TECHNICAL REPORT

68-41-CM

THE ARMY GREEN UNIFORM

by

Stephen J. Kennedy and Alice F Park

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Stephen J. Kennedy and Alice F. Park

March 1968

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Clothing and Organic Materials Laboratory
U.S. ARMY NATICK LABORATORIES
Natick, Massachusetts 01760

FOREWORD

The development and adoption of the present Army Green Uniform represents the culmination of efforts extending over a long period of time to achieve a distinctive appearance for U.S. Army personnel and an identity as an attractively uniformed Armed Service. It was the result of a long-range development program established after World War II when widespread dissatisfaction with the current standard uniform reached a climax.

The story of this development has been documented primarily in the hope that those concerned with future developments will recognize this achievement and further the tradition with which it is associated.

Special recognition is given to a number of persons who made major technical contributions to its development. They include Frank J. Rizzo, who developed the shade which was ultimately adopted as the color of the uniform; George T. B. Page and Walter L. Brown, who monitored the development of all components of the uniform, all of whom are at the U.S. Army Natick Laboratories, and Major General Bruce E. Kendall, former Deputy Commander, U.S. Army Supply & Maintenance Command, Washington, D.C., whose special interest in the development program throughout its entirety was particularly helpful.

Recognition is also merited by the members of the National Academy of Science-National Research Council Advisory Committee on Men's Military Clothing, who reviewed all possible approaches to an improved uniform and recommended the color and design which were finally adopted. These included: Dr. Jules Labarthe, Jr., Mellon Institute of Industrial Research (Chairman); Meyer Kestnbaum, President, Hart, Schaffner and Marx; Irvin Bender, S. Ginsberg Sons; Clyde Bordner, Rogers Peet Company; David L. Charney, Trimount Clothing Company; Guido Fusaro, Louis Goldsmith, Inc.; Hugo Gemignani, Hickey-Freeman; Achille Mongelli, H. Freeman and Son, Inc.; Joseph Salvatore, Eagle Clothes, Inc.; and Timothy F. White, Hogan Brothers.

Acknowledgment is also made to the members of the National Academy of Sciences-National Research Council Advisory Committee on Women's Clothing, who selected Miss Hattie Carnegie as the designer of the present women's uniform and who provided advice and assistance on all elements of the women's uniform design as originally adopted.

These included: Dorothy Shaver, President, Lord and Taylor; Edna Woolman Chase, Editor-in-Chief, Vogue Magazine; Carmel Snow, Editor, Harper's Bazaar; Mary Brooks Picken, authority on Home Economics; Tobé [illegible]er Davis, Tobé Fashion Consultant; and Eleanor Lambert, Fashion Publicist.

S. J. KENNEDY
Director
Clothing & Organic Materials Laboratory

APPROVED:

DALE H. SIELING, Ph.D.
Scientific Director

FELIX J. GERACE
Brigadier General, USA
Commanding

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ABSTRACT

The Army Green Uniform for semidress wear by all male personnel was adopted in 1954 as a result of a post-World War II, long-range uniform improvement program. The new uniform provided the foundation for a stable service uniform system upon which the Army could build the uniform tradition it historically lacked. This report presents the Army uniform problems which led to the uniform program, the selection of a color and design for the new service uniform and accessories, and the development of the Army Green Uniform into a complete system for all-year wear.

THE ARMY GREEN UNIFORM

1. Introduction

The U.S. Army is building a uniform tradition with the Army Green Uniform it adopted in 1954. Throughout its history the American Army has lacked any strong tradition in dress, unlike the U.S. Navy whose uniforms reflect the color, design and spirit of British naval uniforms worn 200 years ago.

The importance of uniform tradition and appeal was stated by Gen. Matthew B. Ridgway, then Chief of Staff, to a Senate subcommittee hearing on appropriations for the Green Uniform in 1955:

> "The American soldier requires and deserves a uniform which he can wear with pride. . . .
> In our never-ending search for men of high caliber and firm determination, we must offer a uniform that is military, distinctive and dignified."

For the first time Army officers and enlisted men share a general duty uniform that is attractively distinct in color from other military uniforms and is designed according to sound principles of style and use. The Army Green Uniform is the result of a long-range uniform improvement program established after World War II when widespread dissatisfaction with the Army uniform reached a climax.

2. Tradition in Uniforms

a. Growth and Importance of Tradition

The importance of a uniform's appearance dates back to the original purpose of special military attire. Medieval princes and rulers initially clothed their followers in the same colors to set them apart from the enemy and from other classes of society(1).

Uniforms in the modern sense of identical clothing for an army were introduced during the second half of the 17th Century. The growth of commerce and the consolidation of finances and authority enabled rulers of emerging nation-states to maintain standing armies and to clothe them in uniforms.

With time, uniforms became a source of patriotism and soldiery pride as well as simple identification. A historian notes, "The esprit de corps of standing armies on the Continent owed much to the jealously preserved traditions linked with their uniforms."(1).

The color of national uniforms became traditional. Generally, the French and Austrian armies wore white, the Prussian armies blue, and the Russians green(2). The famous redcoats of the British were first adopted by Cromwell's Parliamentary Army in 1645, and red continued as the general British uniform color for more than 250 years until changes in warfare required camouflage clothing. The British still preserve their traditional red in the scarlet tunics and cloaks worn by the Foot Guards and Life Guards at state occasions.

Individual regiments within armies were identified by the different colors of their facings, cuffs and trousers and even by differences in their coat buttons. The five regiments of the British Foot Guards are distinguished even today by the traditional grouping of their tunic buttons, from the evenly spaced buttons of the Grenadiers to the 5-button grouping of the Welsh Guards(3).

In America, the new U.S. Navy built its uniform tradition upon the dark blue of the British Royal Naval uniform(4). The present U.S. Navy uniform of blue and gold and the Marine Corps dress uniform of two-tone blue date back to early 19th Century Navy and Marine Corps uniforms. Naval seamen regard their traditional white and blue uniform of blouse, scarf and bell-shaped trousers with such pride that they turned down post-World War II proposals for design modernization(5).

b. Lack of Army Uniform Tradition

In contrast to these strong uniform traditions, the American Army uniform has changed continually. The H.A. Ogden illustrations of Army uniforms and similar studies show the Army enlisted man and officer wearing a different uniform in every major American campaign and war since the Revolution(6,7).

The first Army uniform policy was promulgated by Gen. George Washington in October 1779 after Congress delegated the prescription of uniforms to the Commander-in-Chief. Although a blue, open waistcoat was prescribed as the basic Army coat, the troops were divided by states into regional groups and distinguished by different colored coat facings.

The color of the Army coat was firmly established in 1821 when dark blue was proclaimed the national uniform color. The design of the uniform changed frequently, however, as it followed British and Prussian models and was influenced by civilian fashions.

By the Civil War, the regulation uniform was a semidress type with a dark blue, heavy frock coat and light blue trousers. In a postwar study of the Union uniform, the assistant Surgeon General sharply criticized the heavy, tight-fitting coat as being too restrictive and too warm for year-round wear, especially in the South(8). Instead of boldly designing its own practical uniform, the U.S. Army moved closer to European models and in the late 1870's adopted the spiked helmet popularized by the Prussian Army(7).

The Army's one stable uniform feature -- the blue color of the tunic -- was discarded for field uniforms during the Spanish-American War (1898). The blue coats of U.S. troops fighting in Cuba presented such visible targets to snipers that the men smeared mud on their uniforms to be less conspicuous. By the end of the war the Army had changed its summer uniform color to Khaki (Hindustani for "dust-colored"), a tan shade worn by British troops in India.

The Army also adopted a camouflage color for its winter service uniform -- a dull, greenish-brown color designated as "olive-drab." The Blue Uniform was retained for dress wear, thus beginning the separation of dress and camouflage colored service or field uniforms.

The World War I Army uniform was patterned after the British Army uniform with a stiff, high "military" collar which was perhaps stylish but uncomfortable, and spiral-wound puttees which restricted circulation in the legs when worn too tight.

Between the World Wars, the Army's lack of uniform tradition and firm uniform policy became even more apparent. Army officers began wearing a semidress winter uniform which they referred to as their "pinks and greens" -- a combination of either a dark yellow-green coat and "pink" (light taupe) trousers, or less often, the same coat and matching green trousers. Military tailors and uniform houses competing for uniform sales catered to the desire of local commanders and individual officers to have a uniform that was slightly different, and the color of the green coat became progressively darker. By World War II Army officers appeared in an unpleasing diversity of shades and combinations of the "pinks" and greens.

The outbreak of World War II found the Army literally undressed for wartime duty. Lt. Gen. Edmond B. Gregory, Quartermaster General during the War, has vividly described the Army's uniform plight in 1940:

> "After World War I, for reasons of economy, it was decided to discard the dress uniform and make the so-called 'service uniform' of olive drab woolen cloth do for both field and garrison wear. Officers and enlisted men, in an endeavor to make a military dress appearance, wore their uniforms rather tight, and as someone has expressed it, the Army was prepared for fighting in Maine in summer and Florida in winter.
>
> Furthermore, military planning in the United States, in the years preceding 1940, was based on a defensive concept. Operations had been visualized as taking place mainly near or within the borders of the continental United States, or in similar climatic areas. Consequently, when World War II came upon us, the Army was ill-equipped, having a 'service uniform' which was neither a field uniform nor a dress uniform -- neither attractive in appearance nor usable in the field or in combat."(5)

Under the aggressive leadership of Col. Georges F. Doriot (later Brigadier General), Chief of the newly-formed Research and Development staff of the Office of the Quartermaster General, a program was begun in 1942 to develop functional uniforms which would be suitable for fighting in any part of the world. A significant accomplishment was the development of the M-1943 cold weather clothing ensemble to be worn by U.S. troops in the invasion of France.

To give this combat uniform a semidress appearance for garrison wear, the Army adopted a hip-length jacket styled after the British battle dress jacket. This was the World War II "Eisenhower" or "Ike" jacket, so named because Gen. Dwight Eisenhower first admired and wore the British model when he was Commander-in-Chief of the Allied Forces. . .

In the field, the Eisenhower jacket served as an insulating layer in the M-1943 ensemble, not as an outer field garment like the British jacket. It was to be worn underneath a water-repellent, wind-resistant outer jacket and, when the temperature required, over a sweater, a flannel shirt and wool/cotton underwear.

To accommodate these insulating underlayers, the "Ike" jacket was designed with a bloused action back and roomy sleeves. As a result it was somewhat too large when worn without the extra undergarments. Unfortunately, many soldiers regarded the "Ike" jacket as a dress item because they had no service coat and the men often had it fitted so snugly that they could not wear it in the field as intended(9).

The deep-seated dissatisfaction of the Army with its uniform, which stimulated these continual modifications, reached a peak after World War II. When the troops returned home, the men who were making the Army their career wanted a garrison uniform that was more flattering and attractive in civilian eyes. The olive-drab, short "Ike" jacket was not a satisfactory semidress item in a peacetime society which considered coats and ties the proper attire for many occasions. The baggy fit of the jacket further detracted from its suitability for wear as a service uniform.

The image of the jacket suffered further from its indiscriminate use as a working jacket by soldiers returning to civilian life. Upon discharge, soldiers had been allowed to retain their uniforms because of the shortage of civilian clothes, and the jackets, which were functional as work clothing, were frequently seen on construction crews, filling station attendants and other civilian workers.

The greatest source of dissatisfaction, however, was not with the appearance of the Eisenhower jacket but the olive-drab color of the uniform. Because the color was a camouflage shade, not normally worn in men's clothing, the uniform was almost instinctively rejected.

The acceptance of a uniform is known to be based primarily on the viewer's psychological reaction to its appearance. If the color of a uniform and thus its appearance is displeasing, the reaction will not be favorable even though this dislike may be attributed to other factors. Experts from the clothing industry advised the Army that the olive-drab color lacked consumer acceptability and that the Army should find a more attractive color if it wished to obtain a satisfactory uniform upon which a tradition could be built(5).

3. Separation of the Field and General Duty Uniform

The Army Command was as displeased as its soldiers with the uniform situation. Clothing the Army had been a serious production and supply problem during World War II. A multitude of uniform items had been authorized and numerous out-of-date items continued in use on an optional basis because of wartime fabric shortages and because no long-range uniform policy existed.

The first postwar action taken to meet the uniform problem was initiated by Gen. Eisenhower, then Army Chief of Staff, in March 1946 under War Department Circular 88. To reduce the multiplicity of uniforms, Circular 88 prescribed the olive-drab winter uniform as the field and garrison uniform for all male Army personnel. In keeping with the recommendation of the Doolittle Commission, officers would appear in formation wearing the same uniform as troops. The officer's pinks and greens would become obsolete after July 1948.

For semidress and dress needs, a blue uniform similar to the blue dress uniform of 1938 would be authorized for all male personnel. The Eisenhower jacket would remain a dual-purpose item, serving as the jacket of the garrison uniform and as an insulating layer in the field ensemble.

Since the men would wear the Eisenhower jacket as their uniform "coat" at semidress occasions until a blue uniform was developed, the Quartermaster Corps began a program to improve its appearance. The patterns for the World War II jacket were modified twice with some fullness being eliminated each time.

Unfortunately, the supply of World War II "Ike" jackets in stock was so large that few of the better fitting jackets were ever produced. Officers and enlisted men had their jackets tailored to fit snugly in a wide range of effects which compromised the desired uniformity of appearance. Also, officers were authorized to wear their pinks and greens except when in formation with the troops.

By 1947 it was apparent that no one was satisfied with the Eisenhower jacket as a dual-purpose item. Pressure developed to drop the Circular 88 requirement that this jacket form part of the field ensemble so it could be redesigned solely as a garrison item. The Quartermaster Corps objected that this would leave soldiers without an adequate combat uniform and the Army would be as unprepared for emergency as it was in World War II[10].

The final jacket design in 1950 had a straight, unbloused front, narrower sleeves and a fitted waist. Some blousing was retained in the back to give an "action back" and to avoid the jacket rising above the belt when the wearer bent over. This modified version was later adopted as a flight jacket by the Air Force for its general wear uniform, in addition to a coat which was its basic uniform item.

During this period there was a widespread feeling that any clothing needs beyond a functional field uniform should be met with a completely separate uniform which might serve for both dress and semidress purposes. The blue uniform prescribed in Circular 88 for semidress and dress wear seemed to offer this solution and the development of the blue uniform was initiated in 1947.

The reactions of Army men and women to the proposed blue uniform were obtained in a study conducted by the Survey Research Center of the University of Michigan for the Quartermaster Corps between December 1946 and April 1947[11]. Demonstration teams showed eight different blue uniform combinations to U.S. troops in the United States, Germany, Austria and the Pacific area. More than 30,450 persons filled out group questionnaires and 1213 were interviewed in detail as to their preferences.

Army personnel almost unanimously approved the idea of a dress uniform. They indicated greatest preference for a light blue uniform or a combination of medium blue jacket and light blue trousers. Significantly, color was cited most often as the reason for both liking and disliking the various blue uniforms.

Unfortunately, the cost of the proposed blue uniform appeared to be beyond reasonable expectations of what could be funded at that time. Even if the new items were held to the minimum of coat, trousers and service cap, it was estimated the cost for initial issue would amount to $51,428,000[12]. Since action on such a uniform did not then appear possible, the idea of issuing a blue dress uniform was dropped in 1948.

In April 1948, a change in uniform policy was announced by the new Chief of Staff, Gen. Omar N. Bradley, under Department of the Army Circular 89. Recognizing that the Eisenhower jacket was not a satisfactory dress item and that a blue dress uniform was not feasible, the Circular authorized wool serge coats to replace the Eisenhower jacket for garrison wear.

Officers were to retain the pinks and greens which they had never really relinquished, and enlisted men were to receive a new coat designed like the officer's coat but in olive-drab color to match their trousers. The Eisenhower jacket would be worn by all male personnel only for the winter field uniform. The blue dress uniform would be optional winter dress wear for officers.

Circular 89, like Circular 88, was never implemented. The olive-drab coat appeared to be only another attempt to alter a uniform which no one found really acceptable. The Army was reluctant to spend $21 million for olive-drab coats that would not satisfy the need for an attractive semidress uniform(13).

The need for a uniform change, particularly in color, was increased by the Air Force's introduction of their gray-blue uniform in 1949-50. The Army was clearly at a disadvantage in competing for desirable recruits with its olive-drab uniform against the more attractive uniform colors of the Navy, Marine Corps and Air Force.

At this point Lt. Gen. Wade H. Haislip, Deputy Chief of Staff for Personnel and Administration, requested that a long-range program be initiated to find a lasting solution to the uniform problem. A Uniform Board was appointed in early February 1949 to review the problem, to make recommendations and to oversee the improvement of uniforms for Army men and women. It was from the recommendations of this Uniform Board that the present Army Green Uniform ultimately came.

The primary recommendation of the Board was to develop a uniform for general duty or semidress wear which was completely independent of the field uniform in style, design and color. The Army's history of uniform instability had demonstrated that a dual purpose or compromise uniform would never really be satisfactory.

Second, the Uniform Board urged that a new basic color be found for the general duty uniform. The olive-drab color was no longer required since the general duty uniform would be separate from field clothing. In fact, olive-drab had been declared unsatisfactory even for camouflage purposes by the Corps of Engineers and a new green camouflage color was specified for field garments.

4. Search for a New Color

The most important task facing the developers of the general duty uniform was the selection of a new basic color. It was obvious that the Army uniform could be stabilized only if a pleasing color were found.

The Research and Development staff of the Office of Quartermaster General began the search for a new color early in 1949. It considered many shades, evaluating each on the basis of consumer appeal and attractiveness; potential for integration of summer and winter uniforms with a minimum of separate items, and with accessories of existing uniforms; practicality for general wear; relation to past Army uniforms; and distinctiveness when compared with the uniforms of other U.S. military services and foreign armies.

It was recognized that blue unquestionably would be a popular color for a new uniform because of its basic acceptance in men's clothing. However, it would have been difficult for the Army to find a distinctive, practical blue shade for a uniform since the blue field had been pre-empted by the Air Force and Navy service uniforms and the Marine Corps and Navy dress uniforms.

The green and "pink" combination of the officers' uniform was tentatively rejected because the light trousers would be impractical for general duty wear by enlisted men. The dark yellow-green coat was attractive only when worn in combination with the contrasting pink trousers. Various grays, including the gray of the West Point uniform, and taupe colors in the family of the officers' "pink" trousers were also considered.

The field of greens appeared to offer the best opportunity for a shade which would be basically attractive and also distinctive and militarily acceptable. Various shades of green had been worn in the past by the Army, and accessories for a green uniform might be integrated where necessary with the camouflage green field uniform.

Color experts and clothing designers of the Advisory Committee on Military Uniforms (appointed by the National Academy of Sciences--National Research Council) advised the Quartermaster Corps that gray-green shades of a neutral cast would be attractive and the most flattering to the greatest range of people. Yellow-greens were unpleasantly close to olive-drab, and blue greens would be harder to wear.

Sixteen shades of neutral green close to the gray axis were developed by the Quartermaster Corps Research and Development Textile Dyeing Laboratory, then located at the Philadelphia Quartermaster Depot. Early in 1950, dyed samples of the 16 shades were shown in all possible coat and trouser combinations to 222 enlisted men at the Quartermaster Board, Camp Lee, Virginia, to 30 officers at the Philadelphia Quartermaster Depot, and to 14 civilian consultants on color[14].

The predominant preference of each group was for a dark green coat and light trousers. Interviews of the soldiers indicated they were swayed toward the contrasting combination of greens by their desire to look like officers, who wore dark coats and light trousers.

The design of the coat was worked out during this period by the Uniform Board and the National Research Council Advisory Committee. The committee recommended a modernized, beltless, semifitted style coat similar to that designed for the olive-drab uniform in 1948 and later adopted by the Air Force. The proposed Army coat was distinguished from the Air Force coat by its use of conventional Army pleated top pockets and inside hanging lower pockets. The Army officers' belted coat then in use with its flared cavalry skirt and tight fitting torso was considered out of style.

On 7 April 1950, the Uniform Board presented its first uniform display to the General Staff. In order to provide a wide range of color choices, the QMC dressed mannequins in 31 uniforms of different color combinations but of similar design. Among the colors were the 16 shades of gray-green, three shades of gray, five of blue, and one of taupe. For comparison, the uniform line-up included the existing olive-drab and green and pink Army uniforms, and the Navy, Air Force, Marine Corps and U.S. Military Academy uniforms.

After the showing, the Chief of Staff asked the Uniform Board to screen the colors further and to make a selection of four colors for further review. The Board consulted its Advisory Committee of color experts and designers, which settled on a single color -- the dark gray-green shade ultimately designated Army Green shade 44.

The Uniform Board presented its recommendation for the general duty uniform to the Chief of Staff and his officers on 8 February 1951(15). The proposed coat, trousers and service cap were in the gray-green shade 44, ornamented with gold-colored braids and insignia. The coat was semifitted and single-breasted with conventional Army pockets at the top and bottom, four buttons and no belt.

The Board also displayed three uniforms in other gray-green and blue-green shades as alternatives. All the General Staff officers except one preferred the Army Green shade 44.

A final decision on the uniform's color and design was withheld until Army personnel were surveyed and the proposed uniform was given a wear test. The Army knew from experience that a new uniform must be attractive and serviceable to ensure its proper use and optimal appearance. If a soldier disliked the uniform's look,

he would have his garments altered, often distorted; if the uniform was comfortable, the soldier would wear his coat open or in the wrong size; if the material needed frequent cleaning and pressing or the ornamentation required replacement, the soldier would not spend the money to maintain his uniform properly.

To obtain a representative sampling of reaction to the proposed gray-green uniform, the QMC sent demonstration teams to Army groups in the United States and to troops in the European Theater.

In February 1951 the uniform was modeled for 218 enlisted men at Ft. Meade, Washington, D.C., and for 23 Officers' wives at nearby Ft. McNair[16]. To allow for any influence which length of service might have on their reaction to the uniform, the men were identified as "recruits" (82) with six months service or less, and as "veterans" (136) with three years service or more.

During March and April, a QMC team toured Germany and Austria, showing the proposed gray-green uniform and other new Army uniforms to approximately 14,300 U.S. troops in 24 cities. Questionnaires were filled out by 978 enlisted men and 289 officers -- roughly 10 percent of the audience in each area.

The reactions of these diverse groups were markedly similar on the basic questions of uniform color and design, as Table 1 indicates[16,17]. The wives' lower enthusiasm for a change, it was admitted, was due to their general resistance to new uniform expenses and their past experience as Army wives with the cost of uniform changes.

TABLE 1

	Recruits	Veterans	Officers' Wives	Overseas Troops
Liked Idea of Changing Color	94%	92%	70%	95%
Preferred Army Green 44 to Olive-Drab	94%	92%	70%	96%
Liked Style and Design of Proposed Uniform	89%	95%	100%	96%
Think Officers and EM Should Wear Same Uniform	82%	86%	78%	75%

The proposed uniform was also shown to a group of nine retired General Officers who unanimously approved it.

To test serviceability, the Ceremonial Troop companies of the Third Infantry Regiment in the Washington, D. C., area wore the proposed uniform daily during the winter of 1951-52. Some of the 3000 gray-green uniforms were still being worn two years later. The Third Regiment was surveyed in September 1952. The test subjects strongly endorsed the replacement of the olive-drab uniform with the proposed gray-green uniform for daily wear, and the majority felt that officers and enlisted men should wear the same uniform(13).

Despite the overwhelming acceptance of the gray-green uniform by Army personnel, the plan to adopt it was temporarily dropped from consideration in 1952. The Uniform Board recommended instead that the officers' pinks and greens be adopted with the modernized coat design as the general duty uniform for all male personnel. It was thought that the pinks and greens could be introduced at less cost than the gray-green uniform since there would be no problem of residual stocks of accessories.

The cost of issuing a new uniform to enlisted men would be the same with either color, but if the pinks and greens were adopted, the officers could wear their uniforms in the older style coat until the stocks were exhausted.(18). Also, a procurement study submitted in July 1951 by the General Staff indicated it would cost $91 million to begin integrating the gray-green uniform into the system by September 1953(19).

By 1954, however, the General Staff and Uniform Board realized the adoption of the pinks and greens would be false economy. The original objective of the Army uniform program was to develop a service uniform that was popular enough to establish a uniform tradition. Troop surveys had shown that Army personnel clearly preferred the gray-green uniform. Also, the light "pink" trousers were not really practical for general wear by enlisted men and would require more frequent dry cleaning than the gray-green uniform.

In reassessing the initial costs of introducing a uniform, the General Staff concluded the gray-green uniform would not be much more expensive than the pinks and greens if it were phased in while stocks of the existing olive-drab and pinks and greens were being depleted.

5. Adoption of the Army Green Uniform

On 2 September 1954, the adoption of the Army Green Uniform in shade 44 was announced in Circular 102 — nearly 10 years after the first postwar efforts to find a solution to the semidress uniform problem.

Uniforms were made up for sizing and fitting tests to check the accuracy of the new patterns and to establish the quality level desired[20]. These uniforms were also used in an orientation program to acquaint Army troops throughout the world and the National Guard with the new Army Green Uniform.

The uniform became available at Quartermaster Supply outlets in September 1956 and was initially issued to inductees a year later. After a transition period to allow wear-out of existing uniforms, the Green Uniform became mandatory semidress attire in September 1961.

a. Black Trim and Accessories

Between the adoption and actual procurement of the Army Green Uniform, Gen. Maxwell D. Taylor became the Chief of Staff and ordered several changes in the uniform's appearance.

The uniform as originally proposed carried out a green and gold color scheme with gold buttons, grade insignia of gold on a green background for enlisted men, and a gold-colored sleeve band for officers. It was to be worn with a light tan shirt, a dark green tie, green socks, and russet-colored cap visor and low-quarter shoes. The gold trim and russet leather were selected as a pleasing contrast to the gray-green coat, trousers and cap. The russet shoes and visor also were considered economical since similar items were then worn with existing uniforms.

Late in 1955 the officers' gold sleeve band was replaced with a black mohair braid. At the same time a black mohair braid was added to the officers' trousers — two vertical narrow stripes for general officers and one wide stripe for other officers. The black trim reduced the contrasting color effect, leaving only the gold buttons on the coat as a color contrast with the green of the uniform fabric. The Army Green Uniform was now primarily green and black since the shoes, cap visor, tie and socks had already been changed to black from the shades originally proposed.

The black accessories had been adopted in the interest of a Department of Defense Standardization Program established by Congress in 1954[21]. The first change was from russet to black shoes identical with those worn by the Navy and the Air Force. The cap visor was similarly changed to match the leather of the shoes. Black socks and neckties were adopted next to reduce the number of items in the military supply system and to harmonize with the other accessories.

The black accessories proved quite practical since they could also be worn with the Blue Dress Uniform, which was authorized for optional purchase by enlisted men as well as officers in August 1953 and later became mandatory for officers in 1959. By utilizing the same accessories and basic coat and trouser designs for the Green, Dress Blue and Summer Tropical Worsted and white uniforms, the Army saved money and simplified uniform production and supply. This uniform coordination was another step toward establishing a distinctive "Army look."

b. Service Cap

A cap is clearly the most distinctive feature of a military uniform and its style has a great, though often subtle, influence on the total effect of a uniform. Recognizing this, the Uniform Board appointed a special subcommittee on caps in 1950 to recommend a cap design for the proposed general duty uniform.

The service cap at that time was of a two-piece construction consisting of a frame and four cap covers. The Army adopted this cap in 1946 for reasons of economy and supply when Circular 88 prescribed the issue of three different uniforms to be worn with service caps. Cap covers to match the olive drab wool, cotton khaki and tropical worsted uniforms were supplied with the frame and were interchanged as required. A white cap cover was worn by Military Police.

In place of this system, the Uniform Board subcommittee recommended a solid construction cap in one shade, similar in design to the cap developed by the Quartermaster Corps for the Air Force in 1947-48[22]. The Army adopted a modified version of this cap with a straight, high front and relaxed crown. The Quartermaster Corps lightened the cap from 13½ ounces for the frame and serge cover to 11 ounces by using lighter weight materials and an improved construction.

The present service cap features a gold chin strap for all officers and warrant officers, and a black strap for enlisted men. The black visor is embroidered with gold bullion leaves for general and field grade officers. The shade 44 cap is worn with the summer khaki uniforms as well as the Army Green. The same design is also used for the blue service cap of the Dress Blues.

c. Raincoat

A new semidress raincoat for both enlisted men and officers was introduced for wear with the Army Green Uniform. The need for a satisfactory raincoat was long recognized but its development was postponed until work on the general duty uniform was well underway.

At the beginning of World War II, the Army supplied a camouflage green, coated fabric raincoat for wear with both field and service uniforms. Because the raincoat was hot, uncomfortable and physically restrictive, it was replaced in 1944 with a poncho for field rain protection. In addition, the development in 1943 of a water-repellent, wind-resistant field uniform for cold weather eliminated the need for a field raincoat in that climate.

Concurrent with these uniform efforts, the Army developed a multipurpose field overcoat for officers in a trench coat style -- loose fitting, double breasted with a belt and shoulder loops. This trench coat had a water-repellent, wind-resistant outer cotton shell and a removable wool liner. The coat proved so popular that Circular 88 authorized the issue of a similar coat to enlisted men in 1946.

Unfortunately, to introduce the coat into the uniform system, it was necessary to utilize surplus stocks of wartime fabric. In place of the lightweight materials used for the officers' trench coat, the enlisted men's field coat was made with a 9-ounce cotton sateen outer shell and heavy wool liner. The result was a bulky coat which weighed about 5¼ pounds and was less comfortable than the officers' lighter trench coat.

Circular 88 also prescribed that the outer shell of this overcoat serve as the Army's raincoat. At that time water-repellent treatments did not withstand laundering and it was necessary to re-treat rain garments for water repellency after every dry-cleaning or washing.

The Army's need for a raincoat to wear with the new Army Green Uniform led to the adoption in 1955 of a coated fabric raincoat for both officers and enlisted men. This raincoat was taupe-colored and made of a 1.6 ounce nylon twill, coated on the inside with polyvinyl butyral for complete waterproofness. The coat's design was similar to the officers' taupe wool trench coat(23).

Although the new raincoat incorporated the best rainwear technology at that time, it had several serious disadvantages. Like all coated fabric raincoats, it was impermeable to perspiration vapor and thus subjected the wearer to the discomfort of moisture condensation inside the coat. When the coat became soiled it could not be cleaned readily, and the coat seams at first proved vulnerable to leaks. Further, the general appearance of the raincoat was unsatisfactory: the untreated outside discolored when it became wet; the soft, lightweight fabric clung to the wearer's legs when he walked, and the coat puckered at the seams.

In 1959, a breakthrough in rainwear treatments by technologists at the Quartermaster Research and Development Laboratories (now U.S. Army Natick Laboratories), made a satisfactory and attractive military raincoat possible at last. Chemists at these Laboratories combined two commercially available water repellents to synergistically produce a highly durable water-repellent and oil-resistant treatment for textiles. This treatment, named "Quarpel" as a Quartermaster-developed repellent, freed Army clothing designers from the necessity of using coated fabrics for rainwear.

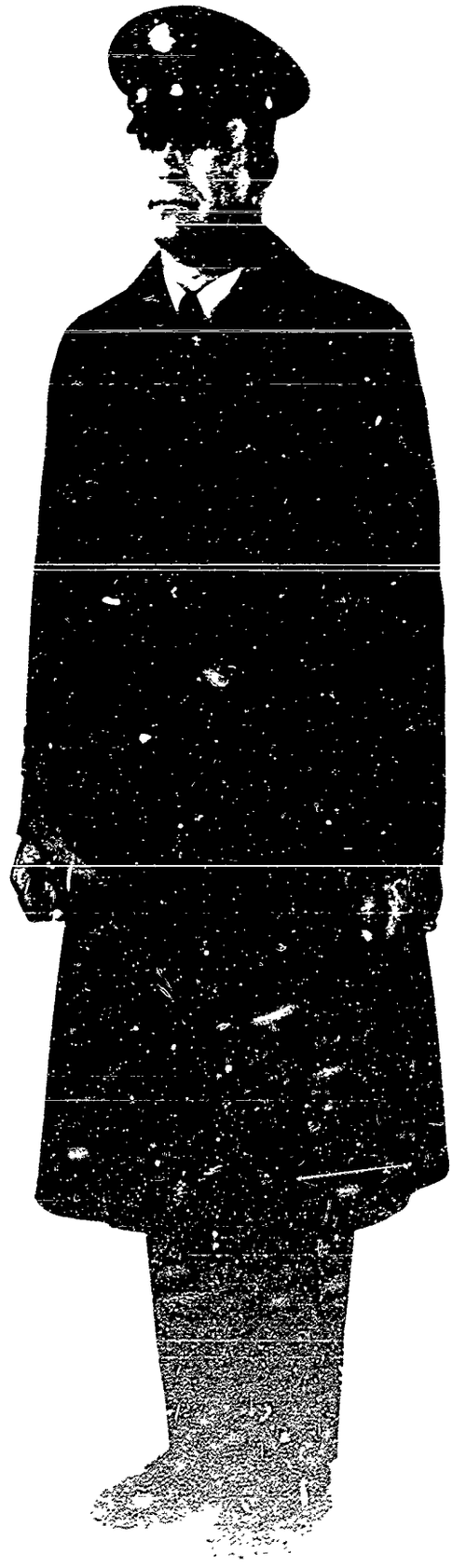
The Quarpel treatment could withstand up to 15 launderings without re-treatment and still retain greater water repellency than the best vapor permeable raincoats then on the market. Fabrics treated with the compound remained vapor permeable and free from uncomfortable moisture condensation(24).

The Quartermaster Corps had applied Quarpel to field and combat clothing and the results confirmed their hopes that the treatment could provide a rain garment which was efficiently water-repellent, washable and comfortable. Accordingly, in 1964 the Army adopted a semidress raincoat utilizing the Quarpel treatment to replace the coated fabric taupe raincoat for all male personnel.

The new raincoat was a lighter but harmonizing shade of green for wear with the Army Green uniform and was made of a single layer of 5 ounce, cotton/polyester fabric with an inside shoulder yoke. Because of its washability and better drape, the new raincoat provided an improved appearance and promised a longer service life than the current standard.

6. An Army Green Uniform for All-Year Wear

The adoption of the Army Green Uniform in 1954 stabilized the winter service uniform and settled the question of color. It did not, however, complete the long-term objective to provide officers and enlisted men with attractive, similar attire for semidress wear throughout the year. In the summer of 1964, the Army adopted a new lightweight Green Uniform and a green wool overcoat which completed the development of this uniform system.



a. Lightweight Green Uniform

(1) Summer Uniform Needs. The Army Uniform Board temporarily laid aside consideration of other uniform problems until the most pressing need for a satisfactory winter service uniform was met. In 1959, when a new five-year uniform program was initiated, top priority was given to the development of a summer service uniform for enlisted men[25].

The inadequacy of the soldier's summer attire for semidress and off-duty wear had been recognized as far back as 1946 when Circular 88 was issued. His service uniform consisted of cotton khaki shirt and trousers which wrinkled easily and quickly became rumpled. During the summer the soldier was the most poorly dressed enlisted man in the military services, particularly at coat-and-tie occasions or on travel. The Marine Corps issued its enlisted men a coat in the summer, and the Air Force provided a summer bush jacket which at least looked more formal than shirtsleeves.

To meet the soldier's need for a coat-type summer uniform, the Quartermaster General proposed developing a lightweight version of the Army Green winter uniform[25]. This was a break from the earlier intents of Circulars 88 and 89 to provide a coat by authorizing the officers' tropical worsted tan uniform for enlisted men. It was felt that a tan uniform was not practical for summer wear by enlisted men. Because of its light color it would be harder to keep clean than Army Green and the soldier would need two tan uniforms to maintain them properly. An Army Green summer uniform should be less expensive, both to the soldier in dry-cleaning costs and to the Army in initial issue.

The proposed lightweight green uniform would fulfill a second major need to increase the flexibility of the Army uniform. The existing system of seasonal changeovers between winter Army Green and summer tan uniforms had several disadvantages.

First, the two-color system was becoming more inconvenient with the increased travel of Army officers through transfers and temporary duty to posts in the United States and abroad. Army personnel often had to carry extra uniforms to be "in uniform" upon arrival at a new post since the changeover dates varied for different climatic areas.

In addition, the Army Green winter uniform was often too warm during the transitional seasons of spring and fall, and officers already had requested a lighter weight fabric for the Green Uniform. It appeared a lightweight uniform would be adequate all year for many personnel working in heated buildings or warm climates[26].

A summer uniform in Army Green promised the further benefit of reinforcing the new Army Green identification by enabling personnel to appear in the same uniform color all year.

(2) Development of Summer Fabric. The fabric which the Quartermaster Corps recommended for the lightweight Green Uniform was a 9-ounce blend of a polyester fiber and wool. This blend was selected by the QM Research and Engineering Command as the most suitable for summer semidress uniforms after two extensive studies of tropical weight fabrics.

The summer fabric studies were part of a larger Wool Conservation Program undertaken by the Army at the time of the Korean War to find a low cost alternate for all-wool fabrics. The domestic supply of wool had never been adequate to meet military and civilian needs, and the Army wished to limit its dependence on imports of foreign wool in times of emergency.

The first Quartermaster Corps study of wools and wool/synthetic blends was carried out in 1951[27]. Textile manufacturers submitted 27 lightweight fabrics as the best summer suit material available on the market. These fabrics were evaluated in laboratory tests for appearance, comfort and wear, and six were selected for field testing along with the standard all-wool material. The candidates included blends of acetate and viscose; wool and rayon; wool and nylon; mohair, viscose, acetate and nylon, and two all-wool fabrics of different construction from each other and the all-wool standard.

The seven fabrics were made into 21 nonduplicating uniforms. Each uniform was worn by officers at Ft. Bliss, Texas, which is hot and dry, and at Ft. Lee, Va., which is hot and humid, on a controlled wear and dry-cleaning schedule from June through September of 1951. A total of 168 test subjects rated the uniforms for appearance, comfort, resistance to soiling and overall acceptability. A panel of nonparticipating field grade officers judged the appearance of the uniforms at the end of the tests. Fabric wear resistance was determined by trained Quartermaster Corps observers who examined the garments during and after the tests.

The combined results of these thorough laboratory and field tests indicated the all-wool standard was the most suitable fabric then available for summer semidress uniforms.

Within a few years, however, the introduction of new synthetic fibers -- particularly polyester and acrylic -- encouraged the Quartermaster Corps to undertake a second search for an alternate to the all-wool standard[28].

The textile industry again submitted summer blends with proved consumer acceptability. Nine fabrics were chosen for study and evaluated during 1955-56 in a battery of laboratory and field tests similar to those of the 1951 study. The tested fabrics were 100 percent polyester fibers; polyester fibers blended with wool, with rayon, with both rayon and wool; two different blends of acrylic fibers and wool; a blend of acrylic fiber and rayon; a blend of modacrylic fiber and wool, a blend of rayon and wool, and the all-wool standard.

In contrast to the 1951 study, several of the blended fabrics showed durability and acceptability equal to or better than the all-wool standard. The best results were obtained with a lightweight blend of 40 percent wool and 60 percent polyester fiber. This blend appeared neater initially and after wear because of its greater wrinkle-resistance and crease retention; it was more durable and resistant to tear and abrasion than all-wool, and it felt more comfortable in warm weather. The blend of wool and polyester was classified in specifications as a Type III fabric for summer uniforms for procurement in lieu of the Type I all-wool fabric.

New materials with similar characteristics were developed for the service cap and tan shirt so they could be worn with the proposed lightweight Green Uniform in warm weather. The shirt fabric was changed from cotton poplin to a polyester/cotton blend which had superior wrinkle resistance and easier maintenance characteristics. The weight of the service cap was reduced by 2½-ounces with lightweight materials, and new ventilation features were added.

The Department of Defense approved the adoption of the lightweight Green Uniform on 13 July 1964. The new uniform not only improved the appearance of soldiers during the summer and provided a flexible Army Green service uniform all year, but it also substantially reduced the number of uniform items. The lightweight uniform replaced the officers' tans and reduced the number of summer khaki items needed by officers and enlisted men for general duty.

The long-sleeve khaki shirt which was worn with a tie was discontinued once the lightweight Green Uniform was available for semidress occasions. However the open-neck, short-sleeve khaki shirt was retained with the khaki trousers as a comfortable working uniform for warm weather.

b. Overcoat

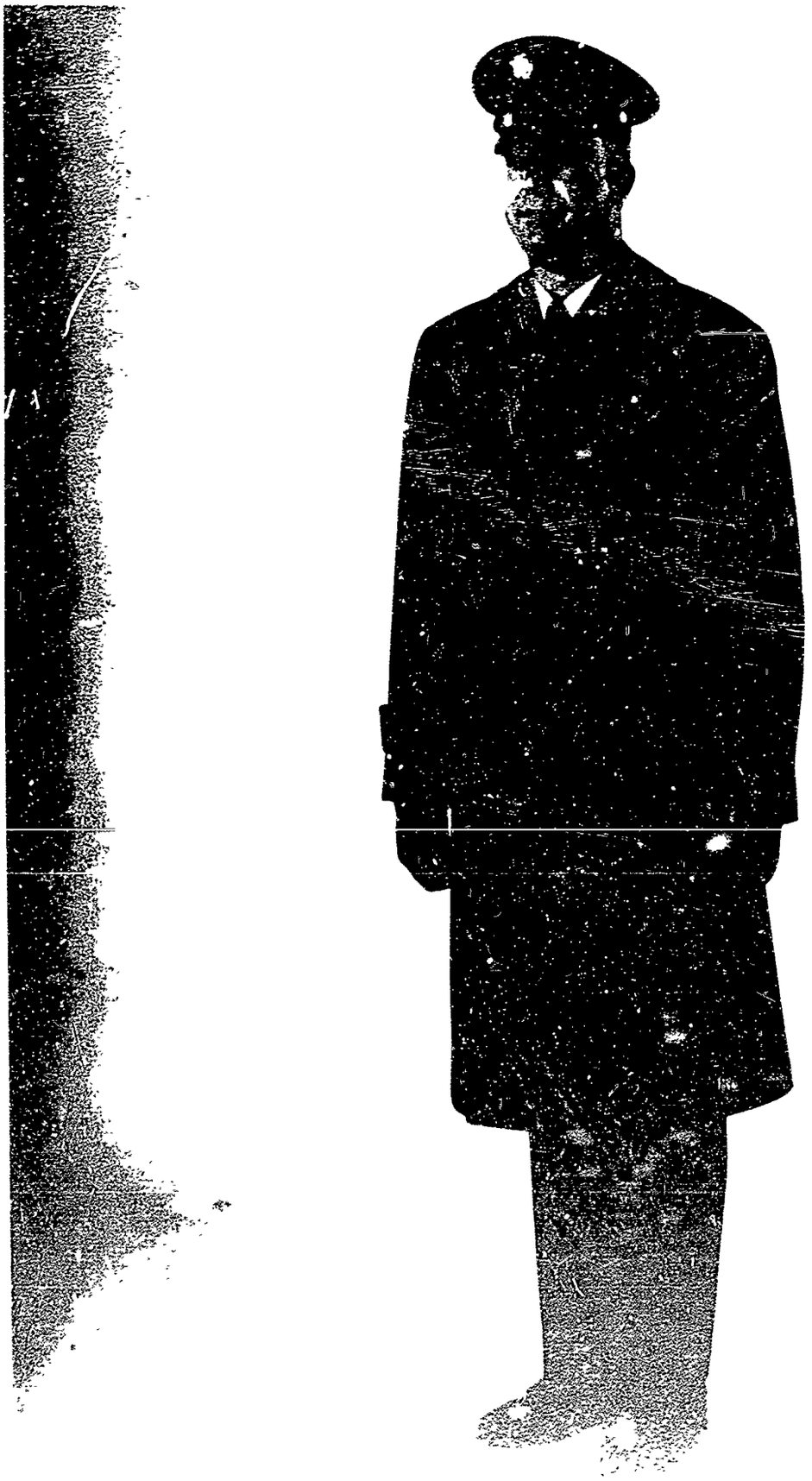
A primary target of the 1959 uniform proposals was the development of a dressier overcoat for enlisted men. The soldier's cotton, camouflage green overcoat (with removable wool liner) was not a satisfactory dress item and was no longer required as a field garment. The Army needed a new overcoat suitable for wear with the Green Uniform and comparable to the coats of the other military services.

As was explained previously, the soldier's water-repellent, wind-resistant cotton trench coat was developed initially for Army officers during World War II as a practical field item. The Army had entered the War with a melton wool field overcoat which weighed 7 pounds when dry and could absorb an additional 9 pounds of water during a moderately heavy rainfall. By 1944 a new Army field ensemble was provided which did not include an overcoat and the officers' trench coat was retained for wear only with the service uniform.

After World War II the appearance of the cotton trench coat was considered unsatisfactory for semidress wear by officers, and in 1950 the Army adopted a wool gabardine, taupe-colored overcoat for officers. The design of the coat retained the still popular trench coat style inherited from the British in World War I -- loose fitting, double-breasted with a belt and shoulder loops.

This well-accepted officers' trench coat became the model in 1959 when the Quartermaster Corps proposed a semidress overcoat for enlisted men to replace the cotton shell overcoat with removable liner. By 1964 when the new overcoat was approved, it was decided to make it green to match the Army Green uniform and to also adopt it for officers in place of their taupe, wool overcoat.

With the initial issue of the green wool overcoat in 1967, the Army finished separating the field and service uniforms and provided all male personnel with a complete, attractive and distinctive Army Green uniform system.



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13. ABSTRACT

The U.S. Army Green Uniform for semidress wear by all male personnel was adopted in 1954 as a result of a post-World War II, long-range uniform improvement program. The new uniform provided the foundation for a stable service uniform system upon which the Army could build the uniform tradition it historically lacked. This report presents the Army uniform problems which led to the uniform program, the selection of a color and design for the new service uniform and accessories, and the development of the Army Green Uniform into a complete system for all-year wear.

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