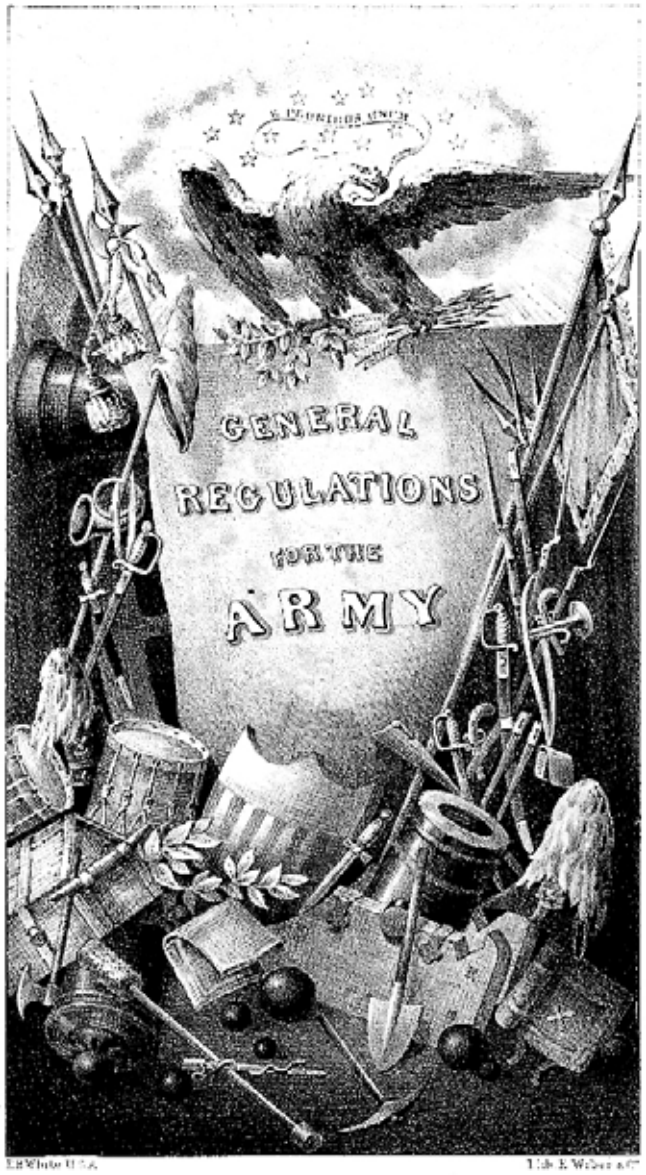
Survey of U.S. Army



Uniforms, Weapons and Accoutrements

David Cole

Survey of U.S. Army

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Introduction

The *Survey of U.S. Army Uniforms, Weapons and Accoutrements* is an expanded version of the classes on uniforms, field equipment and small arm given at the Basic Curatorial Methods Training Course held at the U.S. Army Medical Museum, Fort Sam Houston, Texas in August 2007.

The purpose of this study is to provide a quick reference for the identification of the basic uniforms, accoutrements and small arms used by the American soldier from the period of the American Revolution to the operations in Iraq and Afghanistan all in one source, rather than in seven or eight different books or websites.

This is not an exhaustive study, although the details become greater in the more modern periods. Also the survey concerns itself only with the most common items used by enlisted soldiers. Things like trousers, foot wear, and specialty clothing has for the most part, not been touched upon in any great detail. Certainly each chapter could be greatly expanded upon, and I for one would welcome any suggestions, corrections and especially any additional input.

David Cole
November 2007

Chapter 1 Late-18th Century

Part 1 Uniforms

The traditions of the United States Army, including its uniform and accoutrements, are rooted in the British Army of the 18th Century. Clothing of this period is characterized by tightly fitted smallclothes (waistcoat and breeches) and coats with tight fitted sleeves. Generally speaking, each soldier would receive a uniform consisting of a wool regimental coat, with linen smallclothes in the spring, and a wool regimental coat, with woolen smallclothes in the fall.

Pictured above is a reproduction of a hunting frock of the type that Washington ordered worn by American forces during the siege of Boston in 1775, and subsequently used throughout the war.

At the beginning of the Revolutionary War a few pre-war militia organizations had uniforms, but most of the soldiers of the American Army at the Siege of Boston were wearing civilian clothing. For expediency sake, shortly after assuming command George Washington ordered the use of the hunting shirt as a field garment to provide some uniformity. Made of linen, this garment was little more than a farmer's smock altered with the addition of a fringed cape.

Regulations published in 1779 establish the Army uniform as blue with colored facings based on region: white for New England; red for the Mid-Atlantic; and blue for the South. Musicians wore uniform coats in reverse colors. In 1782, blue coats faced red became standard for everyone except generals and staff officers.

The vast majority of soldiers wore a cocked hat made of black felt and often bound with wool tape around the edge of the brim as seen on the hat of the British sergeant illustrated above (white for foot troops and yellow for artillery. Members of the Light Infantry and Dragoon units wore caps made of black felt or black leather.

Military Cocked Hat with a Royal Cockade.

Reproduction of a Light infantry Cap

The similarities between the American and British uniforms can be seen in this reconstruction of a musicians coat from a regiment of the mid-Atlantic region as prescribed by regulations in 1779.

Reconstruction of the uniform of a private of the Continental Army (from a New England Regiment), circa 1780, in the winter uniform prescribed by regulations in 1779

Part 2 Accoutrements

Pictured above are accoutrements of an obsolete British pattern as used by American forces in the Revolutionary War; to the right is an American pattern 1777 cartridge box produced in Massachusetts for the Continental Army. This was one of the first attempts at standardization of military equipment.

Accoutrements (those items carried on the soldier's person) can be divided into two parts; first, the items needed to fight with, including the cartridge box, bayonet carriage, and scabbard; and second, the items needed to sustain the soldier, including a haversack for food, a canteen for water, and a pack or bedroll for spare clothing. In today's Army, these would be referred to as the Fighting Load and the Approach March load. Organizational items (Sustainment Load) would be carried by the unit trains.

Part 3 Small Arms

The British Short Land Service Musket, Caliber .75

The French Infantry Musket, Model of 1763, Caliber .69

Small arms used by American forces in the Revolution were many and varied, however, at the beginning of the war the British Short Land Service Musket, often referred to as the Brown Bess, was perhaps the most common musket on hand. In 1777, the French allied themselves with the American cause and began sending arms and equipment. The French Model 1763 Infantry Musket, sometimes referred to as the Charlesville Musket, because many were made at the arsenal located there.

Members of the Light Dragoons were generally armed with a carbine, pistol, and saber similar to those illustrated below.

British Light Dragoon Carbine, Caliber .73

British Light Dragoon Saddle Pistol, Caliber .70

American Light Dragoon Saber

Chapter 2 Early America 1786-1833

Part 1 Uniforms

Army uniforms, although sometimes slow to change, generally reflected the civilian styles of the time. Significant style changes were made at the time of the War of 1812 that would last well into the mid-19th Century.

In 1782, as the Revolutionary War came to a close, blue coats with red facings were ordered for all troops. Foot troops were to have buttons of white metal, while artillery was to have buttons in yellow metal. Clothing in the post Revolutionary War period continued to be characterized by tightly fitted garments and tight sleeves, and coats may be distinguished from those worn during the war by a standing collar as illustrated below.

On the left is an infantry soldier from 1794. He is wearing a "Round Hat," a form of top hat with a bear skin crest. The white binding indicates that he is a member of the First Sub-Legion. Adopted in the early 1790s this was the basic infantry uniform of the Army until 1810.

The soldier to the right is an artillery cadet in a similar uniform in 1805.

Beginning around 1800, white linen roundabouts were issued to troops south of the Potomac River for summer wear. Issue was extended to troops in northern districts during the War of 1812.

A new uniform coat was introduced in 1810 that was blue with red collar and cuffs. The red facings worn previously were eliminated. The front closure was held together by hooks and eyes, and the coat had two rows of non-functioning buttons with white lace binding. The "Round Hat" was replaced with a cylindrical Cap, sometimes referred to as a "Yeoman Crown Shako."

Reconstruction of a summer roundabout with 9-button front.

1810 Yeoman Crown Shako similar to that worn by the 5th Maryland Regiment at the Battle of North Point, MD in September 1814.

Reproduction of a uniform coatee made in accordance with the Regulations of February 1812.

Regulations issued in February 1812 called for a single breasted "coatee" with red collar and cuffs. The 10-button front closure was to have binding lace of white for infantry and yellow for artillery, with white or gold metal buttons respectively. A coatee is defined as being a "short-tailed" coat.

However, the year 1812 is a very confusing one in regards to uniforms. Because of a shortage of blue cloth, coatees made of drab, black, brown, or gray cloth were issued to various Regular Army infantry regiments during the winter of 1812-1813. These were made in the same manner as the regulation coatee with red cuffs and collar, and in most cases with the white binding (the 25th through 28th Infantry Regiments received blue coatees with red cuffs and collar, but with white binding lace on the collar only). In February 1813, the white binding was dropped altogether.

In May 1813 uniform regulations were again revised. The new uniform coatee was to single breasted with a 10-button closure in front. The red collar and cuffs were eliminated and lace binding was to be on the collar only in either white for infantry or yellow for artillery. The regulations also introduced a new cap or shako copied directly from the Belgic-type cap worn by the British Infantry. This uniform would remain in service with only minor alterations into the 1820s.

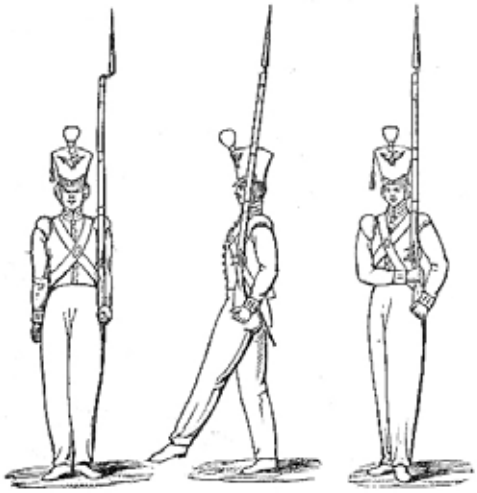
To the left is a reproduction coatee made in accordance with the regulations of May 1813. The cap pictured above is a copy of the Belgic-type cap adopted in 1813, but with the second pattern cap plate introduced in 1814. Both British and American troops referred to this type of cap as a "tombstone" shako, because of the slight extension of the top front.

Gray uniforms continued to be issued as a substitute standard because of the shortage of dark blue wool. The gray coatee became popular with the organized militia of the various states following the war, and was also adopted for the cadets at the U.S. Military Academy.

Gray Coatee, Rifle Regiment, 1814

West Point Cadet Coatee, Circa 1823

The Army regulations of 1821, reaffirmed blue as the national color for Army uniforms. Shoulder wings were added to the coatee, and as a result chevrons were introduced to indicate non-commissioned officer rank.



Illustrations from an 1829 drill manual depicting the uniform prescribed by the regulations of 1821.

Infantry Sergeant from a Grenadier Company, Circa 1827

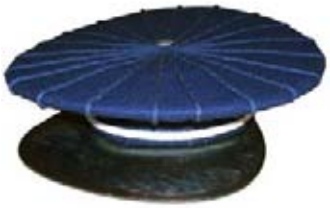
The "Bell Crown" Shako replaced the "Tombstone" Shako that had been used since the War of 1812. In 1825, to augment the shako, a forage cap was introduced for wear in the field.

An example of the 1821 "Bell Crown" Shako from a Massachusetts Volunteer Militia company in Boston, circa 1830.

Pattern 1821 Infantry Shako Eagle

Pattern 1821 Artillery Shako Eagle

Reproduction of the "Pinwheel" type forage cap introduced in 1825.



Part 2, Accoutrements

In 1808 new pattern accoutrements were introduced for the .69 caliber musket. Before the war, the shoulder slings were made of white buff leather, but because of the shortage of buffalo hides, accoutrements produced after the start of the War of 1812 were made entirely of black leather. It is likely that the majority of troops raised for the war used the substitute standard equipment as seen below. White buff was again used in the post war period.

Pattern 1808 Cartridge Box and Bayonet Carriage (wartime production)

Haversack and Canteen

Accoutrements, including a waist belt, cartridge box, and knapsack used by a member of the Massachusetts Militia during the War of 1812.

Part 3 Small Arms

Light Dragoons were not considered to be a part of the permanent establishment of the Army because of the expense of obtaining and maintaining horses. Dragoons were raised on an as needed basis for service on the Northwest Frontier on the 1790s and again for the War of 1812. During the War of 1812 only sabers and pistols were issued to the Dragoons.

Starr Saber and Scabbard

North Martial Pistol from the War of 1812

The U.S. Musket Model 1795, the principle small arm used by the Army in the War of 1812, was a copy of the caliber .69, French Model 1763 Infantry Musket. These muskets were made at the armories at both Springfield, Massachusetts, and Harper's Ferry, Virginia.

The Model 1795 Muskets produced by Eli Whitney incorporate all of the latest technological features such as a rounded hammer face and slanted pan. Whitney delivered 10,000 muskets to the Army under a July 1812 contract. Muskets manufactured under this contract are marked "N. Haven" on the lock plate.

In US Model 1816 Musket was similar to the Model 1795, but incorporated enough new features to be given a new designation. These muskets were made at the armories at both Springfield, Massachusetts, and Harper's Ferry, Virginia. This pattern of musket will continue in use until the Mexican War.

Chapter 3 Mid-19th Century 1833-1850

Part 1 Uniforms

Westward expansion revived the importance of dragoons, and Congress on March 2, 1833, added a Regiment of Dragoons to the Army establishment. This unit was renamed the First Regiment of Dragoons when a second regiment was formed in 1836.

These changes to the Army structure prompted changes to the uniform regulations as well. The uniform coatee introduced by the regulations of 1833 was not much different than its predecessors. It was single breasted for privates with nine buttons in front, and lace on the collar. The buttons were of a new pattern and worsted epaulettes replaced the shoulder wings used previously. The wool lace continued to be white for infantry and yellow for artillery. The new regiment of dragoons also received yellow lace.

The major changes to the uniform included the replacing of the "Bell Crown" Shako with a "Stovepipe" Shako, and the introduced of stripes for officers and non-commissioned officers on sky-blue trousers.

Artillery Sergeant 1836

New pattern buttons introduced in 1833, for Dragoons on the left, and infantry on the right.

Coatee of an infantry private Circa 1840

Non-commissioned officer rank was determined by a combination of button arrangement, lace on the cuffs, and by a red worsted wool sash as seen in the illustration of the artillery sergeant see at the left.

Branch insignia was also introduced although the metal color continued to be yellow for mounted soldiers and white for foot troops. The new branch insignia authorized in 1833 included an eagle with a hunting horn for infantry and an eagle with crossed gun tubes for artillery. The Regiment of light dragoons received a bi-metal insignia consisting of a yellow federal eagle on a white metal sunburst.

Dragoons

Infantry

Artillery

Also in 1833, a black leather forage cap replaced the "Pinwheel" cap of 1825 and a white linen roundabout was authorized for wear in the summer in southern climates. These garments typified the uniform of the soldier in the Seminole War of 1836-1843.

Black Leather Pattern 1833
Folding Forage Cap

Pattern 1833 Summer Roundabout

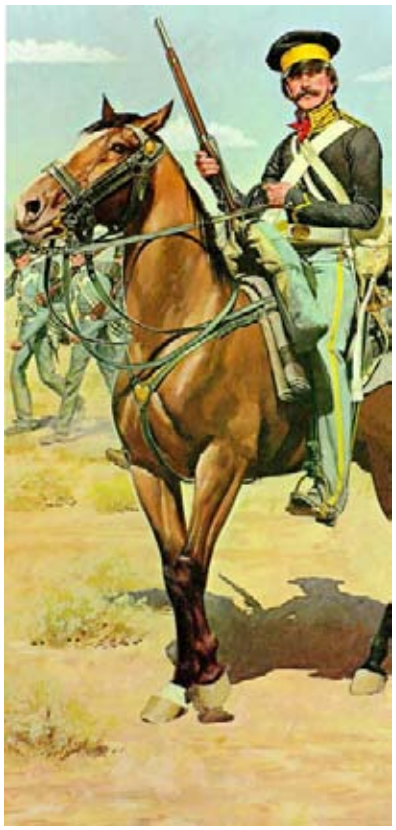
Seminole War, Florida, 1839

Pattern 1839 Forage Cap

Pattern 1833 Roundabout

Although linen smocks, coveralls, sleeved waistcoats and cut down service coats had been used for fatigue since the Revolution, the wool roundabout that was introduced in 1833 was the first recognized fatigue uniform. A new forage cap replaced the folding cap in 1839. Together, these form the basis for the uniform of the Mexican War of 1845-1848.

The uniform regulations of 1847 authorized new chevrons for non-commissioned officers to be worn on both sleeves above the elbow, point upward. The chevrons were made of worsted wool tape in yellow for mounted troops and white for foot troops.



Infantry and Dragoons, Mexico, 1847

Chevrons.

As a badge of distinction when in *fatigue dress*, non-commissioned officers are permitted to wear upon the sleeves of their undress jackets, above the elbow, chevrons of lace corresponding to their uniform, after the following description:

For a Sergeant-Major, *three bars, and an arc.*

For a Quartermaster-Sergeant, *three bars, and a tie.*

For a First-Sergeant, *three bars, and a lozenge.*

For a Sergeant, *three bars.*

For a Corporal, *two bars.*

Non-commissioned officers and privates, as well as musicians, who shall have served faithfully for the term of five years, shall be permitted to wear a chevron on the sleeves of their *uniform* coats, above the elbow, points up; and an additional chevron on each arm for every additional five years of faithful service. And those who have served in war, shall have a red stripe on each side of the chevron.

The paragraph and illustrations from the 1847 regulations describing the new non-commissioned officer chevrons.

Part 2, Accoutrements

Following the War of 1812, 1808 pattern accoutrements continued in use with only minor alterations such as the reintroduction of buff leather. In 1828 an improved 1808 cartridge box with inner flap and ears was introduced to be used with the flintlock musket. The front flap has a highly ornate embossing of a US and Eagle within oval wreath.

Pattern 1828 Embossed Flap Cartridge Box
(Shown without the buff leather sling)

The formation of the Regiment of Dragoons brought the introduction of the Pattern 1834 saber belt made of white buff leather.

The Pattern 1834 Saber Belt.

This belt was in turned replaced with the Pattern 1839 saber belt as seen below. This is the belt used by the U.S. Dragoons in the Mexican War. The new belt introduced the oval brass "U.S." plate later used in large numbers during the Civil War. The long strap was designed to be worn over the shoulder to support the weight of the saber.

The Pattern 1839 Saber Belt with a detail of the Pattern 1839 Belt Plate.

The Pattern 1841 Carbine Cartridge Box was introduced for use with the Hall Carbine. Externally, the Carbine Cartridge Box and the Model 1841 Rifle Cartridge Box looked the same. Both were designed for waist belt carriage only (with two belt straps stitched to the back of the box) and both had a single tin for cartridges. The Rifle Cartridge Box, however, had an implement pouch under the front flap. It was designed for use with the Model 1841 Rifle, but since there were no rifle regiments on the Regular Army establishment at the time, it was used primarily by militia rifle companies until the Mexican War.

Pattern 1841 Rifle Cartridge Box

In 1839 the Army began replacing all its older infantry accoutrements as well. The bayonet shoulder carriage was replaced with a narrow, white buff leather waist belt with a small oval brass belt plate with the letters "U.S." in the center. The scabbard was suspended from the belt by a curved white buff leather loop. The older cartridge boxes (that had wood block inserts) were replaced with a new Cartridge Box that could hold 40 rounds of .69 caliber musket ammunition in two tin inserts. This new box had an oval brass "U.S." plate in the center of the flap and was designed to be carried on the white buff leather shoulder sling only, as there were no belt loops on the back of the box.

Infantry accoutrements of the type used in the Mexican War with a detail of the Pattern 1839 Infantry belt Plate.

Part 3 Small Arms

In U.S. Model 1816 Musket (Type II, a.k.a. the Model 1822 Musket) continued to be manufactured in substantial quantities into the 1830s with only minor alterations, and continued in use until the end of the Mexican War.

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The U.S. Model 1840 Musket was the last of the regulation flintlock muskets. Originally adopted in 1835, and referred to by some authors as the M1835, manufacturing didn't begin until 1840. As early as 1831, Secretary of War Lewis Cass considered ordering a change of muskets for the Army and he convened a blue ribbon panel to conduct a study. The conclusion of the board was submitted in November 1833. In 1835 the Ordnance

Department ordered Harper's Ferry to manufacture patterns to be marked as the Model 1835 U. S. Musket based upon the recommendations of the board, but further changes were ordered. A manuscript Ordnance Regulation written in 1839 refers to the "New Model 1835 Musket," but the later printed version dated 1840, and all subsequent publications, all call it the "Model 1840 Musket." This arm was manufactured between 1840 and 1844 at Springfield Armory, and until 1848 by individual contractors. It was not, however, manufactured at all by the original pattern maker, Harper's Ferry Armory.

The U.S. Model 1842 Musket was the first U.S. weapon made at both the Harpers Ferry and Springfield Armories with fully interchangeable parts. It was also the first regulation musket made in the percussion ignition system by the national armories, and was the last of the smoothbore .69 caliber muskets. A total of 275,000 Model 1842s were produced between 1844 and 1855, 103,000 at Harper's Ferry and 172,000 at Springfield Armory.

The Caliber .54, Model 1841 Rifle was the first rifle made in the percussion ignition system at a national armory. Until the Mexican War it was provided only to militia rifle companies in various states. The Model 1841 was made by Harpers Ferry Armory from 1846 to1855 with a total produced of about 25,296 arms. The weapon has a 33" browned barrel, which was made without provision for attaching a bayonet. The walnut stock is distinguished by a large patchbox on right side of the butt. Sometimes called the "Mississippi Rifle," it owes this name to the successful use of the weapon by a Mississippi rifle regiment under the command of Jefferson Davis during the Mexican War.

Sabers were considered the primary weapons for dragoons, and pistols were next in importance in mounted action. Carbines were primarily for use when dismounted.

The model 1840 heavy dragoon saber was manufactured by N.P. Ames in Springfield, Massachusetts although many were made in Prussia. The blades are slightly less than 36 inches long and about 1.25" inches in width.

Model 1840 Dragoon Saber

Pistols were issued to the dragoons and carried in a saddle holster. The initial issue included the S. North Model 1819 Flintlock Pistol and the Johnson Model 1836 Flintlock Pistol. Both were .54 caliber smoothbores with brass sights and pans and iron mounts. The North had a 10" barrel while the Johnson had an 8.5" barrel. Both had a swivel ramrod which prevented the soldier from dropping the ramrod when reloading on horseback. The flintlock pistols were replaced with the Model 1842 Percussion Pistol in 1845, just prior to the Mexican War.

North Model 1819 Pistol

Johnson Model 1836 Pistol

Model 1842 Percussion Pistol

The Caliber .52, Hall-North Carbine was first issued to the Dragoons in 1833 and was the first percussion weapon and the first breech loading weapon adopted by any government in the world. It was a modification of the Model 1919, Hall Breech Loading Rifle. Both the rifle and the carbine were manufactured by Simeon North, a Middletown, Connecticut gun manufacturer, thus the name "Hall-North."

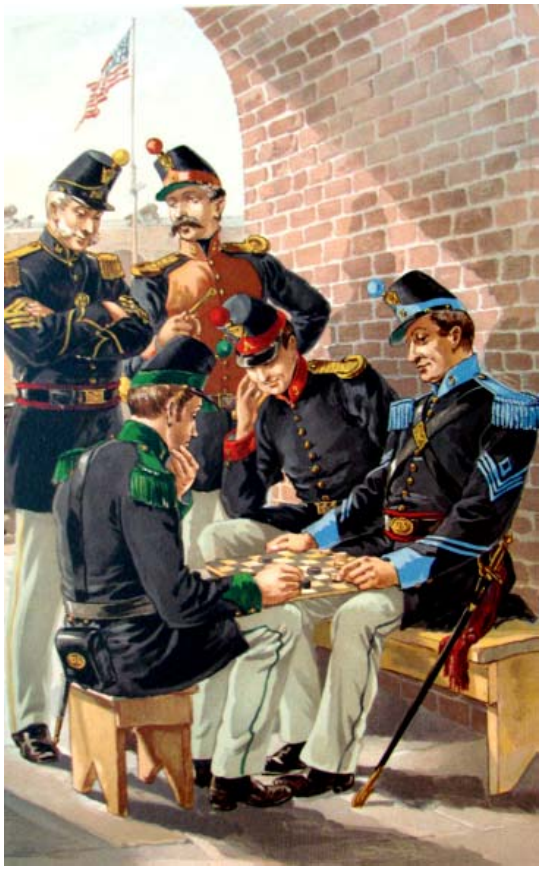
Chapter 4 Mid-19th Century 1851-1872

Part 1 Uniforms

The uniforms introduced under the regulations of 1851 were relatively short lived, but the changes that were made were significant for the Army. The new regulations introduce the frock coat as the service uniform for all soldiers, thus eliminating the coatee. A system of branch colors was also introduced: Prussian blue for Infantry, scarlet for Artillery, orange for Dragoons, green for Mounted Rifles, and black for Staff.

All branch insignia was to be manufactured in yellow metal, eliminating white metal for foot troops. A bright brass general service button was also authorized for all enlisted troops, and the branch letter was eliminated from the center of the national shield.

The "Albert" Cap, copied from the British and named for Queen Victoria's husband, replaced the "stovepipe" shako that had been worn since 1832. Troops continued to wear the roundabout and forage cap for fatigue. A uniform jacket based upon the roundabout soon replaced the frock coat as the service uniform for mounted troops.



The 1851 Army uniform as illustrated by O.H. Ogden for the Quartermaster General, showing the frock coat with branch colored facings and the Albert Cap.

The 1851 bright brass general service button

The Albert cap.

Reproduction Coat of a Dragoon private circa 1853

Survey of U.S. Army Uniforms, Weapons and Accoutrements

The regulations of 1858 and 1860 establish the uniform that defined the Union soldier in the American Civil War. The Army Hat in black felt with appropriate branch insignia; the frock coat with branch piping for foot troops, uniform jackets with branch colored lace for mounted troops, and sky-blue trousers

Infantry Sergeant

Cavalry Corporal

In addition, a four-button, blue wool sack coat and a forage cap (sometimes referred to as a “kepi”) were authorized for fatigue and field wear.

U.S. issue Forage cap and Sack Coat, 1862

Insignia, adopted in 1858 for the Army hat, included the national eagle used to hold up the brim, and branch insignia for Artillery, Infantry, Cavalry, Engineers, and the Ordnance Department, with numbers and letters to indicate the soldiers regiment and company. Although not authorized, many soldiers wore this insignia on the forage cap as well.

The Model 1858 Army Hat with insignia for Company B, 5th Infantry Regiment

Branch Insignia

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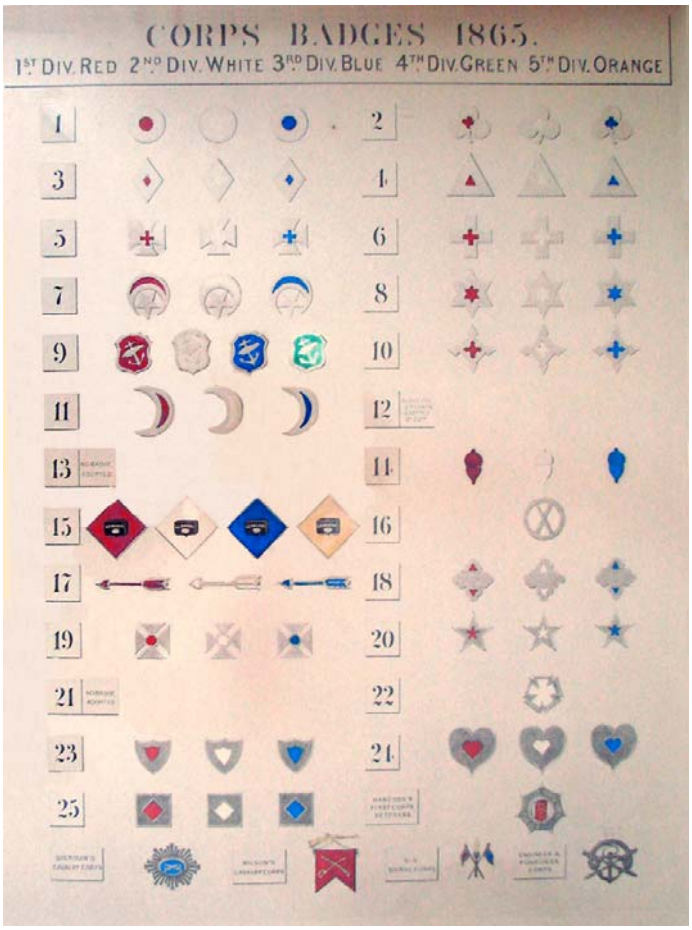
A forage cap with insignia for infantry, in this case the 7th Massachusetts Volunteers. Army regulations authorized the wearing of only the company letter on the front of the cap.

In 1863 Corps Badges were introduced for wear on the cap or on the left breast of the uniform coat. Primarily intended as a means of identifying stragglers and deserters, the badges soon became a source of pride for the individual soldier.

9th Corps Badge worn on the Cap of Sergeant Amos Shumway, 7th Rhode Island Volunteer Infantry.

The period chart to the right shows Army Corps Badges as they were authorized in 1865.



US regulations, Confederate regulations, state regulations, substitute standard clothing, state purchase garments, private purchase garments, and home made garments - the variety of uniforms worn by soldiers; both North and South during the Civil War boggle the mind, and are far beyond the scope of this survey.

Part 2, Accoutrements

In 1851, all leather accoutrements became black and all buff leather accoutrements on hand were ordered to be blackened. In addition, the white linen haversack was also blackened, with the exterior coated with a waterproofing paint.

A new rectangular eagle belt plate with an applied silver wreath was also introduced for all sword belts, including the saber belt, the foot artillery belt, and the belts worn by non-commissioned officers and musicians. The oval "U.S." belt plate formerly used by the dragoons was now used for the infantry equipment belt which had been widened to 2.25 inches.

A two-bag, canvas knapsack, painted in the same manner as the haversack, began replacing the box knapsack beginning in 1855. A new .58 Caliber Rifle-Musket Cartridge Box was introduced in 1857 for use with the Model 1855 Rifle-Musket.

The Philadelphia Depot began contracting for an "oblate spheroid tinned sheet iron" canteen with a sky blue cloth cover in 1858. In 1861 at the start of the Civil War, the Army authorized the use of tanned waxed leather as a substitute standard because of the shortage of buff leather. Both types of leather were manufactured and used throughout the war and issued without discrimination. Also, both the .69 Caliber and .58 Caliber Cartridge Boxes were standardized with both belt loops and shoulder sling as the Pattern 1861. Although a variety of obsolete, commercial and state procure items were procured, most soldiers used the basic regulation pattern accoutrements throughout the war.

Pictured above are the accoutrements and equipment used by the U.S. Army during the first two year of the Civil War. The items shown are (left to right): the P1855 two-bag knapsack with original period blanket; the Pattern 1851 infantry equipment belt with oval “U.S.” belt plate (see detail), scabbard for the M1855 Socket Bayonet (early war production with two rivets), and cap pouch; the P1861, .58 Caliber Rifle-Musket Cartridge Box with tanned leather shoulder sling, brass oval “U.S.” box plate and round brass eagle breast plate; P1851 haversack; and pattern 1858 canteen, with tinned iron cup.

Shown here are the accoutrements and equipment used by the U.S. Army during the last year of the Civil War. The items shown are (left to right): the poncho and blanket formed into a blanket roll; the infantry equipment belt with oval "U.S." belt plate (see detail) now with a retaining clip on one end in place of the leather loop, scabbard for the M1855 Socket Bayonet (late war production with eight rivets), and cap pouch; the Pattern (July) 1864, .58 Caliber Rifle-Musket Cartridge Box with tanned leather shoulder sling, embossed oval "U.S." on the flap and a round brass eagle breast plate; P1851 haversack with tinned iron cup; and pattern 1858 New York Depot canteen, with metal chain attached to the stopper loop.

On the left above is a carbine sling and a Pattern 1851 Mounted Saber Belt used by the Cavalry. To the right is a Pattern 1851 Heavy Artillery Sword Belt with a Model 1833 Artillery Short Sword. These were used in limited numbers by heavy artillery units in garrison (such as in the defenses of Washington) throughout the Civil War. All three items are made of blackened buff leather

Part 3, Small Arms

Following the Mexican War the Model 1842 musket became the service standard small arm for the infantry and other foot troops. The Regiment of Mounted Rifles were equipped with the M1841 Rifle for service on the frontier.

M1842 Musket

M1841 Rifle

In July 1855, Secretary of Ware Jefferson Davis authorized the production of a new .58 caliber rifle musket. This is the first rifled weapon produced for general issue used by the U.S. Army. A rifle version was also produced to replace the M1841 Rifle. Both the rifle and the rifle-musket were equipped with the Maynard patented priming system which used a roll of caps in a compartment in the lock, that advanced when the weapon was cocked.

M1855 Rifle-Musket

M1855 Rifle

As with everything else, a large variety of small arms were used by US soldiers during the Civil War, including a large number of obsolete weapons, both in their original configuration and modernized versions, and a variety of weapons imported from Europe. The M1855 was replaced with the M1861 Rifle-Musket, the principal change being the

elimination of the Maynard Priming System. Minor changes and improvements were made resulting in the M1863 Rifle-Musket, the most notable feature being the shape of the hammer.

M1861 Rifle-Musket

M1863 Rifle-Musket

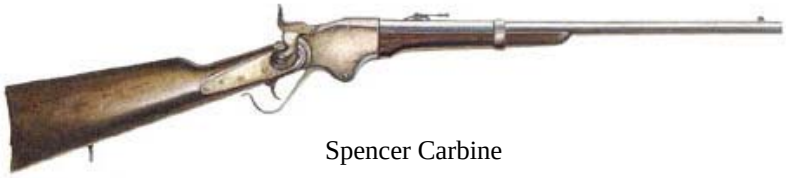
The two most notable (an numerous) imported small arms were the British Pattern 1853, .577 Caliber Enfield Rifle-Musket and the Austrian Model 1854, .54 Caliber Lorenz Infantry Rifle. These weapons were imported by both the U.S. and confederate governments.

British P1853 Rifle-Musket

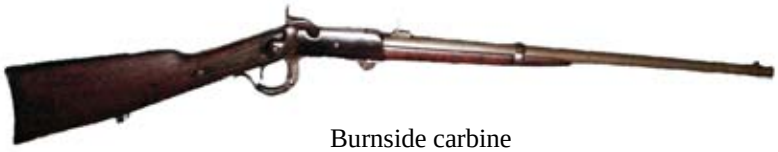
Austrian Model 1854 Infantry Rifle

The carbine was used by the Cavalry and numerous types were used during early part of the Civil War. Three carbines came to predominate by the middle of the war, however, the Sharps, which fired a .54 Caliber paper combustible cartridge or could be loaded with a bullet and loose powder; the Spencer, which was a magazine weapon that held seven rounds of .56 caliber metallic cartridge in a tube in the butt stock; and the Burnside, which used a unique tapered .54 Caliber metallic cartridge fired with a standard percussion cap. In all, more than 95,000 Sharps, 80,000 Spencer, and 54,000 Burnside Carbines were purchased.

Sharps Carbine



Spencer Carbine



Burnside carbine

Revolvers were used by both cavalry and Light Artillery with the .44 Caliber Colt New Army Model 1860; the .36 Caliber Colt Navy Model 1851; and the .44 Caliber Remington Army Model Revolvers being the top contenders in regards to use. Neither carbines nor revolvers were made in government armories, all were purchased by contract.

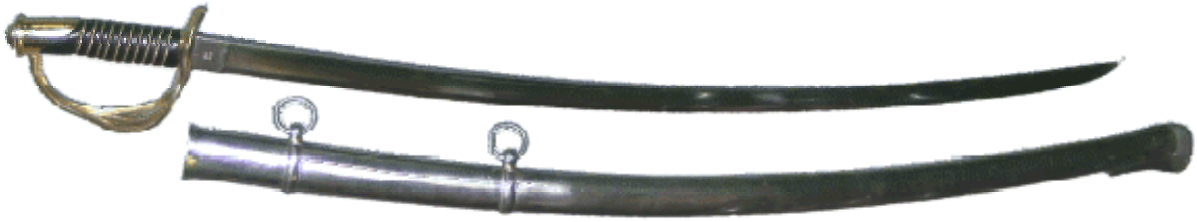
Colt M1860 New Army Model revolver

Colt M1851 Navy Model Revolver

Remington Army Model Revolver

The Dragoons, and later the Cavalry continued to carry the 1840 Dragoon Saber up to the start of the Civil War. In 1857 the Army authorized a Light Cavalry Saber, and began production in 1859 (this is sometimes referred to as the Model 1860). While most Cavalry units received the new saber, once the war started virtually all of the 1840 pattern sabers on hand were issued as well. Mounted members of Light Artillery Batteries dutifully were issued sabers as well, specifically the Model 1840 Light Artillery Saber. Despite images of the dramatic cavalry charge with lifted sabers gleaming in the sun, less that one percent of all the casualties in the Civil War were inflicted by an edged weapon of any type, saber or bayonet.

Model 1840 Dragoon Saber



Pattern 1857 (Model 1860) Light Cavalry Saber

Model 1840 Light Artillery Saber

Chapter 5 Late – 19th Century 1872-1902

Part 1 Uniforms

The period from the early 1870s to the early 1880s is characterized by a considerable lack of uniformity in Army clothing, particularly the field uniform. A look at period photographs reveals that even within the same company as many as four different patterns and several variations of uniform were in use at the same time.

At the end of the Civil War, the Army Quartermaster Department had large quantities of uniforms and equipment on hand. Enough it seemed, to last for many years to come. By 1871, however, the Army faced a crisis as stocks of the most needed sizes were becoming depleted. Congress, through the Secretary of War, was made aware of the problem and authorized budget expenditures for the acquisition of new clothing and accoutrements beginning in Fiscal Year 1872.

Five members of the 12th U.S. Infantry at Fort McKean in 1876. The sergeant on the left is wearing Civil War period four-button sack coat; the sergeant behind him has on a cut-down Civil War frock coat; the three soldiers on the right a wearing the Pattern 1876 sack coat, each of which have been modified. (National Park Service)

Taking advantage of the situation the Army decided to make significant changes based upon field experience and recommendations, not the least of which were those made by Assistant Surgeon Alfred Woodhull. In 1867 Woodhull had made a study of Army clothing and accoutrements, commenting on the problems with existing items, and making some specific recommendations concerning improvements for the health and well being of the soldier.

A member of Company B, 6th U.S. Infantry wearing the 1872 fatigue coat.

For field service the Army chose to adopt the "Swiss Blouse" recommended by Assistant Surgeon Woodhull. The coat was made of dark blue wool, with a nine-button closure in front, a fall collar, and branch colored piping. The distinctive feature of this garment were four

pleats running down each side in front from the shoulders to the bottom of the skirt. The purpose of the pleats was quite revolutionary, introducing the concept of layering. The coat was loose enough that it could be worn with up to three wool shirts and a waistcoat in cold weather and still allow for freedom of movement. This coat was almost universally despised by the average soldier; particularly those serving on the western frontier, and the concept of layering would not be revived by the Quartermaster Department until World War II.

The new uniform had not even been fully fielded before the Army began to make changes. Issue of the pleated blouse was stopped and the pattern 1874 sack coat was issued in its place. The new coat single breasted with five brass buttons in front and one on each cuff; it was made of dark blue wool with branch colored piping on each cuff and on the edge of the fall collar.

Pattern 1874 Sack Coat of and Infantry 1st Sergeant

The new coat was well received, but a new difficulty arose. On June 16, 1874 Congress, upon hearing that the Army was selling large quantities of surplus material, passed legislation that prohibited the expenditure of appropriated money to purchase "hats, uniform caps, forage caps, uniform coats, uniform jackets, sack coats, and unlined coats…until those on hand known as the old pattern… were exhausted."

Members of a Cavalry unit at Fort Grant, A.T. in 1876 showing the variety of both clothing and headgear in use by the Army in the mid-1870s.

A Pattern 1872 Forage Cap with unbound leather visor and enameled black leather chinstrap. The cap has the Pattern 1875 insignia for Company A, 1st U.S. Infantry Regiment.

The issue of headgear for field service went more smoothly for the Army, but was not without its problems. Because of poor storage, the vast majority of old pattern Civil War period forage caps were damaged beyond use by moths. The new Pattern 1872 forage cap was a smart-looking, chasseur-style cap made of dark blue wool with a black leather visor and a black enameled leather chinstrap secured by small brass general service buttons on each side. This cap was universally worn with a brass insignia on the front to indicate the wearer's branch and regimental number, and was well received and generally worn in garrison.

Unfortunately, the success of the Pattern 1872 forage cap was counter-balanced by the issue by the Quartermaster Department of the universally despised Pattern 1872 Campaign Hat. This black felt hat had a wide brim that could be folded up like a cocked hat, or worn down to protect the wearer from sun or rain. While sounding good on paper, in the harsh reality of the west, the hat tended to turn into a shapeless mass. Many soldiers had the brim of the hat cut down to a reasonable size, or resorted to wearing a privately purchased broad brimmed hat as seen in the photograph of the soldiers at Fort Grant seen above.

The 1872 Campaign Hat with the brim folded, and the same hat with the brim let down.

The 1872 regulations acknowledged a distinctive uniform for the field and another for ceremonial occasions. The 1872 dress uniform for mounted troops, including Cavalry, Light Artillery, and the Signal Corps consisted of a dress helmet with the national eagle in front, and branch colored plume and cords. The dress coat was made of dark blue wool with a nine button closure in front. The coat was piped and faced in the branch color.

The 1872 dress uniform for foot troops, including Infantry, Foot (Heavy) Artillery, and Engineers, consisted of a dress cap with a branch colored pom-pom, branch colored braid, and the U.S. coat of arms in front above the branch insignia, both in bright stamped brass. The dress coat was made of dark blue wool with a nine button closure in front. The coat was piped and faced in the branch color, and the skirts were two and one-half inches longer than those of the mounted coat.

The full dress uniform of a Sergeant of Signal Corps circa 1876, with orange branch colored facings. The branch color for the Signal Corps would be changed to black in 1891.

The Pattern 1872 Dress Cap and Pattern 1872 Dress Coat for musician of a Foot (Heavy) Artillery Battery. Coats for musicians had the addition of branch colored lace on the front in a "herringbone" design.

The 1872 Dress Helmet with distinctive brass U.S. Coat of Arms on the front. Although decorative, the helmet cord was supposed to prevent the loss of the helmet should it be blown off the head while the soldier was mounted.

Pattern 1872 Dress Helmet Plate

New insignia made of stamped brass was adopted for the dress cap, dress helmet, forage cap and collar of the coat. This new insignia would continue in use with only minor changes until the end of the century. In 1875, the hunting horn insignia used by the infantry in one form or another since 1833, was changed to crossed muskets. In 1881, the regimental number was ordered removed from the collar of the dress coat and placed in the center of the shield of the dress helmet eagle plate.

Pattern 1872 Infantry Insignia for the Dress Cap

Regimental Numbers for wear on the collar of the dress coat until the new dress uniform coat was introduced in 1881.

Pattern 1875 Infantry Insignia

Pattern 1872 Artillery Insignia

Chevrons from the 1888 Uniform Regulations
(From left to right starting at the top): First Row: Infantry Sergeant Major, Geneva Convention Brassard (Non-Combatant), Signal Service (below brassard), Artillery Quartermaster Sergeant; Second Row: Cavalry Saddler Sergeant, Infantry Chief Trumpeter; Artillery Principal Musician; Third Row: Infantry Ordnance Sergeant, Post Quartermaster Sergeant; Infantry Commissary Sergeant; Forth Row: Hospital Steward; Acting Hospital Steward; Cavalry First Sergeant; Infantry Sergeant; Fifth Row: Infantry Regimental & Battalion Color Sergeant, Infantry Corporal, Cavalry Ferrier, and Infantry Pioneer.

1872 also saw adoption of a new pattern of chevron for non-commissioned officers, reflecting new manufacturing techniques. The chevrons were made of a single piece of wool facing cloth with the outline of the chevron made by machine stitched silk thread. The chevrons also began to reflect the complexity of Army specialties.

Infantry Commissary Sergeant

Artillery Sergeant

Acting Hospital Steward

The Pattern 1876 Campaign Hat

In 1876 a black felt campaign hat replaced the Pattern 1872 hat. This new, reflective of the civilian hats of the time, had a narrow brim with a stitched edge, a black ribbon around the base of the crown, a fore and aft crease, and a Bracher patented metal vent centered on each side.

By the end of 1880 stock of old pattern uniforms were virtually exhausted, and the Army began to again think about refining its uniforms. In 1881, the specifications for the dress coats, both mounted and dismounted were modified slightly and the number was removed from the collar. The branch color for infantry was changed from light-blue to white to coincide with the issued of the new dress coats, mounted troops were able to maintain there colorful plumage.

A dress helmet was introduced for all troops, both mounted and dismounted, to be distinguished by the trim; a spike for foot troops and a branch colored horsehair plume for mounted troops. The universal helmet plate used on the 1872 dress helmet was replaced with an eagle plate that was branch specific.

1881 Dress Helmet Plates for the 1st Infantry Regiment, and for the Battalion of Engineers

The Infantry Dress Coat with white branch color adopted in 1883, and the Pattern 1881 Dress Helmet with Infantry trim.

The Cavalry Dress Coat with the Pattern 1881 Dress Helmet with Cavalry Trim

In December 1883 the campaign hat was changed from black to drab with a brass circular vent centered on each side of the crown. The specifications were changed again in February 1889 with the brass vents being replaced by holes punched in each side of the crown in a "snowflake" pattern. The latter pattern was the type of hat worn during the Spanish- American War of 1898.

The Pattern 1883 Campaign Hat

The Pattern 1889 Campaign Hat

The Canvas Fatigue Uniform as worn in 1888

The 1884 Brown Canvas Fatigue Coat

In May 1884 the Army introduced a brown cotton canvas fatigue uniform. For the first time the soldier now had a full dress, service dress, and fatigue uniform.

Throughout the period a number of subtle style changes were made to the uniform. The sack coat lost its piping; the button pattern changed in 1885; pockets were added in 1887 and removed again in 1892. By the Apache campaign of the 1880s the Army had become far stricter in requiring that the proper uniforms be worn in the field.

A comparison of the button used prior to 1885 (on the left) and that used after 1885 (on the right).

A new forage cap introduced in 1895 was similar to the caps worn by firemen and train conductors, and did not find favor with the troops. A solid brass branch insignia with a screw-post fastener on the reverse replaced the Pattern 1872 branch insignia in 1896.

A Cavalry Sergeant circa 1886

A Pattern 1892 Sack Coat for a Cavalry Corporal and the Pattern 1895 Forage Cap for Troop K, 1st U.S. Cavalry circa 1897.

In May 1898, at the start of the Spanish-American War, the Army adopted a khaki cotton field service uniform based on the British pattern. Because of production problems, no khaki uniforms were issued prior to troop deployment during the Spanish-American War.

August 1898

September 1898

October 1898
(Philippines only)

August 1899

Between August 1898 and August 1899 the army issued no less than four patterns of khaki field service coats. Many of the coats issued in the Philippines were the British Pattern 95 Foreign Service type, procured in Hong Kong.

In June 1898, issue of the dress uniform was suspended. In July 1898 corps badges were revived, but the Grand Army of the Republic lobbied against the reuse of Civil War corps badges so new designs were introduced as seen below.

1st Division, First Army Corps	Headquarters, Second Army Corps	1st Division, Third Army Corps	2nd Division, Fourth Army Corps
1st Division, Fifth Army Corps	Headquarters, Seventh Army Corps	Headquarters, Eighth Army Corps	Artillery Corps, Coastal Defense

Part 2, Accoutrements

At the end of the Civil War the Ordnance Department faced the same issues as the Quartermaster, with vast quantities of accoutrements and equipment in storage. Civil War period accoutrements would continue in use until the mid 1870s. For the infantry, the only concession to the adoption of the caliber .50 fixed cartridge in 1866, was to drop the use of the percussion pouch, and to alter the tin liners of the cartridge box to accept the new cartridge. Two primary methods were used to accomplish this. The first was to remove the small divider in the top compartment of each tin and insert a wood block bored to hold ten cartridges. With two tins in the box, the soldier had ready access to 20 rounds, with an additional 20 stored in packets in the lower compartments. The second method was to remove the small divider in the top compartment and to lay two packets of cartridges in the compartment, one on top of the other. Neither method was entirely satisfactory. The cavalry continued to use its wartime accoutrements unaltered.

Infantry accoutrements as they would have appeared in 1867-1868 included the equipment belt with oval U.S. belt plate and brass keeper; the Pattern 1864 bayonet scabbard; and the July 1864 pattern Cartridge Box. In addition, the Pattern 1851 Haversack and 1858 Canteen continued in use.

In 1870, as a result of heat and poor storage conditions, almost the entire supply of knapsacks and haversacks that the Army had on hand were condemned as unserviceable. In 1871 a board of officers met in Washington to consider improvements to the Infantry equipment. At the suggestion of the Quartermaster General, the responsibility for the manufacture of knapsacks, haversacks and canteens was transferred from the Quartermaster Department to the Ordnance Department. In 1872, the board selected a brace system based upon that used by the British Army. 5000 sets of experimental equipment, with various patterns of cartridge boxes and valise pack, were distributed for field trials. A second board, convening at Watervliet Arsenal, selected a similar system for use by the cavalry, and 4000 sets of equipment were made up for field testing by various Cavalry units.

The result of the first test proved to be an utter failure for both cavalry and infantry troops. The equipment, was uncomfortable, caused chafing and was difficult to impossible to use in a fight. A board of cavalry and ordnance officers was convened at Fort Leavenworth in January 1874 to re-evaluate the cavalry equipment. The recommendations of the board, as approved by the Secretary of War included a belt with Hagner type belt plate, but without the loops for the brace. The saber straps were attached by brass hooks to sliding brass keepers on the belt. This was to allow the saber to be easily removed and attached by the straps to the saddle as necessary. The carbine cartridge box was to be a smaller version of the Dyer cartridge pouch used with the 1872 brace equipment, a second, even small version was recommended for use with revolver cartridges. A revolver holster was also similar to that recommended in 1872, with a smaller flap and a belt loop attached by a Hoffman patented swivel. Finally, the carbine sling adopted before the Civil War was to remain in use.

The 1884 cavalry equipment as generally used, including the modified Hagner belt and belt plate, the 1874 saber straps with brass belt slides, the Dyer Cartridge pouch, the Pattern 1863 revolver holster, and the cap pouch modified to use for revolver ammunition.

The recommendations of the board had no sooner been approved when changes began being made. Because of the large supply of older equipment on hand and the lack of funding by Congress, substitutions began being made. Both the older pattern belt with the eagle plate and the new pattern belt were issued as stocks were available, and both were used side by side well into the 1880s. The Dyer cartridge pouch for revolver cartridges was never produced for issue and old pattern cap pouches were modified for use with revolver ammunition. With thousands of Pattern 1863 holsters on had, the Pattern 1874 holster was not manufactured beyond those made for the field trials. Only the Dyer cartridge pouch for carbine ammunition was universally issued, since the modification of the older pattern box for the new ammunition would be just as expensive as making the new pouch.

The Centennial Year - 1876
The infantry soldier as envisioned in Washington wearing the Palmer Brace System with Hagner pouches.

The Centennial Year - 1876
The infantry soldier as he appeared in reality. Infantry Soldiers in the Black Hills Expedition of 1876.

The Secretary of War ordered another board to assemble at Fort Leavenworth, Kansas, on July 1, 1874 to again review the requirements of the infantry in regards to accoutrements and equipment. The board moved in August to Watervliet Arsenal where access to shops and workman were readily accessible. On November 12, 1874 the board decided to recommend adoption of another brace system, this one having been submitted by Lieutenant George H. Palmer, 27th Infantry. The report of the board was approved by the

Secretary of War on January 4, 1875. Again "the equipment never got beyond the field trial stage and was never put to the test of actual use. It failed to give satisfaction to the army, and was again superseded," (U.S. Supreme Court U.S. v. Palmer, 128 U.S. 262 1888).

In the mean time, the soldiers campaigning in the west were using a mix of old (Civil War) pattern items, experimental items, and items that were made locally by the troops themselves. In the latter category was the thimble or prairie belt. This was an old pattern leather belt with leather or canvas loops stitched around the length of the belt, designed to hold between thirty and forty .45 caliber cartridges. In addition, an arsenal manufactured belt, generally referred to as the Pattern 1876, and was produced in at least four different versions.

In the spring of 1878 the Chief of Ordnance conceded that the Pattern 1874 infantry equipment was not worth the expense. Shortly afterward the Secretary of War ordered a board to assemble to review bayonets and entrenching tools and the equipment of troops in general. This board known as the Miles Board, named for its chairman Colonel Nelson A. Miles, 5th Infantry. It was the eighth board to meet on the subject of accoutrements in as many years.

Several months before the board was to meet, Colonel Hagner, commander at Watervliet Arsenal, responding to reports from the field, put his people to the task of coming up with a viable solution to the problem of accoutrements. Hagner noted that while the brace system had failed, a number of the components had worked reasonably well in the 1876-1877 campaigns. When the board met, Hagner was able to submit a canvas and leather cartridge belt (a pattern 1876 *type 4*), a steel bayonet scabbard, a blanket (clothing) bag, a cotton canvas haversack with leather sling, and a canteen with leather sling for consideration. With considerable deliberation the board approved the equipment as submitted by Watervliet Arsenal. The mess gear adopted in 1874 was continued in use with the new equipment. Distribution began immediately following the conclusion of the board and the majority of items adopted by the board would continue in use well into the 20th century.

The 1876 Cartridge Belt in its final form was produced for both the Infantry and the Cavalry. The board had also found favor with a woven cartridge belt introduced by Major Anson Mills. After a period of negotiation, and at the direction of the Commanding General of the Army, a contract was let in 1880 with the Mills-Orndorff Company of Worcester, Massachusetts for the woven belt. Production began in 1881. The drab colored belt came in two adjustable sizes with either 45 or 50 loops to hold caliber .45 Ammunition, and with a stamped brass "U.S." belt plate. The bayonet scabbard first introduced in 1873 was reintroduced for use with the belt, suspended from a brass wire double hook device.

The Pattern 1878 Infantry Equipment as submitted by Watervliet Arsenal to the Miles Board

The Pattern 1880 Mills Cartridge Belt for caliber .45 ammunition along with the Pattern 1873 Bayonet Scabbard suspended from a brass wire double hook adapter. Pictured to the right is an infantryman on guard duty in 1891 wearing the Mills Cartridge Belt.

It was also decided that the Pattern 1874 cavalry belt, along with the McKeever cartridge box would be used for wear with the dress uniform by all troops when under arms, along with the Pattern 1873 bayonet scabbard for foot troops, and the saber straps for mounted troops.

The accoutrements for wear with the dress uniform by dismounted soldiers included the 1874 Belt, the 1873 Bayonet Scabbard and the McKeever Cartridge Box.

Most states used a similar arrangement, in equipping the members of the National Guard. The wealthier states purchased items with state designations on them such as Mass; RIM; NGP; and so forth, while poorer states purchased standard U.S. marked items from the federal government.

Infantry accoutrements adopted by the Pennsylvania National Guard in 1881. The belt plate, cartridge box, bayonet scabbard rosette, and haversack are all marked “NGP.”

In 1885, a cavalry equipment board was assembled to review horse equipment and cavalry accoutrements. The findings of the board were published in General Order No. 73 for the year 1885. The board confirmed that a modified version of the Pattern 1876 cartridge belt would be used for mounted service along with a modified version of the 1859 Stewart's patented saber straps. The carbine sling was made narrower, with a single prong bar buckle, and a new holster was introduced that could accommodate both the Colt and Smith & Wesson Revolvers. The board also affirmed the continued use of the Pattern 1874 mess equipment and the leather belt with Hagner belt plate and the McKeever Cartridge Box for wear with the dress uniform when under arms.

The accoutrements as approved by the Cavalry Equipment Board of 1885.

In 1892, the Army went to a .38 Caliber revolver and the holster was changed appropriately. In 1894, .30 Caliber Krag-Jorgensen Rifle was introduced and a new Mills double-looped cartridge belt was adopted. The new belt held 100 rounds of .30 caliber ammunition; the color of the belt was dark blue, and it was secured with a brass, C-shaped heavy wire clasp. A cavalry version of the belt had 12 additional loops, six over six, for .38 caliber revolver cartridges.

When the Regular Army changed over to the .30 caliber rifle, the Mills Company continued to make .45 caliber single-looped belts for the National Guard, but changed the color to dark blue. Unless otherwise specified the National Guard belts were delivered with a C-shaped closure as well, although a number of states chose to continue to purchase state pattern belt plates.

The infantry accoutrements and equipment as worn by the Regular Army beginning in 1894 and as worn by them during the Spanish American War.

The double-looped Mills Cavalry Cartridge Belt with the 1892 Holster for the .38 Caliber Colt Double-Action Army Revolver, and the Stewart Patented Saber Straps. After the start of the Spanish-American cartridge belts were again produced in a drab color to help speed production.

Equipment used by the New York National Guard beginning around 1896, and used into the Spanish-American War including the Mills .45 Caliber Cartridge Belt in dark blue. The Merriam Patented Knapsack was not used by the Regular Army except for field trials in the early 1890s. It was however purchased by several states for use by the National Guard. Most surviving examples, particularly those with large black numbers as pictured above, are from New York.

Pictured above is equipment typical of that used by the United States Volunteers in the Spanish-American War. Virtually every type of accoutrement and equipment used by the Army back to 1874 was issued to the volunteer force at the beginning of the war, except for the brace system. Even some canteen and knapsacks dating from the Civil War were dragged from storage to equip the troops. Troops embarking for Cuba were ordered to leave their blanket bags behind and use a blanket roll instead.

Pictured above are three example of cartridge belt contracted for during the Spanish-American War. At the top is a single-loop .45 caliber cartridge belt manufactured by Hurlbert Manufacturing Company; the middle belt is a single-loop .30 caliber cartridge belt also manufactured by Hurlbert Manufacturing Company. Both of these belts are woven, but unlike the Mills process which integrated the loops in the weaving process, the loops on these belts are stitched into place. The bottom belt is a single-loop .30 caliber cartridge belt manufactured by Spalding Sporting Goods Company, and is made of canvas with the loops stitched in place. Spalding also made a mounted version with a saber loop riveted on the left bottom of the belt.

Beginning in August of 1898 the Army began issuing a .38Caliber Mill Cartridge belt to light batteries being fitted out for service in the Philippines, and to members of regimental Non-Commissioned Staff armed with the revolver.

Part 3, Small Arms

The weapons listed below are the principle small arms used during the period from just after the Civil War until the first part of the 20th Century. A number of other weapons, including experimental models or variations were considered beyond the scope of this survey and have not been shown.

At the end of the Civil War, Erskine Allin, Master Armorer at the Springfield Armory was asked to devise a method of converting the thousands of percussion rifle-muskets and carbines on-hand for use with fixed metallic cartridge ammunition. After some experimentation and at least one false start (the Model 1865 Trapdoor), the Army settled upon the Model 1866 Rifle. Utilizing the Model 1863 rifle-musket, the barrel was cut and a trapdoor mechanism installed at the breech end. The barrel was reamed out and a sleeve with a rifled .50 Caliber bore was brazed into place. Finally, a new hammer was attached to the lock plate and the rifle was ready for inspection and issue.

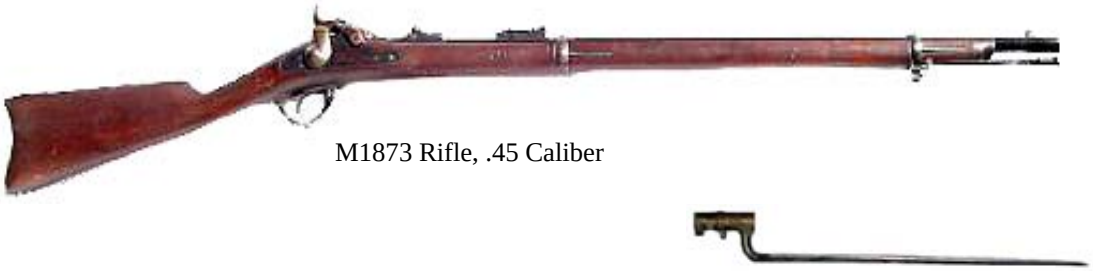
M1866 Rifle, .50 Caliber
Second Model Allin Conversion

In 1870 a small arms review board met and concluded that the .50 Caliber trapdoor rifle should be retained for service use. However, the results of the testing were not considered conclusive and in 1872 two boards were assembled concurrently by the Army. The first was the Small Arms Review Board, also known as the Terry Board for its Chairman BG Alfred Terry, which met at New York City to conduct a comprehensive approach to selecting a small arms system. The second was the Small Arms Caliber Board which met at Springfield Armory to test cartridges and rifling of barrels.

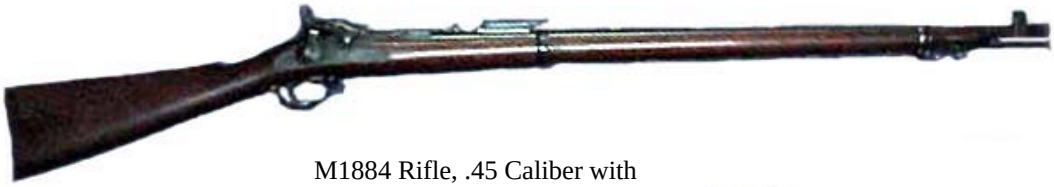
The Small Arms Caliber Board concluded its testing first and the finding were forwarded to the Terry Board. It was determined by extensive testing that the best cartridge then available was of .45 caliber with a round nosed lead-tin alloy bullet, and a straight tapered case holding 70 grains of black musket powder. The Terry Board came to its conclusion, and again the trapdoor rifle was selected, this time to be chambered in .45 caliber, and in both a rifle and carbine version. The recommendations of the board were approved by the Secretary of War on May 28, 1873 with production beginning at the end of the year.

The .45 caliber trapdoor rifle would remain in use with the Regular Army until 1894 and with the National Guard in various states until at least 1905. The version used the most, by both the Regular Army and the National Guard was the Model 1884 with the long range Buffington rear sights. As the supply of socket bayonets began to dwindle in the

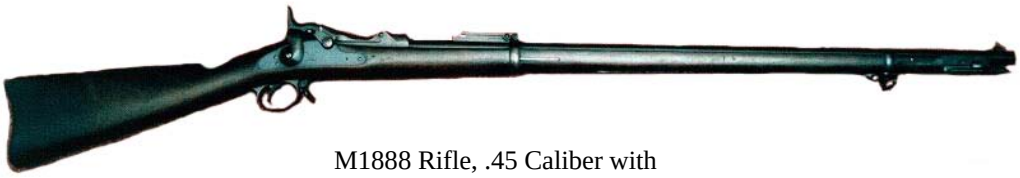
late 1880s, the last model of .45 caliber rifle to be produced, the Model 1888, had a ramrod bayonet.



M1873 Rifle, .45 Caliber



M1884 Rifle, .45 Caliber with
the Buffington Rear Sight



M1888 Rifle, .45 Caliber with
Ramrod Bayonet

In 1892, the Army held a competition, and comparing rifle designs from Lee, Krag, Mannlicher, Mauser, Schmidt-Rubin, and about 40 other military and civilian designs with a view to replacing the trapdoor rifle. The trials were held at Governors Island, New York. Despite protests from domestic inventors and arms manufacturers, an improved form of the Danish .30 caliber bolt-action Krag-Jorgensen magazine rifle won the contract. The selection of the Krag was approved and production began at the Springfield Armory in 1894. Almost immediately changes were suggested, and an improve Model 1896 went into production. Many of the original Model 1892s were returned to the armory to be rebuilt to the new specifications.

The Model 1896 was the standard rifle in the hands of the Regular Army in the Spanish-American War. When the war began, modifications were made to reduce the number of production steps, and the Model 1898 emerged as a result. Although the new weapon was too late for use in the war, many of the volunteer regiments serving on occupation duty received the Model 1898, including those regiments caught up in the Philippine insurrection. The Krag continued in production until 1904 and in service use until 1907 when it was finally replaced by the Model 1903 rifle.

Model 1896 .30 Caliber
Krag-Jorgensen Rifle

In the period just after the Civil War the Army decided that it would arm the cavalry with the much favored seven shot caliber .56 Spencer Carbine, but in 1867, the Army contracted with the Sharps Arms Company to have 31,000 of their carbines converted to .50-70 Caliber, the same round used in the infantry rifle. By the early 1870s cavalry units were being armed with the more powerful Sharps.

Spencer .56 Caliber Carbine

Sharps .50 Caliber Carbine

With the change over to .45 caliber ammunition in 1873, the Terry Board decided to manufacture a carbine version of the trapdoor known as the M1873 carbine. A number of improvements were incorporated into the weapon in 1877 and again in 1884.

M1873 .45 Caliber Carbine

The .45 caliber Model 1884 carbine was replace in 1896 with a .30 caliber carbine version of the Krag-Jorgensen, although the trapdoor would continue to be used by the National Guard into the early part of the 20th century. The Model 1896 Krag-Jorgensen carbine was used by the cavalry of the Regular Army and the majority of Volunteer cavalry units during the Spanish-American War. A small number of Model 1898 carbines were produced and issued during the war as well, and in 1899 a newer version of the Krag, known as the Model 1899 carbine would take the regular cavalry into the new century fighting insurgents in the Philippines.

M1896 .30 Caliber Krag-Jorgenson Carbine

Following the Civil War, the Army continued to issue both the Colt Army and Remington Army percussion revolvers in caliber .44. Although some half-hearted tests were conducted in 1870 and 1872, the Army was in no hurry to adopt a metallic cartridge revolver. Part of the problem was a patent involving the production of cylinders for metallic cartridges that dated from before the Civil War. This patent, held by Smith & Wesson, prevented both the Army and commercial makers from producing a bored-through cylinder essential for a the production of a metallic cartridge revolver. The rights to the patent expired at the end of 1870.

In November 1872, Colt submitted a last minute entry for consideration. This was an entirely weapon called the New Model Army Metallic Cartridge Revolver. In early 1873, as a result of the findings of the Small Arms Caliber Board, the Army requested that Colt submit a version of the revolver in caliber .45. The result was that the Ordnance Department convinced of the superiority of the new weapon suspended further testing and strongly recommended the adoption of the Colt Single-Action Army Revolver. The recommendation was approved by the Secretary of War on June 26, 1873.

Through the influence of Major General John Schofield, the Smith and Wesson Model No. 3 was purchased in limited quantities. The weapon had been designed by the general's brother Major George Schofield. Issue of this weapon began in 1875 through the San Antonio Arsenal to companies of the 4th, 9th and 10th Cavalry. In all, about 8000 Smith & Wesson Revolvers were purchased and just over 5000 issued between 1875 and 1891. In the same period the Army purchased and issued more than 37,000 Colt Revolvers.

Colt Caliber .44 New Army Model Revolver

Remington Caliber .44 Army Revolver

Colt Caliber .45 Single-Action Army

Smith & Wesson Caliber .45 No. 3 Revolver

In the late 1880s Colt began to experiment with double action revolvers. In 1889 they introduced a double-action revolver with a swing-out cylinder design. A spring-powered latch on the left side of the revolver's frame retained the cylinder. The cylinders rotated in a counter-clockwise direction and, as wear occurred, tended to force the cylinder out of exact alignment with the barrel. In spite of this shortcoming, the U.S. Navy purchased 5000 M1889 revolvers between 1889 and 1890.

The Army liked the Navy Model 1889, but wanted a separate bolt to hold the cylinder in the firing position. This change was made and the Army purchased 11,000 Colt revolvers designated as the Double-Action Army Model 1892. But the M1892 also suffered from the counter-clockwise cylinder rotation problem.

Colt corrected the problem by incorporating a safety mechanism developed by Frederick Felton into the lock. Felton's innovation prevented the revolver from being fired while the cylinder was not fully closed and aligned. All of the Model 1892 revolvers were withdrawn from service and eventually replaced with Model 1894, and a further improved Model 1896 revolvers. Most of the Model 1892s were modified by the addition of Felton's lock and made available to the National Guard. All these revolvers were externally indistinguishable from each other except by the markings. While the double action mechanism of this weapon was on the cutting edge of firearms technology, the Army learned in the Philippines that caliber .38 ammunition was not up to the task of stopping an attacking opponent in his tracks.

Colt Caliber .38
Double-Action Army Revolver

Following the Civil war the Army tenaciously hung on to its sabers. The Model 1860 Light Cavalry Saber was issued continuously to cavalry regiments until 1913.

The Model 1860 Light Cavalry Saber

Mounted members of artillery batteries also continued to be issued the Model 1840 Light Artillery Saber. In 1872 the Ordnance Department modified newly produced sabers by using a lighter and slightly thinner blade, however, both versions continued in use simultaneously until the end of the century.

Top: The pattern 1872 version of the Light Artillery Saber
Bottom: The old pattern Model 1840 Light Artillery Saber

Chapter 6 Early – 20th Century 1902-1926

Part 1 Uniforms

The first decade of the 20th century was a period of great change for the Army. During this period the office of the Chief of Staff was created, the militia act was modified leading to the creation of the National Guard, and a number of branches and departments were created or reorganized, including the Army Nurse Corps, and the reorganization of the Artillery into an Artillery Corps consisting of the Field Artillery and Coast Artillery. At the same time, the vast majority of troops were outside the country on occupation duty or containing the insurgency in the Philippines.

In the period following the Spanish American War the Army again took a hard look at its uniforms, accoutrements and weapons. In 1902 a board was assembled in Washington, to review the Army's uniforms, and on July 17, 1902 the results of the board's deliberations were published as General Order No.81. This General Order made significant changes in how the Army looked.

Private, circa 1908, in the summer service uniform

Coast Artillery private, circa 1908, in the old pattern winter service uniform.

Virtually every item of clothing was examined and most were redesigned. Blue was eliminated as a color for service dress, being replaced by olive drab and khaki. Leather items were changed from black to russet, new insignia was authorized, chevrons became smaller, and even new buttons were introduced in gilt for dress and bronze for the field. By the fall of 1902, the Quartermaster Department at Philadelphia began making the new uniforms, but the changes were not without controversy, extending even to the White House. How could the Army think of issuing new uniforms when there were stocks of the older pattern clothing still available and in serviceable condition?

In 1903 a compromise decision was made in which the Artillery and Engineers serving in the United States would continue to receive and wear old pattern clothing until stocks were exhausted. In addition, old pattern trousers and khaki cotton service uniforms would continue to be issued (except those with

branch colored facings) to all units. In 1904 the Engineers and Field Artillery also began receiving the new dress and service uniforms. Only the Coast Artillery continued to wear the older patterns and would do so in some cases, until 1911. It must be noted that there was considerable confusion as to who would wear what throughout the period and both quartermasters and unit commanders did not always follow the rules.

By 1906 things had begun to settle down and the Quartermaster Department hired a British Army tailor to make improvements to the service uniform. New uniform regulations were published in 1908 incorporating all of the changes made since 1903. Included with the regulations was an impressive supplement of hand-colored plates depicting all of the individual parts of the Army's uniform and insignia and citing the authorizing general orders.

Dress Coat

Winter Service Coat

Summer Service Coat

Fatigue Coat

Tropical Service Coat

Shown above is a selection of enlisted uniform coats as depicted in the supplement accompanying the *Regulations of the Army of the United States, 1908.* The enlisted soldier now had a dress winter service dress. summer service dress, fatigue uniform and, tropical service dress.

The 1902 Dress Uniform for a Sergeant of Infantry. Note the blue piping and cord contrasted with white chevrons.

The new dress coat was nothing more than the old service coat elevated in status. The coat now had six buttons instead of five, with a standing collar and branch colored piping. The buttons were a new rimless pattern in gilt brass with the U.S. Coat-of-Arms in the center. A bright brass U.S. device and branch insignia was worn on each side of the collar. Sky-blue wool trousers of both the old and new pattern were issued with the dress coat. The new winter service coat was made of olive drab wool, with a five button front closure, four patch pockets, and a stand and fall collar. Each sleeve had a pointed cuff applied of the same color and material as the coat. In 1906 the service coat was retailored with a straighter stand and fall collar and bellows pockets.

The buttons of the coat were of the new pattern except with a dark bronze finish. A dark bronze metal U.S. device and branch insignia was worn on each side of the collar. Breeches of corresponding material and color were issued as part of the service uniform. The breeches had belt loops and an adjustment belt in the back.

The summer service uniform was made of khaki cotton drill and was unlined. In all other ways the coat and breeches were constructed like the winter service uniform with the same insignia and buttons. The buttons were removable so that the coat could be laundered.

The brown cotton canvas fatigue uniform was similar to what was previously worn, but it now sported two lower patch pockets and a single breast pocket on the left side. In 1908 the brown canvas fatigue uniform began to be replaced with blue denim fatigue uniforms. However it would not be until 1919 that the changeover would be completed.

Blue Denim Fatigue Coat and Hat introduced in 1908.

The tropical service coat was authorized for limited issue garrison wear in hot climates. It was made of white cotton with five white cloth cover buttons in front (in some cases the gilt general service button was authorized by local commanders). The coat had plain cuffs and a stand and fall collar with gilt brass U.S. and branch insignia, and was worn with matching white cotton trousers.

Ankle high black service shoes were worn with both the dress uniform and the tropical service uniform. Russet brown shoes with canvas leggings were worn with both the winter and summer service uniforms. The russet leather garrison belt with single prong bronze frame buckle issued as part of the uniform will be examined in the accoutrement section.

The dress helmets, both mounted and dismounted, were eliminated in 1902. In their place, the Army issued a new dress cap with a flared crown and a band with branch colored stripes. The visor and chinstrap were made of black enameled leather, and a gilt branch insignia was worn on the front. Like the dress coat, the new dress cap was nothing more than the old forage cap given a new status.

1902 Dress Cap for a member of Company H, 10th US Infantry

The service hat was also modified in 1902 with the addition of a screened vent centered on each side, the same as that introduced in 1883, except made of aluminum instead of brass. Older patterns of the hat continued to be issued until stocks were exhausted. The army had reintroduced hat cords with acorn tips in various branch colors in early 1900.

A new pattern service cap was also issued for garrison wear with a flared crown and black leather visor and chinstrap and a bronze metal branch insignia worn on the front.

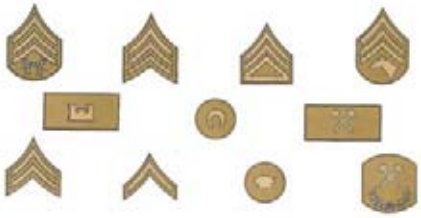
1902 Service Cap with a Signal Corps branch insignia on the front in bronze metal.

The 1902 Service Hat

Service Hat Cord for Cavalry

Collar and Cap Insignia in Bronze at the top and Gilt at the bottom.

Cap Badges for Non-Commissioned Staff



A selection of new small chevrons introduced in 1904 for the field

1902 Gilt Dress Button

1902 Bronze Field Button

1904 Chevrons for the Dress Coat.

Between 1902 and 1904 the Army introduced a staggering variety of rank, branch and specialist insignia in either bright for full dress and drab or bronze for the field, far more than we can deal with in this study. Shown above are a few examples of buttons and insignia extracted from the supplement accompanying the *Regulations of the Army of the United States, 1908.*

On December 26, 1911 the War Department again published *Regulations for the Uniform of the United States Army*. This publication provided guidance on how to wear the uniform. A second publication entitle *The Uniform Specifications* was published on January 25, 1913. This second publication specified exactly what the uniform would consist of. Together these regulations and specification codified the changes that the Quartermaster Department had been making as early as 1909.

The Gilt Rimmed General Service Button for the Dress Uniform

The Bronze Rimmed General Service Button for the Field Uniforms

The Pattern 1911 summer service uniform was made of olive drab cotton drill and was unlined. The coat was single breasted with five removable bronze general service buttons in front. The buttons were a new pattern of bronze metal with a rimmed edge and lines behind the U.S. Coat-of-Arms. In addition the coat had a standing collar; shoulder loops, plain cuffs; and four pockets in front, each with a flap secured by a small bronze general service button. Dark bronze collar discs, 1 inch in diameter, were worn on the collar, with a U.S. disc on the right and a branch disc on the left. Breeches of corresponding material and color were issued as part of the uniform.

The Pattern 1912 winter service uniform was made of olive drab wool. The standing collar coat was lined, but in all other ways matched the summer uniform. Matching wool breeches had belt loops but the adjustment belt used previously in the back, was eliminated.

Pattern 1911 Summer Service Coat with First Sergeant Chevrons

Pattern 1912 Winter Service Coat

A new Pattern 1911 service hat made of olive drab felt with a "Montana" peak replaced the old drab service hat. The new had an olive drab ribbon around the crown with a bow on the left side. At the base of the peak on all four sides was a metal grommet that served as a vent.

The service cap was redesigned with a larger slanted top and better proportions than the older pattern. The visor and chinstrap were russet brown, and the chinstrap was secured with the new small bronze general service buttons. Branch insignia in bronze metal was worn on the front.

The Pattern 1911 Service Hat with Artillery Hat Cord

The Pattern 1912 Service Cap, with insignia for Company A, Battalion of Engineers

The familiar World War I Collar Discs were introduced in 1908 but because of acquisition issues did not get issued in quantities until the 1911 and 1912 standing collar service coats were adopted.

Pattern 1908 Collar Discs from the 1908 Regulations

World War I broke out in August 1914 and almost immediately began to have an impact on Army uniforms. Most notable was the color change to the wool service uniform because of the non-availability of German dyed wool. American manufacturers could not match the German formula for the olive drab color.

Period photograph of a soldier demonstrating how to wrap Spiral Puttees

The United States entered the war on April 6, 1917, and issue of the dress uniform was suspended. With millions of men entering the service, the tailoring of the wool service coat was simplified. The service hat and canvas leggings continued to be issued to troops stationed in the United States, but troops assigned to the American Expedition Forces (A.E.F.) in Europe received new items including both French and British made an overseas caps, spiral puttees, and steel trench helmets.

The Army experimented with steel helmets but because of manufacturing issues, elected to use the British steel helmet instead. Until the end of the war, the vast majority of trench helmets used by the U.S. Army were obtained from the British. The British manufactured helmet can be distinguished from an American manufactured helmet in two ways. The first is that the side loops for the chinstrap are held in place with split rivets on British helmets and with solid head rivet on American produced helmets. The second method, if the lining is present, in that British produced helmet have a red stamp on the white underside of the lining with:

BRODIE'S STEEL HELMET
Registered No. 081,990.
WAR OFFICE PATTERN
PATENT No. 11803/15

The Brodie's Steel Helmet designated as the Model 1917 by the U.S. Army

A British made Pattern 1918 Overseas Cap

Above: U.S. Pattern 1917 Spiral Puttees

Pattern 1917 Wool Service Coat

The quickest method of distinguishing between the Pattern 1912 Winter Service Coat and the Pattern 1917 is the stitching on the cuff. The 1912 coat has two rows of stitching (top photo) white the 1917 has only one.

In December 1917 there was a pattern change in the collar discs for economy reasons. The regimental number was moved to the disc with the US while the company letter remained on the disc with the branch device. Earlier discs continued in use.

Above, the World War I economy Disc

On February 2, 1901 the Nurse Corps became a permanent part of the Army Medical Department under the Army Reorganization Act (31 Stat. 753) passed by the Congress. Nurses were appointed to the Regular Army.

In 1917 the Signal Corps was authorized to recruit bi-lingual (French and English) telephone operators for service with the A.E.F. in France.

The uniform for both organizations was similar, consisting of Navy blue wool. Norfolk-style jacket and matching wool skirt. The Nurse Corps also had specialized work clothing that are not within the scope of this study.

A Signal Corps Telephone Operator at General Headquarters, AEF in Paris, France

Woman's Norfolk Jacket, 1918

In 1918, a secondary standard coat with internal pockets was manufactured for the American Expeditionary Force (AEF), some in the US and some in Great Britain. Shoulder sleeve insignia was also introduced in 1918 but was generally not worn until after the Armistice with the exception of the 81st Division "Wildcats," the 5th Division "Red Diamonds," and some units of the 26th "Yankee" Division.

81st Division

5th Division

26th Division

A Pattern 1918 British made Service Coat worn by a member of the 26th Yankee Division on returning to the United States in 1919.

In 1921, chevrons and service stripes were changed from olive drab on olive drab, to olive drab on Navy blue. By 1924 bright brass general service buttons and insignia were required for use with all service uniforms.

Winter Service coat circa 1925

Bright brass Collar Insignia

Bright brass Service Button

Pattern 1921 Staff sergeant's chevrons

The 1924 service uniform as worn by a Reserve Officer Training Corps (ROTC) cadet in the late 1920s.

Part 2, Accoutrements

The accoutrements and personal equipment used by the U.S. Army in the Spanish-American War continued in used into the 20th century with only slight changes. In 1899 the haversack was made larger, and in 1902 the wider sling was issued for use with both the haversack and the canteen.

The superiority of the Mauser Rifle used by the Spanish was evident and studies on improving the U.S. service rifle began as soon as the war had ended. By 1903 the Army had developed a caliber .30, bolt action magazine rifle of Mauser design and was prepared to go into production.

A board was assembled to examine infantry field equipment both from the standpoint of the lessons learned in Cuba and the Philippines, and in regards to producing a cartridge belt compatible with the new rifle. The old pattern double-loop cartridge belt could not be used to hold the five-round clips needed for the proposed rifle. New pattern equipment was approved with production to begin in 1904.

The new equipment consisted of a drab woven cotton nine-pocket cartridge belt with a bronze wire interlocking buckle. Each pocket could hold two five-round clips of .30 caliber rifle ammunition, and had a flap secured with a bronze metal eagle snap fastener which looked like a small Pattern 1902 general service button on the outside. Pattern 1878 and Pattern 1899 haversacks were modified with the addition of an S-hook attached to each of the D-rings on the back so that the bag could be suspended from the metal eyelets spaced along the bottom of the belt. The Pattern 1878, was suspended from the belt by a drab canvas strap, shaped like and inverted V, with a bronze hook on each end to attach to the loops of the canteen, and a spring clip in the center to attach to an eyelet of the belt. A new entrenching shovel with a T-shaped handle was added and held by a canvas cover with a leather strap and a blued steel and wire pivoting belt loop as used on the pattern 1899 Krag bayonet scabbard. The belt was supported by a pair of canvas equipment suspended that helped to support and distributed the weight of the fully loaded belt.

An incomplete set of Pattern 1903, equipment, dated 1904 and marked for the 17th Company, Coast Artillery Corps which was stationed at Fort Washington, Maryland at the time.

A complete set of the Pattern 1907 field equipment

One major departure from tradition was the formal introduction of the blanket roll. Since the Civil War the American soldier had displayed a preference for using a blanket roll rather than a knapsack for active campaigning. The Pattern 1903 equipment incorporated the blanket roll into the design, utilizing the Tabler's Patented Blank Roll Straps for the purpose. Some of these straps had been purchased and used during the Spanish-American War and the reports of their use had been favorable.

The issue of the new rifle was delay as a result of questions concerning an appropriate Bayonet, and it was not until 1906 that the rifle and new equipment came into general use. The new bayonet was the Model 1905. It was a knife bayonet which was held in a brown leather scabbard with a blued steel and wire pivoting belt loop introduced on the Krag bayonet scabbard in 1899.

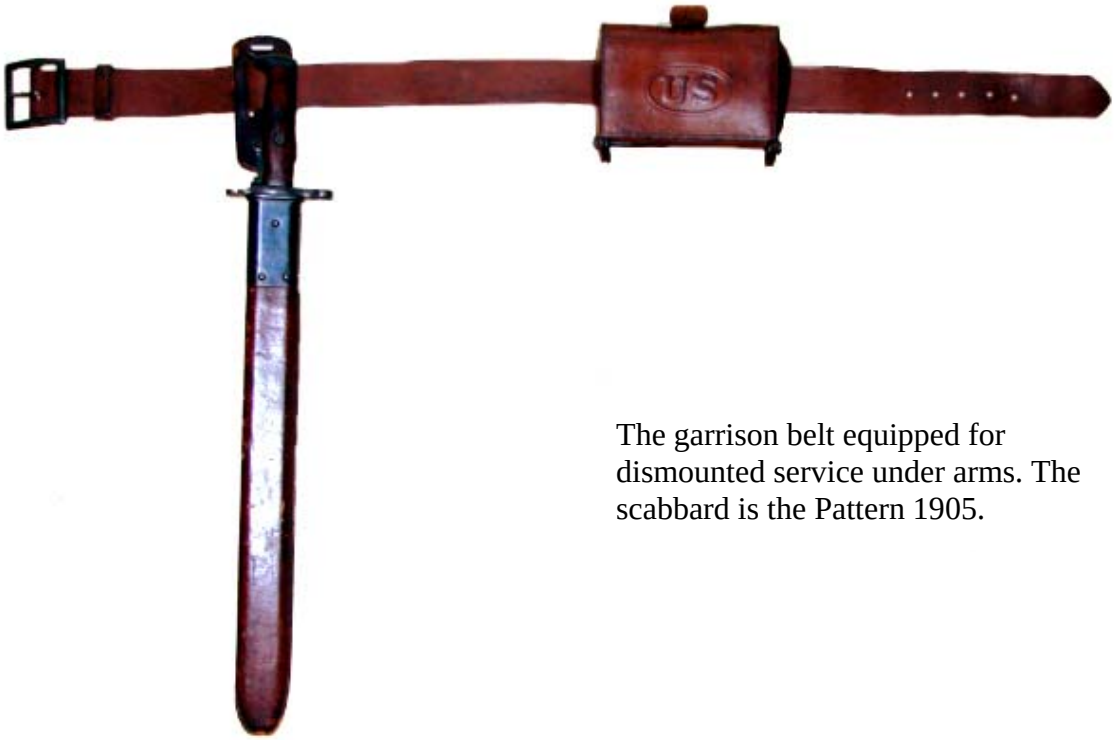
The delay in the issue of the field equipment gave the Army an opportunity to make improvements. The color was changed from drab to a greenish shade of olive drab and the material of the belt was substantially heaver. The S-hooks used to modify old pattern haversacks were replaced with spring clips on newly made haversacks. A new pouch for the field dressing (First Help for Soldiers) introduced in 1900 was also added. The pouch was made of olive drab material with a flap secured by two plain small snap fasteners. A double wire belt hook passed through two metal grommets in the top of the flap and secured to grommets on the bottom of the cartridge belt.

The 1902 clothing regulations authorized the wear of a russet leather garrison belt beginning in 1904. The belt was the same for both mounted and dismounted troops. Although not intended to be an equipment belt, various items of accoutrements were produced for wear with the belt for use when the soldier was under arms in a garrison situation.

For mounted troops these items included a brass keeper and Pattern 1902 saber straps, a McKeever cartridge box in russet leather, a Pattern 1902 revolver holster, and a pattern 1902 pistol cartridge pouch in russet leather.

The Pattern 1902 Garrison Belt equipped for Cavalry

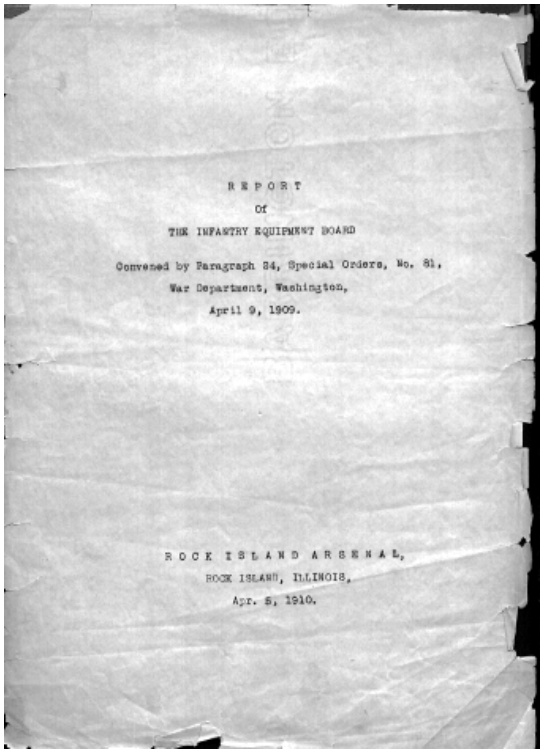
For dismounted troops these items included a McKeever cartridge box in russet leather, and a russet leather slide from which could be suspended either the Pattern 1899 bayonet scabbard used with the Krag Rifle, or the Pattern 1905 bayonet scabbard used with the new M1903 magazine rifle.



The garrison belt equipped for dismounted service under arms. The scabbard is the Pattern 1905.

In 1909, an Infantry Equipment Board was again assembled, this time at Rock Island Arsenal. The board examined in detail what the soldier needed to carry and how the weight was distributed. By 1910 a new, completely redesigned set of field equipment had been developed.

At the right is a photograph taken from the Report of the Infantry Equipment Board of 1909 showing one soldier in the proposed equipment and a second soldier wearing the 1907 equipment. Note that the soldier in the new equipment is also wearing a Pattern 1911 service hat and spiral puttees, even though the photo was taken prior to April 1910.



REPORT
Of
THE INFANTRY EQUIPMENT BOARD

Convened by Paragraph 34, Special Orders, No. 81,
War Department, Washington,
April 9, 1909.

ROCK ISLAND ARSENAL,
ROCK ISLAND, ILLINOIS,
Apr. 5, 1910.

To the left is a photo of the title page of the original report of the Infantry Equipment Board of 1909. The Report is dated April 5, 1910. Below is a photograph from the report showing the new pattern infantry equipment.

The Model 1910 infantry equipment consisted of an olive drab woven cotton 10-pocket cartridge belt with a bronze wire interlocking buckle. The belt was made in three sections a front left side, a front right side, and a connecting web strap. Each of the front sides had five pockets that could hold two five-round clips of .30 caliber rifle ammunition. Each pocket had a flap secured with a bronze metal rimmed eagle snap fastener which looked like a small general service button on the outside, and grommets along the top and bottom. The middle strap had three grommets in the top center and was secured on each side to a frame buckle.

The haversack was moved to the back and had web straps that took the place of the equipment suspenders. Attached to the flap of the haversack was a pouch with a rounded bottom and a flap secured by a single button. This pouch was designed to hold the meat can, knife, fork and spoon, but was found to be too tight. The situation was quickly corrected by squaring off the bottom corners of the pouch. Attached to the bottom of the haversack by a leather strap was a pack extender which held the soldiers blankets, shelter half, tent pole, pegs and rope. This took the place of the blanket bag or bed roll, and it could be detached as a unit from the haversack and stored in the company trains when not needed. The entrenching tool received a new cover made of olive drab cotton canvas. The cover was attached by a wire double hook device to a tab with two grommets that was stitched to the top center of the haversack flap under the meat can pouch. The scabbard for the M1905 bayonet also changed. The new scabbard was made of rawhide with a drab canvas cover and a brown leather tip. At the top of the scabbard was a slotted steel throat with a double wire hook device. The scabbard was attached to two metal grommets on the top left side of the haversack flap and secured near the middle by a loop made of woven cotton webbing.

The field dressing pouch now had a double belt hook secured by a loop of webbing stitched to the back of the pouch rather than through grommets in the top of the flap, but was otherwise unchanged.

The canteen was of an entirely new design. It was made of aluminum and shaped to fit comfortably against the body (kidney-shaped when looked at from the bottom). There was a threaded spout centered on the top with an aluminum cover. To prevent loss, the cover was secured to the canteen body with a short length of chain connected to a rotator ring around the neck of the spout. The earliest 1910 canteens are made of spun aluminum and are seamless, and the caps were smooth and straight sided. In 1912 Rock Island Arsenal developed a satisfactory technique of welding aluminum and went into production. The welded canteens have a seam that runs around the sides and bottom. In 1914 Rock Island Arsenal further reduced the cost of manufacture by eliminating the rotating ring around the spout. The cap chain was now assembled with a small pin to lugs molded on the neck. The cap was changed to a domed design with knurling around the side. The canteen was designed to nest inside of a canteen cup which was also made of aluminum. The cup had a rolled lip around the top edge, and a handle riveted to one side that folded around the bottom of the cup when not in use. The canteen and cup fit into a canteen cover made of olive drab canvas and lined with gray felt. The cover had two flaps on top that fit around the spout of the canteen and each was secured in front with an eagle button stud fastener. The cover was suspended from the cartridge belt by a double belt hook on the back near the top.

Early pattern M1910 Infantry Equipment with the second pattern Meat Can Pouch and the M1910 the first pattern spun aluminum Canteen and aluminum Canteen Cup.

An olive drab cotton web garrison belt was also authorized in 1910. The belt had a round bronze interlocking buckle with the letters "U.S." in the center. Attached to the belt were one or two pockets for ammunition. Each pocket was made of cotton canvas with a flap secured by an eagle snap fastener, and could hold two five-round clips for the M1903 rifle. There was also an olive drab cotton canvas equipment slide with two grommets near the bottom corners that could be used to hold the bayonet scabbard, 1st aid pouch or canteen cover as required.

The M1910 Garrison belt with two ammunition pockets and the M1905 bayonet suspended from the equipment slide. The bayonet scabbard shown is the 1910 conversion of the 1905 scabbard. The old steel swivel was removed and a leather throat with a double belt hook has been added.

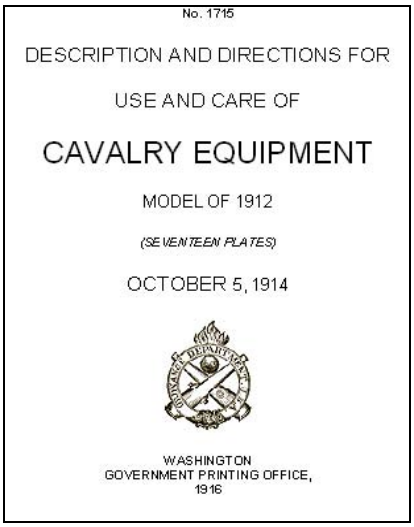
The Cavalry Equipment Board met in 1912 and again in 1914. In 1914 the board published its report recommending the adoption of the M1912 cavalry equipment including a nine-pocket cavalry cartridge belt augmented by a bandoleer, and a russet leather set of cavalry garrison equipment.

The Colt, M1911 automatic pistol was authorized with general production beginning in 1912. To accommodate the pistol, the Model 1912 holster, pistol and revolver belt, and double magazine pocket were also developed and approved by the Cavalry Board. The M1912 pistol and revolver belt was made of olive drab woven cotton with an interlocking bronze wire buckle. The belt was adjustable on one end and fixed on the other. There were metal grommets in sets of three evenly spaced along the length of the belt. Near the left (fixed) end of the belt there was the exterior half of a snap fastener used for securing the double magazine pocket

The Model 1912 holster was made of russet leather with a flap secured by a stud fastener on the front. The holster was attached by a bronze swivel to a leather tab with a double belt hook device at the top. A leather leg strap was secured by two loops to the back of the holster body.

The double magazine pocket was made of olive drab cotton canvas with a pointed flap secured in front with two eagle snap fasteners. There was a belt loop on the rear with the interior half of a snap fastener that connected to the exterior half on the belt.

Because the M1913 cavalry saber was carried only on the saddle the saber attachment for both the cartridge belt and the garrison belt were dropped.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DESCRIPTION AND DIRECTIONS FOR

USE AND CARE OF

CAVALRY EQUIPMENT

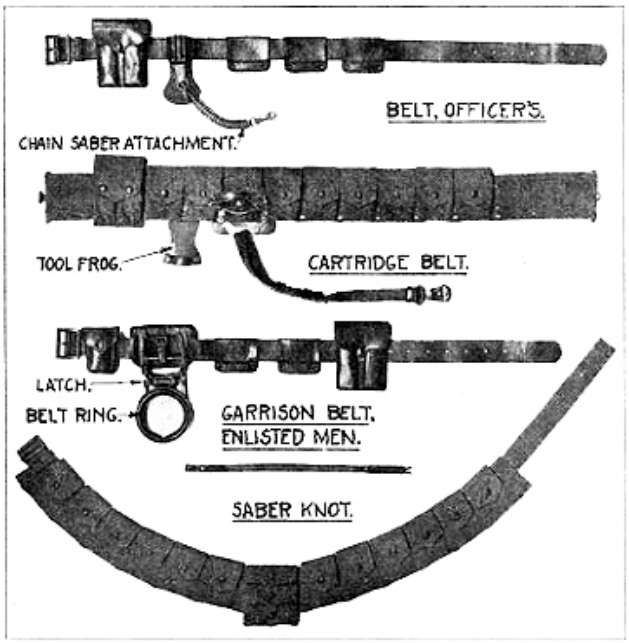
MODEL OF 1912

(SEVENTEEN PLATES)

OCTOBER 5, 1914

WASHINGTON
GOVERNMENT PRINTING OFFICE,
1916

To the right is a plate from the above manual showing the cartridge belt, garrison belt and bandoleer adopted by the Cavalry Equipment Board in 1914.



A 1912 Pistol and Revolver Belt with the M1912 Holster,
M1912 Double Magazine Pocket, and the M1910 1st Aid Pouch.

With the U.S. entry into World War I, the Model 1910 equipment experiences some distinctive changes. The color of the equipment went from olive drab to drab (khaki) to accommodate commercial manufacturers who had difficulty matching the olive drab dye, but even the drab color soon weathered to an off white. The eagle snaps gave way to lift-the-dot fasteners on both the cartridge belt and the canteen cover, and manufacturing techniques were somewhat simplified.

The supply of ammunition carried in the cartridge belt was augmented by the addition of one or more olive drab cloth six-pocket bandolier. Each pocket held two five-round clips of .30 caliber ammunition for the M1903 rifle.

The M1910 Infantry as it actually appeared in use in World War I.

Finally, although strictly speaking not an accoutrement item, soldiers in the American Expeditionary Forces in France were equipped with either French or British protective masks. The British Box Respirator was eventually standardized as the U.S. Model 1917.

The M1910 Infantry Equipment Pattern of 1917 with the M1917 Carrier for the Box Respirator and a six-pocket Ammunition bandoleer. In the upper corner is a detailed view of the lift-the-Dot Fastener.

The 1912 cavalry equipment was soon found to be impractical in the field and was therefore dropped. The Cavalry belt was replaced with the M1918 Mounted belt. This belt was manufactured in the same manner as the infantry belt except the left side had only four pockets in order that the double magazine pocket could be worn on the belt. Since mounted soldiers did not wear the haversack, the 1907 equipment suspenders were worn with this belt.

The M1918 Mounted Cartridge Belt with 1907 Equipment Suspenders; Double Magazine Pocket; M1905 Bayonet with the M1910 Bayonet Scabbard; the M1912 Mounted Holster; and the M1910 1st Aid Pouch.

Right: A member of the 11th U.S. Cavalry on the Mexican Border in 1918, wearing the M1918 Mounted belt with Double Magazine Pocket.

Part 3, Small Arms

In 1905 the caliber .30 M1903 magazine rifle went into general production and issue, replacing both the Krag-Jorgensen rifle and carbine. The rifle was originally equipped with a rod bayonet, but was modified to accept a knife bayonet, designed as the Model 1905, as a result of objections from the Commander in Chief.

M1903 Rifle with the M1905 Bayonet

In 1914 the British government contracted with US commercial arms manufacturers: Winchester, Remington, and Eddystone (a division of Remington) to produce the P14 rifle in caliber in .303 for the British Army. When the US entered the war, the P14 was modified to caliber .30 by the U.S. Ordnance Department and went into production at the same factories as the Model 1917 rifle (commonly called the U.S. Enfield). The number of M1917 rifles in the hands of the troops soon exceeded the number of M1903rifles, although the latter still remained the standard service rifle.

M1917 Rifle and Bayonet

Left: A member of the 367th Infantry, 92nd Division at Present Arms with the M1917 Rifle upon the regiments return to New York from France in1919.

In 1901, the Army upgraded the .38 caliber Colt revolver and included a lanyard ring on the butt of the grip. Numerous complaints were received from troops in the field, particularly those serving in the Philippines, about the revolvers lack of stopping power. In 1909, the Colt Model 1909 revolver chambered for caliber .45 was adopted as an interim measure.

Model 1901, Caliber .38 Revolver

Model 1909, Caliber .45 Revolver

In 1911, after extensive testing, the caliber .45, Colt Model 1911 automatic pistol was adopted with production beginning in 1912. The new pistol was a magazine fed, gas operated, self-loading design developed by John M. Browning in the 1890s. The .45 ACP (Army Caliber Pistol) cartridge contained a great deal of stopping power that would prove itself on a number of battlefields.

The Caliber .45, Colt, Model 1911 Automatic Pistol

At the beginning of World War I, because of the inability of Colt to meet the demand for automatic pistols, the Army purchased revolvers from Colt and Smith and Wesson in order to meet the need. The new pistols (virtually the same as the Model 1909) were chambered to .45 caliber but required small "half-moon clips to hold the Army cartridge in place.

The Caliber .45, Model 1917 Revolver

The venerable Model 1860 light cavalry saber continued in use with the cavalry until 1913. The new saber was designed by Lieutenant George S. Patton, Jr., Master of the Sword at the Mounted Service School at Fort Riley, Kansas. The cavalry saber, Model 1913, a copy of the British cavalry saber Pattern of 1908, was the last saber issued to and used by the U.S. Cavalry. According to Patton's sword manual the saber was designed to be a cut and thrust weapon with a two-edged 38 inch blade with a chisel point. It was only carried while mounted. The grips were checkered black hard rubber and the guard was made of blackened steel. The saber scabbard was made of hickory wood treated with oil and white lead. It was covered with rawhide and then with olive drab canvas. The webbed canvas covering was woven in a circular manner to eliminate a seam.

The Model 1860 Light cavalry Saber used until 1913.

The Model 1913 Cavalry Saber (also known as the Patton Saber)
was the last cavalry saber used by the U.S. Army

Chapter 7 Mid – 20th Century 1926-1956

Part 1 Uniforms

The period between World War I and World War II was perhaps the quietest period in U.S. military history. After World War I, the Army was drastically reduced in strength, there were fewer deployments, and the Great Depression of 1929 insured that money and resources were unavailable. From the early 1920s to the late 1930s there were only minor changes the uniform, accoutrements and small arms. To be sure improvements were designed and plans were made, but most were not implemented or produced until World War II began.

In December 1926, the look of both the summer and winter service coats was changed. The new coats were single breasted with four bright brass general service buttons, a roll collar and notched lapels. Bright brass collar discs continued to be worn with Distinctive Unit Insignia added to the face of the lapels as soon as regimental designs were approved. The winter coat could be worn with either the wool shirt or the khaki shirt along with a black four-fold service necktie. The summer coat was worn with the khaki shirt and the black service necktie. The rest of the uniform remained the same; a service hat or cap, russet leather garrison belt, breeches and spiral puttees or leggings depending on the type of unit and order of dress. As in the past, the new uniform was intended for both field and garrison use.

In addition, various clothing specification changes were made in the early 1930s. Tall lace-up cavalry boots in russet leather were authorized in 1930. The weight of the felt used in the service hat became heavier and the hat took on a stiffer more olive green appearance. In 1934 a “coat-style” service shirt in both olive drab wool and khaki cotton, replaced the pullover-style shirt used since before World War I.

Right: A Master Sergeant in the Winter Service Uniform adopted in December 1926

The summer field service uniform, shirtsleeve order, circa 1935; the soldier is wearing the new coat-style shirt with black tie tucked between the second and third button, and stiffer service hat. Note the branch insignia on the collar of the shirt and the Distinctive Unit Insignia (DUI) on the front center of the hat.

But it was not until the late 1930s that things began to change significantly. In 1938 service breeches, both summer and winter, were eliminated except for soldiers actually engaged in mounted duties. They were replaced with the Pattern 1937 service trousers, in olive drab light shade wool serge for winter and cotton khaki for summer. The specifications for the wool and khaki shirts were also modified somewhat as well.

Service Hat circa 1935 with the Distinctive Insignia of the Harbor Defenses of Narragansett Bay

The Pattern 1939 olive drab wool serge service coat was approved for procurement in 1940. The coat was similar to coats that had been in use since 1926, but incorporated a "bi-swing" back, a set of pleats that gave extended freedom of movement to the wearer. The four-pocket coat was somewhat form-fitting, with a half-belt 1.5 inches wide in the back at the waist. The original design of the coat did not

Left: An Army publicity photo of a sergeant playing cards, wearing the Pattern 1939 Winter Service Coat showing the bi-swing back.

include belt hook, but the continued used of the garrison belt resulted in the continued use of belt hooks until March 1941 when, because of the National Emergency, the belt (and the hooks) were dropped, although the belt was still authorized for purchase and wear until at least 1943.

A 1926 Summer Service Coat used by a member of Headquarters Company, 14th Infantry which was stationed at Fort Clayton, Panama.

Pattern 1939 Wool Service Coat (with belt hooks) used by a member of Headquarters Company, 58th Infantry Brigade, 29th Infantry Division.

M-1938 Dismounted Leggings, on the left is a legging conforming to the specification of 1938, and on the right a legging conforming to the specification of 1942.

The adoption of service trousers meant the elimination of spiral puttees. They were replaced with the M-1938 dismounted leggings which were made of khaki canvas and laced up the side with a cord secured with bright brass hooks and eyelets. In 1942 the color of the canvas changed to olive drab and the hooks and eyelets became blackened steel.

In 1934, the Army developed a new liner for the trench helmet called a "head pad assembly," which consisted of a frame with four leather flaps which laced together and a khaki cotton web chinstrap. World War I steel helmets were retrofitted with the new liner and the result was designated the M-1917A1 helmet. In 1940 a contract was let with the McCord Radiator Company of Detroit, Michigan for the production of brand new M-1917A1 helmets. The exterior paint on the new helmets included a cork aggregate which gave it a rougher less reflective surface.

Exterior view of the M-1917A1 Helmet and an interior view showing the helmet pad assembly.

In February 1941 a new cap, based upon the World War I overseas cap, was standardized, eliminating the issue of the service cap. The service cap remained an optional item authorized for purchase and wear. The new cap came in both olive drab wool serge and khaki cotton to match the service uniforms. In June 1942, the specifications for the cap were modified slightly so that the body of the cap was slightly higher in the back. Upon becoming branch qualified, each soldier was required to add appropriate branch colored piping to the edge of the side curtain of the cap as indicated by the chart below.

Garrison Cap as standardized in 1942, with piping for Engineers

World War II Branch Colors

Branch	Piping Color
Air Corps	Ultramarine blue with golden orange
Armor	Green with yellow
Cavalry	Yellow
Chemical Warfare Service	Cobalt blue with golden orange
Coast Artillery Corps	Scarlet
Corps of Engineers	Scarlet with white
Field Artillery	Scarlet
Finance Department	Silver grey with golden yellow
Infantry	Light blue
Medical Department	Maroon with white
Military Police	Yellow with green
Ordnance Department	Crimson with yellow
Quartermaster Corps	Buff
Signal Corps	Orange with white
Transportation Corps	Crimson with gold

(National Archives)

Two infantrymen wearing the service uniform in the field. This photo shows the culmination of the changes made to the Army's uniform from 1926 to just prior to World War II including the use of the M-1917A1 Helmet, the Service Coat as a field garment, and the first pattern M-1938 dismounted leggings.

In 1940 the commander of III Corps District, Major General J. K. Parsons conducted field trials on a lightweight windbreaker type jacket meant to replace the wool service coat in the field. Specifications for the new jacket were adopted on October 7, 1940 as Jacket, Field, Olive Drab, also referred to as the "Parsons jacket." It was made of olive drab cotton poplin with a flannel lining. There were button tabs at the waist and cuffs, and a front slide fastener closure covered by a placket secured by five brown plastic buttons. The jacket had a fall collar and notched lapels which could be closed over with a button across tab in cool weather. Finally, there was a slant pocket on each side in front, each with a flap secured by a single brown plastic button. After some further studies a second pattern was specified on May 6, 1941. The newer version had shoulder loops added and the pock flaps removed.

Jacket, Field, Olive Drab, Pattern 1940 (Type I)

Jacket, Field, Olive Drab. Pattern 1941 (Type II)

The success of the field trial led to a change in thinking at the Quartermaster Department. The thinking now was that functional clothing should be used in the field, and separate from that worn for garrison or dress. By the beginning of 1942, the service coat was no longer seen as a field garment and was relegated to garrison and off-duty wear.

It was suggested by the Office of the Quartermaster General (OQMG) that the bi-swing back could be eliminated to improve the appearance of the garment and to decrease the cost of manufacture and to save on wool. In June 1942 the "Revised Service Coat" was adopted. It no longer had the bi-swing back and the lower pockets became a simplified interior type with an exterior flap.

The revised Service Coat, Pattern 1942

A wide variety of specialized uniform items were introduced including clothing for parachutists, aviators, armor crewman, and so on that a beyond the scope of this study.

Coat, Parachute Jumper

Jacket, Flying, Cold Weather, A-2

Jacket, Combat, Winter

After extensive research and development in 1940 and 1941, the Ordnance Department in cooperation with the Infantry Board and private industry developed a new steel helmet. The body of the helmet was standardized in June 1941 as the M1. It was made from a single piece of Hadfield Manganese steel with a stainless steel rim butted and spot welded in front. Spot welded to each side was a fixed stainless steel wire chinstrap loop. The helmet was painted inside and out with an olive drab paint mixed with a cork aggregate, and two-piece khaki web chinstrap was stitch to the loops. Because the paint did not adhere well to the stainless steel rim, it was changed to Manganese in 1944, and the butt of the rim moved to the back of the helmet.

The M1 helmet was designed to have a separate liner with a white rayon suspension system similar to that used in football helmets of the time. The initial liner was made of two fiber shells glued together and covered with varnished cloth. Use of the liners in the field quickly showed that they absorbed moisture and lost strength and durability.

Helmet, Steel, M1

In July 1941, the Quartermaster Department began the process of finding a suitable plastic liner for the M1 helmet. In February 1942, a molded, resin impregnated cloth helmet lined was adopted and contracts let for immediate production. The new liner had a suspension consisting of three loops of herringbone twill cotton tape riveted to the sides and tied together with a cord in the center. A leather and cloth headband was clipped to the suspension and could be sized adjusted with a buckle. There was also an olive drab cotton neck band that snapped into the back of the suspension, and a russet leather chinstrap that attached to an interior stud on each side towards the front.

With millions of men and woman in uniform, the amount of insignia used by the Army grew dramatically, reflecting the large and complex structure of the force. Technician grades are added to the rank structure in 1942 and were reflected by a "T" centered below the chevrons. A T/5 was equal to a corporal, a T/4 to a sergeant, and a T/3 to a staff sergeant, however the ranks were not considered to be NCOs in a leadership sense. The insignia below is from a period booklet.

In May 1941 it was announced that the blue denim fatigue uniform would be phased out and replaced with an olive drab, herringbone cotton twill (HBT) uniform. The new uniform was single breasted with five black metal tack buttons in front, plus a waist band with two additional buttons. The jacket also had a notched lapel with a fall collar, and two patch-type breast pockets with a split pleat in the center and a flap secured by a single metal tack button.

"Burst of Glory" tack button, of three types used on the HBT uniform and other field clothing

The uniform was intended for both a fatigue and field use. In November 1942, and improved version was released. Based on field experience, the breast pockets were made larger with a bellows gusset on the outer edge, and the waist band was eliminated. Treated with an anti-vesicant compound, HBTs were also used as chemical protective garments, particularly during the Invasion of France in June 1944. In March 1943, a specification change was made, changing the color of HBTs to a darker Olive Drab Shade 7.

Either a hat or cap of the same olive drab herringbone twill cotton material could be worn with the HBT uniform. The hat was generally worn for fatigue while the cap was intended for wear as a work cap by mechanics and others performing similar duties, but it also became popular as a combat field cap used by troops serving in the Pacific Theater.

Hat, Herringbone Twill, Pattern 1941

Cap, Herringbone Twill, Pattern 1941

Coat, Herringbone Twill (HBT)
Type I, Pattern of April 1941

Coat, Herringbone Twill (HBT)
Type II, Pattern of November 1942

Two soldiers of the 17th Reconnaissance Squadron awaiting transportation on New Guinea in 1944. The soldier in front is wearing a Pattern 1941 Herringbone Twill Coat. The photograph typifies the look of the combat soldier serving in the Southwest Pacific Area.

In 1943 the Woman's Army Corps joined the Army Nurse Corps as a permanent part of the Army establishment. The service and field uniforms worn by woman paralleled those worn by men.

Woman's Summer Service Coat, Pattern 1942

Woman's Winter Service Coat, Pattern 1942

Shirt, Herringbone Twill, Woman's Special, Olive Drab Shade 7

In 1942 the Quartermaster Department began to look for a field uniform that could replace the variety of specialized uniforms and inadequate garments then being issued. By March 1943 the Office of the Quartermaster General recommended a uniform based on the layering principle, but had not determined the individual components of the uniform as yet. In November 1943 the new uniform was standardized as the M-1943 field ensemble. It was made of olive drab shade 7

cotton sateen and consisted of a field cap, four-pocket field jacket, detachable jacket hood, and field trousers. Liners for the jacket and trousers had been planned but were dropped in favor of the continued use of the wool service shirt and trousers. Although not strictly a part of the uniform, new combat service boots with attached leather gaiters were adopted at the same time.

M1943 Field Jacket and Cap

Detail from an Army Signal Corps photograph showing three members of the 92nd Infantry Division in formation wearing the Model 1943 Field Uniform and "Double-Buckle" Combat Boots, Italy 1945.

M1943 "Double-Buckle" Combat Service Boots

Divisions arriving in Europe in late 1944 were equipped with this uniform as were the 82nd and 101st Airborne Divisions. Division already in Europe retained the older pattern uniform.

At the same time the Quartermaster Department was developing the M-1943 uniform in cotton sateen, the high command in Europe was favoring the development of a field uniform based upon British battle dress. This uniform consisting of a waist length wool field jacket and trousers, both in olive drab shade 7, the new uniform was rarely used in the field, but by the end of 1944 it began replacing the four pocket coat and light shade trousers as the Army's service uniform, and would come to typify the American soldier of the early 1950s.

The Olive Drab Wool Field Jacket, worn by a member of the 78th Infantry Division, 1945

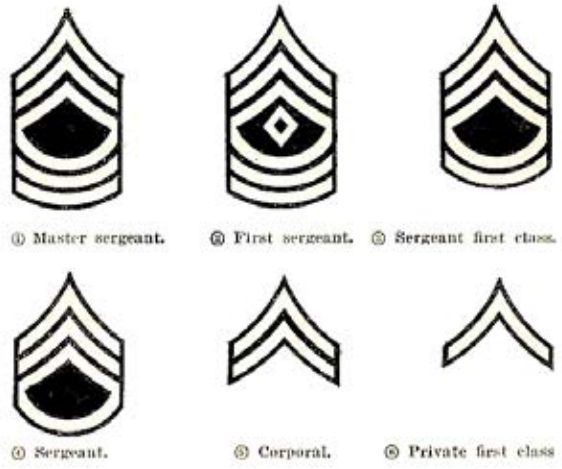
The Olive Drab Wool Field Jacket, worn by a member of the 2nd Infantry Division, 1950

Prior to World War II only marksmanship badges and service medals or ribbons were worn. As a result of the war a large variety of awards, specialty badges and qualification badges came into use.

In 1948 the Army introduced a new rank structure and smaller chevrons, blue on gold for combat arms troops, gold on blue for support troops. Sergeant chevrons were eliminated and Staff Sergeants became Sergeants. In 1951 large chevrons were reinstated except for female personnel. In 1954 Specialist Badges were introduced.

Pattern 1948 Non-commissioned Officer Chevrons (right to left) Master Sergeant (Combat Arms), Corporal (Combat Arms), First Sergeant (Combat Support).

Pattern 1954 Specialist Badge for a Specialist - Grade 8



The return to the pre-1948 chevrons as reflected in an Army manual published in 1951.

In the early 1950s, the Army asked Hattie Carnegie, a popular fashion designer, to restyle the Woman's Army Corps service uniform. The wool serge, taupe jacket she designed "had a high, round collar, slightly padded shoulders, and a nipped-in waist." The tailoring of the matching skirt became more feminine with rounded hips and a calf length hem. The uniform was worn with a tan shirtwaist, cafe brown oxfords or pumps, and a matching service hat. Manufacture and issue of the new uniform began in 1952, and its reception by the members of the WAC was generally less than favorable.

Enlisted woman also received the summer cotton dress worn with a matching garrison cap, cafe brown pumps or oxfords, tan cotton gloves, and cafe brown handbag with shoulder strap.

Left, the Woman's Taupe Service Uniform, and right, the summer cotton dress both introduced in 1951.

Part 2, Accoutrements

Between 1919 and 1940, the Army's accoutrements and personal equipment remained virtually unchanged. Following World War I, there were enough items on hand for every soldier of the Regular Army to be issued two sets, one for field use and one only for inspection. Items produced during World War I would continue in general use throughout World War II and, in some cases, well beyond.

(National Archives)

An Army photograph of two infantry soldiers in training in 1943. The soldier on the left is wearing an M1910 Haversack while the soldier on the right has a M1928 Haversack. Both soldiers have the Pattern 1917 version of the M1910 canteen and cover and, in addition the soldier on the right has an M1910 1st Aid Pouch.

To be sure the Ordnance Department had made improvements to various items, but because of the quantity of items on hand and the financial situation in general, none of these items were put into production until just before the start of World War II. As a result, a number of items have model or pattern dates that are much earlier than their earliest production dates. For example, the M1923 cartridge belt, and the M1924 First Aid Pouch did not go into production until 1940.

In 1936 the Army adopted a field bag (also referred to as a "musette bag") for mounted troops and officers (later extended to airborne and mechanized personnel as well) that was a copy of the officer's field bag used by the British Army in World War I. The old pattern equipment suspenders used by the cavalry were redesigned and D-rings were incorporated so that the field bag could be attached to the shoulder straps. The bag was designated as Bag, Canvas, Field, Olive Drab, M1936 and the suspenders were designated as Suspenders, Belt, M1936. The pistol and revolver belt was also modified enough to get the M1936 designation as well.

The basic load for the infantry remained just about the same as it had been in World War I. In the early 1920s the Ordnance Department had redesigned the cartridge belt. The new belt included elements from both the pre-war belt, such as an interior strap in each pocket to assist in removing the ammunition clip, and the wartime version, such as the lift-the-dot fasteners. The result was designated as the M1923 cartridge belt.

The pouch for the first aid packet was redesigned with a triangular flap secured by a single lift-the-dot fastener; the new pouch designated as the M1924. The haversack was changed by the addition of quick release buckles, and the button on the flap of the meat can pouch was replaced with a strap and buckle arrangement. It was then designated as the M1928.

Between the wars, the M1910 canteen cup and cover remained unchanged, but beginning in 1942 the Army experimented with making the canteen in a variety of materials including plastic, enameled steel, and corrosive resistant steel. The metal canteen cup was replaced with a black plastic cap beginning in 1942. The new cup was initially flat on top, but beginning in 1943 the cap was made with a recessed top.

In 1942, the manufacture of canteen cups made of corrosive resistant steel began, although aluminum cups continued to manufacture throughout the period as well. The new steel cup had a flared edge, while the aluminum cup continued to have a rolled edge.

The M1910 intrenching shovel and cover continued in use throughout the war, but beginning in 1943 a shovel with a folding blade was introduced along with a new canvas carrier. The shovel and carrier were both designated as M1943. Shortly after production of the new shovel carrier was begun, the Army changed the design by adding a gusset on the back with three pair of eyelets, one above the other. The double belt hook, instead of being in a fixed location could now be adjusted, depending on where the carrier was worn.

Above: The M1936 Pistol and Revolver Belt and Suspenders with an M1916 Hip Holster for the .45 Caliber Automatic Pistol, M1911A1, as carried by mounted and specialist personnel, and officers. Also attached to the belt are a Pocket, Magazine, Double-Web, Pistol, M1923, the M1910 Canteen and cover, and a Pouch, First Aid Packet, M1924.

The M1936 Canvas Field Bag attached to suspenders with the M1936 Pistol and Revolver Belt set up for use with the M1 Carbine. Attached to the belt is the Pocket, Magazine, Double-Web, Carbine M1, the Pouch, First Aid Packet, M1942, the M1910 Canteen and cover and the M3 Trench Knife issued to personnel armed with the carbine. Although not strictly an accoutrement, the M1VA1 Carrier for the M1A2-IXA1 – IVA1 protective mask is also pictured.

Members of an airborne artillery unit prepare to load a 75MM Pack Howitzer onto a glider. Note that each soldier is wearing the M1936 canvas field bag, and the M1VA1 carrier for the service gas mask. The two men on the left are both armed with the M1A1 carbine.

Above: The World War II version of the M1910 Infantry Equipment used with the M1 Rifle. Seen here are the M1923 Cartridge Belt, M1928 Haversack, M1943 Intrenching Tool, M1942 First Aid Pouch for the Carlisle Dressing, and the M1 Bayonet in an M7 Scabbard. Included also is the M6 Carrier for the M3-10A1-6 Light Weight Service Gas Mask; two six-pocket bandoleers to hold ammunition for either the M1 or M1903 rifle; and a view (upper right) of the M1943 Intrenching Tool and Carrier.

In 1944 a new pack system was developed by the Army based upon the system then being used by the United States Marine Corps. The system consisted of three parts, the Pack, Field, Combat, M1944; the Suspenders, Pack, Field and Combat, M1944; and the Pack, Field, Cargo, M1944, that attached to the bottom of the combat pack with quick release straps. The packs were made of cotton canvas with cotton web straps; all were in olive drab shade 7. The Field, and two straps to close the main flap, two flaps with eyelets were provided: one on the top center for the intrenching tool, and one of the left side flaps for the M1 bayonet. Bottom straps attached to the Cargo Pack to join the two.

The suspenders could be used alone to support the weight of the pistol or cartridge belt or used to hold the combat field pack. The combat pack had a waterproof liner and interior divisions used to carry the soldiers essential items including field rations, the meat can, knife, fork and spoon, a change of underclothing and socks. A tab with eyelets at the top center of the outside of the pack was used to hold the M1943 intrenching tool and the eyelets on the left side of the flap held the scabbard for the bayonet. Spare clothing and other items not considered to be essential were packed into the cargo pack. This pack could be attached by quick released straps to the bottom of the combat pack, or if not needed, could be detached and left with the company trains. The cargo pack had a waterproof lining and web carrying handle on top so that it could be used as a furlough bag.

The new pack system saw very limited field use in Europe near the end of the war, and it was soon replaced by an upgraded version designated as the M1945. The straps of the two versions were not interchangeable, so many of the M1944 pack were refitted with the new pattern straps,

making the M1944 version in its original configuration, somewhat rare. The new system was adopted as Army standard and continued to be manufactured into the 1950s.

Equipment set in Olive Drab shade 7, including the M1945 Combat and Cargo Packs. Introduced near the end of World War II, this is the equipment used by the American soldier during the Korean War.

Part 3, Small Arms

The M1903 Rifle remained in Army service throughout the interwar years with only minor changes. Remington Arms Company began new production of the M1903 in September of 1941, at serial number 3,000,000, using old tooling from Rock Island Arsenal which had been in storage since 1919. These very early rifles are almost indistinguishable from the rifle made at Rock Island at the end of World War I. As the already worn tooling began to wear out, Remington sought approval to change and simplify the rifle speed up manufacture and improve performance. The milled parts were replaced with stamped parts and walnut stocks were replaced with less expensive but serviceable substitutes. The most noticeable visual difference was the replacement of the barrel-mounted rear sight with a smaller, simpler "peep" rear sight mounted on the rear of the receiver. The new rifle was designated the M1903A3. In early 1942 the Smith-Corona Typewriter Company also began production of the M1903/A3 at its plant in Rochester, NY. Early production Remington and Smith-Corona rifles had a dark gray Parkerizing, but beginning in late 1943 a lighter gray-green finish was used. This later finish was also used on arsenal repaired weapons.

The M1903 and the M1903A3 rifle were used in both training and combat during World War II and saw extensive use North Africa, Europe and in the Pacific. Ranger units in particular preferred the bolt action weapon for commando type missions.

M1903 Rifle with the M1905 Bayonet

M1903A3 Rifle

The United States Rifle, Caliber .30, M1 (also known as the Garand Rifle in honor of its designer John Garand), was the first semi-automatic rifle in the world to be generally issued to infantry. The Army began looking for a replacement for the M1903 rifle almost immediately following the end of World War I. Research and development continued at Springfield Armory into the early 1930s with numerous problems being encountered. But on November 7, 1935 a new rifle was cleared for procurement and on January 9, 1936 became Army standard as the M1 rifle. However, production difficulties and design issued continued to plague the new rifle. Finally, with the redesigned of the barrel and gas cylinder assembly in early 1940, the rifle was ready to go into full production. Output reached 600 rifles a day by January 1941, and by the end of the Army was equipped with the new rifle.

The M1 was a gas-operated, semi-automatic rifle that utilized an eight-round clip which gave United States forces a significant advantage in firepower and shot-to-shot response time over enemy infantrymen in battle. The weapon was principle infantry weapon used in both World War II and Korea.

Much of the M1 inventory in the post-WWII period underwent arsenal repair or rebuilding. While U.S. forces were still engaged in the Korean War, the newly created Department of Defense determined a need for additional M1 rifles and two new contracts were awarded. From 1953 to 1956, M1s were produced by International Harvester Corp. and Harrington and Richardson Arms Company Firearm Company.

Several different styles of bayonets were used with the rifle: the M1905 from 1939 to 1942; the M1942 with 16-inch blades in 1942 and 1943, the Model 1905E1 with shortened 10-inch blade, and the new made M1 Bayonet with 10-inch blade from 1943 until 1953, and the M5 with 6-inch blade from 1953 on.

A World War II M1 Rifle with M1 Bayonet

In 1938, the Chief of Infantry requested that the Ordnance Department develop a lightweight carbine. After competitive testing the Army selected a design for a new carbine that had been submitted by the Winchester Repeating Arms that was standardized as the M1 Carbine on October 22, 1941.

The new carbine was designed primarily to offer non-combat and line-of-communications troops a better defensive weapon than a pistol or submachine gun; one with greater accuracy and range, but without the recoil, cost, or weight of a full-power infantry rifle. The carbine was more convenient to carry for officers, Non-commissioned officers, or specialists encumbered with weapons, field glasses, radios, or other gear. Tank crews, drivers, artillery crews, mortar crews, and other personnel were issued the M1 Carbine. A folding-stock version was developed, after a request was made for a compact arm for airborne troops. The first M1 Carbines were delivered in mid-1942, with initial priority given to troops in the European theatre of war.

Initially, the M1 Carbine was intended to have a selective-fire capability, but the decision was made to put the M1 into production without this feature. Fully-automatic fire capability was later incorporated into the design of the M2 Carbine developed at the end of World War II and used during the Korean War. The M2 featured a select-fire switch that allowed full automatic fire at a rather high cyclic rate (850-900 rpm). The M2 came with a 30-round magazine. In Korea the M2 carbine acquired a poor reputation for jamming in extreme cold weather conditions, a condition attributed to inadequate weak recoil springs.

World War II versions of the M1 carbine (top), and the M1A1 Paratrooper Carbine (bottom)

The post World War II version of the M1 and M2 Carbine was distinguishable only by the selector switch located on the top left side of the receiver. The post war carbines have a ramp-type rear sight and a front barrel band with bayonet lug assembly. The M4 bayonet with leather grip or later a black plastic grip was used with the post war M1s.

A post World War II M1A1 paratrooper carbine

Following World War I some changes were made to the M1911 automatic pistol. In 1924 the newer version type classification to M1911A1. Changes were minor and consisted of a shorter trigger, cutouts in the frame behind the trigger, a longer grip safety spur, a wider front sight, a shorter spur on the hammer, and simplified grip checkering. Perhaps the most noticeable difference was the curved mainspring housing at the rear of the grip. No internal changes were made, and parts remained interchangeable between the two models.

During World War II about 1.9 million pistols were procured by the U.S. Government for all the armed forces. Contractors included Remington Rand Typewriter Company (900,000 produced), Colt (400,000), Ithaca Gun Company (400,000), Union Switch & Signal (50,000), the Singer Sewing machine Company, (500), Springfield Armory and Rock island Arsenal.

After the Second World War, the M1911A1 continued to be a mainstay pistol of the Army in the Korean War. Because so many weapons had been produced in World War II, no additional pistols were produced by the government after 1945; arsenal refinished guns being issued when necessary.

The Caliber .45, Colt, Model 1911 Automatic Pistol

At the beginning of World War II, because of the demand for pistols, the Army reissued M1917 Colt and Smith and Wesson Revolvers to rear echelon troops including prison guards and military police. Revolvers were replaced by the M1911 automatic pistol as they became available.

The Smith &Wesson Model 10 revolver was produced for the government from 1940 to 1945 with a “V” prefix in front of the serial number. These pistols were known as the Smith & Wesson Victory Model. The revolver in caliber .38 special was used by the Army, particularly for air crews, but far more, some 570,000 pistols chambered in the .38/200 caliber, were supplied by the U.S. to the United Kingdom, Canada, Australia, New Zealand, and South Africa under the Lend-Lease Program during the war.

The Caliber .45, Model 1917 Revolver

The Caliber .38 Smith & Wesson Victory Model

The Thompson submachine gun was designed by General John T. Thompson, who started the Auto-Ordnance Corporation in 1916 for the purpose of developing his new weapon. Originally designed for trench warfare the prototype submachine was produced too late for the war. In 1919 the weapon was officially named the "Thompson Submachine Gun” and it was the first weapon to be labeled and marketed as a "submachine gun.”

The Thompson first entered production as the Model of 1921 and small quantities were sold to private individuals, to the U.S. Post Office, and to several police departments in the United States. Some of the weapons were also acquired by the Irish Republican Army and were used in the latter stages of the Irish War of Independence and the Irish Civil War.

In 1938, the M1928A1 Thompson submachine gun was adopted by the Army. The M1928A1 used a 20 or a 30-round box magazine, and a 50 or a 100-round drum magazine. It had cooling fins on the barrel and its cocking handle was on the top of the receiver. Beginning in 1942 a simplified version of the weapon was produced, and designated as the M1 and later M1A1 submachine gun. This version had a plain barrel without cooling fins, a simplified rear sight, a 20 or a 30-round box magazine and the cocking handle on the side of the receiver. The Thomson was used throughout World War II with large quantities being sent to the United Kingdom and other commonwealth countries under the Lend-Lease program.

During the war the Thompson was a special-purpose weapon carried by officers and non-commissioned officers, armor crews, scouts, paratroopers, commandos and rangers, particularly for patrols, ambushes, and fighting in built up areas. In the Pacific Theater, Army jungle patrols were originally equipped with Thompsons in the early phases of the New Guinea and Guadalcanal. But their weight, lack of penetration power, the Thompson proved to be

unpopular. By early 1944 the M3 submachine gun began replacing the Thompson, and they became obsolete at the end of the war.

The caliber .45 ACP, M1928A1 Thompson Submachine Gun

The caliber .45 ACP, M1 Thompson Submachine Gun

The M3 submachine gun (known as the "Grease Gun"), entered Army service on December 12, 1942. The weapon was produced by the Guide Lamp Division of General Motors Corporation. Even at the development stage, the weapon's design focused on simplified production, employing metal stamping, pressing and welding. The M3 was an automatic only, blowback operated weapon that fired from an open bolt fed from a 30-round detachable box magazine. The weapon had a crank-type cocking mechanism on the right side, and a telescoping metal wire stock, which featured threads at both ends used to attach a bore brush, so that it could be used as a cleaning rod.

In December 1944 an updated version was introduced, designated as the M3A1. It had several new features, including a recess machined into the bolt that allowed it to be cocked with the user's finger. The ejection port and ejection port cover were enlarged, a magazine release button cover was added and a magazine loading device was welded to the wire stock. In 1945 the Guide Lamp factory manufactured 15,500 M3A1 submachine guns, with an additional 33,000 weapons manufactured by the Ithaca Gun Company during the Korean War. M3 and M3A1 were officially retired from US service in 1957; however they continued to be used until the early 1990s by armored vehicle crews.

The caliber .45 ACP M3A1 Submachine Gun

The Browning Automatic Rifle (commonly known as the BAR), was designed in 1917 by John M. Browning, as a replacement for French-made light automatic rifles. The BAR was a .30 caliber, gas-operated, select-fire, air-cooled, automatic rifle that fired from an open bolt fed from a 20-round detachable box magazine.

M1818A2 Browning Automatic Rifle

The BAR saw little action in WWI, its first action being in September of 1918. In 1922, the M1922 BAR was introduced. This version was equipped with a flanged or finned barrel and side-mounted sling swivel, and was intended for use by the cavalry. In June 1937, a small number of M1918s were modified to include a spiked bipod attached to the gas cylinder and a hinged butt plate. These weapons were designated as the M1918A1 Automatic Rifle. In 1940, the M1918A2 was introduced. This model was fully automatic fire only. The rate of fire being adjustable with a choice between "fast-auto" (500–650 rounds per minute) and "slow-auto" (300–450 rounds per minute). The bipod was now attached to the barrel and a flash hider was added, a rear monopod was hinged to the butt, and the weapon's role was changed to that of a squad automatic weapon. In 1942, a fiberglass butt stock replaced the wood version, and late in the war, a barrel-mounted carrying handle was added. The BAR continued in use until the late 1950s.

Chapter 8 Late – 20th, Early 21st Century 1954-2006

Part 1 Uniforms

In 1954 the Army began to make changes to the uniform that it had been contemplating since just after the end of World War II. One of the most significant factor effecting decisions made about the new uniforms was the philosophy embraced by the Army leadership that officers and enlisted uniforms should be the same, distinguished only by insignia. Although the changes were begun in 1954, it would take until the end of the decade before they were fully implemented.

Army Chief of Staff, General J. Lawton Collins, approved the reintroduction of a dress blue uniform for enlisted men. The uniform was not intended for general issue, but was authorized to be purchased at the option of the individual. Specifications for the enlisted dress blue coat were established in 1956 and matched those of the army green service coat. The trousers were the same as those specified for officers in 1953 with a gold stripe on the outer leg seam.

The Optional Enlisted Man's Dress Blue Uniform

On September 2, 1954 the adoption of the Army Green Uniform in shade 44 was announced in Circular 102, but it was not until September 1956 that it became available at Quartermaster Clothing Sales Stores, and late 1957 before issues began to inductees. After a transition period to allow wear-out of existing uniforms, the green uniform became mandatory service dress in September 1961.

The new coat was single breasted with four bright brass general service buttons in front, a roll collar and notched lapels. Bright brass collar discs continued to be worn with the distinctive unit insignia worn on the shoulder loops. The uniform was to be worn with a light tan shirt, a black four-fold service necktie, black socks, black low quarter shoes and an Army green service cap with a black visor and chinstrap, or the Army green garrison cap piped in dark green.

The Army Green Uniform

The black accessories were adopted as the result of a Department of Defense Standardization Program established by Congress in l954. The change from russet to black was to reduce the amount of items in the military supply system by making them the same for all of the services.

The wool serge shade 44 material used in the Army Green Uniform became an all-season Army green shade 344 polyester and wool tropical blend on July 13, 1964, and Army green shade 489 polyester and wool serge by 1990. The Army tan shade 46 cotton shirt was changed to an Army green shade 415 polyester and cotton blend in 1979. This shirt is worn with shoulder marks to indicate rank, when not worn under the service coat.

The Army Green shade 44 Service Coat, specifications of March 23, 1956, with Service Cap.

The all-season Army Green shade 344 Service Coat, specifications of July 13, 1964.

The khaki cotton summer uniform was modified slightly following World War II with shoulder loops added to the enlisted man's shirt. The uniform was made of 8.2 once cotton twill in khaki shade 1, and consisted of a long sleeve shirt and trousers worn with low quarter shoes and the garrison cap. Combat boots were authorized for wear with the khaki uniform by airborne troops, military police, color and honor guards, and at graduations.

The abbreviated Khaki Summer Uniform as authorized in 1955.

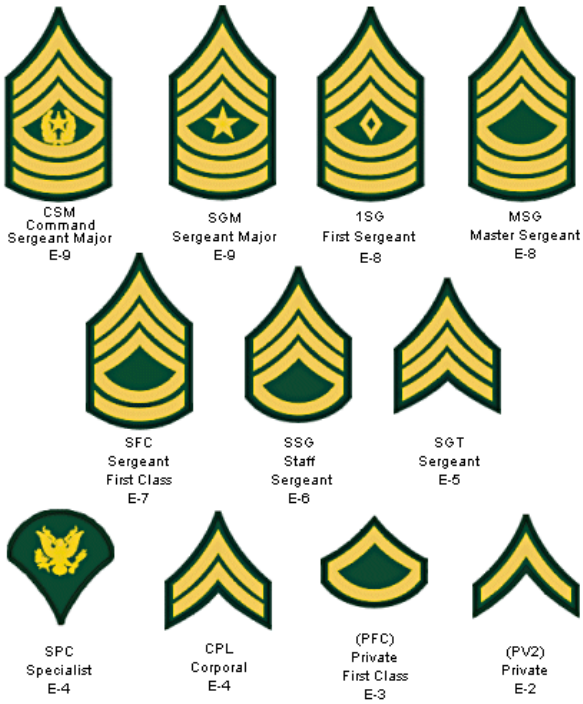
The Class B Khaki Summer Uniform as authorized in 1959

In 1955 an abbreviated version of the uniform was authorized, consisting of a short sleeve shirt, shorts, and knee socks with production beginning in 1956. With the adoption of the abbreviated uniform, the specifications for the khaki shirt were changed by the addition of pleated pockets with pointed pocket flaps. In 1959 the wearing of the short sleeve shirt with the long trousers were authorized, and the shirt specifications were again amended, eliminating the pocket pleats and making the bottom of the pocket flap straight across. The long sleeve shirt was eliminated in upon adoption of the all-season Army Green Uniform in 1964.

Testing for a durable press tan summer uniform began in 1968, but considerable difficulty was experienced with both color and styling. The uniform was made of rayon and polyester in Army Tan shade 445. Field testing of the by drill sergeants began in 1969, and the Department of the Army approved wear of the new uniform beginning in March 1970. However, problems with quality control continued to plague production and the uniform did not become Army standard until June 21, 1973.

The Khaki Shirt adopted in 1959 with patch pockets and clipped cornered pocket flaps.

In 1958 the rank structure was again changed with enlisted grades from E-1 to E-9. The rank of Private (E-2) and Command Sergeant Major (E-9) were added in 1968 without a change to the basic rank structure. There were specialist badges for each of the grades as well, but most of these were eliminated in the 1970s until only Specialist (E-4) remained. In 1979 shoulder marks were introduced for wear on the green Class B shirt and the black wool sweater, and in 1998 same-size male and female chevrons are introduced.



The Army enlisted rank structure, 1974.

Sleeve Badge for a Specialist E-7

Shoulder Marks for a First Sergeant (above) and a Corporal (below).

The Army Uniform Board appointed a special subcommittee on caps in 1950 to develop a cap design for the general duty uniform. The committee recommended a solid construction service cap in one shade, similar in design to the cap developed by the Quartermaster Corps for the Air Force in l948. The Army adopted a modified version of this cap on September 9, 1954. The new cap was made of Army Green shade 44 wool serge with a black leather visor and chinstrap. It had a straight, high front and relaxed crown, and a bright brass disc with the US Coat of Arms was worn centered on the front. The cap was authorized for wear with both the summer khaki uniforms as well as with the Army Green Uniform. The same design in dark blue piped in yellow was also used for Dress Blue Uniform cap. The committee also decided that the olive drab wool and the khaki cotton garrison caps piped in branch colors would be replaced with a single pattern of garrison cap in Army green shade 44, wool serge piped in dark green.

The Army Green Service Cap with infantry distinctive backing for the enlisted cap insignia.

The cap for the Army Dress Blue Uniform

The Army Green Garrison Cap

A Staff Sergeant (E6) of the 864th Engineer Battalion arriving at Qui Nhon, South Vietnam in June 1965. He is wearing the Olive Green shade 107 Utility Coat adopted in 1952.

A Private (E2) of the 11th Infantry Brigade arriving at Qui Nhon, South Vietnam in December 1967. He is wearing the Olive Green shade 107 Utility Shirt adopted in 1963.

A Private (E1) trainee at the Infantry Training Center Fort Jackson, South Carolina June 1972. He is wearing the Olive Green shade 107 Utility Shirt adopted in 1964.

An olive green shade 107, cotton utility uniform was introduced in 1952 gradually replacing the herringbone twill (HBT) uniform adopted in World War II. Specifications for the utility jacket were dated August 30, 1952, and the matching cotton utility trousers were dated November 21, 1952 with production beginning in 1953.

As a result of negotiations with the North Koreans, the "U.S. ARMY" distinguishing insignia was introduced on October 27, 1953 and required to be worn above the left pocket on for both the field and utility jackets. Many units had local directives that required a cloth tape with the soldier's last name stenciled in black letters. In units where standard operating procedures (SOP) required the name tape to be worn above the left pocket, they were worn above the U.S. Army tape. Most units SOPs, however, required the name tape to be worn above the right pocket, which eventually became codified in regulation.

The Name Tape as authorized by unit SOP

The U.S. Army Distinctive Insignia

An olive green shade107 cotton sateen shirt replaced the utility jacket under specifications dated April 12, 1963. The pockets were moved and the pocket flaps now had clipped corners. As a result of early experiences in Vietnam, these specifications were again changed again on November 6, 1964. The buttons were moved so that the white undershirt was less exposed, the pockets now had pointed pocket flaps, and buttoned cuffs were added to the sleeves.

Left: The durable press utility uniform being worn by members of an infantry combat support company in 1976. Note the color difference between the between the Olive Green shade 507 and Olive Green shade 107 as seen worn by the Radio Telephone Operator.

A durable press utility uniform made of olive green shade 507, polyester and cotton was authorized under specifications dated August 25, 1975 which remained in use until replaced by the Battle Dress Uniform (BDU) in the mid-1980s.

In 1963, tropical combat clothing was type classified for production and issue to soldiers serving in Vietnam. There were three basic patterns of Tropical Combat Coats. The first was made of olive green shade 107, wind resistant cotton poplin with two slanted bellows-type breast pockets and two bellows type lower pockets on the coat. The pockets had flaps secured by two exposed plastic buttons, an interior button over gas flap, shoulder loops, and a double button adjustment tab on each side at the waist. The second pattern coat was the basically the same as the first pattern except that all of the buttons were covered to prevent snagging in jungle terrain.

A second pattern Coat, Combat, Tropical, Wind Resistant in OG-197 cotton poplin.

A third pattern Coat, Combat, Tropical, Wind Resistant (Class 1), in OG-107 cotton poplin

A Coat, Combat, Tropical, Wind Resistant (Class 2), in cotton rip-stop.

By 1967 a third pattern coat (Class 1) was standardized in either olive green shade 107, wind resistant cotton poplin or olive green shade 107, cotton rip-stop. This coat retained the slanted pockets with hidden buttons, but the shoulder loops, gas flap, and adjustment tabs were eliminated. A second pattern of this coat (Class 2) in Engineer Research and Development Laboratory (ERDL) camouflage was produced in cotton rip-stop. This uniform was issued to pathfinders, long range reconnaissance patrol members and scout/reconnaissance personnel. Each of these uniforms had matching trousers with slanted front pockets, rear pockets with flaps, and bellows-type cargo pockets with flaps on the legs.

Effective July 14, 1966, the Department of the Army directed that both tapes have black lettering on an olive green shade 107 background. In 1967 rank insignia worn on the Tropical Combat Coat began being changed over to a subdued pattern of black on olive green. In 1968, all insignia, Army wide, worn on the field jacket, utility uniform and the tropical combat uniform was changed to the subdued black on olive green. In addition, the Personnel Armor System for Ground Troops (PASGT), consisting of a Kevlar helmet and a ballistic vest, was also introduced in the early 1980s. The PASGT Helmet replaced the M1 and M1C Steel Helmets for both ground troops and parachutists. The system first saw use in combat in 1983 during Operation Urgent Fury in Grenada, but most soldiers did not receive the Kevlar until a year or two later.

In 1967 rank insignia worn on the Tropical Combat Coat began being changed over to a subdued pattern (black on olive green). In 1968, all insignia, Army wide, worn on the field jacket, utility uniform and the tropical combat uniform was changed to subdued. Rank insignia for enlisted personnel was moved from the sleeve to the point of the collar.

Above is a selection of insignia showing the change over from bright to subdued which began in 1967.

On October 1, 1981 the Army introduced the Battle Dress Uniform or BDUs as they are called. This uniform was descended from the tropical combat uniform of the Vietnam War and consisted of a coat made of a nylon and cotton blend in woodland pattern camouflage with matching trousers, and a field cap. Because combat experience in Grenada showed that the BDU uniform was too hot for tropical climates, the Army authorized the wearing of the old tropical combat uniform for several years while adjustments were made.

By 1988, a hot weather version of the BDUs in cotton rip-stop was available. The two uniforms were very similar in style, with a coat that had four straight bellows-type pockets each with a flap secured by hidden plastic buttons, and matching trousers with slanted front pockets, rear pockets with flaps, and bellows-type cargo pockets with flaps on the legs. With only minor stylistic changes such as the elimination of the waist adjustment tabs, the reduction of the size of the collar, and refinements in stitching and fit, BDUs were worn until replaced by the Army Combat Uniform in 2006.

Members of the 3rd Infantry in 1987. The soldier on the left is wearing the OG-107 tropical combat uniform authorized for wear until the woodland camouflage Battle Dress Uniform as worn by the soldier on the right could be fielded.

The Army also introduced a Desert Camouflage Uniform (DCU) at the same time as the woodland pattern BDU, but issue was limited to special operations troops, and soldiers assigned to exercises in the Middle East such as Operation Bright Star in Egypt. The uniform was virtually the same as the BDUs but in a six-color tan, brown and black desert camouflage pattern. Six-color DCUs have come to typify the American soldier in the Persian Gulf War (1991), although due to logistics glitch issue of the desert uniform to soldiers (especially those in VII Corps), was very restricted. The Army began issuing a new three-color Desert Camouflage Uniform in July 1991. This uniform was worn by troop participating in Operation Enduring Freedom, and Operation Iraqi Freedom from 2002 to 2006, when it was also replaced by the Army Combat Uniform.

The Woodland Pattern Battle Dress Uniform worn by a Master Sergeant, SFOR, Eagle Base, Bosnia-Herzegovina

The Six-Color Desert Camouflage Uniform worn by a Staff Sergeant at a forward operating base at Umm Al Sahik, Saudi Arabia during Operation Desert Shield.

Both the Woodland Pattern Battle Dress Uniform and the six-color Desert camouflage Uniform worn side by side in operations during Desert Storm.

Coat, Woodland Pattern Camouflage Pattern, Combat

Coat, Desert Pattern Camouflage, Combat (six-color)

Coat, Desert Pattern Camouflage, Combat (six-color)

The Army Combat Uniform (ACU) was officially established as the combat and garrison uniform for the Army on 14 June 2004, and has replaced both the Battle-Dress Uniform and the Desert Camouflage Uniform. The ACU consists of a coat, trousers, black beret or matching patrol cap, moisture wicking T-shirt, moisture wicking socks, and brown combat boots.

The color scheme is composed of a gray, tan and sage green digital pattern. The color black was omitted from the uniform because it is not commonly found in nature and appears excessively dark when viewed through night vision goggles.

The ACU Coat is single breasted with integrated blouse bellows for increased upper body mobility, and a plastic zipper closure that can be opened from either the top or the bottom with a front placket that covers the zipper and is secured by hook and loop (Velcro) fasteners. The coat has a Mandarin collar that can be worn up or down; tilted breast pockets with hook and loop closure; a three-slot pen pocket on the bottom of the left sleeve; and hook and loop sleeve cuff closures. On each sleeve near the shoulder there is a slanted pocket with a hook and loop covered flap closure, each with an integrated infrared identification square on the outside. Below each sleeve pocket there an elbow pouch for an internal elbow pad insert.

The Digital camouflage Army Combat Uniform with matching patrol cap with the insignia of a Private First Class of the 3rd Infantry Division.

Rank insignia is attached to a hook and loop patch located on the front center of the coat. Both the name tape and the US Army tape are attached above the left and right pockets respectively and are removable. In the future it will be much more difficult to positively identify Army uniforms since unit patches and the national identification insignia (US flag) are attached by hook and loop rather than being sewn in place. Only metal pin-on qualification badges are authorized for wear with this uniform. The matching trousers have forward-tilted cargo pockets; Knee pouches for internal knee pad inserts; drawstring leg cuff; and bellowed calf storage pocket on the left and right leg.

The M1951 Field Jacket being worn by a drill sergeant at Fort Jackson, SC in 1973

Beginning in 1966, a cold weather field coat, sometimes referred to as the M65 "field jacket", became part of the clothing inventory, replacing the M1951 field jacket. Most "old soldiers" preferred the M1951 because of its "look sharp" fit. Many of the older jackets were still being worn well into the mid-1970s.

The Coat, Field, Cold Weather being worn by a member of the 6th Armored Cavalry Regiment at Fort Knox in 1975.

The M65 was made of olive green cotton and nylon material, single breasted with a zippered closure in front and a front placket secured by snap fasteners. The roll collar had a hood inside. There were four front pockets each with a flap secured by a single hidden snap fastener, and the cuffs were secured

with a relatively new product known as the hook and loop fastener or by its commercial name of "Velcro."

The Coat, Field, Cold Weather, in woodland camouflage pattern

The Coat, Field, Cold Weather in universal digital camouflage pattern

Beginning in 1982, with the introduction of the Battle Dress Uniform, the Army began manufacture of the M65 field coat in woodland pattern camouflage and desert camouflage pattern material. Subsequently, manufacture of the field coat has incorporated the changes of camouflage patterns as the have occurred, three color desert pattern in 1991 and universal pattern digital in 2005. The latest version has hook and loop patches for the attaching of the name tape, US Army tape, shoulder sleeve insignia, and rank.

The M-1951 field cap was made of wind resistant poplin and was a slightly modified version of the original cap adopted in 1943. The M-1951 had a slightly longer visor with rows of reinforced stitching. For cold weather use, the cap had a flannel-lined fold-down flap that covered the ears and the back of the head. A number of senior officers considered the M-1951 field cap to be too slovenly for a proper soldierly appearance. Unit commanders often required the cap to be worn with cardboard or various commercially available stiffeners inside, to keep it straight and upright. In 1953 this policy became official throughout the Army when Chief of Staff General Matthew B. Ridgeway began directing forces to improve their soldierly image. Commercially manufactured stiffened and blocked models of the field cap were produced and sold through the Post Exchange that met military appearance standards. The preferred model was the "Spring-Up" manufactured by Louisville Cap Corporation. These caps became universally known as "Ridgeway Caps." While the M-1951 field cap remained standard issue, use of the Ridgeway cap became widespread throughout the 1950s.

The M1951 Field Cap

The “Spring-Up" model of the “Ridgeway Cap” manufactured by Louisville Cap Corporation

In 1958 the Army established a headgear study group to find a replacement for the unsatisfactory M-1951 field cap. The peacetime conditions during the 1950s had led to an emphasis on appearance. In January 1962 a new cap design was adopted known as the “Cap, Field, Hot Weather.” The term “hot weather” was used because the cap did not have earflaps. The new cap was a “baseball” style, made of olive green shade 106, polyester and rayon blend, with a soft visor and a rounded crown constructed of six triangular segments meeting at the top. There was a ventilation eyelet in each segment. It its original form, the cap was almost universally disliked.

The polyester and rayon material proved to be too hot in tropical climates, and soldiers did not like the look of the high curving front panel. Soldiers either crushed the front of the crown to improve its appearance or purchased theater-made replacements with a lower front panel and a small button at the top of the crown. Eventually a newer version of the cap without the button was introduced for issue at the very end of the Vietnam era. The hot weather field cap continued in use until it was finally replaced in 1985. The M-1951 style field cap, referred to as a “patrol cap” was reintroduced as part of the Battle Dress Uniform in woodland and desert camouflage material, and was continued as part of the Army Combat Uniform in universal digital camouflage pattern.

The issue version of the Cap, Field, Hot Weather introduced in 1962.

The post-Vietnam commercial version of the Cap, Field, Hot Weather, circa 1972.

Cap, Woodland Camouflage Pattern

Cap, Desert Camouflage Pattern
(three-color)

ACU Patrol Cap (Front View)

ACU Patrol Cap
(Rear View)

Broad brimmed "boonie" hats were used in Vietnam as a substitute for the field cap, but their use was frowned upon by higher level commanders, since they were also considered "unmilitary" looking. Similar hats, known as "Hat, Combat, Desert Camouflage Pattern, were introduced as part of the Desert Camouflage Uniform, and were used extensively during the Persian Gulf War (1990-1991).

Hat, Combat, Desert Camouflage, six-color (left) and three-color (right).

On June 14, 2001, the black beret was authorized for wear with the utility uniforms (the BDU, maternity BDU, aviation BDU, desert BDU, hospital duty uniform, food service uniform, flight uniform, combat vehicle crewman uniform and cold weather uniform) and the service uniforms (class A and B uniforms). With the introduction of the Army Combat Uniform the wearing of the beret was extended for wear by trainees and while assigned to a combat zone.

Left: An official Army photo showing the proper wearing of the black general service beret

Production of the M1 Steel Helmet was resumed in 1951. The helmet retained all of the features of the helmets made at the end of World War II except the color was changed to olive drab shade 319 which more closely resembled the olive drab shade 7 used for field equipment. The new helmets were equipped with an olive drab shade 7, T-1 chin strap, with metal clips to allow removal and a ball and claw buckle quick release buckle. In 1966, the color of the helmet was changed to Munsell (Munsell color order system) Y10, a lighter shade of olive green, and in 1973 the T-1 chinstrap was replaced with a cotton and nylon web chinstrap with a chin cup, adjustment buckles on both sides, and black triangular clips that attached to the bail on each side of the helmet.

A post-1950 production M1 Helmet in Olive Drab Shade 319

A post-1965 production M1 Helmet in Munsell Y10

The T-1 Helmet Chinstrap introduced in 1951

M1 Helmet Liner made of nylon introduced in 1963.

In 1955 a new resin impregnated cotton liner was introduced with a heaver olive drab shade 7, web suspension inside, and with the insignia eyelet eliminated from the front. The helmet liner was modified in 1963 with the eliminated of the leather chinstrap and the addition of a new neck band held in place by three metal buckles. At the same time, an identical liner made of nylon was introduced and both were produced simultaneously until 1969, when a nylon liner with a removable inside web suspension held by clips attached to metal dish-shaped studs, became standard. This liner was in use when the M1 helmet became obsolete in 1988.

The U.S. Marine Corps developed a new reversible camouflage helmet cover in 1959, made of heavy cotton twill with a green, brown and black leaf pattern on one side and a mottled tan and brown pattern on the other. The cover had two rows of buttonholes for inserting foliage to break up the lines of the helmet. Used with the cover was the olive drab elastic camouflage helmet

band that was introduced during World War II. In accordance with a DoD directive, the cover was issued to the Army beginning in 1961. The cover was modified slightly in 1966, being printed on a lighter weight cotton duct with a slightly deeper gap between the two middle flaps to add clearance for the chip strap of the helmet. Starting in 1971 a non-reversible helmet cover in ERDL (Engineer Research and Development Laboratory, Natick, MA), woodland pattern camouflage began replacing the reversible covers. The new cover was darker with more brown than previously. After 1980, the helmet band was manufactured and issued with two luminous plastic reflectors stitched to one side at the seam. Finally, in 1983 this cover was modified slightly, being printed in a somewhat lighter shade of color and on a heaver cotton and nylon blend cloth. Both patterns continued in use until the M1 helmet became obsolete in 1988.

M1 Helmet with reversible Camouflage Helmet Cover and Band circa 1968.

M1 Helmet with non-reversible ERDL Camouflage Helmet Cover and Band circa 1975.

Rear view of the M1 Helmet showing the reflective panels stitched to the Helmet Camouflage Band beginning in 1981.

In 1982, the Army introduced the Personnel Armor System for Ground Troops (PASGT), which consisted of a Kevlar helmet and a ballistic vest. Kevlar is the DuPont Company's registered trade-name for a light, strong spun synthetic fiber. The system first saw use in combat in 1983 during Operation Urgent Fury in Grenada, but most soldiers did not receive the system until a year or two later.

The PASGT Helmet was shaped similar to those worn by the German Army in World War II and was designed to replaced the M1 and M1C Steel Helmets for both ground troops and parachutists. The helmet came in five sizes from extra small to extra large and provided ballistic protection for the head from fragmenting munitions and handgun bullets. It came with an integrated strap suspension system inside the helmet and two-point chin strap that could be upgraded to a four point chinstrap and pad suspension system for airborne use. The color of the helmet was a light olive green and it was accompanied by a helmet camouflage cover and band in either woodland pattern camouflage or desert pattern camouflage (six-color or later three-color) as appropriate.

The ballistic vest was made of spun Kevlar and was produced with a woodland pattern camouflage outer shell. A desert (six-color or later three-color) camouflage pattern cover could be added as needed. Throughout 2003 and 2004 the army began replacing the PASGT helmet and body armor with the Advanced Combat Helmet and the Interceptor body armor system.

PASGT Helmet with Woodland Camouflage Pattern Cover.

PASGT Ballistic Vest in Woodland Camouflage Pattern.

The PASGT Helmet and Ballistic Vest with three-color Desert Camouflage Pattern covers.

The Advanced Combat Helmet (ACH) is based on the Modular Integrated Communications Helmet (MICH) design and provided increased 9mm bullet protection. The helmet came with a pad suspension system and a four-point chinstrap. The design has less flare than the PASGT helmet to allow for increased head mobility. The MICH was a special operations ballistic helmet that incorporated protection with the ability to interface with most tactical headsets and microphones used by the Special Operations Command.

The Interceptor body armor is ballistically superior to the PASGT with bullet stopping capabilities. The system consists of an outer tactical vest (OTV) lined with Kevlar and two small arms protective inserts (SPPI). The vest was tested to stop a 9 mm round with minimal deformation. In addition the Interceptor body armor has add-ons such as a groin apron for increased protection. The vest was originally issued with a woodland camouflage pattern outer shell, but this was later replaced with desert and universal pattern shells. It also had a PALS webbing grid on the front of the vest which could accommodate the Modular Lightweight Load-carrying Equipment (MOLLE) or items of All-purpose Lightweight Individual Carrying Equipment (ALICE) equipment.

Army Combat Helmet with Universal Digital Camouflage Pattern Cover (Note the infrared signature tabs)

The Interceptor Body Armor in its original Woodland Camouflage Pattern

The Improved Outer Tactical Vest in the Universal Digital Camouflage Pattern

Some design problems with the Interceptor led the Army to adopt the Improved Outer Tactical Vest (IOTV) in 2007. In addition to increased protection, the IOTV was designed to take the weight off the shoulders and move it to the lower torso of the wearer. It was also equipped with a mesh inner cover designed to improve airflow. There was a cushioning pad in the lower back area of the vest designed to mitigate back injuries due to impact or blunt force trauma. Also, the entire armor system was able to be released with the pull of a hidden lanyard, providing a quick means for escape in case the wearer became trapped or fell into water. Like the Interceptor the IOTV had a PALS webbing grid on the front, back and sides which could accommodate the MOLLE or ALICE equipment.

Beginning in 1954 enlisted woman were given the option of purchasing an Army beige uniform, sometimes called “silver taupe,” made in a tropical worsted or gabardine fabric. This summer uniform was worn with brown accessories until 1962, when black accessories were prescribed.

The woman’s taupe shade 121, wool serge winter uniform was finally eliminated on July 1, 1960 when female soldiers also began wearing Army Green. The first item in the women's green uniform ensemble was the green cord suit, with issued beginning in March 1959 in time for the summer season. It was a two-piece, green and white striped, cotton polyester suit accented by dark green cord trim on collars and cuffs, and on the garrison cap.

The “silver taupe” Summer Service Uniform worn from 1954 until 1964.

The Green Cord Summer Service Uniform adopted in 1959 and worn until 1980.

The Army Green Winter Service Uniform introduced in 1960, with an all-season version introduced in 1964.

The new Army Green Uniform consisted of a fitted single breasted, wool serge shade 44, coat with four general service buttons in front and a matching four gore Army green skirt, garrison cap and service hat. The coat has a notched lapel; fall collar; button-down loops on each shoulder; and hip pockets with slanted opening, and was worn with a long-sleeved tan cotton shirt and a black necktab. The buttons and hat insignia were an antiqued gold colored metal. A short-sleeved tan shirt was added in 1966 and, beginning in 1972, women could wear a white shirt and black collar tab with the green service uniform. In 1972 a black felt beret was also authorized for wear. The Army green service hat did not enter the supply system until July 1963. In the interim, women wore the Army green cord or green wool garrison caps as appropriate to the season.

The changeover from cafe brown to black accessories (shoes, leather gloves, handbag, and the necktab) was completed in August 1962. For summer wear, the tan cotton gloves and scarf were replaced in 1962 with gray-beige items. The US Navy women's handbag was adopted as a standard item of issue for military women in 1965, but its small size made it unacceptable to Army women and in 1969 the Army women's handbag was reinstated as a substitute item. Beginning in 1960, women were authorized to wear seamless hose with their uniforms when not in military formations such as reveille and retreat.

The Mint Green Summer Uniform

The Army Green Pantsuit

The Hot Weather Field Uniform

The wool serge, Army Green shade 44 uniform became an all-season Army Green shade 344 polyester and wool tropical blend in 1964 with the change over for enlisted women in 1966. This change made the uniform suitable for year-round wear and the Army beige uniform was phased out of the women's wardrobe by 1 December 1968.

In keeping with the styles of the times, and enlisted women's mint green summer uniform made of a polyester knit material was authorized for wear in 1975. The uniform had optional long or short-sleeved jackets. The following year, the Army introduced an Army green pantsuit for women who performed military police duties. The jacket and slacks were of a polyester wool gabardine and were worn with a white shirt with black necktab or a rib-knit gray-green turtleneck tunic. In 1977 issue of this uniform was extended to all enlisted women.

A female US soldier in the three-color Desert Camouflage Uniform, serving in Iraq in 2004.

Between 1943 and 1968, the year-round women's field duty uniform, usually called fatigues, continued to be the olive-drab herringbone twill (HBT) shirt, trousers, and garrison cap. After the women's hot weather field uniform-cotton khaki slacks and shirt-had been declared obsolete in 1954, HBTs were worn year-round. However, after nurses and WACs were assigned to duty in Vietnam in the 1960s, HBTs proved to be too warm for the climate. In 1966, women serving in Vietnam began to receive a new hot weather field uniform consisting of a light-weight, olive green, cotton poplin shirt and slacks and hot weather field cap. Black service boots were also issued for wear with the women's field uniform. General issue of this uniform to women began in 1969. Beginning in the early 1980s, woman began to receive the Battle Dress Uniform and all subsequent filed uniforms in the same pattern as men.

Part 2, Accoutrements

Following World War II, the development of new field equipment coincided with the development of a new service rifle. The new system was called the Load-Carrying Equipment, M-1956 and its components included the Individual Equipment Belt; Suspenders (Load Bearing); Field Pack (butt pack); Entrenching Tool Carrier; Universal Ammunition Cases (two each); Canteen Cover; First Aid and Compass Pouch; and Sleeping Bag Carrier.

The system adopted the universal ammunition case, borrowed from the British, that was intended to hold ammunition for a variety of weapons. The small field pack was thought to be sufficient for troops fighting a mechanized war. In 1961 and improved version of the field pack was introduced. Larger with a more rounded shape, the M1961 field pack had a larger top flap, longer straps, and a rubber collar at the opening to help keep the contents dry. A new style of sliding clip was used, replacing the pattern 1910 double belt hook used previously.

The M1956 Equipment proved to be inadequate in Vietnam. The ammunition cases were redesigned to better accommodate the magazines for the M16 Rifle, and additional equipment, such as the rucksack, were introduced to make up for limitations.

Seen above are the original components of the Load-Carrying Equipment M-1956, with Universal Ammunition Case and the M-1956 Field Pack. Included also is the carrier for the M17 Protective Mask.

Components of Load-Carrying Equipment M-1956 as used later in Vietnam, with the M16 Ammunition Case, M1961 Field Pack, and the Lightweight Rucksack with frame

The M-1967 Modernized Load Carrying Equipment constructed of nylon and plastic was seldom issued as a complete set as shown here. Components of the equipment included a new Collapsible Entrenching Tool, a 2-Quart Collapsible Canteen and a Tropical Rucksack.

Because the M-1956 Load-Carrying Equipment was made of olive drab shade 7 cotton canvas, it did not hold up well in the tropical conditions of Southeast Asia. The M-1967 Modernized Load Carrying Equipment, constructed of nylon and plastic, was designed specifically for use in damp climates. This was an interim system that was not widely used and generally only available as components for use with the M1956 equipment rather than issued as a complete set.

All-Purpose Lightweight Individual Carrying Equipment (ALICE) including the Large Field Pack with frame, and is seen here with the carrier for the M17A2 Protective Mask.

All-Purpose Lightweight Individual Carrying Equipment (ALICE) was introduced in 1974. The ALICE system was designed for use in all environments, whether hot, temperate, cold-wet, or even cold-dry arctic conditions. It was made up of components for two types of loads: the "fighting load" and the "existence load". ALICE replaced all prior systems for U.S. Army, but

older M1956/1967 equipment was compatible and continued to be used intermixed while stocks were available. The ALICE continued in use with only minor modification into the 21st century.

The Individual Integrated Fighting System (IIFS) was introduced in 1988 as a possible replacement for the All-Purpose Lightweight Individual Carrying Equipment in Army service. Only marginally successful, The Individual Integrated Fighting System was used on a limited basis alongside ALICE.

The system replaced the concept of a shoulder-harness and equipment belt design with the concept of a tactical load-carrying vest. Components included vests and packs, as well as sleeping bags and cold weather clothing. In addition to the vest, the system incorporates some ALICE components including the canteen cover, first aid & compass case, and the entrenching tool and cover, without modification. A new individual equipment belt was introduced, however, with a black plastic "Fastex" quick-release buckle and a redesigned adjustment system.

In the mid-1990s the tactical load-carrying vest was redesigned due to problems with ventilation and redesignated as the Enhanced Tactical Load-Bearing Vest (ETLBV). The vest is constructed of nylon fabric printed in the woodland camouflage pattern with four permanently attached ammunition pockets that can carry six 30-round magazines for M16 series weapons. The individual equipment belt is secured to the vest by 10 belt loops that use both hook and pile fasteners and snaps.

In addition to the tactical load-bearing vest, there is an ammunition carrying vest intended for use by the infantry grenadiers armed with the M203 grenade launcher. Constructed similar to the tactical load-bearing vest, the ammunition carrying vest has 18 permanently attached ammunition pockets that can carry four pyrotechnic and fourteen 40mm grenade rounds. Because there are no pockets for rifle magazines, ALICE ammunition cases are required for use with this vest.

Enhanced Tactical Load-Bearing Vest (ETLBV)

Large Field Pack with Internal Frame.

Vest, Ammunition Carrying.

The Enhanced Tactical Load-Bearing Vest (ETLBV) seen being worn over body armor.

Modular Lightweight Load-Carrying Equipment, known as MOLLE was first introduced in 1997. The term is used to generically describe all load bearing systems and subsystems that utilize the woven Pouch Attachment Ladder System (PALS) webbing for modular pouch attachment. The PALS grid consists of horizontal rows of 1 inch wide webbing, spaced 1" apart, and reattached to the backing at 1.5 inch intervals.

U.S. soldier in Afghanistan wearing MOLLE with the Large Field Pack with internal frame, all in Woodland Pattern Camouflage Pattern.

MOLLE equipment did not see widespread issue until 2003. It was used by US troops in Afghanistan and to a limited extent by those serving in Iraq. MOLLE equipment at that time was manufactured in the green, black, and brown woodland pattern camouflage. Slowly, during 2004, the equipment was changed over to the three-color desert camouflage patter, and beginning in 2006, all MOLLE equipment was issued in the gray-tone, universal digital camouflage pattern.

Displayed above is a MOLLE vest with components including two Double Rifle Magazine Pouches, bayonet, and two canteens with carriers. Also seen is the carrier for the M40 Protective Mask and the Interceptor Body Armor.

U.S. Army photograph by Sgt. Tierney Nowland
Sgt. Joshua Wettlin with Company B, 1st Battalion, 23rd Infantry Regiment, 3rd Stryker Brigade Combat Team, 2nd Infantry Division wearing the gray-tone digital universal camouflage MOLLE, while pulling security duty in Rashid, Iraq during a cordon and search operation, May 3, 2007.

Part 3, Small Arms

The M1 Rifle remained in Army service throughout the 1950s and with the Reserve Components until the end of the 1960s, with only minor changes. The M14 Rifle was developed from the M1 with modifications that included a shorter receiver, select fire capability, and a detachable box magazine holding 20 rounds. The T44 Rifle in 7.62mm competed successfully against a series of prototype designs, which led to its adoption by the Army as the M14 in 1957. Springfield Armory began tooling a new production line in 1958 and delivered the first service rifles July 1959. However, long production delays resulted in the 101st Airborne Division being the only unit to be fully equipped with the new rifle by the end of 1961.

The M14 Rifle with the M6 Bayonet

The M14 was developed to be used as both a rifle and an automatic rifle in the rifle squad in order to simplify the logistical requirements of the infantry. The weapon excelled as a replacement for the M1 rifle, fixing many of that rifle's shortcomings. However, it proved to be too light as an automatic rifle, and that role fell to the M60 Machine Gun.

The rifle served adequately in Vietnam, the power of the 7.62mm NATO cartridge allowed it to penetrate jungle cover quite well and reach out to extended range. The wood of the rifle stock had a tendency to swell in the heavy moisture of the jungle and fiberglass stocks were produced to resolve this problem. Unfortunately, the rifle was discontinued before many of the new stocks could be distributed for field use.

Intensive studies following World War II by the Army Operations Research Office (ORO) concluded that most combat takes place at short range. They reported that in a highly mobile war, combat teams ran into each other largely by surprise and the team with the higher firepower tended to win. They also concluded that the chance of being hit in combat was essentially random and that aiming made little difference because targets no longer sat still. They stated that the number one predictor of casualties was the total number of bullets fired. These conclusions suggested that the infantry should be equipped with a fully-automatic rifle in order to increase the rate of fire. It was also clear that such a weapon dramatically increased ammunition usage, and in order for a rifleman to be able to carry enough ammunition, it would have to be much lighter.

AR15/M16 Rifle

The M16 Rifle was the initial version first adopted in 1964 by the United States Air Force. It was a lightweight, 5.56 mm caliber, air-cooled, gas-operated, magazine rifle, with a rotating bolt, actuated by direct impingement gas operation. The weapon was constructed of steel, with an aluminum alloy receiver and a composite plastic stock. The M16 was ordered as a replacement for the M14 at the direction of Secretary of Defense Robert McNamara over the objection of the Army. The Army began to field the XM16E1, an M16 with a forward assist feature, in late 1965 with most going to Vietnam. When the XM16E1 reached Vietnam, reports of jamming and malfunctions in combat immediately began to surface. The XM16E1 was standardized as the M16A1 Rifle in 1967, and improvements to the rifle along with training in proper cleaning diminished many of the problems, but the rifle's reputation continued to suffer. Moreover, complaints about the inadequate penetration and stopping power of the 5.56mm cartridge persisted throughout the conflict.

The M16A1 Rifle shown with the M7 Bayonet and M8A1 Scabbard

The M16A2 entered service in the mid-1980s and fired a NATO standard Belgian-designed M855 or M856 5.56mm cartridge. The M16A2 was a select fire rifle capable of semi-automatic fire or three-round bursts. The burst-fire mechanism utilized a three-part automatic sear that fires up to three rounds for each pull of the trigger. The mechanism is non-resetting, which means that if the user fires a two-round burst and releases the trigger, the weapon will only fire a single round the next time he or she pulls the trigger. In theory, burst-fire mechanisms allow ammunition conservation for troops with limited training and combat experience. Other features included an adjustable rear-sight for windage and elevation, a slightly longer buttstock, heavier barrel, case deflector for left-handed shooters, and rounded hand guards.

M16A2 Rifle shown with the M9 Bayonet and Scabbard

A combination of the M16A4 and M4 Carbine continued to replace existing M16A2 Rifles used by the Army. The M16A4 incorporated a flattop receiver unit and a hand guard with four Picatinny rails for mounting optical sights, lasers, night vision devices, forward handgrips, removable carry handle and flashlights. The M4 was a carbine version of the M16A1 with a small retractable buttstock and shorter barrel. The M4A1 was capable of fully automatic fire and was used as a submachine gun by selected individuals in situations such as house to house fighting.

The M16A4 Rifle (top) and the M4 Carbine (bottom), both of which use the M9 Bayonet (center).

The 9mm Semiautomatic Pistol, M9 was adopted by the Army in 1990 to replace the M1911A1 pistol. The M9 was essentially a mil-spec Beretta 92F, locked breech, semi-automatic, recoil-operated pistol, with a 15-round staggered row magazine. The magazine had a reversible release button that can be positioned for either right-handed or left-handed shooters.

The 9mm Semiautomatic Pistol, M9

Under the Joint Service Small Arms Program, a number of 9mm pistol designs were examined in the late 1970s to find a replacement for the 1911. The 9mm round was selected for compliance with NATO standardization. In 1980, the Beretta 92S-1 design was chosen over other entries, but the result was challenged by the Army and a series of new tests were completed over the next several years. In the end the Beretta design was kept, and in 1988 was selected as the primary handgun of U.S. armed forces, and officially entering Army service in 1990.

The M9 was without its share of controversy. Prior to its widespread adoption by the armed services, questions were raised in a Government Accounting Office report regarding a number of incidents where slide failures caused injuries to personnel. These failures were also observed in testing and they occurred in both military and civilian model Berettas with high round counts.

Another concern was the large circumference grip coupled with a long double-action trigger reach that causes some individuals with small hands to have difficulty firing. These firers are forced to adopt an off axis grip in order to reach the trigger. A third concern was the placement of the safety on the slide, which is placed out of the normal reach of the firing hand and could be left in the "safe" position resulting in a failure to fire in an immediate response situation.

Between 2003 and 2006, soldiers reported a lack of stopping power with the 9mm ammunition, and problems with the magazines. Testing showed that the 9mm magazines failed due to the heavy phosphate finish called for in the government specification when used in the environmental conditions in Iraq. After corrections were made to the specifications, almost two million new magazines were distributed without any further malfunctions.

Some M9 has been modified with a tactical rail for the attachment of lights, lasers, and other accessories. Weapon, thus modified have been designated as the M9A1 Pistol. The M9 is used with the M12 Holster, although a number of other commercially procured holsters are often used.

The M60 Machine Gun

Strictly speaking the 7.62mm M60 machine gun was not an individual weapon, but it was used within the rifle squad in the roll of a squad automatic weapon throughout the Vietnam period and later. The M60 was type classified in 1957 as a replacement for the .30 caliber M1919A6 machine gun. It fired 7.62mm NATO ammunition in disintegrating-link belts at a rate 600 rounds per minute. It had a removable barrel which could easily be changed to prevent overheating. The weapon had an integral, folding bipod and could also be mounted on a tripod when necessary. The M60 series was replaced by the M240B 7.62mm NATO medium machine gun.

The 5.56mm M249 Squad Automatic Weapon (SAW) was a full-automatic, gas-operated, magazine or belt-fed weapon. It was used within the infantry squad as an automatic rifle, filling the void created by the retirement of the Browning automatic rifle in 1960, a role that both the M14 and M16A1 rifles had failed to fill. The M249 replaced the M16A1 rifles used in the automatic mode in the rifle squad on a one-for-one. The automatic rifleman supported the infantry squad by providing suppressive fire against point targets in the last 100 yards of the assault. The M249 was also be used as a light machinegun, when fired from a stable position

and not required to conduct fire and maneuver with the squad. When used in the machine gun roll, the gun remained with the base-of-fire element.

The weapon was designed and manufactured by Fabrique Nationale Arms de la Guerre, of Belgium and was adopted by the Army in 1984. The M249's ammunition was a 200-round disintegrating belt, but it was also capable of firing ammunition from standard 20 or 30-round rifle magazines inserted in a magazine well in the bottom of the receiver. Thus the weapon could be fired from the shoulder, from an integral bipod, or from a tripod mount with a traversing and elevating (T & E) mechanism. It was equipped with rails to mount optics and target illuminators and had an optional short barrel for close-quarters operations.

M249 Squad Automatic Weapon (SAW)

The M79 was an attempt to increase firepower for the infantryman by having an explosive projectile more accurate, and with further range than rifle grenade, but more portable than a mortar. It was adopted by the Army on December 15, 1960 with the first deliveries received in late 1961. Owing to its ease of use, reliability, and firepower, the M79 almost immediately became popular with infantry soldiers. The M79 could consistently drop grenades into a 24 inch circle, 150 yards away.

40mm M79 Grenade Launcher

The M79 was a single-shot, break-open, breech-loading, shoulder-fired weapon. It had a protected fixed front sight and a rear leaf sight for ranges from 75-meters to 375-meters in 25-

meters increments that were adjustable for windage. The M79 could fire a variety of 40 mm rounds, including explosive, anti-personnel, smoke, buckshot, flechette, and illumination.

The M203 Grenade Launcher on the M16A1 Rifle

A major drawback with the M79 was that the grenadier was armed only with a pistol in addition to the launcher, and thus diminished the firepower of the squad. The XM203 Grenade Launcher Attachment Development (GLAD) was a single-shot weapon designed for under-barrel use with the M16 series rifle. It fired a 40mm grenade similar to that used in the M79 grenade launcher, but also allowed the soldier to use his rifle when necessary. The XM203 was type classified as the M203 in August 1969, gradually replacing the M79 Grenade launcher during the early and mid-1970s. The M203A1 grenade launcher was a single-shot weapon designed for use with the M4 series carbine and it also fired a 40mm grenade. Both systems had a leaf sight and a quadrant sight.

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