast Draw Combat Action Modifier and Action Cost

Fast Draw SL	CA Mod	Draw Actions	Fast Draw SL	CA Mod	Draw Actions	Fast Draw SL	CA Mod	Draw Actions
0	1.0	5	4-5	2.0	3	12-13	2.4	2
1	1.3	4	6-7	2.1	3	14-15	2.5	2
2	1.6	4	8-9	2.2	2	16-17	2.6	2
3	1.9	3	10-11	2.3	2	18-20	2.7	2

"What we need in this town is more Law and Order."

Mayor Winterbotham

Example:

Black Bart has a basic CA of 6 and a Fast Draw Qualified SL of 8. His CA Mod is therefore 2.2, and it takes 2 Actions to Quick Draw and fire. His CA for Fast Drawing is $2.2 \times 6 = 13$, so he Fast Draws at 13 CA per phase. On the MPC, use 2 AC on the 13 CA line to determine when Bart fires. Under the Impulse system, players should assume that if the Quick Draw uses any part of an Impulse, then the entire Impulse is used up. Alternatively, players may choose to prorate the use of Actions within an Impulse, as defined in Section 5.7 of 3rd edition Phoenix Command.

The Fast Draw Qualified Skill includes the ability to draw and fire a Snap Shot. In other words, at the end of the draw, the weapon has been cocked and a Snap Shot aimed and ready to be fired. Any greater Aim Time takes place based on the character's normal CA.

The preceding example assumes ideal conditions. In a gunfight, many factors play a role. Each gunfighter is trying to close to his ideal range, maintain the target in line for his draw, and catch the opponent off balance or out of position. Interactions between opponents result in variations in each gunfighter's performance. These factors are handled by the **Fast Draw Modifier** found on the following table. Each gunfighter should

roll a 00-99 number and add the Fast Draw Mod to his basic Fast Draw CA to determine the Effective Fast Draw CA. In the tradition of the great westerns, players may also elect to allow a +1 CA modifier to the player who decides to draw first.

Fast Draw Modifier

	Roll	Draw Mod	Roll	Draw Mod	Roll	Draw Mod
"What we need in this	00-00	-5	12-32	-2	88-95	+1
town is more gallows."	01-03	-4	33-66	-1	96-98	+2
Mayor Winterbotham	04-11	-3	67-87	0	99-99	+3

Example:

In the preceding example, Black Bart has a basic Fast Draw CA of 13. In a gunfight Black Bart rolls a 28, so he has a Fast Draw Mod of -2. This gives him an effective draw speed of 13 - 2 = 11 CA. He also receives the +1 for drawing first, since Black Bart is dressed in black and always draws first. His effective CA for the Fast Draw is therefore 12, and his Fast Draw Action cost is 2 AC.

Bart's chance of hitting is as follows: Gun Skill Level 5, +11; Aim Time 1 Action with a Peacekeeper, -17; Range 5 hexes, +22; One Handed Fire, -4; Hip Fire, -6; Target Standiing Exposed, +7. The total EAL is 13, giving him an Odds of Hitting of 22.

1.4

FANNING A REVOLVER

Many of the revolvers of the Wild West are Single Action weapons. Their hammers must be manually cocked before each shot, which is why these weapons have a Rate of Fire of 2. When **Fanning a Revolver**, the firer uses his off hand to cock the hammer, while his gun hand is free to aim and fire. Both Double Action and Single Action revolvers may be fired in this manner. The speed and accuracy with which a character can Fan a Revolver is based on his **Revolver Rapid Fire Qualified Skill**.

To find a character's performance, enter the following table with his Revolver Rapid Fire Qualified Skill Level and read off his **Fanning ALM** and **Rate of Fire**. The Fanning ALM is an additional ALM applied to the shooter's aim due to weapon motion caused by the cocking action. Note that the shooter is firing his revolver with one hand (-4 ALM, Table 4B), and is Hip Firing (-6 ALM, Table 4B).

The Rate of Fire follows standard rules; if 1, it takes 1 AC to cock the hammer and 1 AC to Snap Fire; if an asterisk (*), no AC to cock and 1 AC to Snap Fire.

RRF SL	ALM	ROF	RRF SL	ALM	ROF	RRF SL	ALM	ROF
0	-9	1	3	-5	1	6	-2	1
1	-7	1	4	-4	1	7	-1	1
2	-6	1	5	-3	1	8	0	*

Revolver Rapid Fire (RRF)

Example:

Black Bart has drawn and fired, missing his opponent. Bart now decides to Rapid Fire his revolver. Bart's Revolver Rapid Fire Qualified Skill is 4, so his Rate of Fire is 1 and his Fanning ALM is -4. Bart's subsequent shots take 1 AC to cock the hammer and 1 AC to fire a Snap Shot.

Bart's EAL for each subsequent shot is: Gun Skill Level 5, +11; 1 Action Aim with a Peacekeeper, -17; Range 5 hexes, +22; One Handed Fire, -4; Hip Fire, -6; Target Standing Exposed, +7; Fanning ALM, -4, The total EAL is 9, giving an Odds of Hitting of 09.

"Well, I guess what we really need in this town is a bigger cemetery."

Mayor Winterbotham

The **Speed Loading Qualified Skill** applies to specific types of weapons such as muzzle loading rifles, cap and ball revolvers, or cartridge revolvers. This Qualified Skill increases the speed with which reloading can be done. The Speed Loading Qualified Skill Level determines an **Action Count Mod** from the following table. The Reload Time multiplied by the AC Mod gives the Effective Reload Time for the character using his normal CA..

Speed Loading Action Count Modifier

Speed Loading SL	AC Mod	Speed Loading SL	AC Mod	Speed Loading AC SL Mod
0	1	4-5	.50	12-13 .42
1	.80	6-7	.48	14-15 .40
2	.60	8-9	.46	16-17 .38
3	.55	10-11	.44	18-20 .36

Example:

Mounted

SL

Black Bart has emptied his revolver, missing his opponent. Luckily for Bart, his opponent has proved no better a shot. As his opponent runs for his horse, Bart decides to reload. Bart's revolver has a Reload Time of 24, so his basic reloading Action Cost is 24 AC to load the revolver plus 4 AC to pull each cartridge from his belt, or $24 + (4 \times 6) = 24 + 24 = 48$ AC. Bart's Speed Loading Qualified Skill Level is 2 so his AC Mod is .6. This gives Bart an Effective Reload Cost of $48 \times .6 = 29$ AC. At Bart's CA of 6, he will fully reload his six shooter in a little under 5 phases.

The horse was a fundamental part of the Wild West, and the ability to ride and shoot from

horseback is considered a Qualified Skill. When a mounted shooter takes aim, the

standard Moving Shooter ALM of Table 4D applies, as well as an Aim Time restriction of

1 Impulse. Additionally, a **Mounted ALM** penalty is applied based on the shooter's **Mounted Marksmanship Qualified Skill Level.** This Mounted ALM accounts for disturbances caused by the horse's stride at a gallop and is taken from the following table opposite the Mounted Marksmanship Qualified Skill Level. For a horse at a trot or canter,

ALM

Gus

1.6

MOUNTED MARKSMANSHIP AND THE HORSE

0 -15 3 -6 1 -10 4 -4 2 -8 5 -3 Example:

ALM

use an Aim Time restriction of 1 AC in addition to the Mounted ALM.

Mounted

SL

Axly has emptied his revolver in a gunfight with Black Bart and has run down the street to his horse, Cowchip. There, he mounts and begins to ride out of town. On his way he pulls his Sharp's Carbine from his saddle holster and draws a bead on Black Bart, who is standing in the middle of the street reloading.

Mounted

SL

6

7

8

ALM

-2

-1

0

SPEED LOADING

"Well, if Tex has four Aces, Ralph has four Aces, and I have four Aces, I figure that one of us is probably cheating."

1.5

Axly's Mounted Marksmanship Qualified Skill Level is 3, so he has an additional ALM of -6 as he gallops by. Axly's chance of hitting is: Gun Skill Level 4, +10; Aim Time 2 Actions with a Sharp's Carbine, -12; Range 4 Hexes, +23; Shooter Moving 3 Hexes per Impulse, -10; Target Standing Exposed, +7; Mounted Marksmanship ALM, -6. Total EAL is 12, giving an Odds of Hitting of 18. Axly rolls a 34 and misses, and Bart runs for his own horse, Anthrax.

Shooting a horse is a dastardly thing to do, but for true villains the following rules have been included. The Target Sizes and Movement Speeds for a horse and rider are given on the following table.

	Target S	Size ALM	Horse Movemen	t Speed (HPI)
	Front	Side		• • •
			Walk	.5
Rider	+5	+7	Trot	1
Horse	+9	+14	Canter	2
			Gallop	3

The Odds of Hitting are calculated using standard rules. If the horse is hit, use the following **Horse Hit Location Table** to find the Hit Location and go to the standard **Hit Location and Damage Table (6)** of **Phoenix Command** to determine damage. To correct for the horse's size, use one-half the weapon's PEN when entering **Table 6**. A horse has a Knockout Value of 20 when caught unawares. When panicked or at a hard gallop, its Knockout Value goes to 100. Disabling Injuries use standard rules.

Roll	Horse Hit Location		Roli	Horse Hi	it Location
HOII 00-00 01-02 03-03 04-06 07-08 09-11 12-17 18-18 19-20 21-22	Head Neck Shoulder	Glance Forehead Eye - Nose Mouth Glance Spine Flesh Glance Socket Shoulder	Roi 28-31 32-37 38-44 45-45 46-49 50-54 55-67 68-73 74-83 84-87	Body	Glance Lung - Rib Lung Heart Liver - Rib Liver Intestines Spine Pelvis Hip Socket
23-23 24-25 26-27	Foreleg	Glance Flesh Bone	88-89 90-95 96-99	Hind Leg	Glance Flesh Bone

Example:

Black Bart gets his Winchester 1873 off his horse Anthrax and, being a villain, will take a shot at Axly's horse as Axly rides out of town. After taking a firing stance, Bart fires just before Axly rides out of view. Bart's chances are: Gun Skill Level 5, +11; Aim Time 6 Actions with a Model 1873 Winchester, -5; Range 30 hexes, +9; Target Speed 3 Hexes per Impulse, -7; Target Size for a Horse from the Side, +14. Total EAL is 22, giving an Odds of Hitting of 80.

Bart rolls an 11 and hits Cowchip. He then rolls an 81 for the Hit Location, hitting the horse in the pelvis. Bart's rifle has a PEN = 2 and DC = 5. Entering the Hit Location and Damage Table (6) with an EID of 2/2 = 1, Cowchip takes 94 PD. Cowchip is galloping away and has a Knockout Value of 100. The horse rolls a 35 and continues out of town. Axly, Cowchip, Bart, and Anthrax have all survived to fight another day.

"By sundown? I'm sorry, I just don't see how I can do it. I have my horse to shoe, laundry to pick up, packing still to do.... How about if I get out of town by, say, Thursday evening, Friday morning at the latest?"

Killer Keith MacMyer

WEAPON DATA

This Chapter is devoted to pistols, rifles, shotguns, and gatling guns of the Wild West. These weapons are presented in the following pages along with their physical characteristics and parameters used by the **Phoenix Command Combat System**.

All the weapons in this supplement may be considered Point Fire Weapons. That is, they are conventional projectile firearms which are aimed by direct line of sight. The **Weapon Data Tables** which comprise the rest of this supplement contain all the weapon values required for play. In the interest of space and efficiency, these values have been abbreviated and are described below. For artistic reasons, all weapons are shown facing to the right. In some cases, the images have been reversed to accomplish this. Those familiar with **Phoenix Command** will recognize these weapon values. For those not using **Phoenix Command**, an Action Count is about one-half a second long.

Length (L)

Overall weapon length in inches.

Weight (W)

The loaded weapon weight in pounds. It does not include a holster or sling.

Reload Time (RT)

The time, in Action Counts, required to fully reload the weapon. For Cap and Ball revolvers, replacing an empty cylinder with a loaded cylinder requires 20 Action Counts.

Rate of Fire (ROF)

The time, in Action Counts, required to chamber a round from the weapon's magazine. A number following an * indicates the weapon is capable of fully automatic fire and gives the number of rounds fired per half second burst.

Weapons with no ROF entry have no magazine; the time required to prepare a shot is given by the Reload Time (RT).

Ammunition Capacity (Cap)

The maximum number of rounds held in the weapon's magazine.

Ammunition Weight (AW) and Feed Device

The weight in pounds per magazine (Mag) or individual round (Rnd).

"Of course I joined the outlaws. They have the coolest outfits."

Тех

POINT FIRE WEAPONS

2.1



Knock Down (KD)

Measure of the weapon's knock down capability. This has nothing to do with physical damage or incapacitation but can be used to determine if the projectile's momentum knocks the target off his feet or off balance. This is discussed in 3rd Edition **Phoenix Command**.

Sustained Automatic Burst (SAB)

Measure of the weapon's recoil and its accuracy during long bursts of automatic fire.

Aim Time Modifier (Aim Time Mod)

The combined measure of the weapon's accuracy and speed of aim. There are several Aim Time Modifiers, one for each Aim Time listed in the third column. The greater the Aim Time Modifier, the greater the weapon's accuracy.

Penetration (PEN) / Damage Class (DC)

PEN measures bullet penetrating power, and DC measures bullet damage capability. The greater the PEN and DC, the greater the penetration and damage. The PEN and DC are given for target ranges 10, 20, 40, 70, 100, 200, 300, and 400 hexes. A hex is two yards across. There are up to three sets of PEN and DC values. Each set represents a different type of ammunition as given to the left of these values: Lead Ball (LB), Lead Minie Ball (LMB), and Lead Round Nose (LRN).

Players not using the **Advanced Phoenix Command Combat Supplement** should not use weapon data from the shaded portion of the tables. This data represents performance beyond the weapon's Effective Range and is used only in the **Advanced Phoenix Command Combat Supplement**.

Minimum Arc (MA)

The minimum number of hexes over which a burst of fully automatic weapon fire must be spread. The greater the weapon's recoil, the greater the Minimum Arc.

Ballistic Accuracy (BA)

The measure of weapon/ammunition accuracy potential. The larger the BA, the greater this potential. This value is used in the **Advanced Phoenix Command Combat Supplement**.

Time of Flight (TOF)

The projectile's time of flight in tenths of seconds (Master Phasing Counts (MPC)). This value is used in the Advanced Phoenix Command Combat Supplement.

"How was I supposed to know he was an unarmed man? His back was to me."

Axly

	1 1						F15	stols / Tech Level 1					10
	Physical A Data T L 5		Aim	Balli	stic D	ata	Da	0.00	in S)	rd b		
Pistols			AC Md			10	20	40	70	100	200	300	400
Derringer	L	5	1 -14	LB	PEN	1.1	1.0	.8	.6	.5	2	.1	
Single Shot Pistol	W BT	.7	2 -11 3 -10		DC	3	2	1	-	T	1	1	
50 Caliber	ROF	-											
Cap and Ball	Cap	1							N. N. N.				
The Derringer was one of the most famous pistols of its day. One like this was used in the assassination of President Lincoln.	КD	Rnd			BA TOF	36 1	26 2	16 3	8	39	·7 22	-12 36	
Elliot Single	L	4	1 -14	LRN	PEN	1.0	.9	.7	.6	.4	.2	.1	1
Single Shot Derringer	W BT	.4	2 -11		DC	2	1	1	1	1	1	1	
41 Caliber	ROF	-											
Rim Fire Cartridge	Cap	1 .03											
This small single shot pistol could be put in a vest pocket, waistband, boot, handbag, or hat sweatband.	KD	Rnd 3			BA TOF	41 1	31 2	21 4	13 7	8 10	-2 23	-7 38	
Remington Double Derringer	L	4	1 -14	LRN	PEN	1.0	.9	.7	.6	.4	.2	.1	
Twin Shot Derringer	IW BT	.5	2 -11 3 -10		DC	2	1	1	1	1	1	1	
41 Caliber	ROF	2											
Rim Fire Cartridge	Cap	2											
This vest pocket pistol was introduced in 1866. It became the most popular pocket pistol of its time.	кр	Rnd			BA TOF	41 1	31 2	21 4	13 7	8 10	-2 23	-7 38	and the second
Elliot Pocket Repeater	L	4	1 -14	LRN	PEN	.9	.9	.7	.6	.5	.2	.1	
5 Shot Pocket Pistol	W	.7	2 -11 3 -10		DC	1	1	1	1	1	1	1	
22 Caliber	ROF	3											
Rim Fire Cartridge	Cap AW	5 .01											
This multiple barreled pistol was cocked by pushing the ring trigger forward. The trigger was then pulled to fire it.	КD	Rnd 1			BA TOF	46 1	36 2	26 3	19 6	14 9	4 21	-1 34	Salar in
Colt Army Dragoon, First Model	L	14	1 -19	LB	PEN	1.3	1.1	.9	.7	.5	.2	.1	
Revolver	W	4.3	2 -12 3 -10 4 -9		DC	3	3	2	1	•	1	1	
44 Caliber	ROF	2	5 -8										
Cap and Ball	Cap AW	6 .03	6 -7 7 -6										
This heavy revolver was introduced in the late 1840s. Later models were much lighter, and as a result, more popular.	КD	Rnd 4			BA TOF	35 1	25 1	16 3	85	38	-7 19	-112 32	
Colt Walker	L	16	1 -20	LB	PEN	2.2	2.0	1.7	1.3	1.0	.4	2	.1
Revolver	W	4.8	2 -12		DC	6	5	4	3	2	1	1	1
44 Caliber	ROF	2	4 -9 5 -8										
Cap and Ball	Cap AW	6 .04	6 -7 7 -6										1
Powerful revolver, which in its day was the equivalent of the 44 Magnum. It came equipped with a shoulder stock.	КD	5			BA TOF	36 1	26 1	16 2	18 4	3.6	-5	-11 23	-15 34

Pistols / Tech Level 10		<u> </u>												
	Phy	Physical Data		Balli	stic D	ata	Ra	nge	in 2	yar	d he	xes		
Pistols		11.2	AC Md			10	20	40	70 1	00 :	200 3	00 400		
Colt Model 1851 Navy	L W	14 2.8	1 -18 2 -11	LB	PEN DC	1.1 2	1.0 2	.8 1	.5 1	.4	.1	1200		
Revolver	RT	120	3 -10 4 -9									12		
36 Caliber	ROF	2	5-8 6-7											
Cap and Ball	Cap AW	6 .02 Rnd	7-6											
This revolver was used by both army and navy personnel, and saw service with both Union and Confederate forces.	КD	2			BA TOF	34 1	24 1	14 3	6 5	18	-8 18			
Colt Pocket Police	L	12	1 -16	LB	PEN	.9	.8 1	.6 1	.4	.3	.1			
Revolver	вт	100	3 -10		00	2	'	- 1	25		1			
36 Caliber	ROF	2	5 -8									27.2		
Cap and Ball	Cap AW	5 .02 Bod	0 7							1111				
This light, five shot revolver was introduced in 1862 as an alternative to the larger military service revolvers.	KD	2			BA TOF	34 1	24 2	14 3	6	1 9	-8 21			
Colt Model 1860 Army	L	14	1 -17	LB	PEN	1.3	1.2	.9	.7	5	2	4		
Revolver	VV DT	120	3 -10		DC	З	3	2						
44 Caliber	ROF	2	4 -9 5 -8									12		
Cap and Ball	Cap AW	6 .03	6 -7 7 -6											
The Colt Army was the most common pistol of the Civil War. The army / navy designated caliber, rather than service.	KD	4			BA TOF	35 1	25 1	16 3		3 8	-7 19	12 31		
Remington New Model Army	L	14	1 -17	LB	PEN	1.3	1.2	.9	.7	5	.2	.1		
Revolver	VV DT	120	3 -10		DC	З	3	2						
44 Caliber	ROF	2	4 -9 5 -8 6 -7											
Cap and Ball	Cap AW	6 .03 Bod	7 -6											
Remington and Colt revolvers amounted to 75% of all revolvers purchased by the Union in the Civil War.	KD	4			BA TOF	35 1	25 1	16 3	8 5	38	-7 19	12 31		
Starr 44	L	9	1 -17	LB	PEN	1.1	1.0	.8	.6	.4	.2	.1		
Double Action Revolver	BT	120	3 -10		DC	3	٢	2						
44 Caliber	ROF	1	5 -8											
Cap and Ball	Cap AW	6 .03 Bod	0 -7											
This double action revolver was used by Union forces in the Civil War. 10% of all Union pistols were Starr models.	KD	4			BA TOF	35 1	25 1	15 3	7 6	2 9	-7 20	12 34		
Spiller and Burr	L	12	1 -17	LB	PEN	1.0	.8 2	.7	.4	.3	1.			
Revolver	RT	120	3 -10		20	2	2		a con		10.0	1		
36 Caliber	ROF	2	5 -8											
Cap and Ball	Cap AW	6 .02 Bod	7 -6											
Confederate made Whitney revolver with brass frame. Iron shortages in the South led to the adoption of brass frames.	KD	2			BA TOF	34 1	24 1	14 3	6 5	1 8	-8 20			

				Pistois / Tech Leve							vei	10	
	Physical Data		Aim	Baili	stic D	ata	Re	nae	in 9	2 VA	rd be	XAS	
Pistols			AC Md			10	20	40	70	100	200	300	400
Griswold and Gunnison	L	14	1 -17	LB	PEN	1.3	1.1	.9	.7	.5	.2	-1	
Revolver		120	3 -10		DC	3	3	2	100	1		1 m	
44 Caliber	ROF	2	5 -8										
Cap and Ball	Cap AW	6 .03 Bod	7 -6										
Brass framed Confederate copy of the Colt Army. Only a few thousand Confederate revolvers were ever made.	КD	4			BA TOF	35 1	25 1	16 3	8 5	38	-7 19	-12 32	1
Le Mat	L	14 4 2	1 -19	LB	PEN	1.2	1.1	.9	.6	.5	.2	.1	
Twin Barrel Revolver	вт	210	3 -10	ІВ	PFN	19	1.7	15	12	10	5	2	
42 and 60 Caliber	ROF	2	5 -8 6 -7	(one	DC shot)	7	7	6	3	2	1	1	
Cap and Ball	Cap AW	9 / 1 .03 Bnd	7 -6	(0110	31101)								
The Confederate Le Mat had a 9 shot .42 caliber cylinder and a second, single shot .60 caliber barrel.	кD	3			BA TOF	35 1	25 1	15 3	7 5	2 8	-7 19	-12 32	- 22
Smith & Wesson Model #2	L	10 1.6	1 -16	LRN	PEN DC	.7 1	.6 1	.5 1	.4	.3	.1		
Revolver	BT	40	3 -10										
32 Smith & Wesson Long	ROF	2	5 -8 6 -7										
Cartridge	Cap AW	6 .02 Rnd											
Early cartridge firearm of the Civil War. S&W held the patent on a bored through revolver cylinder for metallic cartridges.	кD	2			BA TOF	42 1	32 2	22 4	14 7	9 11	-1 26		
Colt Shopkeeper	L	7 1.8	1 -16 2 -11	LRN	PEN DC	1.3 2	1.2 2	1.0 1	.8 1	.7	.3	1	
Revolver	RT	30	3 -10 4 -9								100		
38 / 40 Winchester	ROF	2	5 -8										
Cartridge	Cap AW	6 .03											
for merchants & shop keepers. It lacked an ejector, which made reloading slow.	кD	3			BA TOF	46 1	36 2	26 3	18 6	13 9	3 20	-2 34	
Colt Peacemaker	L	11	1 -17	LRN	PEN	1.5	1.4	1.2	1.0	.8	4	2	.1
Revolver	вт	2.5	3 -10		00	0	0	2					
45 Long Colt	ROF	2	5 -8										
Cartridge	Cap AW	6 .05 Bnd											
Famous Colt Peacemaker which won the west. This is the weapon of the lawman, outlaw, and army during the 1880s.	кD	5			BA TOF	43 1	33 1	23 3	15 6	10	1 19	-5 32	-9 46
Colt Frontier Model	L	11 2.5	1 -17 2 -11	LRN	PEN DC	1.7 4	1.6 4	1.3	1.0	.8	4	21	.1
Revolver	BT	24	3 -10		-•			-					
44 / 40 Winchester	ROF	2	5 -8 6 -7					3					
Cartridge	Cap AW	6 .04 Rnd	↓ -/										
The Colt Model P was also chambered in 44 / 40 to make it compatible with the Winchester Model 1873 repeating rifle.	КD	5			BA TOF	40 1	30 1	20 3	12 5	77	-3 17	-8 28	-12 41

Billion	Phy Di	sical ata	A Ti	lm me	Ball	istic D	Data	Ra	ange	in 2	2 ya	rd he	exes	400
Charleville Musket / Smoothbore Flintlock Musket / 69 Caliber / France		60		-25		PEN	24	20	20	1.7	1.4	200	300	400
	Ŵ	13.0	23	-15 -10		DC	9	9	8	7	4	1	1	1
	RT ROF	24	4 5	-8 -6	Shot	PEN DC	1.0 1	.9 1	.6 1	4	21			
	Cap AW	1 .12	6 7 8	-5 -4 -3	(10)	SALM BPHC PR	-2 *8 .1	4 *3 .1	9 75 .2	13 23 4	18 TT .6			
The Charleville musket was the primary weapon of Napoleon's army in the early 1800s. Weapons changed little from this period until the advent of percussion arms in the mid 1800s. Ignition relied upon the spark of flint on steel.	КD	Rnd 14	9 10	-2 -1		BA TOF	34 1	24 1	15 3	7 5	2.8	-8 17	-14 28	-17 40
Brown Bess / Smoothbore Flintlock Musket / 75 Caliber / United Kingdom	L W	56 12.0	1 2 2	-24 -14	LB	PEN DC	2.6 10	2.5 10	2.2 9	1.9	1.6	.9	.5	.9
The Brown Bess was the standard weapon of the British army during the American	RT	24	4	-9 -7	Shot	PEN	1.3	1.1	.8	5	3			
Revolutionary War. It was a smoothbore 75 caliber flintlock which in most respects was identical to the Charleville pictured above. These flintlocks had limited effective range and	Сар	1	6	-5 -4	(10)	SALM	-1 *8	5	10 58	14	17			
were designed to fire at massed infantry formations. As such, they were not aimed at individual people, but at an entire enemy unit. Each formation closed to ranges of under	AW	.14 Rnd	8	-3 -2		PR	.1	.1	.3	.5	.7			Ē
100 yards and opened fire. On the whole, a unit's fire was a hail of lead, with each soldier, officer, and NCO sharing equally in the danger.	кD	18	10	-1		BA TOF	34 1	25 1	15 3	75	28	-7 17	-13 28	-17 40
Hall Flintlock / Smoothbore Breechloading Flintlock Musket / 75 Caliber / USA	L W	52 11.5	1. 2	-24 -14	LB	PEN DC	1.8 8	1.7 7	1.5 5	1.3	1.0	.6	.3 1	.2 1
	RT ROF	20	4	-9 -7 -6	Shot	PEN DC	.9 1	.7 1	.5 1	.3	21			120
Y	Сар	1	6 7	-5 -4	(10)	SALM BPHC	1 *7	6 *2	11 43	16 13	18			
The Hall Flintlock was adopted by the US army in 1819 and had an interesting breech	AW	.14 Rnd	89	-3 -2		PR	.1	.1	.3	-			-	in the second
Percussion versions were used into the mid 1800s.	КD	15	10	-1		TOF	34	24 2	15 3	-	9	21	34	49
Jaeger Rifle / Rifled Flintlock Musket / 75 Caliber / Germany	L W	40 9.5	1 2	-23 -12	LB	PEN DC	3.4 10	3.2 10	2.9 10	2.5 10	2.1 9	1.2	.7	.4
The Jaeger rifle was of Europeon design and was the weapon of hunters and woodsmen	RT ROF	80 -	3 4 5	-9 -7 -6										a state
Wars and were known for their accuracy. Unlike the smoothbore musket, their rifled barrels gave them improved accuracy but made reloading more difficult. The bullet was	Cap AW	1 .14	6 7 8	-5 -4 -3										
wrapped in a greased cloth patch which provided a tight fit with the barrel's rifling. Considerable pressure from the ram rod was required to drive the bullet home resulting in the long reloading time.	КD	Rnd	9 10	-2 -1		BA	48	38	28	20	15	6	0	-4
Kentucky Rifle / Rifled Cap and Ball Musket / 45 Caliber / USA	L	50	1	-23	LB	PEN	1.9	1.7	1.4	1.1	.8	.3	.1	.1
	W	8.8	2	-12 -9		DC	5	5	4	3	2	***	1	1
	ROF	-	5	-6 -5										
	Cap AW	1 .04	7	-4 -3										
The Kentucky rifle shown above is a percussion version of the legendary flintlock American rifle. Unlike European rifles, the US rifles were of smaller caliber and had longer		Rnd	9 10	-2 -1		BA	44	35	25	17	12	2	-3	-7
barrels to conserve gun powder and lower ammunition weight.	KD	5	11	0	1.8		1	1	2	4	7	15	26	3/
	Ŵ	9.0	2	-23 -12	LB	DC	2.1	6	5	4	2	1	1	1
	rt Rof	80	4	-7 -6										
	Сар	1	6 7	-5 -4										
The percussion plains rifle was the standard rifle of the frontiersman. Known for its	AW	.05 Rnd	8 9	-3 -2								1		
accuracy and dependability, it was used well into the 1860s. In the late 1860s, the plains rifle was replaced by the breechloaders such as the Sharps.	KD	6	10 11	-1 0		BA TOF	45 1	35 1	25 2	17 4	12 7	15	26	37

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	Phy	sical	Ai	m	Balli	stic D	ata	R	ende	In	2 va	rd b	AXAS	
Rifles		ata	AC	ne Md			10	20	40	70	100	200	300	400
Harpers Ferry Model 1855 Rifle / Rifled Cap and Ball Musket / 58 Caliber / USA	L W	56 9.3	1 2	-23 -12	LMB	PEN DC	2.7 8	2.6 8	2.3 7	2.0	1.7 5	.9.1	51	.3
Rekar	RT	24	345	-9 -7 -6										
	Сар	1	6 7	-5 -4										
This was the US military's first rifled musket. Introduced shortly before the Civil War, rifled	AW	.08 Rnd	8	-3 -2										
smoothbore musket had not accounted for the increased accuracy of the rifled musket.	кD	12	10	-1 0		TOF	47	38	28	20 5	15 7	16	28	37
Colt Revolving Rifle / Cap and Ball Revolving Rifle / 56 Caliber / USA	L W	56 10.3	1 2	-24 -13	LMB	PEN DC	2.6 8	2.4 8	2.2 7	1.8 6	1.5 4	.9	.5 1	3
	RT	110	4	-9 -7 -6										
3	Cap	5	67	-5 -4										
The Colt Revolving Rifle was introduced shortly before the Civil War. It made use of a standard revolver action and was used for a short time by Berdan's Sharpshooters before		Rnd	9 10	-2 -1		BA	47	38	28	20	15	5	0	4
the Sharps rifles became available.	KD	10	11	0		TOF	1	1	3	5	7	16	28	37
Wesson Target Rifle / Rifled Cap and Ball Musket / 52 Caliber / USA	L W	54 32.0	1 2	-30 -21	LMB	PEN DC	5.3 10	5.1 10	4.7 10	4.1 9	3.6 9	2.4	1.6	1.0
1 All All All All All All All All All Al	RT ROF	90	3 4 5	-14 -9 -7	- - -									
	Сар	1	6 7 8	-5 -3										
This heavy target rifle with telescopic sights is typical of the target rifles of the Civil War.		Rnd	9	-1			50			~~		-		-
telescopic sights provided extreme range sniping capability.	кD	14	13	1 2		TOF	53 0	44	34	26	21 5	11	18	26
Springfield Model 1863 / Rifled Cap and Ball Musket / 58 Caliber / USA	L W	56 9.6	1 - 2 -	-23	LMB	PEN DC	2.7 8	2.6 8	2.3 7	2.0 6	1.7 5	.9	.5 1	.3 1
	RT ROF	24	3 4 5	-9 -7 -6								12/13		
	Сар	1	6 7	-5 -4										
The Model 1863 Springfield was one of America's most historic weapons. Produced in mass numbers during the Civil War, the Model 1863 may well have been responsible for		Rnd	9	-2		RA	47	38	28	20	15	5	0	4
more casualties in the Civil War than any other weapon.	КD	12	11	Ó		TOF	1	1	3	5	7	16	26	37
Sharps Carbine / Breechloading Cap and Ball Rifle / 52 Caliber / USA	L W	38 8.2	1 - 2 -	-22	LMB	PEN DC	2.1 5	2.0 5	1.8 4	1.5 2	1.3 1	.8	.5 F	.3
CALL COL	RT ROF	20	3 4 5	-9 -7 -6									Les a	
	Сар	1	67	-4 -3										
The Sharps rifle and carbine were breechloading cap and ball rifles. Unlike their musket counterparts, the ball and powder were inserted directly into the chamber through a	~**	Rnd	9 10	-2 -2 -1		вА	48	38	29	21	16		10	-4
breech mechanism.	KD	9				TOF	1	2	3	6	8	14	30	44
Sharps Rifle / Breechloading Cap and Ball Rifle / 52 Caliber / USA	L W	47 9.4	1 - 2 -	23 12	LMB	PEN DC	2.2 6	2.1 5	1.9 4	1.6 3	1.4 2	.8	.5	.3
	RT ROF	20 -	4 5	-7 -6									1	1
	Сар	1	67	-5 -4										
The Sharps rifle was introduced in 1862 and was used extensively in the Civil War. Made famous by Berdan's Sharpshooters, it was known for its accuracy and hitting power. The	AW	.07 Rnd	9 10	-3 -2 -1		RA	48	38	29	21	16	6	0	1
rifle had sights calibrated out to one thousand yards.	KD	9	11	o		TOF	1	1	3	6	8	18	30	43

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Rifles and Gatling Guns / Tech Level 10	Phy	Physical Data		m	m Balilstic Dat		ata	De		a in 2 verd			d beves	
Rifles and Gatling Guns	Da	ata		Md			10	на 20	40	70	∠уа 100	200	300	400
Remington Geiger / Rolling Block Breechloading Rifle / 45 - 70 Government / USA	L	38	1 -	22	LRN	PEN	7.1	6.8	6.4	5.8	5.2	3.7	2.6	1.8
	RT ROF	7.9 6	2 - 3 4 5	-9 -7 -6		DC	9	9	9	9	9	1	State of	
	Cap AW	1 .07	6 7 8	-5 -3 -2										
The Remington - Geiger rolling breech block was introduced shortly after the Civil War. Extremely dependable, the Remington was popular on the frontier in the 1870s.	КD	14	9 10	-2		BA TOF	57 0	48 1	38 2	31 3	26 5	16 10	10 18	8 23
Remington Model 1872 / Rolling Block Breechloading Rifle / 45 - 70 Government / USA	L W	48 9.0	1 -: 2 - 3	23 12 -9	LRN	PEN DC	7.7 9	7.5 9	7.0 9	6.3 9	5.7 9	4.1 7	2.9	2.1
	RT ROF	6	4 5 6	-7 -6 -5										
Remington rolling block breechloading rifle. To reload, the shooter cocked the hammer,	Cap AW	1 .07 Rnd	7 8 9	-4 -3 -2		- 4							100	
then rolled back the breechblock. This opened the chamber and ejected the spent cartridge. A new cartridge was inserted and the breech closed for the next shot.	КD	14	10 11	-1 0		BA TOF	57 0	48	39 2	31 3	26 4	16 9	10	522
Springfield Model 1873 / Breechloading Rifle / 45 - 70 Government / USA	L W	52 8.4	1 - 2 2 - 3	22 12 -9	LRN	PEN DC	8.0 9	7.7 9	7.2 9	6.5 9	5.9 9	4.2 8	3.0 6	2.1
	RT ROF	6	4 5 6	-7 -6 -5										
	Cap AW	1 .07	7	-4 -3										
Ine Trapdoor Springfield became the US military's standard rifle during the Indian Wars. It was a very simple weapon which was both strong and easy to handle. This made it popular with both troops and field commanders.	КD	Hnd 14	9 10 11	-2 -1 0		BA TOF	57 0	48 1	39 2	31 3	26 4	16 9	10 15	6 21
Springfield Model 1873 / Breechloading Rifle / 45 - 90 Government / USA	L W	52 8.4	1 -: 2 -: 3	22 12 -9	LRN	PEN DC	11 9	10 9	9.5 9	8.7 9	7.9 9	5.7 9	4.2	3.0 6
After the Civil War, a decision was made to make a breechloading rifle the official arm of all US troops. At the time there were thousands of old muzzle loading rifles in inventory, so a design which modified the muzzle loading rifles for breechloading was developed.	RT ROF	6	4 5 6	-7 -6 -5										
This modification later became the Trapdoor Springfield. In this design the breechblock was hinged at its forward end. A simple latch released the block so that it flipped up exposing the chamber and ejecting the spent cartridge. A new cartridge was then inserted	Cap AW	1 .08 Rnd	7 8 9	-4 -3 -2										
and the block pushed down. The side mounted hammer was then cocked and the weapon was ready to fire.	КD	17	10 11	-1 0		BA TOF	57 0	48 1	39 1	31 3	26 4	16 8	11 13	7
Colt Buntline Special / Revolver / 45 Long Colt / USA	L W	20 2.9	1 -	18 11	LRN	PEN DC	1.8 4	1.7 4	1.5 3	1.2 2	1.0	51	21	
	RT ROF	24 2	3 - 4 5	10 -9 -8										
60	Cap AW	6 .05 Rnd	7 8 9	-7 -6 -6 -5										
This unusual Colt Model P had a 16 inch barrel and removeable shoulder stock.	кр	6				BA TOF	43 1	33 1	24 3	16 5	11 8	1 17	-5 29	
Gatling Gun / Carriage Mounted Machine Gun / 58 to 45 Caliber / USA	L W	54 90	1 -:	37 27	58 rf	PEN DC	3.9 10	3.7 10	3.4 9	3.0 9	2.6 8	1.6 3	1.0	.6 1
	RT ROF	20 *6	3 - 2 4 - 1 5 - 1	22 18 14	50 cf 45/70	PEN DC PEN	7.6 9 8.1	7.3 9 7.9	6.8 9 7.4	6.1 9 6.6	5.5 9 6.0	3.9 8 4.3	2.8	2.0 3 2.2 0
	Cap AW	400 42 Drm	7 8 9	-8 -6 -5		MA	9	9 .2	.4	9	.9	ช 2	0	3
First produced in 1862, the Gatling Gun was one of the first successful machine guns	кр	15	11 13	-3 0		BA TOF	57 0	48 1	39 2	31 3	26 4	16 9	10 15	6 21

		L				Lever Action Rifles / Tech Level 10											
	Physical Data		Physical Aim		Ballistic Data												
Lover Action Billeo			Tim	e			10	Ra	inge	in 2	2 ya	rd he	xes	400			
Cooper Carbino / Lover Action Bills / 50 Bim Eiro / LICA	<u> </u>	47	AC	Ma		DEN	10	20	40	10	100	200	300	400			
Spencer Caroline / Lever Action Rine / 52 Rint Fire / USA	w	10.3	2 -	24 13	LRIN	DC	1.5	1.4	1.2	1.0	1	1	1	1.			
			3	-9													
	I ROF	20	4	-7													
		Ŭ	6	-5													
	Cap	7	7 8	-3													
The Spencer repeating rifle was introduced in 1862 and was one of the finest repeating		Tube	9	-2													
arms of the Civil War. It had a spring loaded magazine bored through the butt of the stock		7	10	-1		BA	44	34	24	17	11	2	-4	-7			
and was loaded from a tube containing seven carthoges.			ļ	_		IUF				-0	3	20	33	70			
Henry Repeater / Lever Action Rifle / 44 Rim Fire / USA	L	44	1-4	23	LRN	PEN	1.6	1.5	1.3	1.0	.8	.4	2				
	*	9.7	3	-9		DC	4	3	3	2							
	RT	66	4	-7													
	ROF	2	6	-6													
	Сар	15	7	-4													
The Henry rifle was introduced in 1862 and had a tubular magazine under the barrel. The	AW	.04 Rnd	8	-3 -2													
Henry repeater was the predecessor of the Winchester lever action rifles and as a tribute	1	1	10	-1		BA	44	35	25	17	12	2	-3	-7			
to Henry, Winchester ammunition still bears an "H" on its headstamp.	KD	5	11	0		TOF	1	1	3	5	8	18	29	42			
Winchester Model 1866 / Lever Action Rifle / 44 Rim Fire / USA	L	38	1 -2	23	LRN	PEN	1.7	1.6	1.3	1.0	.8	.4	.2	1			
	W	9.6	2 -	12		DC	4	4	3	2	1	1	1	1			
	RT	57	4	-7													
	ROF	2	5	-6													
	Сар	17		-ə -4													
	AW	.04	8	-3													
The Model 1866 Winchester is a modified version of the Henry rifle. This was the first		Rna	10	-2 -1		BA	43	33	23	15	10	0	-5	-8			
firearm created by the newly formed Winchester Repeating Arms Company.	KD	5	11	0		TOF	1	1	3	5	7	17	28	40			
Winchester Model 1873 / Lever Action Rifle / 44 - 40 Winchester / USA	L	38	1 -2	23	LRN	PEN	2.6	2.4	2.0	1.6	1.3	.6	.3	1			
	w	9.1	2 -1	12		DC	6	6	5	4	3	1	1	1			
	RT	50		-9 -7													
- O	ROF	2	5	-6													
	Сар	15	6	-5 -4													
	AW	.04	8	-3													
One of the most famous rifles of the Wild West. Along with the Colt Frontier Model Six		Rnd	9	-2 -1		BA	43	34	24	16	11	1	4	-8			
Shooter (also chambered for 44 / 40), it was a common weapon on the frontier.	KD	6	11	ó		TOF	1	1	2	4	6	13	22	32			
Winchester Model 1876 / Lever Action Rifle / 45 - 60 Winchester / USA		45	1 -2	23	LRN	PEN	5.1	4.8	4.4	3.8	3.3	2.0	1.3	.8			
	Ŵ	9.9	2 -1	13		DC	9	9	8	8	7	4	2	1			
	BT	40	3	-9 -7													
	ROF	2	5	-6													
	Can	12	6	-5 -4													
	AW	.06	8	-3													
The Winchester Model 1876 chambered the more powerful 45 / 60 round. It was a		Rnd	9	-2			51	12	30	24	10	0					
the Chiricahua Apaches.	КD	10	11	0		TOF	0	42	2	3	5	11	17	25			
Kennedy Benester / Lever Action Bifle / 45 - 60 Winchester / LISA		45	1.5	22		DEN	5 1	1.8	4.4	3.8	33	20	12	8			
Rennedy Repeater / Level Action Time / 45 - 00 Winchester / 03A	Ŵ	9.9	2 -1	13		DC	9	4.0 9	4.4 8	8.0	7	4	2	1			
	БТ	40	3	-9													
0	ROF	40	5	-6													
		10	6	-5													
	AW	.06	8	-3													
The Winchester was not the only lever action rifle found in the Wild West; the Kennedy		Rnd	9	-2			E4	40	20	24	10		-	-			
the Nez-Perc'es surrendered in 1877, marking the end of the Indian Wars.	КD	10	10	-'		TOF	0	42	2	24	5	11	17	25			
			_							_	-	-	-				

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Physical Data		Physical Data		Physical Data		Physical Data		Physical Aim Data Time		Aim Time	Ballistic Da			ata Range			in 2 yard he			exes	
-		AC Md			2	4	6	10	15	20	30	60									
W	48 8.8	1 -23 2 -12 3 -9	Slug	DC	2.7 10	2.6 10	2.6 10	2.6 10	2.5 10	2.4 10	2.3 10	1.9 8									
RT ROF	60	4 -7 5 -5 6 -4	Shot	DC DC SALM	1.7 3 -11	1.6 3 -6	1.6 3 -3	1.5 3 1	1.4 2 4	1.3 2 6	1.1 2 10	.7 1 15									
Cap AW	.13 .13		(9)	BPHC PR	*9 0	*8 0	*7 0	*5 .1	*2 .1	*1 .2	59 .2	13 .5									
кD	18			BA TOF	55 0	47 0	41 0	34 1	29 1	25 1	19 2	9 4									
L W	20 5.3	1 -20 2 -12 3 -11	Slug	DC	2.2 9	2.1 9	2.1 9	2.1 9	2.0 9	1.9 8	1.8 8	1.5 5									
RT ROF	50	4 -10	Shot	PEN DC	1.4 2 -2	1.3 2 3	1.3 2 6	1.2 2 10	1.1 2 13	1.0 1	.9 1 18	.5 1 23									
Cap AW	2 .13 Bnd		(9)	BPHC	*5 0	*2 .1	*1 .1	36 .3	15 .4	.5	3 .8	0									
кD	16			BA TOF	55 0	46 0	41 0	34 1	29 1	25 2	19 2	9 5									
L W	52 7.6	1 -22	Slug	PEN DC	3.9 10	3.9 10	3.8 10	3.8 10	3.7 10	3.6 10	3.4 10	2.9 10									
RT ROF	10	4 -7 5 -5 6 -4	Shot	PEN DC SALM	1.5 3 -13	1.4 3 -8	1.4 3 -5	1.3 3 -1	1.2 2 2	1.1 2 4	.9 2 7	.6 1 12									
Cap AW	1 .13 Bnd		(9)	BPHC	*9 0	*8 0	*8 0	*7 .1	*4 .1	*3 .1	*1 .2	27 .4									
кD	20			BA TOF	55 0	47 0	42 0	35 1	29 1	25 1	20 2	10 4									
L W	52 9.7	1 -23 2 -12 3 -9	Slug	PEN DC	3.3 10	3.3 10	3.2 10	3.2 10	3.1 10	3.0 10	2.8 10	2.4 10									
RT	18	4 -7	Shot	PEN	1.5	1.4	1.4	1.3	1.2	1.1	.9	.6									
		6 -4		SALM	-13	-8	-5	-1	2	4	7	12									
AW	2 .13 Rnd		(9)	PR	0	0	0	.1	-4 .1	-3 .1	-1 .2	.4									
ĸD	19			BA TOF	55 0	47 0	41 0	35 1	29 1	25 1	19 2	10 4									
L W	18 5.1	1 -20 2 -12 3 -11	Slug	PEN DC	2.5 10	2.4 10	2.4 10	2.4 10	2.3 9	2.2 9	2.1 9	1.8 7									
RT ROF	18	4 -10	Shot	PEN DC	1.1 2	1.1 2 2	1.0 2 5	1.0 2 9	.9 2	.8 2	.7 1 17	.4 1 22									
Cap AW	2 .13 Brd		(9)	BPHC	*8 0	*4 .1	*2 .1	70 .2	30 .3	16 .5	6 .7	1									
ĸD	16			BA TOF	55 0	46 0	41 0	34 1	29 1	25 1	19 2	9 4									
L W	52 10.2	1 -23 2 -13	Slug	PEN DC	3.6 10	3.5 10	3.5 10	3.4 10	3.3 10	3.2 10	3.1 10	2.6 10									
RT	18	4 -7	Shot	PEN	1.5	1.5	1.5	1.4	1.3	1.2	1.0	.7									
		5 -5 6 -4		SALM	-14	-9	-6	-2	1	4	7	12									
AW	_16		(9) 1	PR	0	8 0	8 0	.1	.1	.1	.2	.3									
KD	нnd 22			BA TOF	55 0	47 0	42 0	35 1	29 1	25 1	20 2	10 4									
	Phy Ba L W RT ROF Cap AW KD ROF CAP AW KD RT ROF CAP AW	Physical Data L 48 W 8.8 RT 60 ROF * Cap 2 AW 1.3 Rnd KD KD 18 L 20 W 5.3 RT 50 ROF * Cap 2 AW 1.3 Rnd KD KD 16 L 52 W 7.6 RT 10 ROF * Cap 1 ROF * Cap 2 W 9.7 RT 18 ROF * Cap 2 W 1.3 Rnd KD KD 19 L 18 ROF * Cap 2 W 1.13 </td <td>Physical Data Aim Time Ac Mai Aim Aim Ac Mai Aim Aim Aim Aim Aim Aim Aim Aim Aim Ai</td> <td>Physical Data Aim Aim Ac Md Rome Ball Ac Md Rome L 48 1 -23 Slug Rome W 8.8 2 -12 Shot Rome ROF 5 -5 6 -4 (9) RD 1 20 1 -20 Shot Rome KD 18 </td> <td>Physical Data Aim Arm Arm Arm Arm Arm Arm Arm Arm Arm Ar</td> <td>Physical Data Aim Ac Md Ballistic Data L 48 1 -23 Slug PEN 2.7 W 8.8 2 -12 DC 10 RT 60 4 -7 Shot PEN 1.7 ROF 5 -5 DC 3 6 -4 .7 Shot PEN 1.7 Cap 2 -4 .7 AW .13 - BA 55 KD 18 - Slug PEN 2.2 W 5.3 2 -12 DC 9 3 -11 Shot PEN 1.4 DC 2 RT 50 4 -10 Shot PEN 1.4 ROF - 2 -12 MC 9 AW .13 - SALM -2 AW .13 - SALM -15 ROF 5 -5 DC 3 SALM -13 Cap 1 2 -12 Slug PEN 3.3</td> <td>$\begin{array}{c c c c c c c c c c c c c c c c c c c$</td> <td></td> <td>Physical Data Aim Ac Md Ballistic Data 2 Range 2 In 2 4 Column 6 L 48 1-23 Slug PEN 2.7 2.6 2.6 2.6 W 8.8 3 -9 Shot PEN 1.7 1.6 1.6 1.5 ROF 5 -5 DC 3 3 3 Cap 2 1 -7 Shot PEN 1.7 1.6 1.6 1.5 AW .13 - (9) BPHC '9 '8 7 '5 AW .13 - PR 0 0 0 1 L 20 1-20 Slug PEN 2.2 2.1 2.1 2.1 2.1 W 5.3 2.11 DC 9 9 9 RoF - 10 Sup PEN 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.2 2 2 3.3 3.3</td> <td>Physical Data Aim AC M Ballistic Data 2 Rame 2 In 2 4 B L 48 1-23 Slug PEN 2.7 2.6 2.6 2.6 2.5 W 8.8 2-12 DC 10 10 10 10 10 10 RT 60 4-7 Shot PEN 1.7 1.6 1.6 1.5 1.4 Cap 2 6-4 9 BPHC 9 9.7 5 2 AW 13 - BA 55 47 41 34 29 Cap 2 1-20 Slug PEN 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 1.1 KD 18 -10 Sold PEN 1.4 1.3 1.3 1.2 1.1 L 20 1-20 Slug PEN 2.4 1.4 3.4 29 KD 16 -10 Sold PEN 3.9 3.8 <t< td=""><td>Physical Data Aim Ac Md Ballistic Data 2 Rame bit 2 Ballistic Data 2 Rame bit 2 Ballistic Data 3 Ballistic Data 2 Ballistic Data 3 Balli</td><td>Physical Data Aim Ac Mathem Ballistic Data Rare for the present of the present of</td></t<></td>	Physical Data Aim Time Ac Mai Aim Aim Ac Mai Aim Aim Aim Aim Aim Aim Aim Aim Aim Ai	Physical Data Aim Aim Ac Md Rome Ball Ac Md Rome L 48 1 -23 Slug Rome W 8.8 2 -12 Shot Rome ROF 5 -5 6 -4 (9) RD 1 20 1 -20 Shot Rome KD 18	Physical Data Aim Arm Arm Arm Arm Arm Arm Arm Arm Arm Ar	Physical Data Aim Ac Md Ballistic Data L 48 1 -23 Slug PEN 2.7 W 8.8 2 -12 DC 10 RT 60 4 -7 Shot PEN 1.7 ROF 5 -5 DC 3 6 -4 .7 Shot PEN 1.7 Cap 2 -4 .7 AW .13 - BA 55 KD 18 - Slug PEN 2.2 W 5.3 2 -12 DC 9 3 -11 Shot PEN 1.4 DC 2 RT 50 4 -10 Shot PEN 1.4 ROF - 2 -12 MC 9 AW .13 - SALM -2 AW .13 - SALM -15 ROF 5 -5 DC 3 SALM -13 Cap 1 2 -12 Slug PEN 3.3	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Physical Data Aim Ac Md Ballistic Data 2 Range 2 In 2 4 Column 6 L 48 1-23 Slug PEN 2.7 2.6 2.6 2.6 W 8.8 3 -9 Shot PEN 1.7 1.6 1.6 1.5 ROF 5 -5 DC 3 3 3 Cap 2 1 -7 Shot PEN 1.7 1.6 1.6 1.5 AW .13 - (9) BPHC '9 '8 7 '5 AW .13 - PR 0 0 0 1 L 20 1-20 Slug PEN 2.2 2.1 2.1 2.1 2.1 W 5.3 2.11 DC 9 9 9 RoF - 10 Sup PEN 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.2 2 2 3.3 3.3	Physical Data Aim AC M Ballistic Data 2 Rame 2 In 2 4 B L 48 1-23 Slug PEN 2.7 2.6 2.6 2.6 2.5 W 8.8 2-12 DC 10 10 10 10 10 10 RT 60 4-7 Shot PEN 1.7 1.6 1.6 1.5 1.4 Cap 2 6-4 9 BPHC 9 9.7 5 2 AW 13 - BA 55 47 41 34 29 Cap 2 1-20 Slug PEN 2.2 2.1 2.1 2.1 2.1 2.1 2.1 2.1 1.1 KD 18 -10 Sold PEN 1.4 1.3 1.3 1.2 1.1 L 20 1-20 Slug PEN 2.4 1.4 3.4 29 KD 16 -10 Sold PEN 3.9 3.8 <t< td=""><td>Physical Data Aim Ac Md Ballistic Data 2 Rame bit 2 Ballistic Data 2 Rame bit 2 Ballistic Data 3 Ballistic Data 2 Ballistic Data 3 Balli</td><td>Physical Data Aim Ac Mathem Ballistic Data Rare for the present of the present of</td></t<>	Physical Data Aim Ac Md Ballistic Data 2 Rame bit 2 Ballistic Data 2 Rame bit 2 Ballistic Data 3 Ballistic Data 2 Ballistic Data 3 Balli	Physical Data Aim Ac Mathem Ballistic Data Rare for the present of									