Yesterday's Soldier

Yesterday's soldiers entered the 20th century as the victors of the Spanish-American War and faced new challenges in the Philippine Islands, China and other hot spots.

Today's soldiers — with a modern force structure, computerized equipment and high-tech weaponry — owe a debt of gratitude to their unknown comrades in simple blue shirts and battered campaign hats.

This representation of the 1900-era soldier includes individual equipment issued to soldiers during that period.

Sky-Blue Kersey Overcoat

The all-seasons overcoat was made of 22-ounce sky-blue kersey (twill weave) lined with dark-blue flannel. The pattern was calf length and double breasted, fastening with two rows of six coat-size brass buttons. Attached underneath the rolling collar by means of metal hooks and eyes was a removable, finger-length cape, lined with dark-blue flannel for the infantry branch color, and closing with seven brass buttons.

Weight: 7.0 pounds

Shelter Tent

The shelter tent of 1861 was adopted from the French army and made of white cotton duck. It measured 65 inches by 61 inches, with a triangular end piece, added in 1892, of 3 feet, 7 inches. The two halves together created the "pup" tent. Each half also included a manila guy line, a two-piece, 46-inch wooden pole, and five 9-inch wooden pins. After 1899 the tent changed color from white to khaki, and cloth straps were added in 1900 to create a shelter-tent and clothing-roll combination.

Weight: 2.6 pounds

Woolen Blanket

Included in the clothing allowance was a blanket of pure long-staple wool in a twill weave. It measured 7 feet long by 5 1/2 feet wide. The color was a mixture of blue and white yarns, with a dark-blue stripe, 2 1/2 to 3 inches wide, across each end, about 6 inches from the edge. In the center the letters "U.S." were either woven or stamped in indigo dye.

Weight: 5.0 pounds

Rubber Poncho

Every soldier also carried a poncho for rain protection. Authorized in 1861, the poncho was made of half-bleached cambric sheeting coated with Para rubber and measured 60 inches wide by 72 inches long, with 18 brass grommets along the edges, equally spaced. In the center of the poncho was a 13-inch-wide slit opening for the soldier's head; the slit closed by a flap fastened by a button.

Weight: 2.8 pounds

Blanket Bag and Heavy Marching Order

In 1878 the Watervliet Arsenal modified the individual equipment to include, besides a canteen and haversack for rations, a rectangular blanket bag made of drab cotton duck for the bedding and spare clothing. It was worn on the back and was supported by detachable shoulder straps of black leather with double-wire brass hooks. Within the blanket bag each soldier carried a shelter tent, poncho, overcoat, blanket, extra shoes, extra clothing and toilet articles.

Weight: 24.9 pounds (full)

Tin Canteen

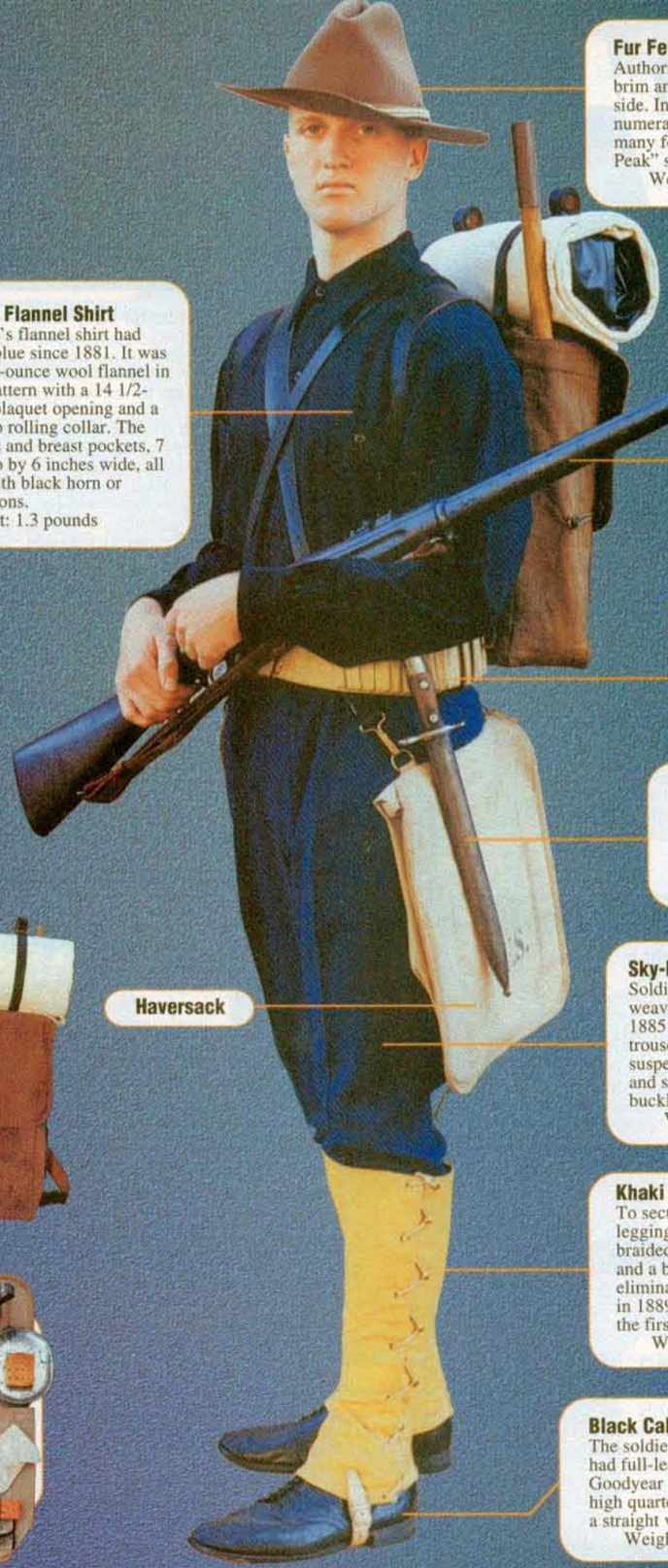
The water canteen was a pre-Civil War pattern that was modified in 1878. Equipped with a leather shoulder strap, the canteen was made of sheet tin. It was 7 inches in diameter and 3 inches thick, and the rimmed mouth piece was closed with a tin-capped cork and riveted with an iron wire stem and loop attached by a brass 3-inch chain. Soldered to the tin loop on each side was a wire loop for the leather shoulder strap. The contents stayed cool by dampening the gray Petersham (wool felt) and drab cotton-duck outer cover.

Weight: 1.2 pounds
4.2 pounds w/3 pints water

Haversack Ration and Mess Equipment

The cotton-duck haversack carried the soldier's meat can and spoon of tinned iron and the steel knife and fork with cast iron handles. It also contained the loose hard bread ("hardtack") crackers, bacon in a detachable bag, and coffee, sugar and salt in separate cotton-drill drawstring bags. The haversack ration differed little from that consumed during the Civil War.

Weight: 3.0 pounds (rations)



Fur Felt Campaign Hat

Authorized in 1889, the drab campaign hat had a 3-inch brim and a 5 3/4-inch crown, with ventilation holes on each side. In 1899, orders added a hat cord and metal letters and numerals for unit identification. The center-creased hat took many forms until the appearance in 1912 of the "Montana Peak" service hat, still worn by male drill sergeants.

Weight: 0.4 pounds

Dark-Blue Flannel Shirt

The soldier's flannel shirt had been dark blue since 1881. It was made of 10-ounce wool flannel in a slip-on pattern with a 14 1/2-inch deep plaquet opening and a 3-inch deep rolling collar. The round cuffs and breast pockets, 7 inches deep by 6 inches wide, all fastened with black horn or rubber buttons.

Weight: 1.3 pounds

M-1896 Magazine Rifle

In 1892, the Army adopted a magazine rifle to replace its single-shot, black-powder arms. Called the "Krag-Jorgensen" after its Norwegian inventors, this weapon fired a high-velocity, smaller-caliber cartridge.

Caliber: .30
Capacity: 5 rounds
Overall length: 48.9 inches
Weight: 10.1 pounds
Cycle rate: 20 rds/min

Woven Cartridge Belt

The soldier carried 100 rounds of .30-caliber rifle ammunition in his double-loop cartridge belt. Adopted in 1894, to match the dark blue uniform, the color returned to a natural gray after the war with Spain.

Weight: 1.6 pounds empty
13.5 pounds with cartridges

M-1892 Knife Bayonet

Attached to the cartridge belt by means of the M-1899 double-wire hook, the blue-steel scabbard of the M-1892 knife bayonet replaced the socket bayonet with triangular blade.

Weight: 1.7 pounds

Haversack

Sky-Blue Kersey Trousers

Soldiers wore trousers of 22-ounce wool kersey (twill weave) in the traditional contrasting sky blue. The post-1885 shade was darker than the Civil War color. These trousers had a separate waist band, fly front and suspender buttons of black japanned metal, with watch and side pockets in front and one right pocket and buckled cloth back strap in the rear.

Weight: 2.0 pounds

Khaki Canvas Leggings

To secure and protect their trousers, soldiers wore leggings of 15-ounce khaki cotton duck. Fastened with a braided round cord around brass hooks on the outside and a buckled leather strap beneath the instep, leggings eliminated tucking the trousers into the socks. Adopted in 1889, they remained part of the field uniform until the first combat service boot arrived in 1943.

Weight: 0.5 pounds

Black Calfskin Shoes

The soldier's shoe was made of black calfskin. It had full-leather heels and machine-stitched Goodyear welt soles. The pattern used an ankle-high quarter (upper) with a web heel strap, joined to a straight vamp (toe) with a horizontal seam.

Weight: 2.3 pounds

Information and equipment provided by Walt Bradford, curator, Museum Section, U.S. Army Center of Military History. • Soldier model, PFC Marshall Codd, is from the 3rd U.S. Infantry (The Old Guard) Fort Myer, Va.

Today's Soldier

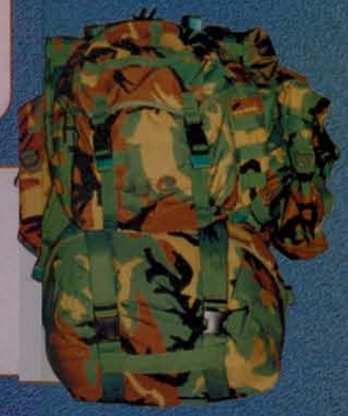
TODAY'S soldiers are arguably the smartest, deadliest and best trained in the history of our nation. In fact, the U.S. Army is commonly accepted as being the best in the world.

Some of the credit for that world-renowned reputation must be given to technological advances over the last 100 years. Soldiers now have individual equipment that provides almost every possible combat advantage.

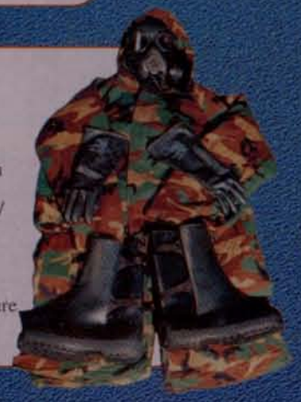
This representation of the soldier of today includes individual equipment currently being issued to soldiers around the world.

Interceptor Body Armor
The Interceptor system was designed to provide effective defense against shrapnel from mines, grenades, artillery fire, mortar shells and rifle bullets. The IBA system consists of a Kevlar vest with detachable neck and groin guards, and small-arms protective inserts.
Weight: 16.4 pounds
Protection without inserts: 9mm pistol rounds and shrapnel
Protection with inserts: 7.62mm rifle rounds and shrapnel

Improved Rainsuit
The IRS parka and trousers are made of a pliable, moisture vapor semipermeable polyurethane backside coated nylon material with a durable water-repellant finish. The parka will accept the standard button-in field jacket liner for additional insulation. The parka also has underarm-ventilation slide fasteners, front insignia tab and adjustable toggle closures at the hood and bottom hem. The trousers have slide-fastener, adjustable-closure, bottom leg hems for easier donning and doffing without removal of boots.
Weight: 2.9 pounds



Modular Lightweight Load-carrying Equipment System
The MOLLE system consists of a modular rucksack with removable compartments and components, and a fighting load vest that accepts removable pockets for rifle, pistol, squad automatic weapon and grenadier configurations. One waist belt serves both the vest and backpack, and allows quick release of the backpack from the waist belt. The MOLLE also includes an On-the-Move Hydration System.
Weight: 16.8 pounds



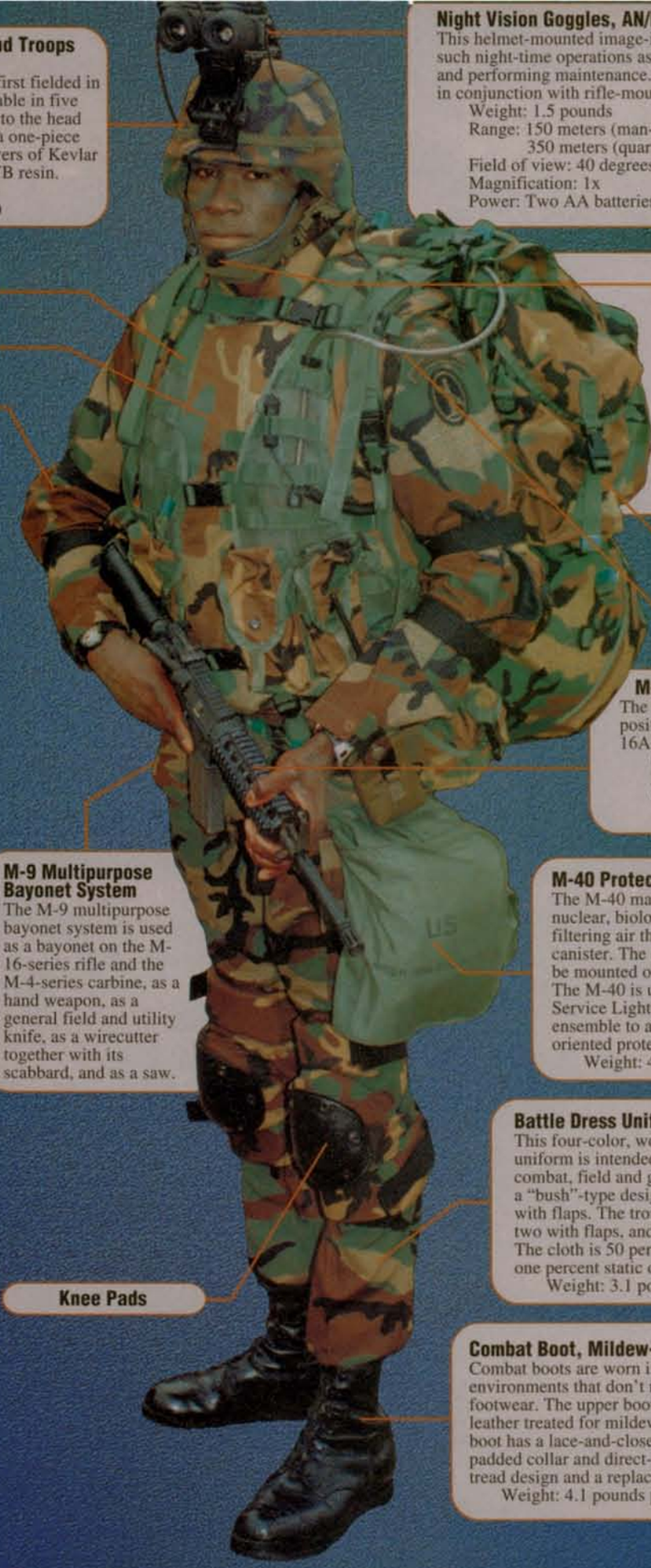
Joint Service Lightweight Integrated Suit Technology Ensemble
The JSLIST ensemble is a lightweight, flexible clothing system that provides protection against chemical and biological agents. The JSLIST components include an overgarment worn over the Battle Dress Uniform, and the Multipurpose Rain/Snow/CB Overboot worn over standard combat boots. These items, when combined with standard CB protective butyl gloves and masks for respiratory protection, allow for complete mission-oriented protective posture flexibility.
Weight: 9.6 pounds

Modular Sleeping Bag System
The MSBS is a bag-within-a-bag concept. An intermediate sleeping bag fits into a "patrol" warm-weather bag to form an extreme cold-weather sleeping bag. The bivouac cover can be used in any configuration. The system is augmented by the use of the insulating layers of the Extreme Cold Weather Clothing System. The MSBS consists of a camouflage, water resistant, breathable bivouac cover; a lightweight patrol sleeping bag; an intermediate cold-weather sleeping bag; and a compression stuff sack (to store and carry the system).
Protection:
Patrol Bag: 35 to 50 degrees
Intermediate CW Bag: -5 to 35 degrees.
Patrol, ICW and ECWCS: Down to -50 degrees.
Weight: 10.6 pounds

Knee and Elbow Pads
Knee and elbow pads provide protection to dismounted soldiers engaged in tasks that subject these areas to possible injury caused by impacts, pressure, protruding objects and debris. The pads come in three sizes and are constructed of a molded, high-density polyethylene shell fastened to a camouflage fabric outer cover that is sewn to a polyester inner lining. Inside the covering is sewn a three-segment impact-cushioning polyethylene foam.
Weight: 1.7 pounds

Meal, Ready-to-Eat, Individual
The standard military ration for the individual soldier is the MRE, which was fielded in the early 1980s. Each MRE contains approximately 1,300 calories. The MRE remains usable for three years at 80 degrees and six months at 100 degrees. Since 1993, 70 new items have been approved for the MRE, 14 of the least popular items were replaced, menus increased from 12 to 24, and four vegetarian meals are now included.
Weight: 1.5 pounds

Personnel Armor System Ground Troops Helmet
The standard PASGT helmet was first fielded in the early 1980s. The helmet, available in five sizes, provides ballistic protection to the head from fragmenting munitions. It is a one-piece structure composed of multiple layers of Kevlar 29 ballistic fabric and phenolic/PVB resin.
Weight: 3.1 pounds (X-Small)
4.2 pounds (X-Large)



Night Vision Goggles, AN/PVS7D
This helmet-mounted image-intensification system is used for such night-time operations as driving, walking, map reading and performing maintenance. The system is designed for use in conjunction with rifle-mounted aiming lights.
Weight: 1.5 pounds
Range: 150 meters (man-size target in starlight)
350 meters (quarter moon)
Field of view: 40 degrees
Magnification: 1x
Power: Two AA batteries or one lithium battery.

Fighting Load Vest

Interceptor Body Armor

Elbow Pads

Soldier Intercom
The Soldier Intercom allows soldiers to talk to each other from up to 700 meters without giving away their positions. Squad leaders can talk to the entire squad simultaneously on a discreet channel heard only by them. Each SI unit includes a receiver/transmitter, rechargeable battery pack and headset with boom microphone.
Weight: 1.4 pounds

MOLLE System

On-the-Move Hydration System

M-4 Carbine
The M-4 is a more compact, four-position buttstock version of the M-16A2 rifle.
Caliber: 5.56mm
Magazine capacity: 30 rounds
Overall length (compact): 29.8 inches

M-9 Multipurpose Bayonet System
The M-9 multipurpose bayonet system is used as a bayonet on the M-16-series rifle and the M-4-series carbine, as a hand weapon, as a general field and utility knife, as a wirecutter together with its scabbard, and as a saw.

M-40 Protective Mask
The M-40 mask protects soldiers against nuclear, biological and chemical threats by filtering air through an externally mounted filter canister. The canister is easy to replace and can be mounted on the left or right side of the mask. The M-40 is used in conjunction with the Joint Service Lightweight Integrated Suit Technology ensemble to allow for complete mission-oriented protective posture.
Weight: 4.5 pounds

Battle Dress Uniform, Temperate Zone
This four-color, woodland-camouflage pattern uniform is intended for use in temperate-zone combat, field and garrison environments. The coat is a "bush"-type design with breast and lower pockets with flaps. The trousers have four standard pockets, two with flaps, and two leg-cargo pockets with flaps. The cloth is 50 percent cotton, 49 percent nylon and one percent static dissipative fiber.
Weight: 3.1 pounds

Knee Pads

Combat Boot, Mildew- and Water-Resistant
Combat boots are worn in combat, field and garrison environments that don't require specialized footwear. The upper boot is made of cattlehide leather treated for mildew and water resistance. The boot has a lace-and-closed-loop closure system, padded collar and direct-molded sole with deep-lug tread design and a replaceable heel.
Weight: 4.1 pounds per pair (Size 9)

Information and equipment provided by David Nelson, deputy product manager, Enhanced Soldier Systems, Project Manager Soldier, Fort Belvoir, Va. • Soldier model, SSG Leslie Woodley, is from the 3rd U.S. Infantry (The Old Guard), Fort Myer, Va.