DOCUMENT RESUME

ED 068 784 AC 012 899

TITLE	Introduction to Leadership Development. Reserve Officers Training Corps Manual.
INSTITUTION	Department of the Army, Washington, D.C.
REPORT NO	ROTCM-145-4-1
PUB DATE	Feb 72
NOTE	360p..
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	American History; Armed Forces; Colleges; *Curriculum Guides; High Schools; *Leadership Training; Manuals; *Military Personnel; Military Science; *Military Training; *Officer Personnel; Textbooks
IDENTIFIERS	*Reserve Officers Training Corps

ABSTRACT

This manual is a textbook for the Junior Reserve Officers Training Corps course entitled "Introduction to Leadership Development." Part One of the manual explains the Reserve Officer Training Corps at the high school and college levels, outlines the concept of the citizen-soldier in American history, and explains the organization of the Army. The Army's role in American history is discussed in Part Two. Other divisions of the manual are concerned with respect to the flag, prisoner of war behavior, individual health, military customs and ceremonies, and descriptions of weapons. Appendix A deals with uniform care and preservation. (For related document, see AC 012 900.) (RS)

DEPARTMENT OF THE ARMY [illegible] MANUAL

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FOREWORD

This manual supports the Junior ROTC MT–1 curriculum entitled "Introduction to Leadership Development."

The proponent of this ROTCM is the United States Army Infantry School. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications) to the Commandant, United States Army Infantry School, ATTN: ATSIN–I–T, Fort Benning, Georgia 31905, with information copy furnished Commanding General, United States Continental Army Command, ATTN: ATIT–R–ED, Fort Monroe, Virginia 23351.

Part one of the manual explains the Reserve Officers Training Corps at both the high school and college levels and outlines the concept of the citizen-soldier as it has developed throughout American history. Particular detail is given to the basic structure of the Active Army, concerning how it operates as a fighting team. Although the Army's structure may seem complex at first glance, it should be remembered that such a large organization functions according to the quality of its leadership. Junior ROTC training is an introduction to the leadership qualities required to make the Army function efficiently.

Part two presents a brief introduction to the Army's role in American history over the past 200 years. It will be noted that each participation in armed conflict, from the Revolutionary War of 1776 to Vietnam, hinged on extending the political idealism of democracy. The success of Army involvement weighed on the shoulders of Army leaders who headed up the organization, and personal sketches of such men, starting with World War I, are included to further emphasize what makes some men leaders.

Parts three, four, five, and six deal respectively with knowing how and when to respect the US flag and understanding what a soldier should do when a prisoner of war; why the health of each soldier is important and how the individual may maintain his health; an explanation of military courtesy and customs, ceremonies, and salutes to include how they function relative to everyday life in the military organization; and descriptions of Army rifles and grenade launchers.

ROTC MANUAL
No. 145–4–1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *1 February 1972*

INTRODUCTION TO LEADERSHIP DEVELOPMENT

*This manual supersedes ROTCM 145–4–1, 7 September 1967.

PART ONE

INTRODUCTION: ROTC AND THE US ARMY

CHAPTER 1

THE CITIZEN-SOLDIER TRADITION: PAST, PRESENT, AND FUTURE

ROOTS OF THE TRADITION

Since 1776 our national military policy has been based on the maintenance of a small Regular Army during peacetime capable of being quickly reinforced in wartime. This policy is part of our citizen-soldier tradition which is founded on the belief that every citizen should be ready to take up arms in time of national emergency. George Washington best expressed this basic American idea when he said that ". . . every citizen who enjoys the protection of a free government owes his personal services to the defense of it."

An essential feature of this tradition has been the policy of placing our citizen-soldiers in effectively organized and trained units of a citizen Army Reserve. This type of reserve force has been deemed necessary not only to avoid reliance on a large standing army but also to prevent citizen-soldiers from simply serving in the lower ranks of an expansible Regular Army maintained at skeleton strength in peacetime.

The antecedent of this reserve force, the Colonial Militia, was composed of civilians who were required by colonial laws to perform military training and service. When threatened by hostile Indians or other enemies, militiamen would leave their civilian pursuits and take up arms for short periods of time in defense of their communities. In longer wars or emergencies, such as the French and Indian War, the militia formed a base from which volunteer forces were drawn. During the Revolutionary War, the regular Continental Army consisted of such volunteer forces of citizen-soldiers; local militia groups serving for shorter periods joined the Continental Army when their particular communities were threatened and they contributed at least half of the men who fought in the Patriot cause.

Thus the citizen-soldier tradition has its roots deep in our national history. There are several reasons for it, one being the distrust of the American people for large standing armies. This distrust dates back to our earliest settlers, many of whom came to America to escape the tyranny of rulers who sometimes used military force against their own people. In setting up a free government, the founding fathers made certain that their armed forces would only serve and protect the people. While the Constitution of the United States empowered Congress to raise and support armies, it also made provision for state militias that could be called into federal service in time of war or emergency. And the founding fathers clearly expected the citizen-soldiers of the militia rather than Regular Army professionals to be the bulwark of our Nation's defenses.

THE CITIZEN-SOLDIER IN THE NINETEENTH CENTURY

Washington himself thought a "well-regulated militia" should be the most essential element of American military strength. He had, however, found during the Revolution that militia units were untrained and unreliable, a "broken staff" to rely on. In 1790 and 1791 his Secretary of War, Henry Knox, submitted proposals to Congress aimed at remedying these defects and creating a "well-regulated militia," uniform in training and organization among the various states. Knox asked for a militia force consisting of all able-bodied white males between the ages of 18 and 60. This militia would be divided into three classes: the Advanced Corps of men between 18 and 20, to be armed, clothed, and equipped at federal expense and trained in state camps for 30 days each year; the Main Corps of men between 21 and 45 to be mustered and trained four days a year; and the Reserve Corps of men between 46 and 60 to be mustered twice a year.

Congress rejected Knox's proposals and in the Militia Act of 1792 provided instead for the enrollment of all men between the ages of 18 and 45 in state militias, with the responsibility for organizing and training the men left entirely to the individual states. Each man was required to furnish his own arms. The result was a very large body of "enrolled militia" lacking formal training, adequate organization, and equipment. The system did not produce the "well-regulated militia" desired by Washington. Each state had its divisions, brigades, regiments, and battalions, but these were administrative rather than combat ready tactical formations.

The Militia Act of 1792 remained the basic federal law relating to the militia until 1903. Several acts passed in the interim, however, increased federal responsibility for the development of

the militia as a reserve force. In 1798, the states were permitted to purchase weapons from federal arsenals and provision was made for arming the militia when called into federal service. In 1808, the important principle of federal grants-in-aid to the militia was established by providing for an annual appropriation of $200,000 to be used in arming the militia. The amount was raised to $400,000 in 1877 and $1,000,000 in 1900. The American citizen-soldier tradition was also strengthened by the passage of the Morrill Act of 1862. This act provided federal land grants for colleges that would agree to include military instruction among their required subjects. This was the forerunner of the Reserve Officers' Training Corps, finally established by the National Defense Act of 1916.

The effectiveness of the militia as a bulwark of the Nation's defenses was also limited by constitutional and statutory restrictions on its use by the Federal Government. During the War of 1812 several state governors argued that since the Constitution limited the federal use of the militia to "execute the Laws of the Union, suppress Insurrections and repel Invasions," the militia could not be called to duty until an enemy had actually crossed the national boundary, the militia could not be employed beyond the state boundaries, and the President of the United States must exercise his command of the militia in person. Congressional legislation limiting the federal call of the militia to six months service was also a handicap.

Congress did not resolve these questions in the years following the War of 1812. In later wars of the century, reliance on militia units declined, and the Federal Government turned to volunteer units formed under the clause in the Constitution that grants Congress "power to raise and support armies" as a means of providing necessary military forces. Thus while in the War of 1812 the militia provided 88 percent of the men under arms, in the Mexican War this figure dropped to 12 percent. During the Civil War, when a draft was instituted to supplement volunteers, the figure dropped to less than two percent. Both volunteers and conscripts were still, under the universal military service provisions of the Militia Act of 1792, militiamen, but they were not brought into the federal service as much. Many militia units did, however, volunteer *en masse* for federal service. And many militiamen who answered President Lincoln's initial call on the state governors for 75,000 militia troops to serve 31 months immediately after the firing on Fort Sumter continued to serve throughout the conflict as volunteers. A large percentage of the officers of the Union Army has been militiamen, New York's 7th Regiment alone furnishing over 600 officers.

Nevertheless, it is clear that during the course of the nine-

teenth century the mass militia organization established in 1792 broke down. As long as frontier dangers menaced their very doorsteps, most men of all ages owned muskets and knew how to use them. In time, however, the growth of towns and cities and the passing of the frontier removed the pressing need which every man had once felt for owning and using his own weapon. Also, as the country became more industrialized, it became important not to disrupt the economic structure by using all able-bodied citizens as a militia force in the event of a national emergency. Recognizing this change in American society, Massachusetts abolished the compulsory features of militia service in 1840; other states quickly followed her example.

An organized militia force composed of individuals who volunteered to meet regularly as a group for military drill and training supplanted the obligatory mass system provided by the Militia Act of 1792. The existence of these organizations was authorized by the 1792 act which provided for special company-sized units within the divisions, brigades, regiments, and battalions of the enrolled militia. In these units the men furnished their own horses, firearms, and other equipment including a special uniform. Men joined these organizations for various reasons. Some were interested in military training. Others liked the social activities associated with these units. Still others were conscious of their individual responsibility for the protection of their community. Units of this type performed good service in the Revolutionary War, the War of 1812, the Mexican War, and the Civil War. They increased in numbers and strength after the Civil War as the ordinary militia declined. These voluntary militia organizations became known as the National Guard, a term popularized by Lafayette during his 1824 visit to the United States. In the Spanish-American War in 1898 many volunteers were in fact National Guardsmen. By 1900, the National Guard contained over 100,000 officers and men, slightly greater than that of the Regular Army.

THE CITIZEN-SOLDIER IN THE TWENTIETH CENTURY

The Dick Act of 1903, which supplanted the Militia Act of 1792, was the first of a series of legislative actions, including the National Defense Acts of 1916 and 1920 and the Reserve Forces Act of 1955, which would mold the National Guard into an effective reserve force capable of promptly reinforcing the Regular Army during a national emergency. The act divided the militia, which was defined as consisting of all able-bodied citizens and those aliens desiring to become citizens, into two classes, the Organized Militia, to be known as the National Guard, and the Reserve Militia. The National Guard, whose members would be

volunteers, was required to meet certain training standards which included at least 24 training assemblies and a 5-day summer encampment each year. Increased federal support, both in funds and supplies, would be provided to the National Guard, while Regular Army instructors would be assigned to the Guard to aid in its training. National Guard units would participate in the maneuvers of the Regular Army. While no provisions were made either in this act or in subsequent ones relating to the Reserve Militia, it was to serve as the manpower pool from which men would be drawn under selective service systems enacted during World Wars I and II.

Just as important as providing for a well-trained and well-organized militia was development of a system for its use by the Federal Government. The National Defense Act of 1916 provided for the drafting of the National Guard into the service of the United States and this method was utilized in 1917 through the Selective Service Act of that year. The method currently in use was first set forth in an amendment to the National Defense Act passed in 1933, establishing the National Guard of the United States as a Reserve component of the United States Army. The members and units of the National Guards of the states were also to be members and units of the National Guard of the United States. The National Guard of the United States, as a Reserve component of the United States Army, is, under this act and its successors, today subject to a direct order to active duty by the President once Congress has authorized it or if the President declares a national emergency. No longer is it necessary to issue a call to the governors of the states, as was required during the nineteenth century, nor the mechanics of a draft, as was required by the National Defense Act of 1916.

The authority of the President to order the National Guard to active duty as a Reserve component of the United States Army does not nullify his authority to call the National Guard into federal service as a militia force for the purposes specified in the Constitution. This authority was exercised in Arkansas in 1957, in Mississippi in 1962, and in Alabama in 1963.

The National Defense Act of 1916 created the Officers' Reserve Corps and the Enlisted Reserve Corps as Reserve components of the United States Army formed under the army clause of the Constitution. This was the beginning of the Organized Reserve Corps, a force presently known as the United States Army Reserve. In addition to its mission of providing units to reinforce the Army during war, a mission which it shares with the National Guard, the Army Reserve has the additional task of providing a pool of trained men who may be used to augment the strength of

Regular Army and National Guard units and as replacements during wartime.

In World War I, our citizen Army Reserve made a vital contribution to victory. Of the 43 divisions in the American Expeditionary Force, 18 or two-fifths were National Guard divisions. The Officers' Reserve Corps furnished many of the officers for newly formed National Army divisions, whose ranks were filled by hundreds of thousands of draftees. The Enlisted Reserve Corps provided over 80,000 technically trained men.

In 1940, after World War II broke out in Europe, Congress authorized the President to order the Reserve components to active duty for a year, and after the United States entered the war the period of service was extended for the duration. Again the National Guard furnished 18 organized divisions and many other units. While these Guard organizations were badly understrength and lacking in modern equipment when first called up, some of them were among the first units to be sent overseas after Pearl Harbor. The Organized Reserve Corps furnished over 100,000 officers for building new divisions that were again filled with men drafted from civilian life. A serious defect in the Organized Reserve at the time was the lack of enlisted personnel, there being only 3,000 in the Enlisted Reserve at the time of the callup in 1940. Nevertheless, our citizen army reserve once again made a vital contribution in World War II.

After World War II, the National Guard and the Army Reserve were each reorganized. Some National Guard and Army Reserve units, and thousands of individual members of the Army Reserve, were ordered to active Federal service during the Korean War and proved a significant factor in meeting the challenge of Communist aggression. Since Korea, the Army's Reserve components have been again reorganized with the goal of creating a force capable of rapid action in an emergency without the extensive additional training required in previous wars. During the Berlin Crisis of 1961 a more combat ready National Guard and Army Reserve again made invaluable contributions to the build-up of the Nation's armed might in the face of a Communist challenge.

THE PRESENT AND FUTURE

Our Active Army today is larger than it has ever been in peacetime. This isn't because the American people no longer believe in maintaining a relatively small standing army capable of rapid expansion by an organized citizen Army Reserve. The size of the Army, like the size of the other services, is determined by the jobs assigned to it. Never before, except during wartime, have

our Armed Forces been called upon to do as much as they are now doing throughout the world. All of the missions of the Armed Forces are directly related to two problems: making the United States safe against attack, and helping to promote world peace. These are not separate problems, for we know that only a militarily strong America can lead the free nations of the world towards the goal of world peace. As in the past, therefore, today's Army is only as large as required to perform the missions necessary to maintain our national security.

But even though the Active Army is larger than it has ever been in peacetime, it is not nearly large enough to meet the requirements of a full-scale war. American soldiers are spread thinly in oversea stations on every continent, standing guard with our allies against possible aggression; in Korea and Germany they are face to face with powerful Communist forces; in Vietnam they have been engaged in mortal combat with the forces of tyranny.

If we are ever attacked at home, or engaged in another world war, to maintain our national security we would have to build a large Active Army in an extremely short time. In such an event, the Reserve components would play a vital role.

The fighting spirit may come easily to Americans when they are forced to fight in defense of their freedom, but the skills required in modern warfare come only from hard and continuous training. Unless our citizen Army Reserve is intensively trained, it will not be ready to do the job required of it in an all-out emergency. Our Reserve components must be prepared to take the field as soon after mobilization as possible.

No one can predict whether there will be another world war, another United Nations action like the one in Korea, or a direct attack on the United States. Nor can anyone know how long the United States and other free nations will continue to be endangered by the military power and imperialistic designs of the Soviets and the Chinese Communists. We do know that in the event of a major war we must be prepared to fight on much shorter notice than we have ever had before, perhaps on no notice at all.

In another war we may be the first target, and the initial strike may be our first warning. There would be little, if any, time to train the units and men of our Reserve forces that would be required to reinforce our active forces. During the two world wars we had time to organize and train a large army and to become fairly strong before we joined our allies in fighting the common enemy. We had this time because our allies took the enemy's first blows and because our own home front was protected by our geographical isolation. But long range bombers, submarines, rockets, and guided missiles now make it possible for an enemy to carry the fight to our own backyards, to make any American city

another Pearl Harbor. We can no longer count on the Atlantic and Pacific Oceans and the north polar region as barriers to invasion; nor can we count on resistance by other nations to give us time to train an armed force adequate to meet the challenge of aggression. In order to safeguard our freedom, we must have large numbers of trained Reservists and National Guardsmen, ready to serve individually or in units when needed. Not only will lives be saved by having a well-organized and well-trained Reserve force ready to expand our active forces rapidly, but our very survival as a nation may depend on it.

CHAPTER 2

RESERVE OFFICERS' TRAINING CORPS

HISTORY

You, as a member of the Reserve Officers' Training Corps (ROTC), will become acquainted with one of the largest and oldest teams in the world, the United States military team.

The officers and noncommissioned officers, as coaches on the military team, must learn their organization from the bottom to the top. The ROTC program is your first step toward learning this organization.

The JROTC cadet may receive credits toward graduation while learning Military History, Drill and Ceremonies, Psychology of Leadership, Marksmanship, and Land Navigation. He can look forward to a successful career as a noncommissioned or commissioned officer, with promotion hastened by his ROTC background. If he graduates in the senior (college) ROTC, he can receive a reserve commission or, if he is a distinguished military graduate, he may receive a Regular Army commission. Opportunities for advancement are open throughout the entire series of ranks to the position of Chief of Staff of the Army. For example, General of the Army George C. Marshall was a graduate of the ROTC program at Virginia Military Institute. The professional military man may look forward to retirement with a generous income at a relatively young age; for example, a master sergeant (E-8), retiring at 48 with 30 years service receives over $650 a month.

GROWTH AND ACHIEVEMENTS

The ROTC program is one of the means of implementing our national military policy. The nation's military concept calls for an adequate active army and a standing reserve of citizen-soldiers. In the first years of our nation's history, the mechanics of war were relatively uncomplicated. Thus, it was feasible for every able-bodied man to be taught the basic fundamentals of warfare. Many of our citizens literally lived with the plow in one hand and the musket in the other, and needed only to be formed into units to make an army. Lack of organization and

training of these citizen armies was proven early in the Revolutionary and Civil Wars. As history progressed, the mechanics of war and the implementation of national policies have become more complex; a well-trained-equipped, and -organized army has become a prerequisite for national survival.

In the Battle of Long Island the loosely knit army of General Washington met the trained regulars of General Howe on Brooklyn Heights. The disaster of the Battle of Long Island was the possible consequence of a joint command where each commander assumed that some necessary task had been done by the other. In any case, one of the four passes to Brooklyn Heights was left unguarded and the American casualties and men captured numbered almost three thousand. Had the British pursued vigorously, they could have brushed aside the feeble remaining defenses and destroyed the entire army.

In the Civil War the story of the First Battle of Bull Run (1861) is a record of confusion, disorder, and panic. Northern troops fired upon each other, orders went astray, units—through their ignorance of elementary drill—failed to execute the orders of their officers. Conditions were almost as bad in the Confederate Army, but in the end the Northern troops panicked.

In each war it took two hard years of experience to weld these citizen-soldiers into a winning army. Training was necessary to achieve victory.

As wars become more scientific and our citizens less like soldiers, the time required to mold an army becomes longer and longer. Fortunately for the United States and its future soldiers, the need for a trained reserve was recognized.

Teaching military science in civilian institutions was advocated as a means of strengthening our military soon after the Constitution was signed. Initial efforts, although on a small scale, were important because they established a workable training program. In 1819, Captain Alden Partridge, a former superintendent of the United States Military Academy, initiated a program of military education at Norwich University. Afterward, other colleges and universities offered military training.

During the Civil War, this practice received great support from the Morrill Act of 1862 (the year following the First Battle of Bull Run). The Morrill Act provided grants of land and, later, financial support for colleges that would offer military training along with training in the agricultural and mechanical arts. Congress provided for a major expansion of the military science courses in 1916 when it founded the Reserve Officers' Training Corps as a part of the National Defense Act. The new program's value was proved in World War I, and in 1920 an amendment to

the National Defense Act incorporated the experiences gained. The high esteem ROTC has earned among educational institutions is attested to by a long-standing waiting list of high schools, junior colleges, colleges, and universities applying for establishment of ROTC units.

The ROTC program progressed after World War I. Thorough training in the various arms and services was started, and Regular Army officers were detailed as Senior Army Instructors and assistant Senior Army Instructors (SAI). Successful completion of a senior course of instruction led to a Reserve commission.

Three levels of ROTC instruction were established at the start of the program: a senior advanced course of 2 years, a senior basic course of 2 years, and a junior course which was established in certain noncollegiate military schools, high schools, and other preparatory schools.

a. The junior course consisted of a minimum of 3 hours a week devoted to military instruction for a period of 3 years. It did not then (and does not now) lead directly to a commission, but it was regarded as the equivalent of the first year of the senior basic course. Special provisions were made for military schools, and the graduates of a Military Junior College (MJC) could be commissioned if they successfully completed their summer camp and received their baccalaureate degrees within 2 years of the completion of the MJC ROTC program.

b. The senior basic course required a minimum of 3 hours of general military instruction a week. The senior advanced course was optional to those who had completed the senior basic course, and its vacancies were filled on a competitive basis. Senior advanced instruction consisted of a minimum of 5 hours a week devoted principally to subjects vital to the arm or service in which the training was conducted. A 6-week camp was usually conducted between the junior and senior years.

The program started with the 1919–20 school year, with about 90,000 students. Their numbers were about equally divided between the junior and senior divisions. That year, 135 graduates received commissions in the Organized Reserve Corps (now the Army Reserve).

Five years later, there were about 42,000 students in the junior division and 75,000 in the senior division. Each year, approximately 5,000 graduates were commissioned. These strengths remained fairly constant, although the number commissioned increased to about 6,000 a year by 1928. There were 72,000 in the junior division and 113,000 in the senior division by the school year 1941–42. Nearly 10,000 received their lieutenant bars and a call to active duty that year.

World War II proved a concrete test for the ROTC program. Rapid expansion caused the Army to detach large numbers of regular officers from their units to organize and train new units. Fortunately, ROTC graduates were available to take their places and serve as company and staff officers in the existing units. By the middle of 1941, 56,000 Reserve officers, most of them ROTC graduates, had been called into service. By 1945, more than 100,000 ROTC graduates had served in all branches of the armed services from the rank of second lieutenant to general. General Marshall later wrote: "Though ROTC graduates composed 12 percent of the war officers, its (the ROTC program) most important contribution was the immediate availability of its product. Just what we would have done in the first phases of our mobilization and training without these men, I do not know. I do know that our plans would have had to be greatly curtailed, and the cessation of hostilities on the European front would have been delayed accordingly. We must enlarge and strengthen the system.

Since World War II the ROTC program has been enlarged and strengthened. More units have been established and more schools are participating in the program. Requirements have not changed measurably since 1920, but emphasis and training have changed.

During the 1971–72 school year 147,325 students received Army ROTC training: 50,234 in the Senior Division; and 97,091 in the Junior Division and National Defense Cadet Corps (NDCC). The annual quotas for production of commissioned officers are determined yearly commensurate with the exigencies of the service. Of these, approximately 10 percent are designated distinguished military graduates and are afforded the option to accept a Regular Army commission. A large percentage of these young officers, both regular and reserve, find themselves on active duty immediately following their graduation; the remainder are called within 12 months, unless deferred.

During the 1971–72 school year 877 educational institutions provided some type of military training for their students. In the Senior Division ROTC program there are 185 colleges and universities with satellites. In the Junior Division ROTC program there are 41 military institutes, 544 high schools, and 26 schools in the National Defense Cadet Corps program. Figure 1 shows the Senior Division ROTC institutions in the 4 army areas.

BENEFITS

The Junior ROTC program, like academic courses in English, history, and mathematics, usually offers the student credits to-

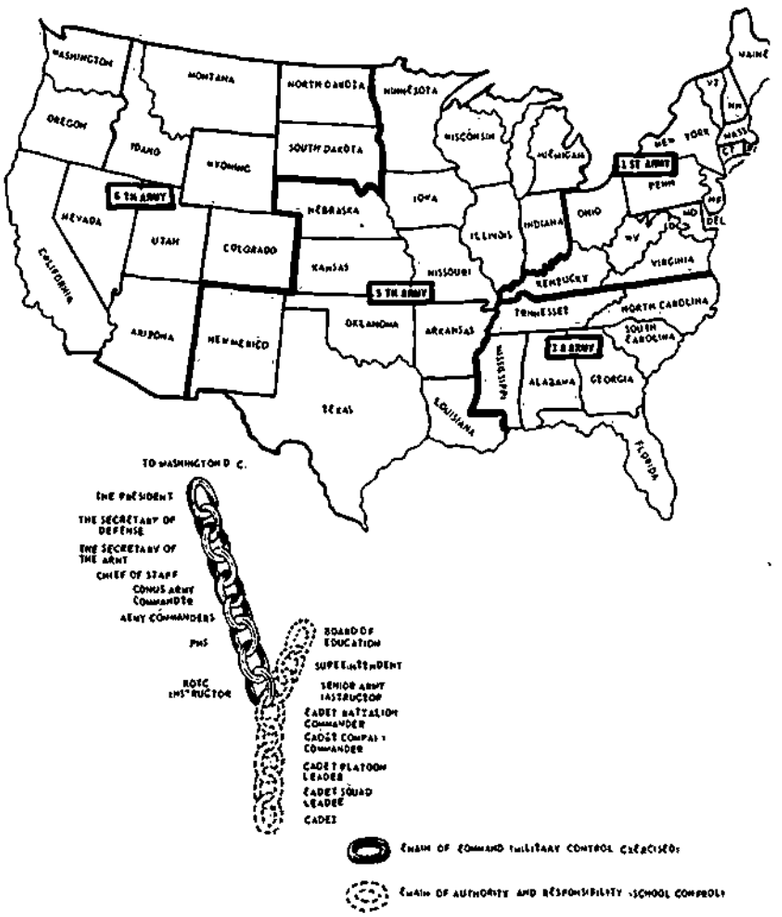


Figure 1. ROTC units and chain of command within Army areas.

ward a high school diploma. To obtain these credits, he must maintain a satisfactory average in JROTC and complete each year's work before going to the next.

The JROTC student has the satisfaction of assuming responsibility early in his training. He learns basic military procedures during the first years of study, then takes the responsibility of leadership and teaches the procedures during succeeding years. He plans and directs unit training, makes decisions on matters relating to personnel and discipline, and assumes command responsibilities. Young men in business executive training must wait years to exercise this type of authority.

Junior ROTC gives the student an advantage over other inductees into the Army. A recent graduate of the Junior ROTC

inducted into the service stated: "ROTC did me more good than all other courses combined." Each man interviewed was appointed as trainee in charge of a unit ranging in size from a squad to a company. Trainees who satisfactorily perform these leader tasks receive promotions, more responsibility, and more authority. Each step up in the Army chain of command carries with it more responsibility, authority, privilege, and pay. The more ROTC training a trainee acquires, the faster will be his progress in this chain of command. Many Reserve and National Guard (NG) units make the first pay raise and advancement in rank automatic for Junior ROTC graduates.

Junior ROTC studies are excellent background for senior courses and give the student more opportunity to become a distinguished graduate with a Regular Army commission. Many graduates of Junior ROTC continue their Army military education at the United States Military Academy at West Point.

UNIFORMS, INSIGNIA, AWARDS, AND ACTIVITIES

Army uniforms and equipment received by cadets of Junior ROTC units are valued at more than $100. It is a new uniform especially designed for the junior cadet. (See appendix A).

Rank is won and worn in the cadet corps just as it is won and worn in the Army. Figures 2 and 3 illustrate typical cadet rank insignia from corporal to colonel. In the military, an individual must learn to take orders before he can give them. Therefore, he learns to take orders early in his military training. The squad leader has earned the right to give orders by successfully completing his previous studies. His stripes are respected for the experience they represent.

Cadets are authorized to wear ribbons and medals on the uniform. Awards may include ribbons for the best drilled squad, platoon, and company, and medals for the highest scores fired on the rifle range, the highest academic rating, and the outstanding cadet. Typical awards are illustrated in figures 4 and 5 along with ROTC insignia.

Annual formal inspections of Junior ROTC units are conducted by Army commanders or their representatives. Based on the results of these inspections, units that have attained an exceptionally high standard of training and discipline are designated honor units. Members of units so designated are authorized to wear a distinctive insignia. For high school units, this is a five-pointed star of gold color metal and blue enamel nine-sixteenths inch in diameter, and for essentially military school units, a five-pointed star of gold color metal and white enamel nine-sixteenths inch in diameter.

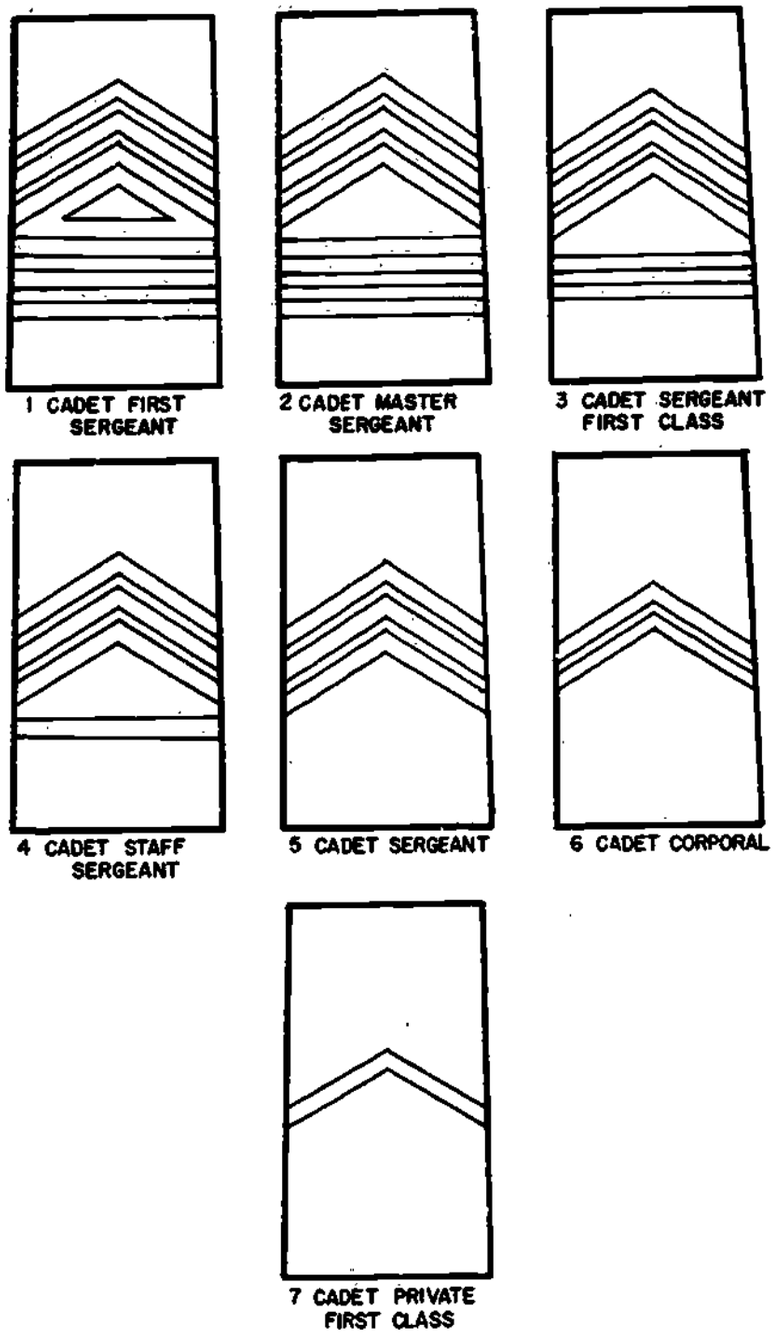


Figure 2. Noncommissioned officer insignia.

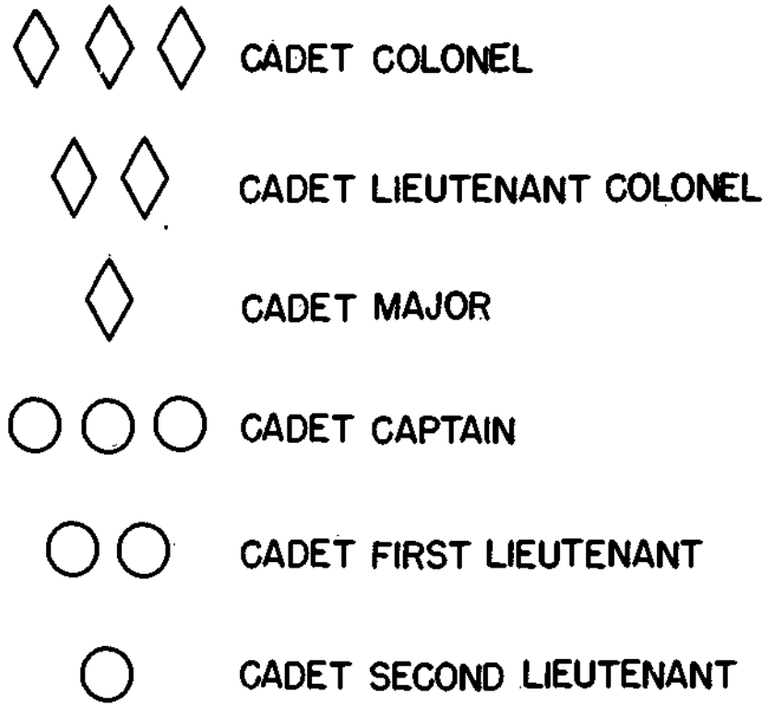


Figure 3. Commissioned officer insignia.

Junior ROTC competition and social activities are limited only by the imagination. Such activities may include a rifle team that competes in matches with other schools, a drum and bugle corps, or a drill team, and such social functions as the annual military ball or a military field day.

ROTC ORGANIZATION

Military control is exercised through a series of leaders. When the captain company commander wishes to move his camp 5 miles down the road, he does not give each man this information, he gives an order to his lieutenant platoon leaders. The platoon leaders then give the order to their sergeant squad leaders, who give the order to their men. The series of leaders (company commanders, platoon leader, and squad leader) is called the chain of command. This chain of command extends from the President of the United States (Commander in Chief of the Army) to the last private in the rear rank.

Your school has a similar chain of responsibility. The county

or city superintendent supervises the school principal, who supervises the teachers or professors, who in turn instruct you, the student. As an ROTC cadet, you are in the direct chain through your cadet officers and Senior Army Instructor with the Chief of Staff of the Army. The chain of command from Department of the Army to you is illustrated in figure 1. Higher commanders, with wide areas of responsibility, have staff officers who keep them informed and make recommendations regarding certain areas of their responsibility.

Control starts at the top. The Department of the Army is charged by law with preparing plans, policies, and regulations to implement the statutory provisions of the Army ROTC program. This control is a part of the functions of the Chief of Staff of the Army. His principal advisor for ROTC matters is the Deputy Chief of Staff for Personnel.

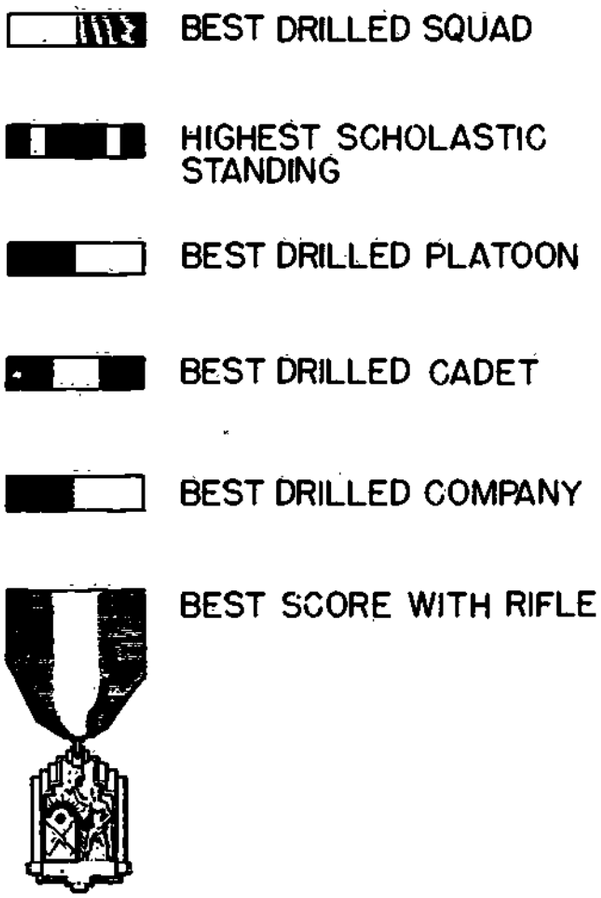


Figure 4. Typical cadet awards, decorations, and insignia.

Figure 4—Continued.

The Department of the Army has delegated to the Commanding General, Continental Army Command, the responsibility for the direction, supervision, coordination, and inspection of all matters pertaining to the organization and training of units and individuals of the Army ROTC.

Army commanders, under direction of the Commanding General, United States Continental Army Command, are responsible for the operation, training, and administration of ROTC units in their areas. Army commanders are responsible for the coordination, supervision, and inspection of ROTC activities, including the organization, administration, training, and supply of the units and their instructor staffs. They are the immediate military superiors of the Senior Army Instructor in their area.

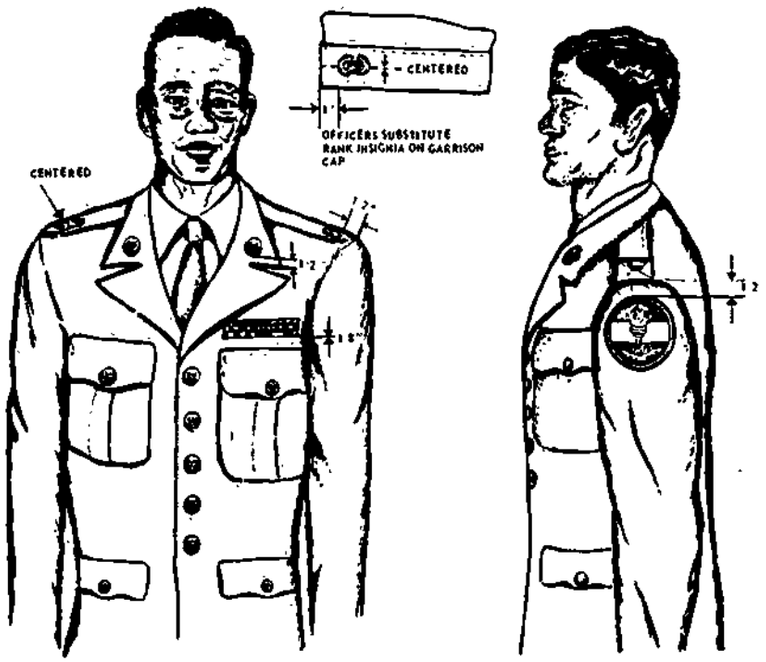


Figure 5. Approved manner of wearing insignia.

Civilian heads of educational institutions having ROTC units exercise generally the same control over the department of military training as they do over other departments of the school. The Senior Army Instructor, in turn, is responsible both to school officials and to higher military authorities for the effective conduct and administration of all Army ROTC activities at his school. He also represents the Department of the Army locally in all matters relating to the ROTC. He and his staff are carefully selected to meet the high standards which the Army requires of all personnel assigned to ROTC duty. The Senior Army Instructor and his staff are your link with the Army. The organization of a typical cadet unit is illustrated in figure 6. This organization closely parallels the organization of an infantry battalion.

The Army maintains close supervision of ROTC training to insure the highest possible standards. Furthermore, the Army furnishes well-trained military personnel, a specially designed program of study, and adequate supplies. Schools, in return, must be properly accredited, must insure that a sufficient number of students are enrolled in the ROTC units, and must furnish facil ities for the units to operate properly.

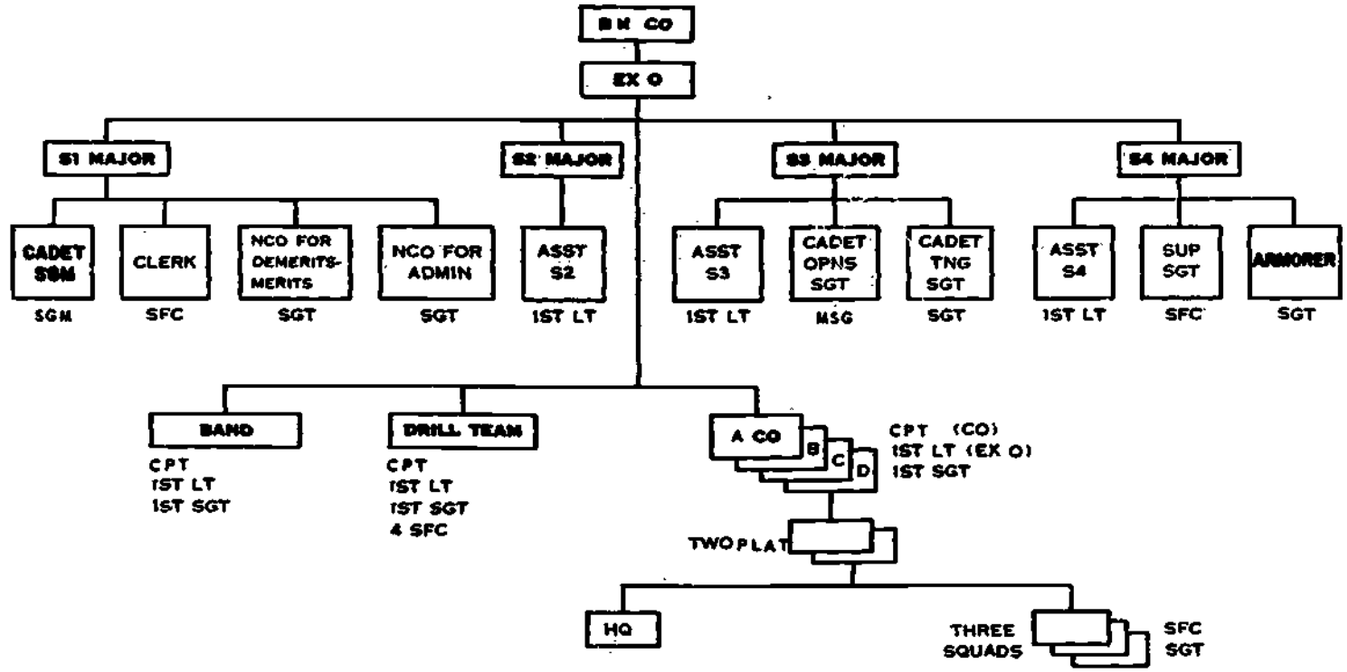


Figure 6. Typical ROTC unit organization.

TYPES OF ROTC TRAINING

JUNIOR ROTC

OBJECTIVES

Junior Reserve Officers' Training Corps (ROTC) and National Defense Cadet Corps (NDCC).

Objectives. The objectives of Junior ROTC/NDCC are to develop in the student—

1. A knowledge of basic military skills and an appreciation of the role of the United States Army in support of national objectives.

2. Self-reliance, leadership, and responsiveness to constituted authority.

3. Attributes of good citizenship and patriotism.

4. Ability to communicate effectively both orally and in writing.

5. An appreciation of the importance of physical education to the accomplishment of these objectives.

Application and scope.

1. *Application.*

a. Junior ROTC, Class High School (HS). This program provides for either a 3- or 4-year course of JROTC instruction that may be elective or required as determined by the school officials. School officials may choose to conduct the Academic Program, a course of instruction offered by the school, completion of which will qualify a student for entry into a college or university offering Senior ROTC. School officials may also elect to conduct the Technical Program. The Technical Program is designed to prepare students to qualify for accelerated promotion in a military occupational specialty should they enter the military service, rather than qualify them for credit in the Senior ROTC. Enrollment in the Technical Program will be limited to students who are taking a high school vocational course rather than an academic course.

b. Junior ROTC, Class Military Institute (MI). For the Class MI schools, a standard course of instruction consisting of 4 years will be prescribed. This course of instruction will consist of 96 hours yearly and will be predicated on the Academic Program.

c. National Defense Cadet Corps. This program provides for either a 3- or 4-year academic course of instruction that may be elective or required as determined by the school officials.

2. *Scope.* The program of instruction consists of 3 or 4 years of military training, designated Military Training, MT–1, MT–2, MT–3, and MT–4, that will consist of a minimum of 96 hours per year. Class MI units will conduct all 4 years of military training. Class HS and NDCC units may conduct either the 3- or 4-year program. Schools that conduct a 3-year program will schedule MT–1, MT–2, and MT–3 during the last 3 academic years of high school.

3. *Military training certificate.*

a. Junior ROTC. In accordance with Department of the Army Regulations, a Military Training certificate—Reserve Officers' Training Corps—will be presented to each student who successfully completes all or part of the Junior ROTC course of training. The form will be annotated to indicate the number of years of training successfully completed.

b. National Defense Cadet Corps. In accordance with Department of the Army Regulations, a Military Training Certificate—National Defense Cadet Corps—will be presented to each student who successfully completes the entire prescribed course of military training. Students who do not complete the prescribed course of training will be presented a certificate in letter form stating the amount of training completed.

Camps. The Department of the Army (DA) has no objections to the holding of summer, weekend, or holiday camps by institutions, provided these camps are held at no expense to the government. No program of instruction for these camps is issued by the Department of the Army. The decision as to subjects taught and duration of the camp is left to the Senior Army Instructor and the school officials.

ELIGIBILITY FOR ENROLLMENT

All students formally enrolled in the Junior ROTC must be—

1. Citizens of the United States not less than 14 years old (at the time of entrance into the ROTC training program).

2. Physically qualified under standards prescribed by the Department of the Army. Senior Army Instructors will accept as students only those fit for general service.

3. Accepted by the institution as a regularly enrolled student.

4. Qualified morally. Applicants for enrollment in the ROTC who have been convicted by a civil court or by any type of court-martial, for other than a minor traffic violation, are not eligible for enrollment without specific approval of the Department of the

Army. The applicant may submit a request to The Adjutant General, through military channels, for review and final determination when the violation is nonrecurring and does not involve moral turpitude, provided such request is accompanied by recommendation of the Senior Army Instructor concerned that a waiver be granted.

In addition to the general conditions enumerated above, there are certain specific requirements for enrollment in specific courses. These requirements are set forth by Army regulation.

The provisions of the regulation provide that, when desired by institutional authorities, some male students who cannot be enrolled in the ROTC may be permitted to pursue the ROTC course without expense to the government.

CREDIT FOR JUNIOR ROTC TRAINING

Army Regulation 145–2 provides credit as follows: *Placement in Senior ROTC.*

Subject to the approval of the Senior ROTC institution and the Professor of Military Science, cadets may be given placement credit for prior military training toward completion of Army Senior ROTC courses.

The Department of the Army recommends the following placement credit for JROTC and NDCC instruction (credit for NDCC if conducted under supervision of an SAI who is a Reserve or retired Army officer):

Satisfactory completion of—	*Credit*
MT–1	None
MT–1 and –2	MS I
MT–1, –2, and –3	MS I and II

Examinations for placement (oral, practical, or written) may be used at the discretion of the PMS.

Academic credit for prior military education and training is an institutional matter.

Enlisted grade authorization. JROTC/NDCC cadets are entitled to the following grade status upon enlistment in a Regular or Reserve component of the Army (including the Army National Guard) (to grade Private (E2) only, for inductees):

1. The grade of Private (E2) if member has successfully completed the first 2 years of a prescribed JROTC/NDCC course.

2. The grade of Private First Class if member has successfully completed the 3-year JROTC/NDCC course, provided otherwise qualified and recommended by the SAI; if determined not entitled to grade Private First Class to grade Private (E2) as a minimum.

3. The grade of Corporal or Specialist Four if member has successfully completed the 4-year course of JROTC/NDCC instruction, can validate by test his proficiency in an MOS authorized that grade, is otherwise qualified, and is recommended by the SAI; if determined not entitled to grade Corporal or Specialist Four the grade of Private First Class or Private (E2) as appropriate.

JROTC cadets who have completed a 3-year JROTC course are entitled to grade Private (E2) minimum, upon enlistment or induction in an active or Reserve component of the Armed Forces other than Army.

SENIOR ROTC

OBJECTIVES

The traditional 4-year Army ROTC program has been a familiar part of the American college scene since it was first established by the National Defense Act of 1916. Currently operating on 285 college and university campuses, it has produced several hundred thousand officers and has been the backbone of the Army Officer Corps. It will continue to be the major source of new officers for the Army. The 4-year program is divided into two phases—a 2-year Basic Course and a 2-year Advanced Course.

BASIC COURSE

The Basic Course is normally taken by the college student in his freshman and sophomore years. In some institutions the course is compulsory for all male students who are physically qualified. At most schools it is elective.

The instruction in the freshman year is known as Military Science I and in the sophomore year as Military Science II. The purpose of this instruction is to introduce the student to basic military subjects: military history; familiarization with basic weapons, equipment, and techniques; military organization and functions; and the techniques of leadership and command. All studies, which require approximately 3 hours per week, are conducted "on-campus." It is from the men who successfully complete this instruction that the best qualified are selected for the Advanced Course which leads to an officer's commission.

ADVANCED COURSE

The college student who wishes to take the Advanced Course, which is normally given in the junior and senior years of college, must apply for it. Only those students who have demonstrated a positive potential for becoming effective officers are selected. Most of the men who qualify for this training have completed the Basic Course. Student veterans, however, who have had 1 or

more years of active military service and students who have had the equivalent of Military Science I and II in a military school may be granted credit for the Basic Course and selected for the Advanced Course. The Advanced Course studies in the junior year are known as Military Science III and in the senior year as Military Science IV. The instruction consists of approximately 5 hours of "on-campus" study per week, plus a 6-week training camp. Instruction in the Advanced Course includes leadership and the exercise of command, military teaching methods, tactics, logistics, administration, and military justice. Practical leadership and command experience are provided by assigning Advanced Course students as cadet officers and noncommissioned officers. In addition to the textbooks and uniforms which are provided without costs, the student receives $100 per month during the school year and one-half the monthly base pay of a second lieutenant with less than 2 years service, for the camp period.

When the college student is enrolled in the Advanced Course, he must agree to accept a commission, if offered, after he has successfully completed the course. When he is awarded his degree and is commissioned a second lieutenant, he incurs an obligation to serve for 2 years in the Active Army and 4 years in a Reserve status with one of the Reserve components. If he is graduated as a Distinguished Military Graduate (DMG) and accepts a Regular Army commission, he must agree to serve for 3 years in the Active Army.

TWO-YEAR PROGRAM

The college student is now offered the opportunity to be commissioned a second lieutenant in the Army after only 2 years of ROTC training. A new 2-year program, authorized by the ROTC Vitalization Act of 1964, extends the advantages of ROTC to junior college graduates and to students in 4-year colleges who have not participated in the ROTC program during the first 2 years. A basic 6-week training period after the sophomore year takes the place of the Basic Course required of students in the traditional 4-year program. When a student with 2 years of college has been selected for the new program and has successfully completed the basic camp training, he is eligible for the ROTC Advanced Course in his junior and senior years. The Advanced Course, which leads to an officer's commission, is the same for students in either the 4-year program or the 2-year program, except that men in the 2-year program are not eligible for ROTC scholarships.

In addition to the pay provided during the Advanced Course and the Advanced Course training camp, the student attending

the basic training camp receives pay at the rate of pay of an enlisted man E–1 for that period.

SCHOLARSHIP PROGRAM

The new ROTC Vitalization Act of 1964 authorizes financial assistance in the form of 2- and 4-year ROTC scholarships for carefully selected students. Under this program, the Army pays for all tuition fees, lab fees, textbooks, and other required expenses, except room and board. In addition, the student receives $100 per month for the duration of the scholarship, except for a 6-week Advanced Course training camp, during which he is paid at the rate of pay of a second lieutenant with less than 2 years service.

FLIGHT TRAINING PROGRAM

The college man who wants to learn to fly may have the opportunity to do so during his ROTC training. Flight instruction is offered to students in the second year of the Advanced Course by some colleges and universities.

Under this program, the Army will pay for flight training for selected, qualified ROTC students. To participate, the student must have an aptitude for flying, and meet the required physical qualifications. He must also agree to participate in the Army Aviation Program, if selected, upon entering active service. Normally this is done after he has completed training which qualifies him for the branch of the Army to which he is assigned. When he successfully completes Army Aviation Training, he must serve on active duty for 3 years.

Flight training under the ROTC program is given at an airfield near the institution by a civilian flying school which has the approval of the Federal Aviation Agency, Department of the Army, and the college. The instruction includes approximately 35 hours of ground training and more than 36 hours of flight training. Students who successfully complete the program of instruction may qualify to take the FAA examination for a private pilot's license.

All textbooks, flight clothing, and equipment required for the program are furnished at no cost to the students. Transportation between the college and airfield is also provided.

CHAPTER 3

COMPONENTS OF THE ARMY

BACKGROUND

The laws of each of the 13 original colonies required all able-bodied men, 18 to 45 years of age, to serve in the colonial militia with periodic training in peace, and service at the call of the governor or the legislature in times of war or danger. The militia system, inherited from England, was designed primarily for local defense against Indians and rival colonists. The militia of each colony was organized into companies in the widely separated towns and villages, and these in turn were loosely organized into battalions and regiments.

The Continental Army, consisting of forces of colonial volunteers under General George Washington, helped win the independence of our Nation. In that war, Frederick Von Steuben, the Prussian general who volunteered his services to the American Colonies, established the first drill regulations and outlined the first standard set of Army Regulations.

Following the Revolutionary War we became a nation instead of an aggregation of colonies, and George Washington became the first President. No one realized better than he the need for a regular force. Under his guidance a small Army was organized under the Department of War, which included what is now known as the Department of the Navy. The Continental Congress authorized a force of only eight men to guard military supplies. This was the actual size of the first peacetime United States Army.

The Army's history has been one of great expansion in each national crisis, followed by contraction as the crisis was overcome. In all of its wars this country was dangerously unprepared at the outset but eventually managed to build a strong military force. The belief that the Army should be no larger than that required for the immediate security of the Nation still exists. Having entered the age of fast intercontinental transportation, the Nation has come to realize the importance of plans for rapid mobilization, and the need for a strong, well-trained modern Army.

FUNCTIONS OF THE ARMY

The Army contributes to the security of the United States and supports our national and international policies by organizing, training, and equipping land forces. These land forces must be capable of conducting prompt and sustained combat operations on land in accordance with plans for our national security. The primary functions of the Army are to defeat enemy land forces, to seize and hold enemy territory, and to deal with local populations in time of war. In addition to the above, the Army has certain specific functions, which include providing antiaircraft units for the defense of the United States against air attack, maintaining an intelligence organization, and providing support for the administration and operations of the Panama Canal, river and harbor projects, and the possessions and territories of the United States.

The role of the Army has been well summarized by former Chief of Staff of the Army General Maxwell D. Taylor when he said—

"The Army is an essential part of America's deterrent force. Its employment in oversea areas is a declaration of national intent which encourages our allies and gives warning to potential aggressors. It is essential as a bulwark against aggression, large or small.

"In the event of general war, the Army is a decisive instrument in the attainment of a victory compatible with postwar national objectives. It is a force which has the strategic and tactical flexibility, and the versatility, required to gain control of the resources derived from the soil of the enemy. It can proportion its blows to fit the case—from the force of the MP's truncheon to the kilotons of atomic weapons. It can temper its destructive power to the aims and needs of postwar peace."

COMPONENTS

The United States Army (USA) consists of three components: the Regular Army (RA); the National Guard of the United States (NGUS); and the United States Army Reserve (USAR).

The Regular Army is a professional organization which fulfills the peacetime requirements of a standing army at home and abroad. The Regular Army contributes to and keeps abreast of developments in military science and tactics. It furnishes instructors for the other components of the United States Army as well as for ROTC units at various secondary schools, universities, and colleges throughout the country. One of the major jobs of the Regular Army is the training of civilians for military service.

To do this it maintains an extensive system of schools for training personnel in a wide variety of specialties. The Regular Army constitutes a hard core around which an expanded force may be built in time of war. In short, the mission of the Regular Army is to defend and train.

The National Guard is an organized Reserve component of our Army with units in each State, the District of Columbia, and Puerto Rico. The primary mission of the National Guard is to supplement the Active Army by providing units which are organized, equipped, trained, and available for immediate service in time of national emergency. The secondary mission of the National Guard is that of a state force which, under the direction of the governor, provides the state with local security and disaster relief when necessary. The strength of the National Guard is maintained by voluntary enlistment.

The United States Army Reserve is a federally controlled civilian component of the Army consisting of units and personnel in various states of training and readiness. Its mission is to be capable of furnishing, in the event of war or emergency, units and individuals to supplement the Regular Army. The Armed Forces Reserve Act of 9 July 1952 divides the reserve into three groups, or categories, of availability for service—

The Ready Reserve.

The Standby Reserve.

The Retired Reserve.

The categories are simply a method of classifying Reserve members and units according to when they can be ordered to active duty, so that in a future emergency, all calls to active duty will be made as fairly and as systematically as possible.

CHAPTER 4

CHARACTERISTICS AND PRINCIPLES OF ARMY ORGANIZATION

NEED FOR ORGANIZATION

A military organization is a group of men or units banded together to perform military functions with definite responsibilities and duties assigned each individual.

Any task that cannot be accomplished by one man working alone requires some form of organization. Every office, store, or factory is an example of civilian organization. Each worker has specific duties and cooperates with others under a leader. Organization is also required in group sports. For example, no one man can win a baseball game. Neither can nine men, if they do not play definite positions, and if they do not cooperate with each other. They can win only when each man has an assigned part and all of them are organized into a team.

An Army without organization would be an aimless mob. The Army is organized into a highly flexible force, both tactical and administrative. To win battles, soldiers must be organized into teams. Each man has duties to assist the team as a whole, and each team assists the others in accomplishing the mission of the larger group to which it belongs. For example, the infantry battalion fights by combining fire, maneuver, and shock action to inflict losses on the enemy and to neutralize his combat power; and ultimately the infantrymen of the rifle companies must close with the enemy and destroy or capture him.

THE ORGANIZATION PATTERN

Every well-planned organization, civilian or military, follows the same general pattern. Whenever decisions must be made and action taken, there must be an executive or commander. He has authority to issue and enforce any orders necessary to carry out his responsibilities. Every member of the organization has specific, clearly defined duties. The effectiveness of each member is often hampered if he is required to report to more than one

superior. In an effort to follow the instructions of one, he may violate instructions of the other. The Battle of Shiloh, fought in April 1862, is an example in which neither of the opposing armies was really commanded. The two armies fought without coordinated command and control as neither Grant nor Johnston established an organized headquarters from which to direct operations.

In well-planned organizations, manpower is not wasted. Only the number of men required to work efficiently is provided. Assigned to each job are personnel capable of performing the job and every position in the organization is designed as a stepping stone for the next higher one. In this manner, the work at hand is performed efficiently, able persons are rewarded, and replacements are available for key positions in the organization.

MISSION, SIZE, AND COMPOSITION

A military team is organized to perform specific duties. These duties—the mission of the team—determines its size and composition and the leaders, personnel, weapons, and equipment assigned to it. The mission of the Armed Forces is decided by the people of the United States represented by Congress. The President, as Commander in Chief, establishes the organization and policies of the national security forces in accordance with the Constitution and laws adopted by Congress. He is assisted by members of his cabinet and professional military advisers. Thus, there is a national organization behind the Army, Navy, and Air Force that is much more complex than any military organization.

GRADE AND RANK

Each soldier in a military organization holds a place according to his ability and experience. As a trainee, he is an E–1, which is the lowest grade. Later, as he obtains more military experience and knowledge, he is promoted to higher grades until he becomes a leader along the chain of command.

Leaders are grouped into two general classes, commissioned and noncommissioned. However, selected individuals may receive warrants to perform highly specialized and technical tasks. A warrant officer ranks between a top enlisted man and a second lieutenant. Second lieutenants and higher grades are appointed by the President and confirmed by the Senate. They receive formal commissions authorizing them to serve as officers of the Army. The commissioned grades are: second lieutenant, first lieutenant, captain, major, lieutenant colonel, colonel, brigadier general, major general, lieutenant general, general, and general of the Army.

Second lieutenants, first lieutenants, and captains are referred to as company grade officers; majors, lieutenant colonels, and colonels as field grade officers; and all grades of generals as general officers.

Ranking next below commissioned officers are warrant officers. They are normally selected from the Army's outstanding noncommissioned officers. Usually, they hold positions as technical or administrative supervisors. The grades of warrant officers junior grade and chief warrant officer provide a means of advancing and increasing the pay of specialists whose development requires special skill and years of experience. Warrant officers are not normally required to perform duties as commanders or leaders.

Noncommissioned officers ("noncoms") are enlisted men appointed by their unit commanders. The Army noncommissioned officer grades are: corporal (E–4), sergeant (E–5), staff sergeant (E–6), sergeant first class or platoon sergeant (E–7), master sergeant or first sergeant, as appropriate (E–8), and sergeant major or command sergeant major, as appropriate (E–9). Noncommissioned officers are placed in charge of other enlisted personnel.

Certain enlisted personnel are designated "specialists" and receive the pay of the comparable noncommissioned officer grade. However, they are technicians and as such are not placed in command of other enlisted men.

PRINCIPLES OF ORGANIZATION

The organization must have an effective command-control system. In developing a control system for a unit, the following factors must be considered:

Unity of command. In every effective military unit there must be only one overall commander—a commander who is responsible for all that his unit does or all that it fails to do. He must have the necessary authority to enable him to carry out his responsibilities.

Span of control. By definition, span of control is the number of immediate subordinates one commander or leader can effectively control, supervise, or direct. Maximum and minimum limits of span of control vary with the conditions under which the unit is designed to operate and the complexity of functions performed. In a unit, composed of identical elements, each performing the same function, the span of control should be greater than in a similar size unit composed of different type elements, each with a different function. Other factors affecting span of control are freedom of movement, communication facilities, and staff and command assistants available to the commander.

Chain of command (fig 7). Chain of command is the succession of commanders through which authority passes and commands are given. It is the factor which enables the commander to retain unity of command of all elements of his unit without exceeding the maximum practical span of control. If the commander has overall responsibility for the actions of all elements, his span of control would be excessive. By using a chain of command he can limit the number of subordinates he directly supervises. For example, company commanders employ such a procedure with platoon leaders, and platoon leaders with squad and section leaders.

In providing a unit with the necessary means to accomplish its

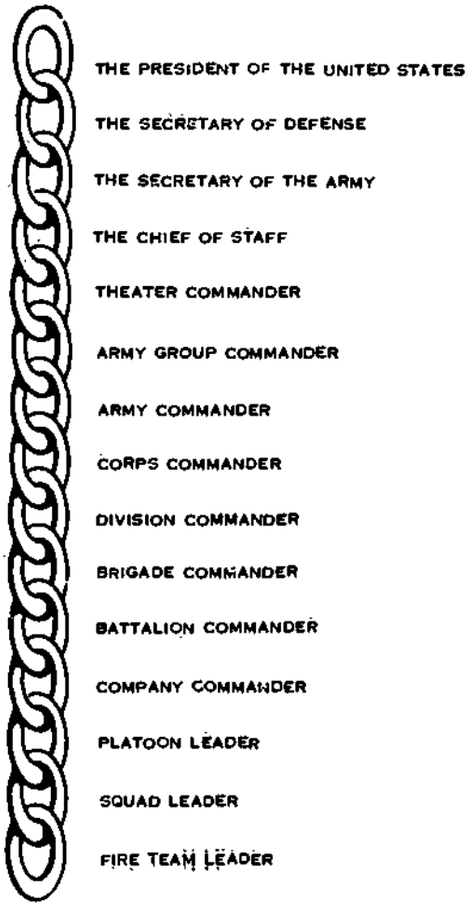


Figure 7. Chain of command.

mission, care must be exercised to insure that the following factors are considered:

Simplicity. The factor of simplicity is applied to organization in an effort to reduce the necessity for developing high skill levels in training, minimizing supply and maintenance problems, and facilitating the employment of the unit. Simplicity alone is not, however, a guarantee of good performance. The organization developed must be capable of discharging the necessary functions. The simplest weapon is the fist or club. An army equipped in this manner would be short-lived on the battlefield of today. Simplicity must be tempered with consideration of the other factors affecting organization to insure a workable solution.

Economy. Only the personnel and equipment normally required in performance of the mission should be organic to the unit. Equipment not used on a day-to-day basis should be pooled at the highest echelon practical and requested as needed by the using units.

Flexibility. Even though designed for a specific mission, infantry units must be capable of a wide variety of self-sustained operations with or without nuclear weapons support and in any type of terrain, weather, or situation employing all means of mobility. Consequently, the organizational structure of these units must be one that will facilitate the formation of combat groupings or task forces containing the necessary elements to accomplish the mission of finding, fixing, fighting, and finishing the enemy. Infantry units must be capable of receiving and directing the operations of attachments and coordinating the efforts of reinforcing units. Conversely, they must also be capable of continuing operations after suffering heavy personnel and equipment losses.

TRENDS IN ORGANIZATION

In every age, technological developments have dictated changes in groupings of men on the battlefield. The machinegun made marching lines of men obsolete, and greater use of armored vehicles reduced the value of static defenses. In our age, nuclear weapons are dictating changes in organizational and tactical concepts. To meet this challenge, the Army is now developing small, powerful, self-contained mobile units which can accomplish the task of advancing the infantry without presenting a target upon which it would be economical for the enemy to expend a nuclear weapon. These small units will make maximum use of such technological developments as guided missiles and other advanced equipment. A few of these organizational changes are included in this manual. For example, the greater flexibility and firepower of the 10-man squad is in accord with this general trend.

CHAPTER 5

BASIC ARMY ORGANIZATION

UNDERLYING THEORY OF ARMY ORGANIZATION

There is a necessity for one leader for each unit and subdivision thereof. This theory is referred to as unity of command. Command is the authority which an individual in the military service lawfully exercises over his subordinates by virtue of his rank or position. By unity of command we mean there must be one, and only one, leader in charge of, or responsible for, a mission or a group of men. Command and the exercise of personal leadership are inseparable. Whether the force commanded is small, whether the functions of the commander are complex or simple, the commander must be the leader and the single controlling authority. He must be made fully responsible for everything that his unit does or fails to do, and then held strictly to account. He must at the same time, however, be given the rank and authority necessary for him to carry out whatever mission he is given. Divided authority usually brings disaster in any military operation.

The chain of command is a system of authority in which all of the actions of an individual or group are the responsibility of their leader, who in turn, is responsible to a higher leader. Everyone who commands is also commanded.

Maximum delegation of authority is an important requisite for the proper functioning of the chain of command. One commander, the company commander, for example, cannot exercise effective personal control on the battlefield over 170 men placed under his command. Yet according to the requirements of unity of command, he must be made responsible for everything these 170 men do or fail to do. While this company commander cannot delegate responsibility for the actions of his men, he can and does control them effectively through the control he exercises over his subordinate commanders—the actual immediate commanders of his men. Subordinate commanders, however, cannot act effectively unless they are regularly given the authority to do so. This is the real meaning of the necessity for delegating

authority. Subordinate commanders not only must be in a position to give effective orders for their company commander, but must be accustomed to doing so or a breakdown will occur in the chain of command at a critical time. All down the chain of command, therefore, commanders delegate as much authority as possible to subordinate commanders, thereby insuring that in a critical moment their wishes will be carried out as promptly and effectively as if they were at the point of crisis themselves.

Early in the history of warfare it was found that if each man had to repair or manufacture his own weapons, find and prepare his own meals, or procure his clothing or armor, much of the combat effectiveness of the force was lost. Leaders of armies found that to be successful on the battlefield they needed to use some of their men to support the rest of the men in battle—some to secure food, some to repair armor, and some to build bridges.

Specialization was also found to be necessary within the ranks of the fighting troops. Men who rode horses required a mission different from that of men who fought on foot. Scouting for the enemy also called for specialists. Further specialization became necessary even within major combat groups. Lightly armed horsemen, for example, were found to be highly effective on wide enveloping movements, but comparatively ineffective when assigned to make short frontal charges. On the other hand, heavily armed horsemen carried out short-range shock assignments well, but were not as effective when they had to cover a lot of rough ground in their attack. At the same time, it was learned that big, strong men, who could carry very heavy armor, heavy shields, and long spears, were particularly useful for shock action, while their lighter, more nimble associates who carried less armor were the best kind of harassing or decoy forces.

This specialization of functions is present today in the distinctions we make between combat and combat support elements—infantry and artillery, for example; between the arms and services of the Army; between the roles of staff and command; and, finally, in the way we group forces in accordance with their missions. To be successful in battle today, as always, each of the various tasks that face a commander must be made a responsibility of one or more members of his command. In this way each task is performed more efficiently and economically.

The branches of the Army are classified as basic branches, special branches, reserve branches, and other groups (fig 10, 11).

The *division* is the basic Army unit of the combined arms and services. Like the Army group, field army, and corps, the division is tailored for the environment and the accomplishment of specific missions. It has both tactical and administrative functions. The

division achieves flexibility through the tailoring of its components to meet tactical and strategic requirements and through its capability to vary its organization for combat. When organized, Army divisions may be characterized as either infantry, mechanized infantry, armored, airborne, or airmobile. These divisions are capable of operating independently or in conjunction with each other, in all forms of war.

In addition to infantry and tank battalions, the division has the following units:

Military police company.
Aviation battalion. (Infantry and airborne division only. Armored and mechanized divisions have command aviation section in headquarters and headquarters company. Airmobile division has aviation group.)
Engineer battalion.
Signal battalion.
Armored cavalry squadron.
Division artillery.
Support command.
Three brigade headquarters and headquarters companies.

In addition to three rifle companies, and combat support company, the infantry battalion has a headquarters and headquarters company consisting of—

Company headquarters.
Battalion headquarters section.
Battalion communication platoon.
Battalion support platoon.
Battalion maintenance platoon.
Battalion medical platoon.

The rifle company has three rifle platoons, a mortar platoon, and a company headquarters.

ORGANIZATION OF THE INFANTRY PLATOON

Mission. The mission of the rifle platoon is to close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault by fire and close combat.

Capabilities. The rifle platoon is capable of—

Closing with the enemy by means of fire and maneuver in order to destroy or capture him.
Repelling enemy assault by fire, close combat, and under certain conditions, counterattack.
Providing a base of fire element and maneuver element.
Seizing and holding terrain.

Maneuvering in all types of terrain and climatic conditions.
Capitalizing on all forms of mobility.
Conducting parachute assaults (airborne infantry platoon).
Conducting semi-independent patrol, ambush, and raid operations.
Conducting airmobile operations.

Characteristics. The rifle platoon is the basic tactical element of the rifle company. Its equipment, organization, and training enable it to conduct operations in widely varying conditions of weather and terrain under conditions of nuclear and nonnuclear warfare. Suitably reinforced, the rifle platoon is capable of conducting independent operations for limited periods of time. The rifle platoon of infantry company can be completely transported in carriers, trucks, and aircraft. The mechanized rifle platoon is completely mobile and can be transported in aircraft minus the platoon's heavy equipment.

ORGANIZATION AND DUTIES OF PERSONNEL

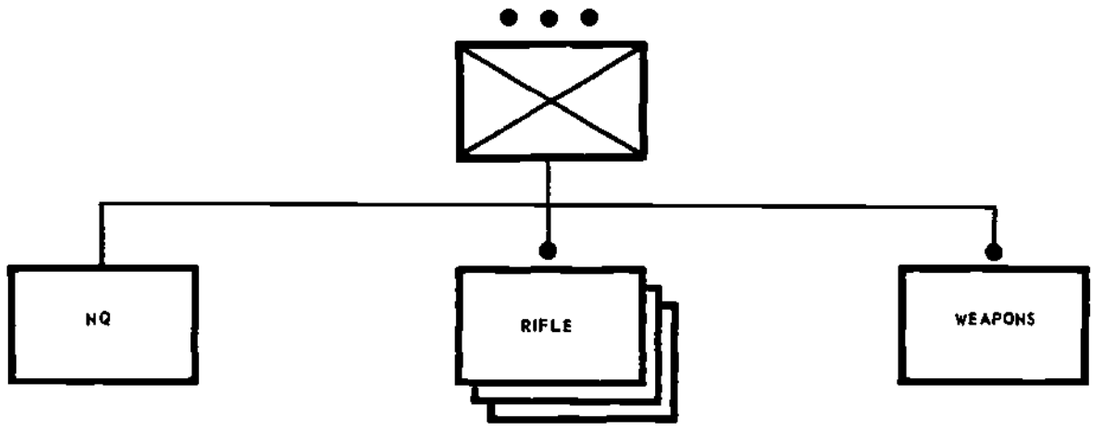
Organization. The rifle platoon (fig 8) of the infantry company consists of a platoon headquarters, three rifle squads (10 men each), and a weapons squad (11 men). The platoon leader, platoon sergeant, and radiotelephone operator compose the platoon headquarters. Each rifle squad (fig 9) consists of a squad leader and two fire teams (Alfa and Bravo). A fire team leader, an automatic rifleman, a grenadier, and either one or two riflemen compose each fire team. The weapons squad consists of a squad leader, two machinegunners, two assistant machinegunners, two antitank gunners, two assistant antitank gunners, and two ammunition bearers.

The rifle platoon of the mechanized infantry company is organized the same with the following exceptions:

Each squad has an organic personnel carrier with a mounted machinegun.
An extra machinegun for special purposes and defense is carried in each rifle squad carrier.
One rifleman is added to the rifle squad and is also designated as the carrier driver.
Within the weapon squad, one ammunition bearer is designated as the carrier driver.

Duties of Platoon Personnel. The platoon leader commands his platoon and is responsible for its discipline, training, welfare, control, and tactical employment. He is responsible for all platoon equipment and its maintenance.

The platoon sergeant is second in command. He assists in the



*AUTHORIZED IN MECHANIZED PLATOON ONLY
**DRIVER/AMMO BEARER IN MECHANIZED PLATOON: AMMO BEARER IN OTHER TYPE PLATOONS

Figure 8. Rifle platoon.

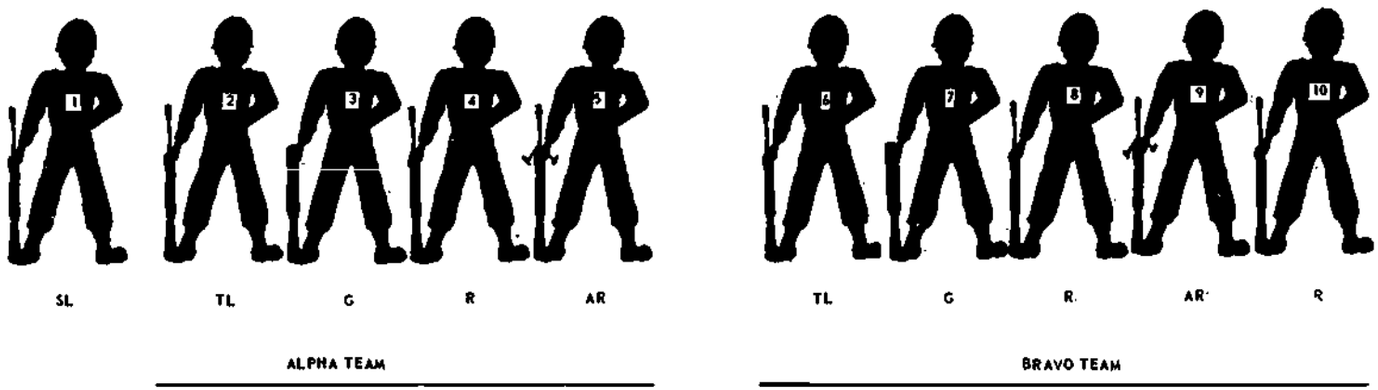


Figure 9. Rifle squad.

control of the platoon, supervises ammunition resupply, and commands the platoon in the platoon leader's absence.

The radiotelephone operator operates the platoon leader's radios and assists the platoon leader as directed. The rifle squad leader is responsible for the discipline, training, welfare, control, and tactical employment of his squad.

The fire team leaders are fighter-leaders. They assist the squad leader in control of the squad by initiating action and setting the example within each team as directed by the squad leader. The senior fire team leader commands the squad in the absence of the squad leader.

Riflemen, automatic riflemen, and grenadiers are trained in individual and team combat. Their specific tasks are designated by their squad or fire team leader. Riflemen in each fire team may carry additional ammunition for the squad automatic rifles. The platoon leader may designate squad members to be armed with light antitank weapons (LAW) in addition to their primary weapons.

The weapons squad leader is responsible for the discipline, training, welfare, and tactical employment of his squad. Based on the platoon leader's orders, the squad leader selects exact firing positions for squad weapons and may control their fires. He supervises the displacement of his squad.

Machinegunners and antitank gunners employ their weapons as directed by the weapons squad leader. They control the fire and displacement of the weapons as directed. The senior gunner commands the squad in the squad leader's absence. Assistant gunners assist in the employment of their respective weapons. Ammunition bearers provide resupply of ammunition for the machineguns and antitank teams, and assume the duties of a wounded crew member as directed.

CHAPTER 6

ARMY BRANCHES AND MISSIONS

DEVELOPMENT OF MILITARY SPECIALIZATION

The responsibilities and challenges faced by the United States Army today are steadily increasing. In order to meet these responsibilities and challenges, our military forces, together with those of our allies, must be capable of coping successfully with a wide variety of situations ranging across the entire spectrum of warfare, including all-out nuclear war with or without tactical nuclear weapons, local aggressions, and cold war.

The Army is being trained and equipped to wage all forms of war: general, limited, strategic, tactical, nuclear, conventional, and counterinsurgent. It must be ready to meet a crisis with whatever the situation requires.

In these years of rapid change, there is one significant fact about the Army which remains unchanged. It takes men to do these jobs. It takes capable, highly trained men who know their jobs and are determined to do them.

Since specialization is the "keynote" for training these men, the Army has established specialist organizations in which the required skills are concentrated for use wherever required.

THE BRANCHES

Officers of the Army are appointed into a basic or special branch and wear the insignia of that branch (fig 10, 11) as a component of their uniforms. They are known, for example, as infantry officers, quartermaster officers, or medical officers. Thus, the assignment of an officer to a branch designates in a broad sense his military specialty, since an officer will receive training in units or schools of his branch.

Although the offices and chiefs of some technical services were eliminated in the Army reorganization of 1962–63, the branches are continued for training, functioning, and personnel management.

The 18 branches of the Army are classified as the basic branches and the special branches.

Basic branches.

Infantry.
Adjutant General's Corps.
Corps of Engineers.
Finance Corps.
Quartermaster Corps.
Field Artillery.
Air Defense Artillery.
Armor.
Ordnance Corps.
Signal Corps.
Chemical Corps.
Military Police Corps.
Transportation Corps.
Military Intelligence.

Special branches.

Army Medical Department (Medical Corps, Army Nurse Corps, Dental Corps, Veterinary Corps, Medical Service Corps, and Army Medical Specialist Corps).
Chaplains.
Judge Advocate General's Corps.
Women's Army Corps. (Members of the WAC may be detailed to certain basic and special branches.)

Reserve branches and other groups. In addition to the basic and special branches of the Army, there are four other specifically designated elements of the Army.

Staff specialist, US Army Reserve.
Civil affairs, US Army Reserve.
General staff.
Inspector general.

The branches of the Army are grouped into arms and services. The arms are those branches whose primary mission is combat and combat support. The services are those branches whose primary mission is combat service support and/or administration to the Army as a whole. Certain branches have primary missions in both fields.

Arms.

Infantry.
Corps of Engineers.
Field Artillery.
Air Defense Artillery.
Armor.
Signal Corps.

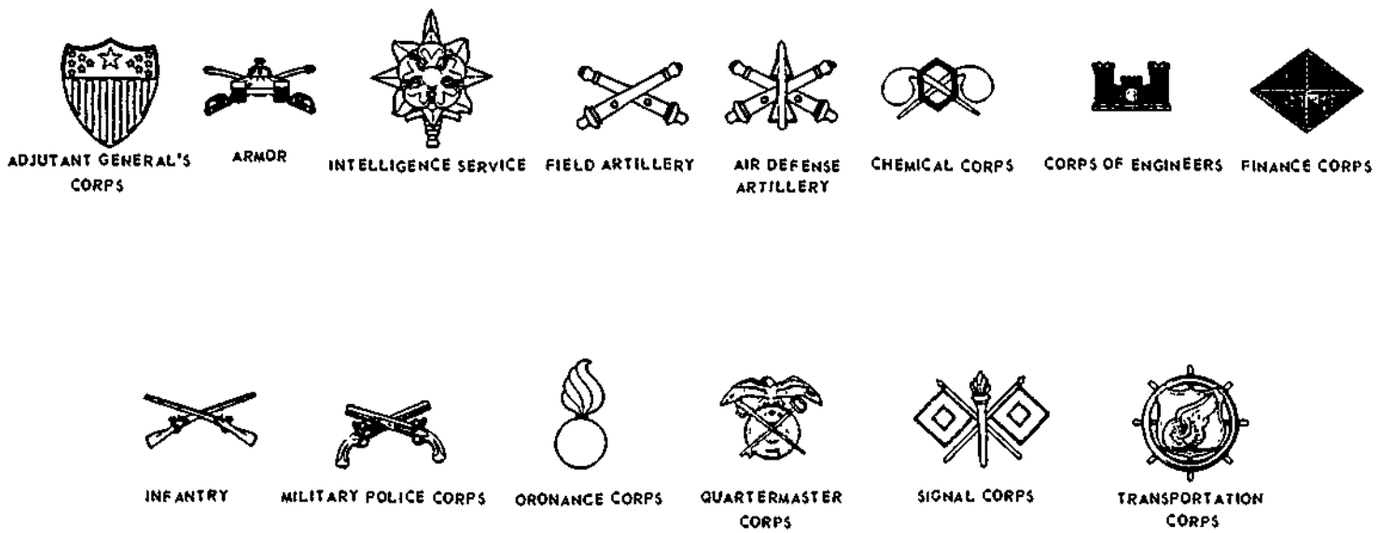


Figure 10. Branches of the Army.

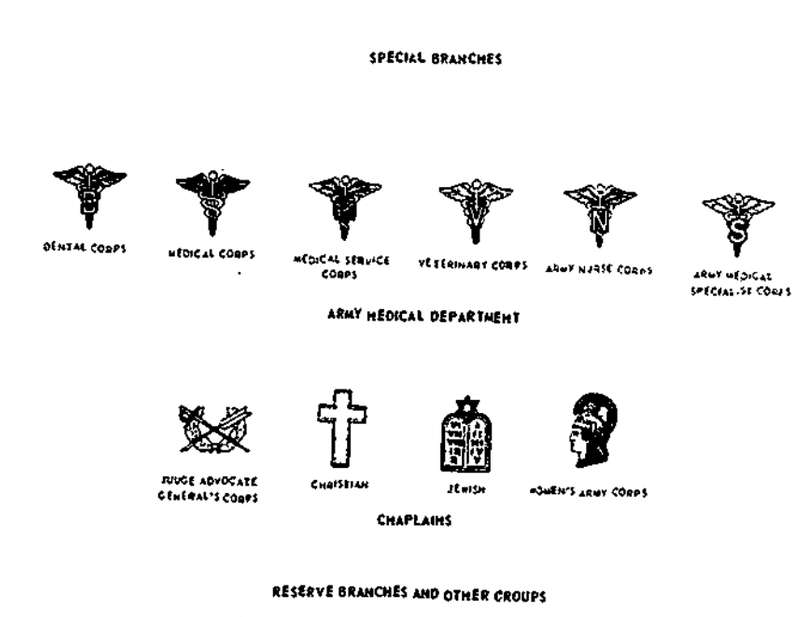


Figure 11. Special and reserve branches.

Services.

Adjutant General's Corps.
Corps of Engineers.
Finance Corps.
Quartermaster Corps.
Army Medical Department.
Chaplains.
Judge Advocate General's Corps.
Ordnance Corps.
Signal Corps.
Chemical Corps.
Military Police Corps.
Women's Army Corps.
Transportation Corps.
Military Intelligence.

MISSIONS OF THE BRANCHES

The Combat Arms Branches. The nature of modern military operations makes it necessary that certain branches be made up of basic combat specialists for the successful conduct of warfare. These basic combat specialties are—

Infantry. The primary mission of the infantry is to defeat the enemy in close combat. This is accomplished either by attacking the enemy with fire and maneuver in order to destroy or capture him, or by repelling his assault. The infantryman is capable of fighting over all types of terrain and in weather conditions which often restrict the employment of heavy weapons and equipment. His primary weapons are hand weapons; however, due to the present day capability of airplanes and helicopters, the major part of the infantry division is air transportable.

Corps of Engineers. In its dual capacity as an arm and a service branch, ready to perform major engineering, construction, and combat services, or rescue and relief in major disasters, the Corps of Engineers is unique among military organizations. As a combat arm, its role is to fight, build, or demolish to facilitate the advance of our Armed Forces; to retard the progress of the enemy; or to guard withdrawal when necessary. As a service arm, its mission is to build bases and facilities for the Army and Air Force; provide the geodetic, topographic, and mapping services and engineer intelligence for military operations; develop new engineering equipment and techniques, including nuclear power plants for the Department of Defense; train military engineering personnel; and procure and distribute engineering equipment and supplies for the Army. The corps also performs peacetime jobs such as flood control, river dredging, and maintenance of harbors, buildings, and grounds.

Field and Air Artillery. Artillery is the combat branch which is primarily concerned with the employment and firing of cannon and missiles in warfare. Its armament includes many types of guns, howitzers, and guided and free flight missiles, all designed to enhance the destructive potential of the arm against hostile targets on the ground, in the air, and on water. Artillery is comprised of two types: field artillery and air defense artillery, each type being armed with weapons and equipment commensurate with its combat responsibilities.

Field artillery has two principal missions: to support the other arms by fire; and to give depth to combat and isolate the battlefield. Air defense artillery has the principal mission to protect specified areas or installations against attacks by hostile aircraft and guided missiles.

Armor. The basic missions of Armor are to attack, disrupt, disorganize, and destroy enemy forces; and to provide reconnaissance, security, and antitank defense for friendly forces. Armor may be employed in all types of ground combat, either independently or as part of a larger force.

Signal Corps. Signal Corps personnel are a part of all major units. Their mission is to provide communication networks between all installations. They design, install, and maintain radar, radio, telephone, telegraph, photographic, motion picture, and automatic data processing equipment.

The Service Branches. The primary mission for all of the service branches is combat service support and/or administration. The specific missions for each service branch are—

Adjutant General's Corps. This Corps furnishes administrative and personnel services. Administrative services are furnished to staff activities of a headquarters and to units to assist in their internal management. They include data processing, records management, forms and publications management, and printing and local reproduction. Personnel services are furnished to individuals and include personnel management as well as welfare and morale services.

Finance Corps. Briefly stated, the mission of the Finance Corps is to pay the Army. It handles the payment of commercial bills in addition to payment of troops, allotments to dependents, budgeting, accounting, and other aspects of financial management for the Army.

Quartermaster Corps. This Corps is charged with furnishing the majority of the everyday needs of the soldier, including food, clothing, and bedding. The Corps supplies fuel, lubricants, and organizational equipment (such as tents, office furniture, and many other items). Also within its responsibility are the supplies for laundries, bakeries, sales commissaries, exchange services, and refrigeration, plus the maintenance and repair of quartermaster items.

Army Medical Department. The Army Medical Department includes the Medical, Dental, Veterinary, Medical Service, Army Nurse, and Army Medical Specialist Corps. The chief functions of the Medical Corps are care of the sick and wounded, physical examinations, prevention of disease, and the operation of hospitals and dispensaries. The Dental Corps is charged with the conduct of all dental service, including examination and treatment. The mission of the Veterinary Corps includes inspection of meat, fish, and dairy products purchased by the Army to ascertain quality and fitness for consumption. Insuring physical well-being of animals is an important part of the duties of this corps. The Medical Service Corps is divided into four sections: the pharmacy, supply, and administrative section; the sanitary engineering section, the optometry section; and the allied sciences

section. Its function is to relieve the professional medical personnel of supply and administrative duties. The Army Nurse Corps, made up primarily of commissioned officers and warrant officers (male and female), provides the necessary nursing service for the Army. There are three sections within the Army Medical Specialist Corps, composed of the following specialized personnel: dietitians, physical therapists, and occupational therapists.

Chaplains. The duties of the Army chaplain are similar to those performed by his civilian counterparts. The mission of the chaplain is to promote religion and morality in the Army. His field of activity includes religious services and ministrations, religious education, pastoral care and counseling, character guidance instruction, liaison with the civilian community, and the administration necessary to support the program.

Judge Advocate General's Corps. This is the legal branch of the Army. It provides professional legal service and assistance, supervises the Army's system of military justice, and reviews records of trials by courts-martial.

Ordnance Corps. This Corps is concerned primarily with supply of arms (such as rifles, pistols, and artillery pieces), ammunition, vehicles, and fire control instruments (for directing the fire of artillery). Repair and maintenance of this specialized equipment is also a major function.

Chemical Corps. There are two types of Chemical Corps troop units: combat support units and service units. The mission of combat support units is to furnish operational assistance, such as smokescreens, to combat elements of the Army. Service units provide supply, maintenance, decontamination, and other specialized services for all types of units, including the combat support units and other service troops in a field army and in a communications zone. The Chemical Corps has a multiple mission: to study and investigate chemical, biological, and radiological (CBR) warfare; to furnish technical advice and assistance to the Secretary of the Army, Chief of Staff, and other elements of the Department of the Army; and to develop, provide, and service the material pertaining to CBR warfare required by the Army and, as assigned, for the Navy and Air Force and for foreign aid programs.

Military Police Corps. The principal functions of the military police are to enforce laws, regulations, and orders; control traffic; investigate and prevent crime; control the circulation and identification of individuals; and apprehend military of-

fenders. They also intern, care for, supervise, and repatriate prisoners of war and enemy aliens; take custody of, care for, and rehabilitate military prisoners; operate and administer disciplinary barracks; and protect property by preventing pilferage of supplies and equipment in storage and in transit.

Women's Army Corps. This branch consists of commissioned and enlisted female personnel of the Nation's womanpower. Women of the Women's Army Corps are often assigned for duty with other branches.

Transportation Corps. The Transportation Corps mission is to provide for the movement of personnel and equipment for the Army and, as assigned, for the Navy, Air Force, and other Government agencies; and to provide logistical support for Army rail and floating equipment, and supply and maintenance for Army aviation. The Corps furnishes three types of service to accomplish this mission: provision of the transportation means and facilities; management of the movement capability of the transportation service; and provision of a supply and maintenance service for that equipment for which Transportation Corps has logistical responsibility.

Military Intelligence. This organization provides military intelligence, counterintelligence, field operations intelligence, and security for the Army. Originated in 1962 as the Army Intelligence and Security Branch, its title has been changed to Military Intelligence Branch, but its mission remained the same. This branch provides a career program for qualified personnel.

CHAPTER 7

ORGANIZATION OF THE DIVISION AND LARGER UNITS

MISSIONS AND ROLES, ORGANIZATION, CAPABILITIES, AND LIMITATIONS OF THE DIVISION

MISSION

The mission of the division is the destruction of enemy military forces and the seizure or domination of critical land areas, their populations and resources.

In addition to its basic mission, the division may be employed to accomplish—

A show of force.
Truce enforcement.
International police action.
Encouragement of a faltering government.
Legal occupation.
Restoration of order.
Protection of personnel and property.
Assistance to civil defense efforts.
Counterinsurgency tasks.

GENERAL CHARACTERISTICS

The division consists of a relatively fixed command and control, combat, combat support, and combat service support structure to which is assigned combat battalions (airborne infantry, infantry, mechanized infantry, tank airmobile infantry) in proportion to and in numbers appropriate to the division's mission and its anticipated operational environment. Determination of the types and numbers of combat battalions in a particular division is called "tailoring." Making this determination prior to deploying a division to a particular area of operations is "strategic tailoring." The transfer of units by higher field commanders from one division to another, or the augmentation of a division from nondivisional sources to meet specific needs, or the streamlining of a division by detaching some of its elements or equipment is "external tactical tailoring." Grouping appropriate elements of the division under its three brigades and other control

headquarters in numbers and types appropriate to each brigade or other control unit's specific mission is "internal tactical tailoring" and is referred to, in this manual, as organization of the division for combat.

A division is designated by the Department of the Army as airborne, armored, infantry, mechanized infantry, or airmobile depending upon the numbers and types of combat battalions assigned when it is strategically tailored. This tailoring gives the division and its subordinate units the capability to perform specific missions in an anticipated operational environment. An example of an infantry division is shown in figure 12.

Within the division the three brigade headquarters are the major tactical command headquarters to which combat, combat support, and combat service support elements may be attached or placed in support to perform specific missions.

The division support command consists of a headquarters and headquarters company and functionalized combat service support units appropriate to support the division (fig 13). Combat service support units can be fragmented to provide functional support elements which can be attached to or placed in support of the brigades or other combat units.

Since the organization, strength, and equipment of the division are based upon its contemplated mission and the operational environment, its capabilities and limitations will depend upon the manner in which it has been strategically or externally, tactically tailored. The lists of capabilities and limitations which follow are a guide to the conditions under which the various divisions might be employed.

All divisions can—

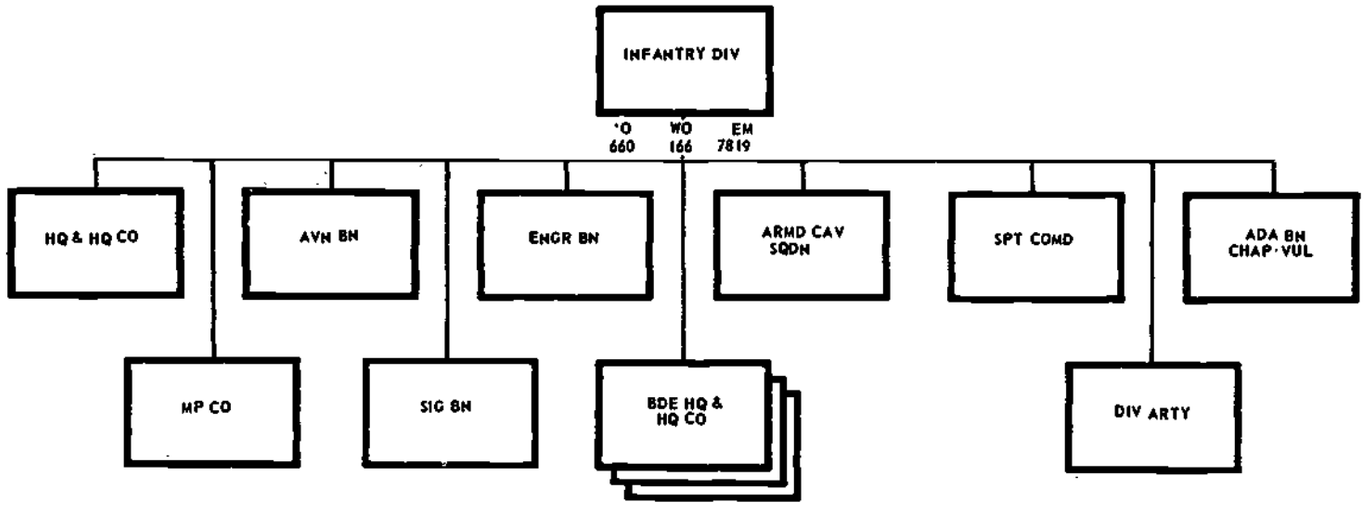
- Perform ground operations under conditions of nuclear or nonnuclear warfare to include antiguerrilla operations.
- Operate as a part of a joint amphibious force.
- Control and administer additional combat battalions.
- Control enemy populations.
- Restore order.
- Conduct airmobile operations.
- Conduct long-range patrolling.
- Perform approximately 75 percent of their own vehicle and equipment maintenance.

All divisions have organic air defense artillery.

THE DIVISION BASE

GENERAL

Divisions have a common base consisting of the division headquarters and headquarters company, three brigade headquarters

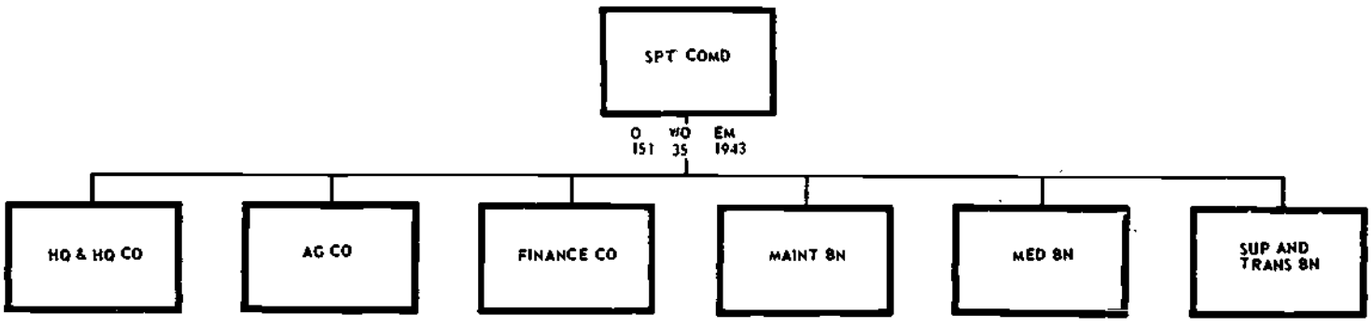


*O – OFFICERS
WO – WARRANT OFFICERS
EM – ENLISTED MEN

MISSION. To destroy enemy armed forces and to control land area including populations and resources.

ASSIGNMENT. To Field Army.

Figure 12. Infantry division.



MISSION: To provide Division level combat service support (except COMSEC equipment, construction, and water supply) to all organic and attached elements of the Division.

ASSIGNMENT: To Infantry Division.

Figure 13. Division support command.

and headquarters companies, division artillery, support command, aviation (infantry and airmobile infantry only), engineer, and signal battalions, and armored cavalry squadron, and a military police company. Capabilities of the division support command are modified to meet the varying supply and maintenance requirements of differing combinations of combat battalions. Further, the quantity and type of equipment vary depending upon the type division. Examples of this modification are found in the military police company, the air equipment support company, and the division artillery of the airborne division.

DIVISION HEADQUARTERS AND HEADQUARTERS COMPANY

General. The division headquarters provides command and supervision of operations of the division and attached units. The headquarters company provides administrative support for the division headquarters. The headquarters company is normally located at the division main command post. Elements may operate a division tactical command post when required.

Organization. See figure 14.

DIVISION MILITARY POLICE COMPANY

General. The division military police company provides military police support to the division to include—

A provost marshal section for the division special staff.

Up to 36 motor patrols or 36 traffic control posts or a combination thereof on a 24-hour basis when not involved in other tasks.

Operation of prisoner of war (PW) collecting points at brigade and division and evacuation of PW from brigade to division.

Investigation of crime.

Control of stragglers and refugees.

Escort and security of sensitive materiel, personnel, installations, and movements.

Security for division command posts.

Organization. See figure 15.

Employment. The company headquarters is located near the division main. The security platoon habitually furnishes ground protection for the division main and tactical headquarters echelons with particular attention to their critical areas. When two brigades are committed, a military police platoon is in direct support of each, a third platoon operates the division straggler and PW collecting points and evacuates PW from brigades, and

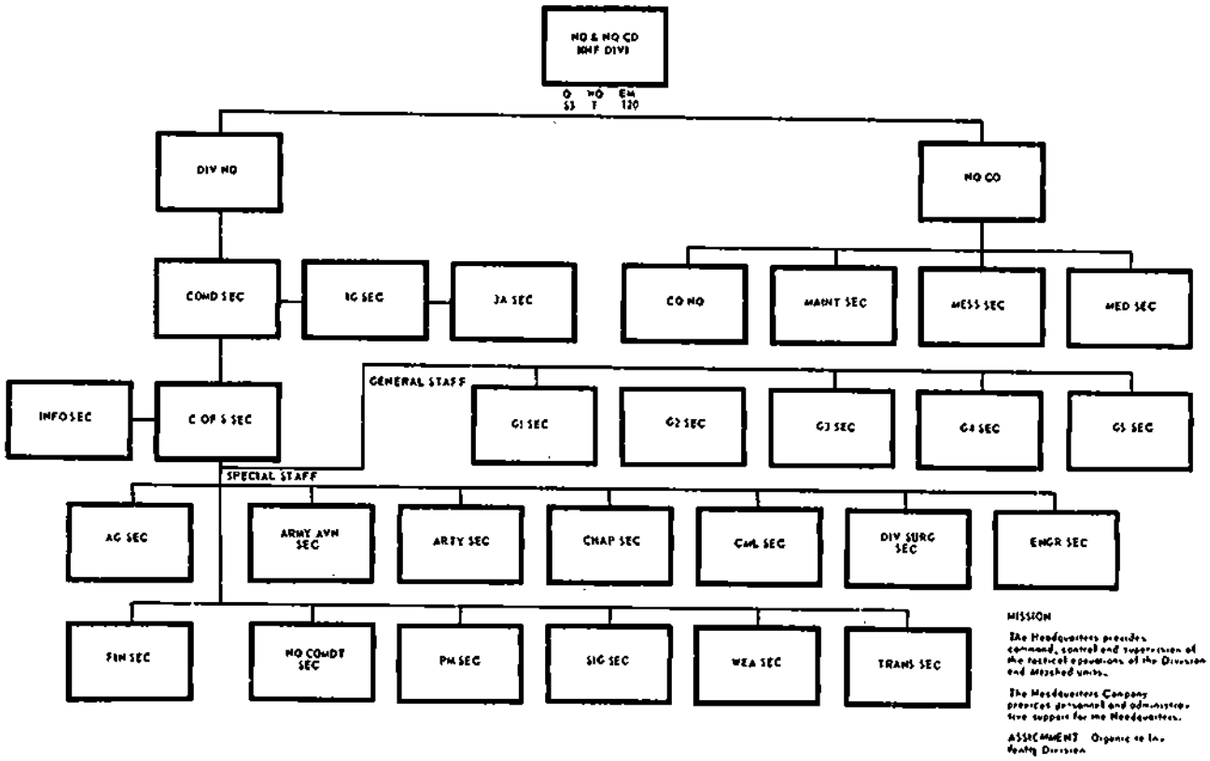


Figure 14. Organization of infantry division headquarters and headquarters company.

the fourth platoon is in direct support of the support command. When three brigades are committed, and a platoon is required in support of each, additional military police are requested to support the support command.

DIVISION AVIATION BATTALION

General. The division aviation battalion provides aviation support for the division to include—

- Support of division headquarters, the support command, and other elements without organic aviation.
- Reinforcement of units with organic aircraft.
- An aviation section for the division special staff.
- Operation of a central aircraft communication and control facility and division instrumented airfield with terminal flight facilities and ground control approach radar.
- Aerial surveillance.
- Assault aircraft for employment under operational control of combat unit commanders in airmobile operations with an organic single lift capability of the assault elements of one dismounted infantry company.
- Logistical lift to include supplemental aeromedical evaluation.
- Provision of armed escort for airmobile operations.

Organization. See figure 16.

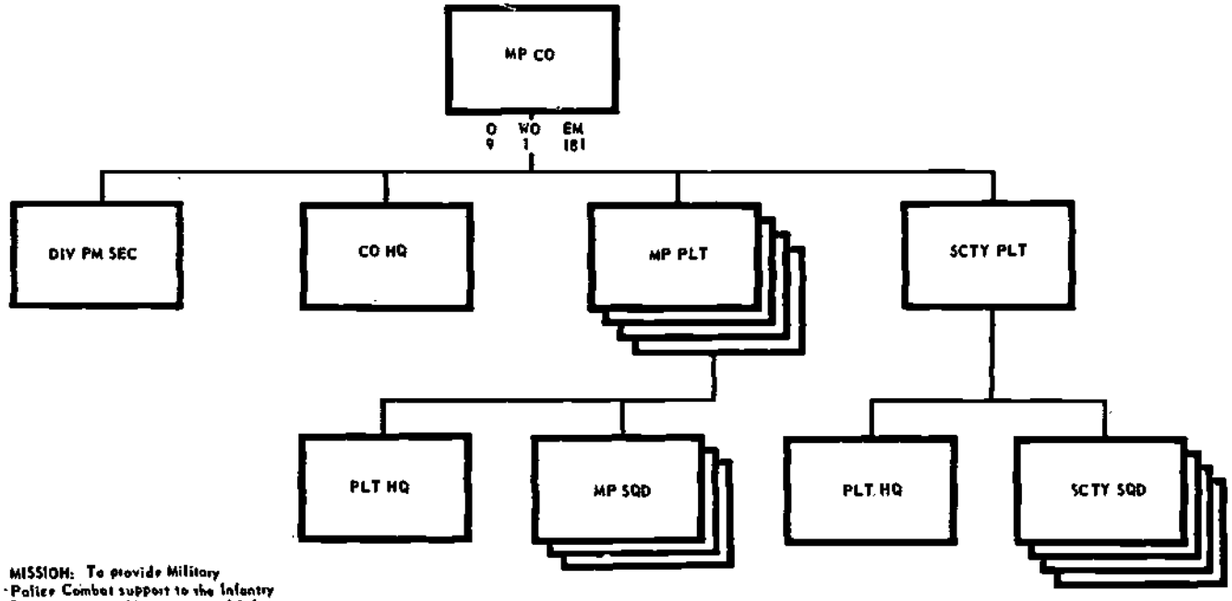
DIVISION ARMORED CAVALRY SQUADRON

General. The division armored cavalry squadron is a combat unit which can—

- Protect the flank or flanks of the division.
- Provide security and liaison between division units or between the division and adjacent units.
- Collect and report information of intelligence value over wide fronts and to extend depths.
- Act as covering force in the advance-to-contact, offense, defense, or retrograde.
- Provide communications relay.
- Conduct radiological monitoring and survey.
- Perform damage control operations.
- Provide rear area security.
- Provide armed escort for airmobile operations.
- Conduct semi-independent operations when suitably reinforced.

The squadron must be reinforced to conduct sustained combat operations and, for continuous operation, it requires considerable logistical support, particularly petroleum products.

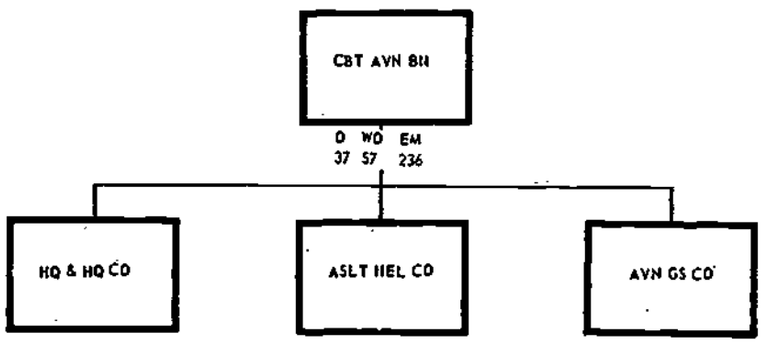
Organization. See figure 17.



MISSION: To provide Military Police Combat support to the Infantry Division, Armored Division and Infantry Division (Mechanized).

ASSIGNMENT: Organic to Infantry Division, Armored Division, or Infantry Division (Mechanized).

Figure 15. Division military police company.



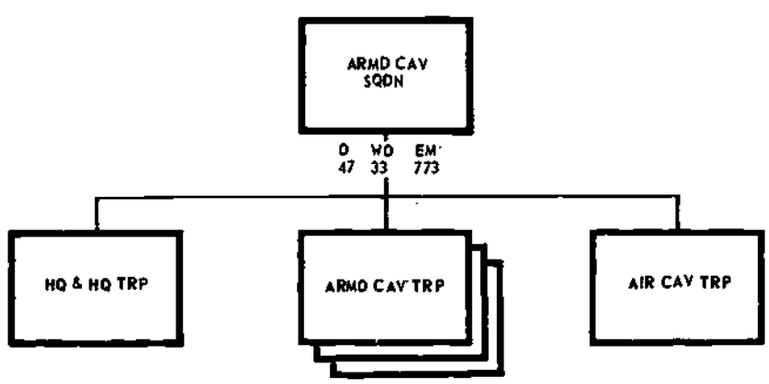
MISSION. Provides aviation support for the Division Headquarters, Division Support Command and other Divisional units without organic aircraft. In addition, provides:

General support and reinforcement to units possessing organic aircraft.

An aviation special staff section for the Division Headquarters.

ASSIGNMENT. Organic to the Infantry Division.

Figure 16. Division combat aviation battalion.



MISSION: To perform reconnaissance and provide security for the Division of unit to which attached and engage in offensive, defensive and delaying action as an economy of force unit.

ASSIGMENT: Organic to Armored Division, Infantry Division, Infantry Division (Mechanized).

Figure 17. Division armored cavalry squadron.

DIVISION ENGINEER BATTALION

General. The division engineer battalion provides engineer support to the division to include—

- Construction, maintenance, removal, and rehabilitation of obstacles, roads, bridges, culverts, deception devices, camouflage, fortification, fords, airlanding facilities, and emplacements.
- Technical assistance to other division troops in performing the functions listed above.
- Demolition to include conventional and atomic demolition munitions (ADM).
- Establishment and operation of a maximum of five water supply points.
- Engineer reconnaissance and intelligence.
- An engineer section for the division special staff.
- Performance of infantry-type missions and assisting combat elements in breaching fortifications.

Organization. See figure 18.

DIVISION SIGNAL BATTALION

General. The division signal battalion provides signal communication support to the division to include—

- Installation and operation of an area communications system having three area signal centers to service units in the division area and command signal centers at the division main command post (CP), division tactical CP, support command headquarters, and division rear echelon when the latter is located in the division area.
- Installation and operation of message center, messenger, cryptographic, teletype, and radio (except staff vehicle radios) communications for division headquarters and support command headquarters.
- Messenger service between division and brigade.
- Multichannel terminal facilities for the brigades to communicate with division main CP and rear echelon, and the radio equipment for the brigade terminals of the division radioteletypewriter (RATT) net.
- A signal section for the division special staff.
- Photographic service (except aerial photography).

Organization. See figure 19.

DIVISION SUPPORT COMMAND

General. The division support command provides administrative support to the division to include:

Supply, including establishment of mobile distribution points for all classes of supplies and maps.

Direct support maintenance (except for medical cryptographic and electrical accounting equipment).

Division level as opposed to unit level medical service, including evacuation of patients, treatment (including emergency dental), medical supply, or organizational medical equipment maintenance.

In the airborne division, air equipment required for aerial delivery of personnel, supplies, and equipment.

Advice to the division and subordinate commanders and their staffs on logistical operations to include status of supply, maintenance, and transportation, and capabilities of organic and attached supply, maintenance, and transportation units.

Organization (fig 13). Support command units are capable of fragmentation in order to provide attachments to division elements on missions which cannot be supported directly.

The support commander exercises tactical command authority over the administration company. Performance of its primary mission is carried out under the staff supervision of the G1.

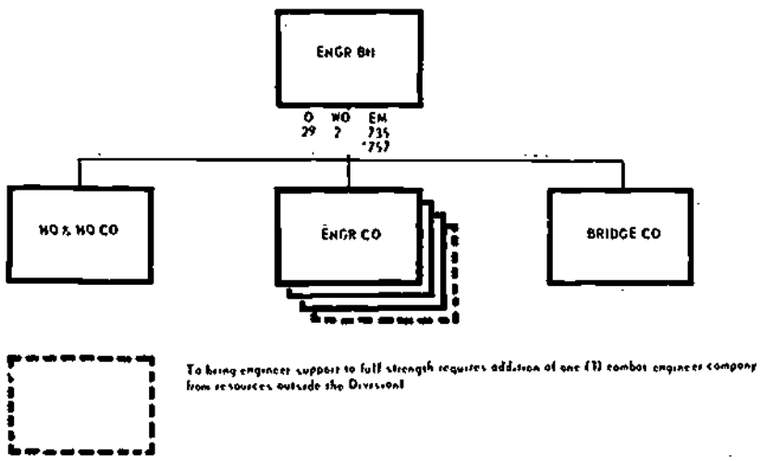
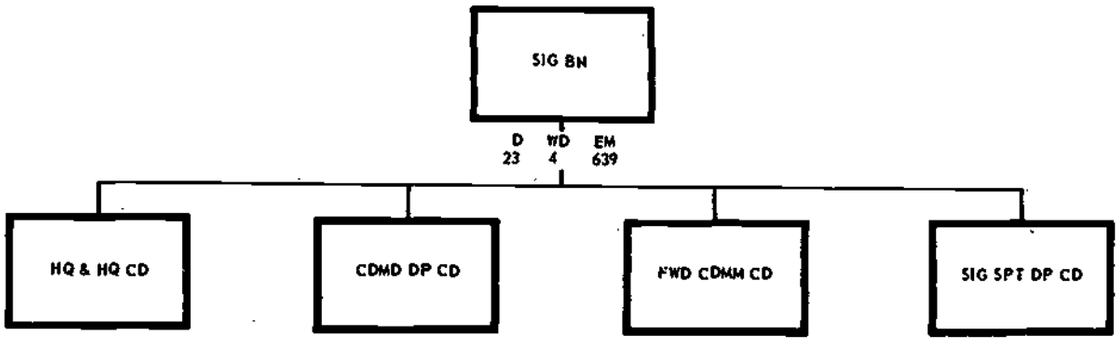


Figure 18. Division engineer battalion.



MISSION:

To install, operate, and maintain a division communications system for support of division-level functions including: command, control, intelligence, firepower, and combat service support.

To provide internal command post (CP) communications at all echelons of Division Headquarters including Division Support Command and Division rear echelon.

To provide special staff and technical assistance for planning and control of all Division communications, by the Division Command and Staff.

To provide direct support CDMSEC logistics for the Division.

To provide photographic service (excluding aerial photography and development of color film and motion picture film) for the Division.

ASSIGNMENT:

Armored Division.

Infantry Division.

Infantry Division (Mechanized).

Figure 19. Division signal battalion.

The combat service support functions of the support command are organized on a functional basis.

The support command commander exercises command authority over the medical battalion. The performance of its primary mission is carried out under the staff supervision of the division surgeon.

Employment. The support command commander is the division level logistical operator for all operations except communications and engineer services.

The support command is normally located in the division rear area. Combat service support units are located forward with the brigades to furnish one-stop, direct support. Units in the division rear area receive support from the division support area.

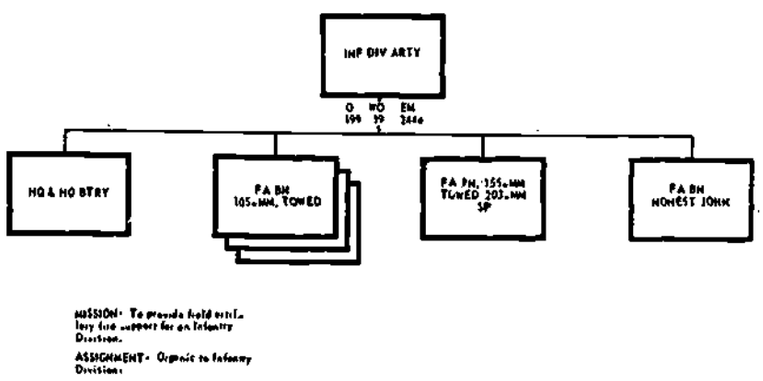
Combat service support can be provided on an area basis or by attachment of support units to major divisional units. It is usual for both methods to be employed with the area support method as a basis.

DIVISION ARTILLERY

General. The division artillery provides combat support to the division by accurate delivery of nuclear and nonuclear artillery fires of appropriate type, caliber, and density under all conditions of weather, visibility, and terrain. The division artillery provides an artillery section for the division special staff.

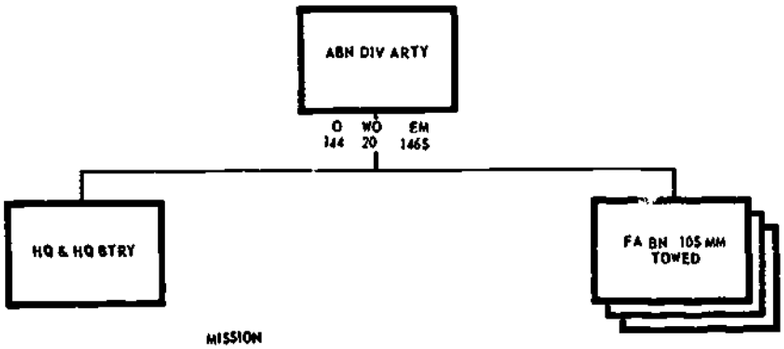
Organization. See figure 20.

Employment. Artillery attached to the division or artillery in support of the division is integrated into the division artillery's operational system.



1 Infantry

Figure 20. Types of division artillery.



MISSION

To provide artillery support for an Airborne Division.

ASSIGNMENT

Organic to Airborne Division.

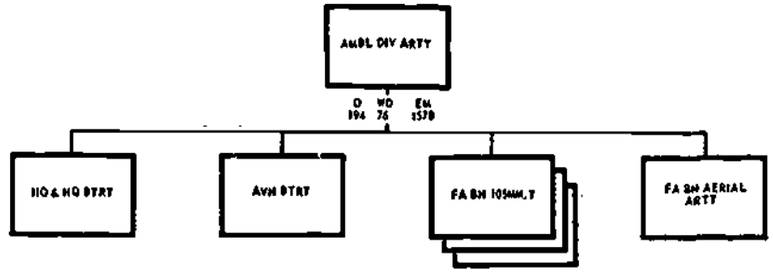
2 Airborne

Figure 20—Continued.

When artillery battalions are attached to brigades for independent or semi-independent operations, it may be necessary to augment them with survey equipment and personnel, long-range radio equipment, forward observers, and ammunition supply means.

Firing batteries are capable of operating independently of the parent battalion for several days. Attachments from the headquarters and service batteries are normally provided for periods of extended independent operations.

The missile battalion is normally employed by separate battery



MISSION

To provide direct and general artillery support for the Airmobile Division

ASSIGNMENT

Organic to the Airmobile Division.

3 Airmobile

Figure 20—Continued.

with extended distances between firing elements. Its nuclear and nonnuclear capabilities are employed under division, brigade, or battalion command as the situation requires.

BRIGADE HEADQUARTERS AND HEADQUARTERS COMPANY

General. The brigade headquarters assists the brigade commander to command all elements of the division which are attached and to supervise all elements in support of the brigade in either combat or training situations. The brigade headquarters company provides administrative support to the brigade headquarters.

Organization. See figure 21.

Employment.

- The brigade normally commands the tactical operations of two to five attached combat battalions.
- The brigade may be employed on independent or semi-independent operations when appropriately organized for combat.

TANK BATTALION

General.

- Tank battalions close with and destroy enemy forces, using fire, maneuver, and shock effect.
- Tank battalions are particularly well suited to operations which require mobile, direct firepower, and armor protection.

They are well suited for rapid exploitation, pursuit, disruption of the enemy's rear, and mobile defense. They contribute mobility, firepower, and shock action to the tank-infantry team. Their armor shielding reduces vulnerability to hostile fire and permits rapid exploitation through contaminated areas.

Tank battalions require more equipment maintenance and logistical support than do infantry, mechanized infantry, and airborne infantry battalions. They are more sensitive to difficult terrain and barriers than their counterparts. Their primary equipment is not air transportable.

Organization. See figure 22.

Employment. In the armored division, although the tank battalion is normally attached to a brigade, it can be employed independently. When the tank battalion is cross-attached with a

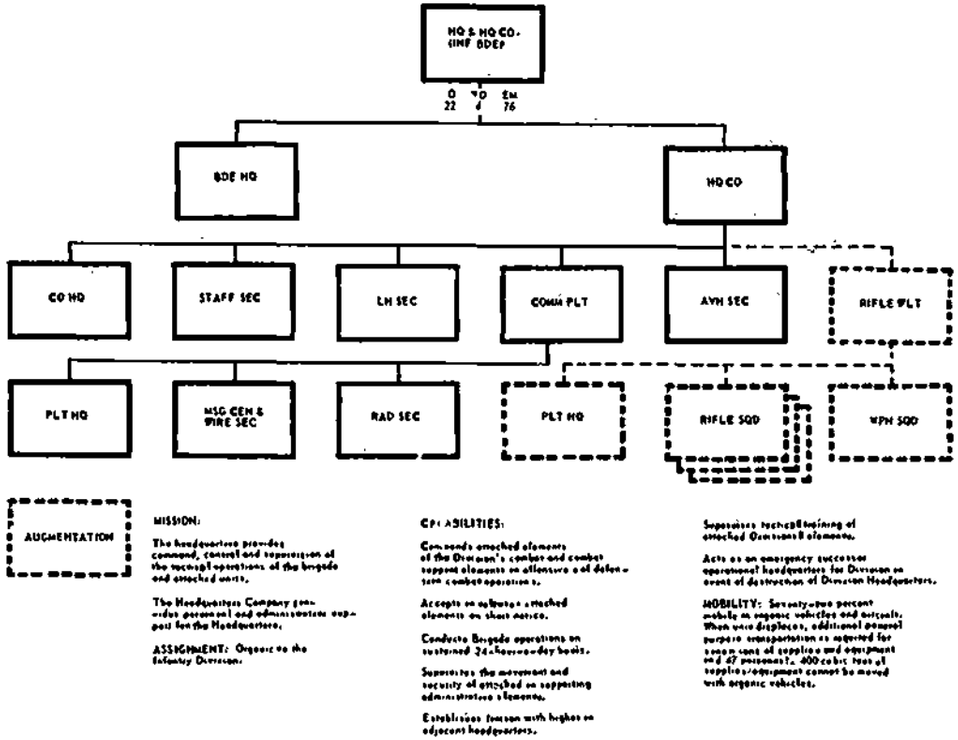


Figure 21. Headquarters and headquarters company, brigade.

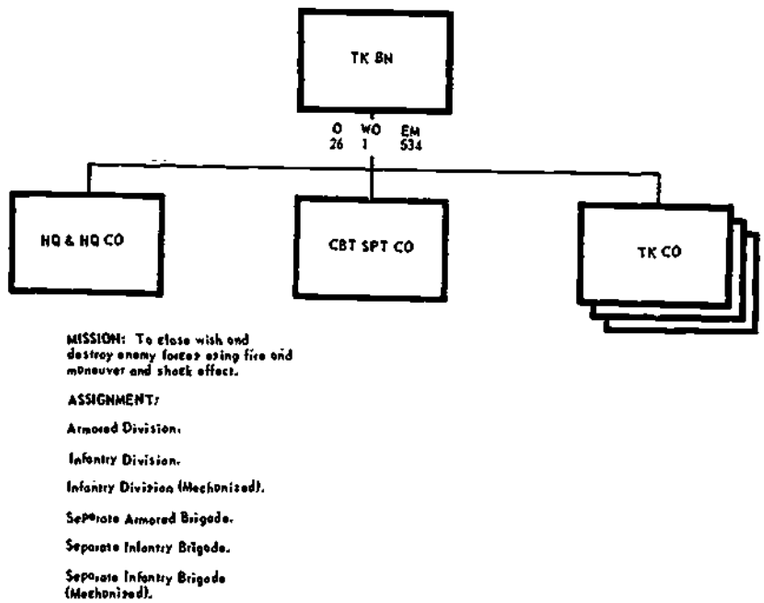


Figure 22. Division tank battalion.

mechanized infantry battalion it then serves as a combined arms battalion task force.

In the airborne, infantry, and mechanized divisions, tank battalions are employed in roles which take advantage of their firepower, armor protection, and mobility, consistent with the division's mission. The battalion is normally attached to a brigade, thereby adding to the firepower of the brigade and depth to the antitank defense. In the mechanized division the tank battalion is normally used after cross attachment to form a combined arms battalion task force. The tank battalion may be employed to reinforce other units in offensive and defensive operations or may be employed without attachments.

INFANTRY BATTALION

GENERAL

The mission of the infantry battalion is to close with the enemy by means of fire and maneuver in order to destroy or capture him or to repel his assault by fire, close combat, and counterattack.

The battalion is the infantry's basic tactical unit. The per-

sonnel, equipment, and training of the battalion provide for versatility and enable it to accomplish a variety of combat missions with organic means. The battalion's command structure is designed to accept an augmentation of forces. The battalion is capable of fighting with or without vehicles, with minimum adjustment of equipment and personnel, whenever dismounted, mechanized, motorized, amphibious, airmobile, or joint airborne operations are required.

CAPABILITIES

Battalions have the following capabilities:

- Close with the enemy by means of fire and maneuver is order to destroy or capture him.
- Repel enemy assault by fire, close combat, and counterattack.
- Provide base of fire and maneuver elements.
- Seize and hold terrain.
- Conduct independent operations on a limited scale.
- Furnish limited antitank protection.
- Provide indirect fire support for organic and attached units.
- Conduct long-range reconnaissance patrolling when appropriately equipped.
- Participate in air landings when provided sufficient air transportation.
- Conduct operations in all types of terrain and climatic conditions.

Infantry battalions, when mechanized, have a sustained capability for rapid movement which may influence the maneuver in which the operation is conducted. The armored personnel carriers organic to or provided such battalions give them the following additional capabilities to—

- Maneuver with a high degree of cross-country mobility with light armor protection and multiple means of communications.
- Exploit the effects of mass production weapons.
- Complement and enhance the inherent capabilities of tank elements, when employed in tank-infantry task forces.
- Provide a highly mobile exploitation force when suitably reinforced with appropriate combat and combat support elements.
- Traverse inland waterways while mounted.

Airborne infantry battalions (which may also be mechanized) have the following additional capability: conduct airborne assault by parachute or assault aircraft with minimum marshaling and planning procedures.

The battalion is a tactical and administrative headquarters; however, it is primarily dependent on higher echelons for combat service support.

The infantry battalion organization consists of a headquarters and headquarters company, three rifle companies, and a combat support company (fig 23).

HEADQUARTERS AND HEADQUARTERS COMPANY, INFANTRY BATTALION, INFANTRY DIVISION

The infantry battalion headquarters and headquarters company consists of the battalion headquarters, company headquarters, battalion headquarters section, communications platoon, support platoon, maintenance platoon, and the medical platoon (fig 24).

Battalion headquarters. This headquarters consists of the battalion commander (lieutenant colonel) and his unit staff; the executive officer (major); the operations and training officer (S3, major); the motor officer (captain); the adjutant (S1, captain); intelligence officer (S2, captain); the supply officer (S4, captain); the communications officer (captain); and the battalion sergeant major (E–9).

Company headquarters. This headquarters provides control and services for headquarters company and consists of the company commander (captain), executive officer (1st lieutenant), first sergeant, supply sergeant, armorer, company clerk, and a light truck driver.

Battalion headquarters section. This section contains the special staff officers and personnel who work at battalion headquarters as assistants to the unit staff. This section consists of the S3 air (captain), two liaison officers (lieutenant), the operations sergeant, the intelligence sergeant, the assistant operations sergeant, the personnel staff noncommissioned officer, the chemical noncommissioned officer, two sergeant team chiefs, two clerk typists, two intermediate speed radio operators, one operations assistant, two radioteletype operators, nine light truck drivers, and one mail clerk.

Communications platoon. The battalion communications platoon (assisted by other communications personnel in headquarters company) installs, operates, and maintains communications facilities within the battalion headquarters. In addition, they establish and maintain communication to the rifle companies, elements of the headquarters company, and attached units. The platoon also provides maintenance support for the rifle companies

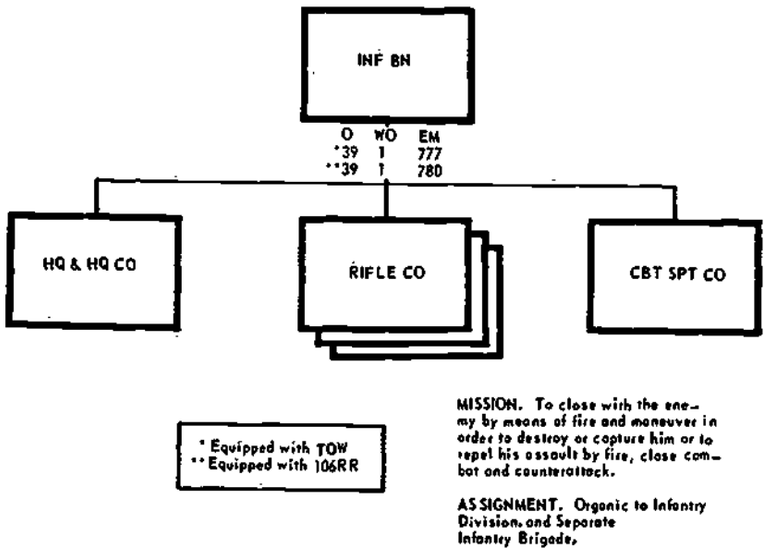


Figure 28. Infantry battalion.

for all signal equipment except cryptographic. The communications platoon consists of a platoon headquarters and two sections and is commanded by the battalion communications officer.

The platoon headquarters consists of the communications chief, one senior radio mechanic, one radar mechanic, two radio mechanics, and one light truck driver.

The message center section consists of a senior message clerk, three message clerks, and two motor messengers.

The wire section consists of a wire foreman, two wire team chiefs, two senior wiremen, four wiremen, one senior switchboard operator, and two switchboard operators.

In addition to those personnel organic to the communications platoon, the battalion headquarters is provided communications personnel organic to the headquarters section.

A team chief and two radioteletypewriter operators are provided for each of the two radioteletypewriter stations at battalion. Two intermediate speed radio operators are also in the headquarters section. They operate the AM radios of the S3 Air.

Battalion support platoon. The support platoon provides supply, transportation, and mess support for the battalion. The platoon is organized into a platoon headquarters, a supply section, a transportation section, and a battalion mess section. The general functions of the platoon are—

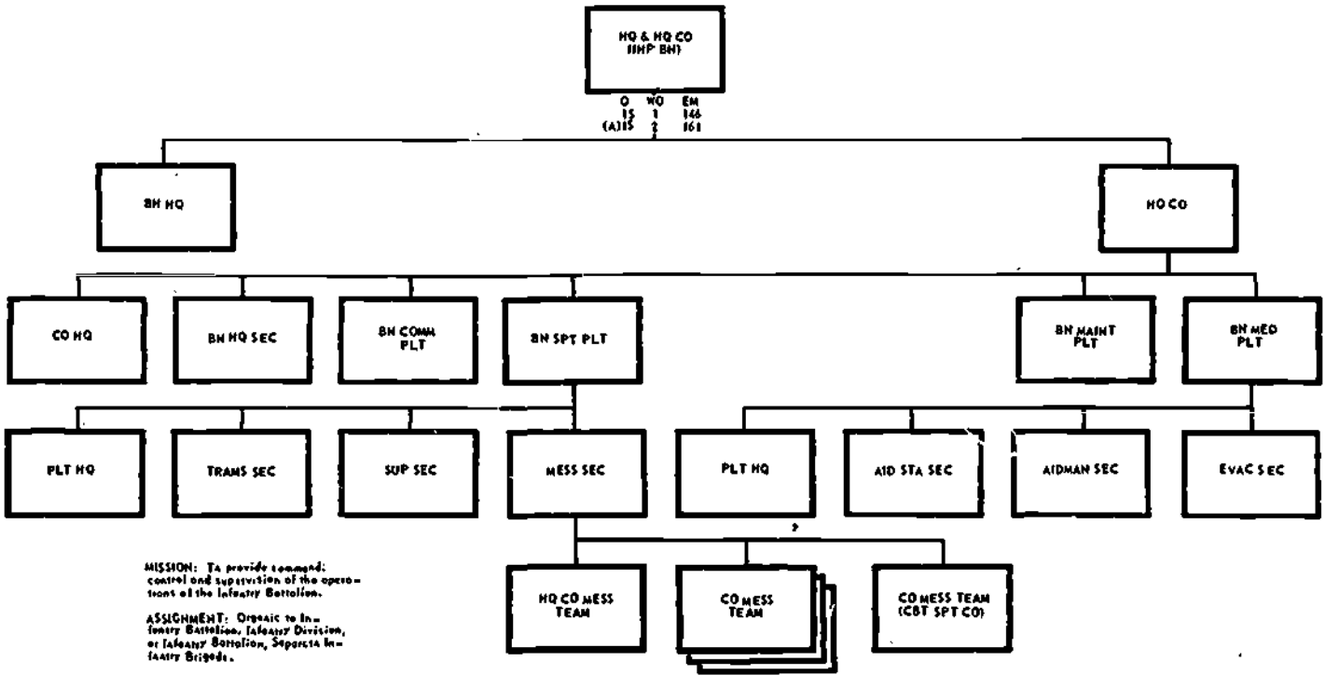


Figure 24. Headquarters and headquarters company.

Platoon headquarters provides command and control for the platoon. The platoon leader operates under staff supervision of the battalion S4 and functions as a special staff officer.

The supply section receives and consolidates supply requests from organic and attached elements, except for automotive, cryptographic repair parts, and signal repair parts, and medical expendables, and prepares and forwards battalion requisitions to the appropriate agency. Upon receipt of supplies, the section distributes them within the battalion.

The transportation section is organized and equipped with personnel and trucks required to transport all types of supplies from supply points to the companies of the battalion.

During tactical operations, part of the transportation section will operate from the battalion field trains. Trucks loaded with ammunition and supplies needed for the immediate support of combat operations will be in the battalion combat trains.

The mess section is organized to provide meals for the entire battalion. During tactical operations it will usually be located with the battalion field train in the brigade trains area. This section normally prepares food in one central location and then carries it in insulated containers to the companies of the battalion. This section may provide centralized (battalion) or decentralized (company) messing as required.

Key personnel and their duties are—

Support platoon leader who is responsible for accomplishment of the platoon mission and for the operation, movement, and security of the battalion field trains. He maintains communication with the battalion S4 in the battalion logistical net.

The supply warrant officer is the section leader of the supply section. He directs section operations, and supervises in maintenance of records and preparation of requisitions and other documents. He also assists the platoon leader in the operation of the battalion field trains.

The section sergeant supervises the operations of the transportation section.

Battalion maintenance platoon. Maintenance embodies all actions taken to keep materiel in a serviceable condition or to restore it to serviceability. It includes inspecting, testing, servicing, repairing, and evacuation.

The battalion maintenance platoon has primary responsibility for the organizational maintenance (except signal and medical) of the battalion.

The maintenance warrant officer is the platoon leader and works directly under the supervision of the battalion motor

officer. He directs the timely requisitioning of repair parts and directs the repair and maintenance of all battalion equipment except signal and medical. He coordinates with forward support maintenance units for the accomplishment of major repair and maintenance. He coordinates platoon activity to support battalion plans.

Battalion medical platoon. The medical platoon furnishes medical services to include collection, emergency treatment, and evacuation of patients, and supervision of sanitation for the battalion. The platoon is organized with a platoon headquarters, an aid station section, an aidman section, and an evacuation section.

The platoon headquarters consists of a lieutenant medical operations assistant who assists with the operation of the battalion aid station, and supervises evacuation and platoon administration. A platoon sergeant supervises the enlisted personnel of the platoon and assists the platoon leader and his assistant in supervising the activities of the platoon.

The platoon headquarters consists of a captain platoon leader who is also the battalion surgeon, a lieutenant medical operations assistant who assists with the operation of the battalion aid station, and supervises evacuation and platoon administration. A platoon sergeant supervises the enlisted personnel of the platoon and assists the platoon leader and his assistant in supervising the activities of the platoon.

The battalion aid station section is the first medical installation in the system of evacuation. The section consists of two medical assistants, two senior aidmen, and two medical specialists.

The aidman section consists of 12 medical aidmen. Four aidmen normally support each rifle company. Each rifle platoon receives one aidman and the senior aidman of the four operates the company aid post.

The evacuation section consists of one section sergeant, six ambulance drivers, and six medical aidmen. The principal duties of this section are: to evacuate litter patients from rifle companies to the battalion aid station, administer emergency medical treatment en route to battalion, direct or guide walking wounded to the battalion aid station, and assist in the movement of the aid station.

Augmentation units. Upon special authorization by the Department of the Army or when the battalion is organized as a separate unit, or when duly authorized by the appropriate authority, any or all of the following may be placed in augmenta-

tion: a chaplain section, a personnel section, and a tactical air control party:

Chaplain section. The chaplain section consists of a captain chaplain and one assistant who is also the driver for the chaplain's 1/4-ton vehicle. This section is authorized only when the battalion is organized as a separate unit.

Personnel section. The personnel section is organized to handle the records and pay of personnel assigned to the battalion. The personnel section consists of a record team, a pay team, and a personnel management team. This section will be added to the battalion only when authorized by the appropriate authority.

Tactical air control party. This is a team furnished by the Air Force and assigned to the battalion as augmentation. They provide direction and control of aircraft engaged in close support of ground operations. They also advise the commander of the capabilities and limitations of high performance aircraft and their armament. The tactical air control party consists of two officers, a forward air controller, and an air liaison officer, plus the necessary enlisted personnel, radios, and vehicles.

There are no major organizational differences between the infantry battalion, infantry battalion (mechanized), and the infantry battalion airborne division. The principal differences occur in the strengths of the support elements of the headquarters and headquarters companies and in the equipment authorized in the battalions according to their mission. The mechanized infantry company has a full-tracked personnel carrier for each squad and a maintenance section in the company headquarters.

RIFLE COMPANY

MISSION AND CAPABILITIES

MISSION

The mission of the rifle company is to close with the enemy by means of fire and maneuver in order to destroy or capture him or to repel his assault by fire, close combat, and counterattack.

CAPABILITIES

The rifle company is capable of—

Closing with the enemy by means of fire and maneuver in order to destroy or capture him.

Repelling enemy assault by fire, close combat, and counterattack.

Providing a base of fire and maneuver elements.

Seizing and holding terrain.

Maneuvering in all types of terrain and climatic conditions.

Capitalizing on all forms of mobility.

Conducting parachute operations (airborne infantry), air-mobile operations, and mechanized operations.

Conducting semi-independent patrols ambushes, and raids.

Conducting independent operations for limited periods when suitably reinforced.

Conducting special operations such as amphibious and riverine operations when provided with sufficient means.

Providing limited antitank protection.

Exploiting the effects of nuclear weapons and chemical munitions.

CHARACTERISTICS

Infantry is the arm of close combat. It fights by combining fire, maneuver, and shock effect. It is capable of seizing and holding terrain for extended periods. Because of its versatility, it is capable of fighting under widely varying conditions of terrain, weather, and nuclear availability. The organization, equipment, and training of infantry units permit their use of a variety of techniques to accomplish their mission.

The rifle company is the basic tactical element of the battalion. Its organization and equipment provide it with the necessary means to conduct combat operations. When increased combat power is required for specific tasks, the company is capable of receiving and controlling additional combat and combat support elements. When suitably reinforced, the rifle company is capable of independent operations for limited periods. While the mobility of the rifle company, infantry, airborne infantry and light infantry battalions is that of the dismounted soldier, the company can adapt to other forms of mobility with the provision of armored personnel carriers, trucks, and aircraft. The rifle company is completely air transportable in helicopters, medium assault aircraft, or medium transport aircraft. The rifle company, mechanized infantry battalion, is completely mobile. It is air transportable in helicopters, medium assault aircraft, or medium transport aircraft less its heavier equipment.

ORGANIZATION AND DUTIES

ORGANIZATION

General. The rifle company consists of a company headquarters, three rifle platoons, and a mortar platoon (fig 25).

Company Headquarters. Personnel of company headquarters infantry, and airborne infantry rifle companies, include those who command or directly assist the commander, and those who

provide combat service support. The former normally includes the company commander, executive officer, first sergeant, communications chief, radiotelephone operators, and wiremen. The latter normally includes the supply sergeant, armorer, and supply and company clerk. The company headquarters of the mechanized infantry rifle company differs in that—

A maintenance section, consisting of 11 men, is part of the company headquarters.

No field wiremen are assigned.

A tracked recovery vehicle is in the maintenance section.

There is only one 1/4-ton truck with trailer in the company headquarters.

Rifle Platoon. The rifle platoon of the infantry company consists of a platoon headquarters, three rifle squads, and a weapons squad. The platoon headquarters consists of a platoon leader, platoon sergeant, and a radiotelephone operator. Each rifle squad consists of a squad leader and two fire teams which are designated ALFA and BRAVO. Each fire team has a fire team leader, an automatic rifleman, a grenadier, and either one or two riflemen. The weapons squad has a squad leader, two machinegunners, two assistant machinegunners, two antitank gunners, two assistant antitank gunners, and two ammunition bearers.

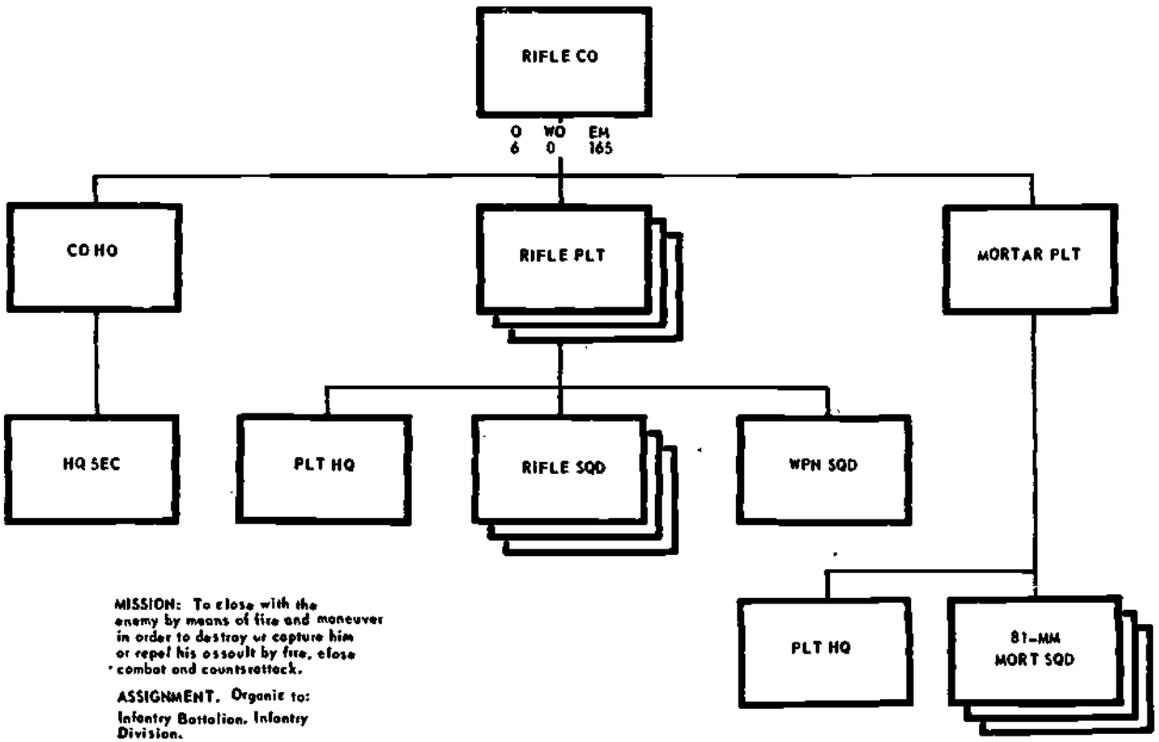
The rifle platoon of the mechanized rifle company is generally the same; however, there is one additional rifleman in each rifle squad who functions as the armored personnel carrier driver, and in the weapons squad one ammunition bearer is designated the armored personnel carrier driver. Each squad is equipped with an armored personnel carrier.

Mortar Platoon. The mortar platoon of the rifle company consists of a platoon headquarters and three mortar squads. In the platoon headquarters are the platoon leader, platoon sergeant, forward observers, fire direction computers, and radiotelephone operators. Each of the mortar squads contains a squad leader, gunner, assistant gunner, and two ammunition bearers. In the mechanized rifle company, one ammunition bearer is assigned the additional duty of an armored personnel carrier driver.

DUTIES OF COMPANY HEADQUARTERS PERSONNEL

Company Commander. The company commander is responsible for what his company does or fails to do. He is responsible for the training, maintenance, discipline, control, tactical employment, administration, and welfare of his company and for all aspects of its performance in garrison and in combat.

He meets his responsibilities by planning, by timely decisions



MISSION: To close with the enemy by means of fire and maneuver in order to destroy or capture him or repel his assault by fire, close combat and counterattack.

ASSIGNMENT. Organic to:

Infantry Battalion. Infantry Division.

Infantry Battalion. Separate Infantry Brigade.

Figure 25. Rifle company.

and orders, and by personal supervision. His professional knowledge must include a thorough understanding of the tactical employment of the rifle company, the technical capabilities and limitations of organic weapons, and the use, capabilities, and limitations of other arms and services that may be associated with the company in combat.

The company commander exercises command through his platoon leaders and first sergeant. Within guidance set forth by higher headquarters, he establishes policies and standards for the company. By formal and informal inspections, he insures that his policies and standards are executed or properly attained.

The company commander trains his subordinate leaders and uses them to the maximum in accomplishing his mission. He supervises the performance of those under his command and takes positive action to correct any deficiencies. He strives to develop in his subordinate leaders such qualities as initiative, self-reliance, ingenuity, and professional competence by furnishing guidance and then allowing them maximum freedom of action in performing their assigned tasks.

In combat, the company commander makes decisions on the tactical employment of his unit based on orders from higher headquarters and on his estimate of the situation. He keeps informed of the situation at all times. He goes where he can best influence the action of his company. When a situation exists which is beyond the capability of his unit, he requests assistance from higher headquarters. In the absence of orders, he makes decisions for the employment of the company based on his understanding of the overall mission and on his estimate of the situation.

The company commander is responsible for the combat effectiveness of his unit and the personal well-being of the individuals under his command. The company commander, by his personal actions and by directing and supervising his subordinate leaders, insures that a continuous and effective effort is made to attain the highest possible standard in these matters.

Executive Officer. The executive officer performs duties assigned to him by the company commander. He keeps abreast of the tactical situation and assumes command of the company in the absence of the company commander. He is in charge of the operations of the command post and insures communication with elements of the company, battalion, adjacent companies, and supporting units. He notifies appropriate units of changes in the command post's location. He controls the movement of administrative vehicles within the company area and supervises the supply

of ammunition to the platoons. He supervises company administration, supply, and service.

First Sergeant. The first sergeant assists the company commander by performing assigned duties including the supervision of training, administration, mess, supply, and maintenance activities. He makes recommendations to the company commander on such items as appointments, reductions, assignments, and disciplinary matters as they pertain to the enlisted members of the company. He assists the executive officer and represents him when he is temporarily absent from the command post.

Communications Chief. The communications chief supervises the installation and operation of the company communications system and assists in procuring signal supplies. He coordinates with the maintenance section leader on matters concerning organizational signal maintenance. He advises the company commander on matters pertaining to communication security, and he disseminates appropriate information from current communication orders (signal operation instruction extracts and standing signal instructions). He supervises the radio mechanics, radiotelephone operators, and wiremen in the performance of their communication duties. He conducts communication training as directed by the company commander.

Radiotelephone operators. The two radiotelephone operators operate the radios of company headquarters and perform first echelon maintenance on the company's radio equipment. They are trained to operate all the company's communication equipment. The radiotelephone operators are also light truck drivers. In the mechanized infantry rifle company, the APC driver is also a radiotelephone operator.

Radio Mechanic. He makes minor repairs on company radio equipment.

Wiremen. The two wiremen install and maintain the company wire system, assisted by other personnel as necessary. They are trained to operate all of the company's communication equipment. There are no wiremen in the mechanized infantry rifle company.

Supply Sergeant. The supply sergeant requests, receives, issues, stores, maintains, and turns in supplies and equipment for the company in accordance with current regulations and policies. Under the supervision of the company commander or his designated representative, he prepares and maintains required supply records.

Armorer. The armorer makes minor repairs on the weapons of the company. He is supervised by and assists the supply sergeant.

Company Clerk. The company clerk performs necessary clerical duties under the supervision of the first sergeant. He also delivers incoming mail and collects and processes outgoing mail.

Supply Clerk. The supply clerk assists the supply sergeant in the performance of his duty.

Maintenance Section Personnel (Mechanized Rifle Company). The maintenance section is composed of a motor sergeant (section leader), tracked vehicle mechanics, recovery mechanics, and a radio mechanic. Vehicles authorized are: one 2 1/2-ton truck with trailer, one 3/4-ton truck with trailer, and one tracked recovery vehicle. The company maintenance section has the primary function of keeping all company vehicles, and communication equipment operating at maximum efficiency. Vehicles requiring more extensive repairs than the maintenance section can accomplish are turned over to the battalion maintenance platoon. The motor sergeant supervises company organizational maintenance, is in charge of the company reserve of repair parts, and keeps records on all scheduled maintenance.

DUTIES OF RIFLE PLATOON LEADER

The platoon leader commands his platoon and is responsible for the discipline, training, welfare, control, and tactical employment of his platoon. In addition, he is responsible for all equipment issued to his platoon.

DUTIES OF MORTAR PLATOON PERSONNEL

Platoon Headquarters.

Platoon leader. The mortar platoon leader is responsible for the discipline, training, welfare, morale, control, equipment, maintenance, and the tactical employment of his platoon. He is responsible for preparing the company fire plan. He works closely with the field artillery forward observer, mortar observers, and the attached and organic element leaders in fire support planning and coordination.

Platoon sergeant. The platoon sergeant assists in the control of the platoon and supervises ammunition resupply, feeding, and the use of the platoon transportation. He assumes command of the platoon in the absence of the platoon leader. Based on instructions from the platoon leader, he may control the tactical em-

ployment of the mortar squads to include selection of firing positions, fire control, and displacement.

Forward observer. The forward observer relays information for adjustment of the fire of the company mortar squads and, when required, the fire of supporting artillery and battalion mortar units.

Fire direction computers. The fire direction computers in the fire direction center (FDC) prepare the necessary firing data for the mortars.

Radiotelephone operator. The radiotelephone operator operates and performs user maintenance on the communications equipment in platoon headquarters. He is also a light truck driver.

Mortar Squad.

Squad leader. The mortar squad leader is responsible for the discipline, training, welfare, morale, control, and (based on instructions of the platoon leader) tactical employment of his squad. Specifically, he selects exact firing positions for his squad, controls its fire, and supervises displacement.

Gunner. The gunner places firing data on the sight and lays the mortar for elevation and deflection and makes the safety checks.

Assistant gunner. The assistant gunner checks the barrel for cleanliness, assists the gunner in laying the mortar, and loads the mortar.

Ammunition bearer. The ammunition bearer prepares the ammunition for firing and passes it to the assistant gunner. Additionally, he alines the aiming posts under the direction of the gunner.

Ammunition bearer/driver. The ammunition bearer/driver assists in emplacing the mortar, maintaining the ammunition supply for firing. He drives the squad vehicle.

COMBAT SUPPORT COMPANY

GENERAL

The combat support company, organic to infantry battalions, provides the battalion a major source of responsive combat power. Its mission is to provide reconnaissance, ground surveillance, indirect fire support, antiarmor support, and limited air defense support to the battalion. To accomplish this mission the combat support company is organized as follows:

Company headquarters.
Reconnaissance or scout platoon.
Heavy mortar or mortar platoon.
Antitank platoon.
Ground surveillance section.
Redeye section (air defense).

The above organization gives the infantry battalion the capability to perform ground radar surveillance and reconnaissance, to provide for its own antitank and mortar support, and to conduct limited air defense against hostile aircraft (fig 26).

COMPANY ELEMENTS

Company Headquarters. The company headquarters includes the command and control, communications, administrative, and supply personnel. The company commander recommends the employment of his organic platoons and additionally performs other duties as directed by the battalion commander; e.g., manning an alternate command post or operating a task force headquarters.

Reconnaissance or Scout Platoon. This platoon is called a *reconnaissance* platoon in light infantry and airborne battalions; it is called a *scout* platoon in the infantry, airmobile infantry, and mechanized infantry battalions. (For convenience of discussion, it is referred to as a scout platoon.) The scout platoon of the infantry battalion conducts reconnaissance and security missions for the battalion. It has a limited capability for offensive, defensive, and retrograde actions. The platoon normally operates under the staff supervision of the S2 for reconnaissance missions and the S3 for all other missions, including security.

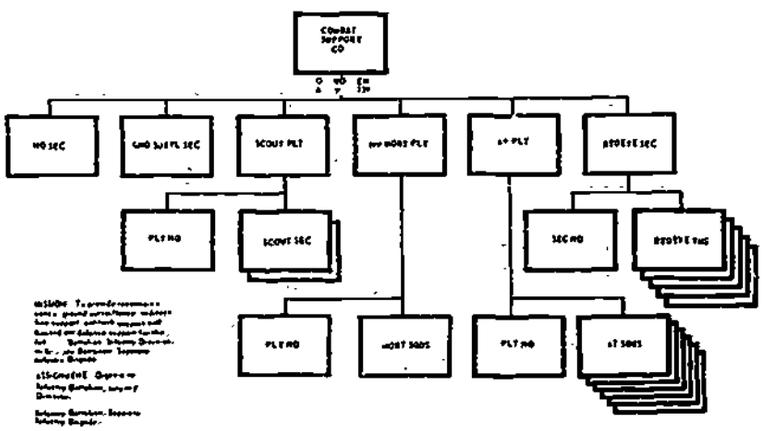


Figure 26. The combat support company.

Heavy Mortar or Mortar Platoon. This platoon is called a *heavy mortar* platoon in the infantry and mechanized infantry battalions; it is called a *mortar* platoon in the airborne infantry, airmobile infantry, and light infantry battalions. For convenience of discussion, it is referred to as a mortar platoon.

The battalion mortar platoon can provide a heavy volume of accurate and sustained fire on a close and continuous basis. The platoon may be employed to neutralize or destroy area or point targets, to screen large areas with smoke for sustained periods, to provide illumination, or when equipped with heavy mortars to attack targets with chemical fires. It is capable of firing from concealed and covered positions and engaging targets in defilade.

The mortar platoon normally is employed in general support and positioned where its squads can best support the main attack (in the offense) or cover the most probable enemy avenue of approach (in the defense). Direct support and attachment are the least desirable methods of employing the mortar platoon and are used infrequently in defensive operations. During airborne or airmobile operations, control of the mortar squads may be decentralized during the early stages of the assault. Centralized control is established as soon as possible.

Priority of fires is usually given in the main attack or to the company positioned on the most probable avenue of approach. Mortar fires are planned and integrated with those of the supporting artillery. Forward observer teams are normally allocated to each rifle company. In the defense, mortar and field artillery forward observer teams normally accompany combat outpost forces, as do artillery forward observer teams.

In the mechanized infantry battalion, the mortars are normally fired from mechanized infantry vehicles; however, sometimes they are fired from ground positions. On-carrier firing permits rapid displacement and minimum reaction time in moving situations. In the infantry, airborne, airmobile, and light infantry battalions, displacement and reaction time are normally greater in moving situations since cross-country mobility is limited (unless Army aviation is used for displacement).

Antitank Platoon. The primary mission of the antitank platoon is to provide assault-antitank fire support for the battalion. Its secondary mission is to provide other forms of fire support.

Depending on the situation, the elements of the platoon may be employed in general support, direct support, or an attached role. The platoon's mobility and communications enable it, or elements of it, to respond readily to tank threats throughout the battalion area.

The platoon's primary target is enemy armor. Lacking such

targets, it may engage bunkers, observation posts, vehicles, crew-served weapons, and similar targets in an assault fire role, provided this does not interfere with accomplishment of its antitank role.

Ground Surveillance Section. The mission of the ground surveillance section is to provide ground radar surveillance for the infantry battalion.

The section is capable of performing a wide variety of tactical functions in support of the battalion's mission; it may participate in offense, defense, retrograde, or other tactical operations by monitoring point targets, searching enemy positions and possible avenues of approach, and assisting in control of units during periods of reduced visibility.

The ground surveillance section is commanded by the section sergeant who is responsible for the section's training, control, tactical employment, and supply. He recommends methods of employment of the section to the battalion S2 who exercises staff supervision over the section.

Redeye Section. The mission of the Redeye section is to provide defense against low-flying enemy aircraft.

The air defense section may be employed in general support of the battalion or in direct support of specific subordinate elements, or in a combination of the two methods.

The air defense section is commanded by the section leader, who is responsible for the training, tactical employment, and supply of the section. The section leader serves as a battalion special staff officer (air defense officer).

LARGER UNITS

THE CORPS

The corps is a highly flexible force larger than a division and smaller than an army. It is generally a tactical (not administrative) unit, but may adapt itself to the administrative role on separate missions.

A corps consists of a corps headquarters and headquarters company, certain organic elements designated as corps troops, and a variable number of divisions. This organization depends on the corps mission, the terrain, and the enemy situation. The number of divisions and units of other services are attached as required.

FIELD ARMY

Like the corps, the field army consists of the number of combat and supporting units required by the situation. While the corps, which is smaller than the field army, is a tactical grouping of

divisions and supporting units, the field army is *both* a tactical and administrative organization.

ARMY GROUP

This is the next command larger than the field army and is the largest *field* organization under a single commander. It may consist of as many as a million men. The army group headquarters exists primarily to provide tactical control and coordination for its subordinate elements. The army group commander controls the operations of the armies placed under his command. During World War II, three United States Army Groups were employed to control eight field armies in France and Germany.

THEATER COMMANDS

Theater commands are provided to command all the forces of the United States in an oversea area or theater of operations. Normally these are joint commands and include forces of the Navy and Air Force in addition to those of the Army. These theater or area commands have no prescribed strength. The United States Army element may consist of as little as a division or as much as several army groups. The strength of a theater command depends upon its mission and the situation. Theater commands provide facilities for tactical control and operation, as well as facilities for administrative and supply support for all forces in the theater.

CHAPTER 8

SPECIALIZED AREAS

ARMY AVIATION

While firmly rooted to its traditional role as a ground fighting force, today's Army looks increasingly to the air for major improvements in two vital battlefield requirements: mobility and surveillance. Army aviation is neither "another Air Force," nor a special branch of the Army. More than anything else, it is a trend toward an airminded and airmobile Army in an era when a division will be expected to cover in combat at least three times as much ground as in the past.

The present concepts of warfare call for the rapid dispersal of troops to positions 5 to 10 to even 50 miles apart to avoid large concentrations of men and equipment which could be wiped out by the powerful nuclear weapons of today. These scattered units must be held together by a well-informed command, have the ability to mass quickly to gain superiority of force, then again disperse to deny the enemy a big target. On such a battlefield, there would be gaps which could be penetrated by the enemy. Only aircraft could cover those gaps effectively. And only the light, rugged planes and helicopters of Army aviation, operating just above the treetops or near other natural cover, would be elusive and versatile enough to effectively and swiftly fill such gaps.

The officers who fly Army aircraft must maintain their proficiency as ground officers or specialists in addition to keeping up their flying qualifications. To keep up with ever more complex aircraft and increasingly stringent instrument checkouts, they must work hard at their flying jobs. Yet, each must also qualify in his basic branch.

Army aviation is not an official branch such as infantry, ordnance, and the others. However, it functions in a manner similar to a branch. Officers assigned to Army aviation are still commissioned in the basic branches and are detailed for a period of time into the program. The Army Aviation Center is located at Fort Rucker, Alabama.

AIRBORNE

Airborne operations are another of the Army's contributions to modern warfare. The Russians were the first to introduce airborne troops into warfare. The Germans developed airborne operations to a stage where airborne troops were first successfully used in conjunction with ground operations. But it was the American Army, more than any other, that developed the principles of large-scale airborne operations. On three separate occasions during World War II, the Army dropped an airborne corps behind enemy lines—in Normandy, Holland, and Germany.

The importance of airborne operations was probably never more pointedly brought out than in the conquest of the Philippine Islands by American forces in 1944. Airborne regiments were dropped three times during this campaign. The outstanding example of the use of airborne troops was the capture of Corregidor Island. The American forces desperately needed the harbor of Manila so that US ships could unload the supplies needed by the troops on Luzon. But to get into the harbor, the fortified island of Corregidor, which effectively guarded the harbor entrance, had to be captured. To capture the island by amphibious landings, though not impossible, would have entailed heavy casualties. It was decided, therefore, to drop the parachute troops of an airborne infantry regiment. Five days after the paratroopers made their jump the island was secured and the harbor was open. It had taken the Japanese 6 months to capture Corregidor from the Americans in 1942.

The largest airborne assault in World War II was executed by the First Allied Airborne Army, which contained formations of both air and ground units. This command conducted the operation in Holland in September 1944. Aircraft flew 5,582 sorties to deliver 2,557 gliders and 34,876 glider-borne troops and parachute troops and their equipment. A study of historical accounts leads to the conclusion that airborne operations played a significant part in the overall campaign in World War II. There is no doubt that airborne units achieved an *esprit de corps* seldom equaled by other units.

The first concentrated study on airborne operations was directed in October 1918 by General John J. Pershing after Brigadier General "Billy" Mitchell recommended that bombers be sent behind German lines to drop parachutists to attack the fortress of Metz from the rear. This plan was canceled when the Armistice ended combat operations. It was left for the next generation to develop airborne warfare in World War II.

In January 1940 the Army launched a study to determine the feasibility of airborne infantry and the practicability of trans-

portation by air of all types of ground troops and equipment included in an infantry division. A test platoon was organized and in August 1940 this platoon made a parachute jump from a B–18 bomber.

In 1942, the United States Army activated the Airborne Command, several parachute regiments and battalions, and two divisions. During 1942 to 1943, air and ground officers applied themselves to insure the training that permitted the later commitment of airborne forces in major operations. As a result of these efforts, the proficiency demanded of parachute, airlanded, and troop carrier units working in conjunction was attained.

The mission of airborne units is to seize objectives in enemy territory by means of assault parachute landings. In basic terms, an airborne operation is a commitment of forces by air transportation. The lift capacity, speed, and the independence of surface obstacles permit a surprise concentration at selected objectives beyond the reach of other land forces. The development of airborne techniques has permitted the assault delivery of mass forces capable of organized combat within moments following the passage of aircraft over the objective. Individuals can engage the enemy in a matter of minutes after jumping from an aircraft.

In an airborne operation the division cannot support itself for a long period of time. Supplies must be dropped or there must be a rapid linkup with friendly ground troops. On the ground the airborne division employs the same tactics as does the infantry division. The major elements of the airborne division are the same as those of the infantry division.

Ground combat training of airborne units is not much different from that of other troops. Physical fitness is stressed. The individual parachutist is given a basic jump training course and is declared qualified after a minimum number of jumps. Upon completion of this training, the new parachutists, ranging in grade from private to general, are usually sent directly to airborne units for assignment.

AIRMOBILE OPERATIONS

In 1965 the 1st Cavalry Division (Airmobile) was organized at Fort Benning, Georgia. It was the first new type division in the Army since the creation of the airborne and armor divisions of World War II.

The US Army pioneered the concept and has proved its usefulness in Vietnam operations.

Although this type organization has been of great value in Vietnam, it was not originated specifically for that conflict. The

airmobility concept was conceived for use in every phase of land warfare, from limited conflicts to nuclear wars.

The employment of the helicopter is another means of moving the soldier quickly into combat, overcoming terrain obstacles and using the element of surprise.

Airmobile units use their own or attached Army aviation for movement and fire support. Airmobility and precise timing enable fresh troops to be placed on the objective immediately upon the lifting of artillery fires. Operations are based upon and have as their aim the location and destruction of enemy forces rather than the seizure and retention of ground areas. The constant threat of airmobile operations forces the enemy to allocate combat forces to protect this rear area, supporting units, and installations.

RANGER

The history of the American Ranger is a long and colorful saga of courage, daring, and outstanding leadership. It was written by men whose skills in the art of fighting have seldom been excelled. Ranger history began in 1756, when Major Robert Rogers organized companies of colonial American frontiersmen to provide scouts for the British Army. The high proficiency in marksmanship, field craft, and forest fighting of these frontiersmen, the first Rangers, contributed materially to England's success in the French and Indian War.

Ranger-type units—Daniel Morgan's Riflemen and Marion's Rangers—helped win our independence in the Revolutionary War. Confederate ranger-type units—Mosby's Rangers and John Morgan's Raiders—conducted hit-and-run operations against the Union forces in the Civil War.

During World War II, six Ranger Battalions were organized. Five battalions participated in campaigns in Africa and Europe. The Sixth Ranger Battalion assisted in the liberation of the Philippines. All had been deactivated by the end of the war in 1945.

Ranger units appeared again during the Korean War, this time as Airborne Ranger companies. After a year of operation, the Airborne Ranger companies were deactivated and Ranger training became individual, rather than unit, training. Graduates were returned to their units, rather than being assigned to special units. This permitted the entire Army to profit from the specialized training received by Ranger students.

The United States Army Ranger Course is conducted in three phases. The first phase, at Fort Benning, Georgia, physically hardens the student and reviews basic skills. The second and

third phases are conducted in the Blue Ridge Mountains near Dahlonega, Georgia, and the swampy areas of Eglin Air Force Base, Florida. In the Mountain and Florida phases, the Ranger students are confronted with the ultimate in "do-it-yourself." They are placed in continuing situations requiring the most diligent application of past instruction, concurrent with the absorption and application of instruction then being presented. Logical thinking under adverse conditions of physical and mental stress and fatigue is demanded.

The Ranger Course is designed to prepare the student to be a skilled, aggressive combat leader in any environmental extreme. It is the closest possible simulation of actual combat.

SPECIAL FORCES

The only organization in the United States military establishment that is specifically organized and trained to direct and conduct guerrilla warfare activities and to conduct and direct counterguerrilla warfare activities as part of a complete counterinsurgency program is the Special Forces Group (airborne). Special forces was initially the outgrowth of the experiences gained in guerrilla warfare by the Office of Strategic Services (OSS), during World War II.

The mission of the special forces soldier is to advise, train, and assist indigenous forces in counterinsurgency operations; and in addition, to develop, organize, equip, train, and direct indigenous forces in the conduct of guerrilla warfare. Special forces can assist in training military personnel in combating guerrilla and terrorist activities and subversion. In addition, they may train foreign military personnel in the techniques of guerrilla warfare, thus enhancing the defense capability of the nation concerned. This, then, is the cold war mission. In a hot war, special forces units are responsible for the conduct of all unconventional warfare activities within a guerrilla warfare operational area and may be called upon to perform other tasks associated with or in support of guerrilla warfare.

The major components of the special forces group are the headquarters company and the four special forces companies. The special forces group can be augmented by intelligence specialists and also by support or service units within a friendly territory, thus establishing a special forces operational base.

Until recently, only those officers who volunteered were accepted for special forces. The present policy now permits the assignment of officers to special forces on a nonvoluntary basis, when such assignment is required to fill vacancies.

PART TWO

US MILITARY HISTORY: THE ARMY HELPS BUILD A NATION

CHAPTER 9

THE REVOLUTIONARY WAR

INTRODUCTION

The subject matter contained in this part of the manual is not intended as a complete discourse on American military history and should not be regarded as such. It is a brief presentation of the accomplishments of the American Army with emphasis on the fighting man. By selected examples it tells how the American soldier has established traditions of service through courage and devotion to duty in meeting and defeating the enemy wherever the security of this Nation has been threatened. It is a factual account of brave soldiers who have faced danger and sacrifice, often above and beyond the call of duty, to keep this Nation a free land. This account is a portion of the heritage of American youth to remind them that freedom did not come easily and to challenge them to raise even higher the distinctive and honored banners of the American Army.

THE FIRST YEAR

American colonists rose in revolt against Great Britian in April 1775. Late in the night of 18 April about 700 British troops marched from Boston to seize and destroy military supplies stored at Concord, 20 miles away. But Paul Revere and William Dawes got the signal, and rode their horses through the night, along separate ways, to warn the countryside that the British were coming. At Lexington, the King's troops found a small force of Minutemen drawn up on the village green. The British commander ordered the "rebels" to disperse. Some unknown soldier fired a shot, "the shot heard around the world," and then British bullets ripped through the small band of patriots, killing eight and wounding ten others (fig 27).

Figure 27. The Battle of Concord.

The Redcoats continued to Concord where they destroyed such of the military supplies as they could find. But, when they retraced their long march along the hot, dusty road, Minutemen and alarm companies kept up a deadly fire on the British from behind trees and fences. When they reached the safety of their positions near Boston, the British had lost about 273 men. Militia and volunteers from all of New England rallied to join the Massachusetts colonists in a siege of Boston.

News of Lexington and Concord electrified the colonies. Men left their accustomed tasks of keeping the store and plowing the fields to take up arms to strike a blow for freedom.

In South Carolina two infantry regiments were formed clad in blue with silver half moons on the front of their caps. In Virginia, Patrick Henry—who earlier had made the speech in which he said, "Give me liberty, or give me death!"—assembled 300 men from various parts of Virginia at Culpeper Court House in July with whom he marched to Williamsburg to protect the Virginia colonists' convention. The Minutemen from Culpeper County, as a part of their rustic, homemade uniforms wore green hunting shirts which had big white letters across the front: "Liberty or Death."

The Continental Congress now recognized that all the colonies were in for war. On 14 June it provided for a "Continental Army"—the beginning of a regular force serving the whole Nation rather than individual states—and on the next day it chose George Washington to be commander in chief.

During the night of 16 June, Americans fortified a position in front of Bunker Hill, across the bay from Boston. The next day British warships bombarded them, and the Colonials watched redcoats forming for an attack straight up the hill. Colonel Israel Putnam passed the word along, "Boys, don't shoot till you can see the whites of their eyes." Twice the British advanced with parade-ground precision up the slope. Twice the Colonials held their fire till the last minute, and then poured it on. The British fell back and formed for a third assault. But the Americans ran out of ammunition, and had to give up the hill after losing 400 men. The British took the hill, but in doing so they lost more than 1,000 men out of a force of about 2,200.

On 3 July Washington assumed command of the poorly trained troops around Boston who were maintaining a siege against Boston, blocking all roads, while the British garrison simply held on, awaiting the arrival of replacements from England. Washington could not attack the city, as he was desperately short of both powder and cannon, although he realized that unless he did so prior to the arrival of British replacementa, the margin for victory was extremely slim.

Congress and the individual Colonies sponsored voyages to the West Indies to obtain war materials from the French and Dutch. Washington put some of his troops on board ship and this improvised Navy succeeded in capturing numerous British supply ships. He also sent Colonel Henry Knox, later to become his chief of Artillery, westward to Fort Ticonderoga in upper New York, which had been seized by Colonel Ethan Allen's Green Mountain Boys in May 1775 (fig 28), to haul to Cambridge the powder and cannon which had fallen into the hands of the Americans at that time. Through the bitter winter weather Knox marched through the snowbound countryside from Ticonderoga to Cambridge with powder and over 50 cannon.

On 4 March 1776, a force of American infantry and artillery took Dorchester Heights, from which position their cannon could dominate Boston. Recognizing that the situation was hopeless, the British evacuated Boston on St. Patrick's Day, 1776. Driving the enemy from Boston was a real victory for the Americans, but long, dark days lay ahead before final victory could be won.

While Washington was winning the victory at Boston, other American forces attempted to seize Quebec in the north and repulsed a British attempt to take Charleston in the south. The

Figure 28. Capture of Fort Ticonderoga.

gallant but unsuccessful attempt to take Quebec was made by two columns; one under General Montgomery advanced from Ticonderoga along the St. Lawrence River while the other under Colonel Benedict Arnold went from Boston through the wild and difficult Kennebec River Valley. A desperate attack against Quebec on the night of 30–31 December failed. General Montgomery was killed and Arnold wounded. But Colonel Arnold would not retreat and besieged Quebec until his small force, now outnumbered by the reinforced British he was besieging, was driven back to the head of Lake Champlain in June 1776 (fig 29). The successful American defense of Charleston was made in late June 1776 when a British fleet accompanied by an army under General Clinton was repulsed and severely damaged by the fire of the American batteries under Colonel Moultrie at Fort Sullivan where the gallant Sergeant William Jasper in the midst of an iron hail of cannonballs from the whole British fleet replaced the crescent colors of South Carolina on the walls of the fort after they had been shot down.

LONG ISLAND TO PRINCETON

With the evacuation of Boston, the attention of both Washington and Howe shifted to New York. Both recognized that it was a position offering the British the greatest strategic advantage. If the British held New York, they could advance up the Hudson River and join forces with their troops driving down from Canada and divide the New England colonies from those to the south, or they could advance against the seat of the Continental Congress in Philadelphia. With these considerations in mind, in April and May 1776, Washington brought most of his army, 10,000 men, down from Boston to New York.

In July, the Continental Congress made the decision which turned the colonists' rebellion into a war for independence. It issued the Declaration which summed up the grievances against

Figure 29. Benedict Arnold's tiny squadron was destroyed by the British.

the Crown and closed with this pledge: "And for the support of this declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honors." Now it was up to the Army to make that Declaration of Independence stick.

Some two and one-half months after Washington had reached New York, a British force of 32,000 well-trained regulars under command of General Howe, supported by a strong British fleet under the general's brother Admiral Howe, began to land on undefended Staten Island. By dint of the efforts of Congress and the neighboring states, the force Washington brought from Boston was raised to 26,000 men by late August 1776 when the battle of Long Island began. Most of the men were militia or recently enlisted Continentals who had not been exposed to the discipline and training given the previous year before Boston.

With the British encamped only a few miles away on Staten Island and able to move by sea at will, the possibility existed of an attack either on the city of New York on Manhattan Island or on Long Island, where Brooklyn Heights stood in a position dominating the southern tip of Manhattan Island. Washington decided he must defend Brooklyn Heights if he was to defend Manhattan. He divided his army and sent 10,000 men to occupy a fortification on Brooklyn Heights and in forward positions back of a line of thickly wooded hills that ran across the southern end of the island.

The British chose to attack Brooklyn Heights; there at the Battle of Long Island by an excellently executed turning movement, whose success was achieved by the fact that the Americans had neglected to guard a vital road through the woods, they handed Washington a thumping defeat. The Continentals were forced to evacuate Long Island and took up positions on Manhattan Island and the mainland to the north. The British landed on Manhattan in mid-September and in a series of actions during October and November drove Washington's army across the Hudson into New Jersey. Washington now gathered the remnants of his force and began a rapid retreat through bitter winter weather across New Jersey with Howe's advance force under General Cornwallis in rapid pursuit. With each step in the withdrawal, more and more men left the Army, and Washington in early December with only about 3,000 got across the Delaware River just as Cornwallis was arriving in Trenton. Cornwallis was unable to follow farther as the Americans had all available boats on the other side of the river. But winter was approaching and General Howe decided that the time for active campaigning was at an end. Instead of continuing the pursuit of

Washington, Howe ordered his men into winter quarters in New Jersey and New York, and sent a detachment to take Newport in Rhode Island, confident that he could shatter the small remaining rebel force with one blow in the spring. Washington's little force could now pause for a while. With little to show but a record of defeat and retreat, even Washington wrote, "If every nerve is not strained to recruit a new army, I think the game is pretty nearly up."

Washington saw that only by reawakening the spirit of the Army and of the people by some spectacular stroke could he hope to check the tide of despair and confusion that was sweeping the American states. Looking over the possibilities, he decided to concentrate all the troops available and strike a blow at the British before the end of December. The British had scattered their troops in winter quarters in a chain of posts on a line from Staten Island to Princeton. A force of about 1,400 Hessians—Germans whom George III, the British King, had hired to help the British—were quartered in Trenton across the Delaware River and Washington guessed that they would be celebrating through Christmas night. Washington decided to surprise the garrison at Trenton by an attack to be delivered from two directions one hour before dawn on 26 December 1776 (fig 30).

In the evening as the troops prepared to embark, a cold wind sprang up and it began to snow. Colonel Glover's regiment of hardy fishermen from Marblehead got the boats ready and late Christmas night they shoved off. Washington's men got across, despite the large cakes of ice in the river. While the Americans

Figure 30. The Battle of Trenton.

marched nine miles through a storm of hail and rain which froze upon their clothes, the Hessians slept in their warm quarters after a night of celebration in Trenton. At 8 in the morning, later than had been planned, the ragged, half-frozen Americans arrived at the edge of town. Hessian sentries gave the alarm too late, for before the rest of the soldiery could be roused and formed in line of battle the two American columns closed in on them from both ends of town.

At the head of King Street, Captain Alexander Hamilton's Company of Artillery raked the icy street and broke up a Hessian counterattack. (Today Hamilton's company is the Headquarters and Headquarters Battery, 1st Battalion, 5th Artillery, the oldest unit in the Regular Army, and the only Regular Army unit showing battle credits for the Revolutionary War on its organizational color.) Two Hessian guns were brought up and opened fire, but the gunners fell under the fire of the Americans. A force of Virginians led by Captain William Washington and Lieutenant James Monroe charged the Hessians, drove them back, and captured both Hessian guns. Both officers were wounded but both would continue to fight and distinguish themselves even more—Captain Washington as a colonel of a corps of cavalry and young Monroe as the 5th President of the United States.

The Hessian commander tried to rally his troops and was killed. Now the Americans were sweeping the Hessian mercenaries before them. Wherever the enemy turned, they found American bayonets and cannon blocking the way. Within an hour and a half after the attack began, the Hessians surrendered. Only 400 were able to escape, 30 were killed, and the prisoner count was 918. The Americans lost only 4 killed—2 from freezing—and 4 wounded. Washington and his troops, taking with them the captured Hessians and military supplies, recrossed the Delaware to their encampments.

Leaving three regiments to guard his base at Princeton, Cornwallis marched the rest of his British troops toward Trenton. The Americans dug in behind a small creek, and Cornwallis waited till the next morning to attack. Posting a few men to keep fires going all night to deceive the British, Washington gathered his Army and slipped out. It marched around the British, and headed for Princeton. Nearing that British base, the Americans met two of the British regiments which had been left behind but who were then on their way to join Cornwallis at Trenton. The British opened fire, and at first the Americans fell back. But Washington rode up to rally them, and they moved forward. One British regiment fled southward to join Cornwallis. The Continentals drove the other ahead of them to Princeton. There still

was another British regiment there, but that was not enough to stop the Americans who drove right on through the town. With the British in New Jersey scattered, Washington led his exhausted men to the vicinity of Morristown, where they went into camp for the rest of the winter.

SARATOGA, VALLEY FORGE, AND STONY POINT

During the summer of 1777, a new danger appeared in the north. General Burgoyne was marching with a strong British force from Canada to the Hudson River Valley. At the same time a smaller British force under St. Leger was marching eastward down the Mohawk Valley with the intent of meeting Burgoyne near Albany. Americans checked St. Leger's column in the Mohawk Valley, but Burgoyne was sure that his force alone could reach Albany and then march down the Hudson to cut the colonies in two. As the threat grew, more New Englanders arrived to join the growing number of New Yorkers with General Gates' American Army in northern New York State.

Washington had organized a regiment of picked riflemen under Daniel Morgan. Now he called in Morgan and told him that he was sending him and his riflemen to join Gates' Army. Morgan's Riflemen hurried northward. But Morgan's first concern was to make sure that every man's rifle was in perfect shape. The rifle was a distinctive American weapon. Its grooved barrel gave the bullet a spinning motion which made it travel farther and much straighter. Morgan stopped at Bethlehem, Pennsylvania, to have Daniel Kleist, expert gunsmith, examine every man's rifle and put it in perfect condition.

A few miles from Saratoga, the Americans dug in on Bemis Heights, along the Hudson River. The British arrived on 19 September. As they approached, Morgan's Riflemen advanced on the left in a long broken line through the woods on Freeman's Farm. Imitating wild turkey calls to signal their positions, these sharpshooters took cover behind trees and fences and fired down the British ranks. For 4 hours the marksmen kept the British in confusion, and only the arrival of British cannon saved them from rout. The Americans returned to their lines that night while the British began digging in around Freeman's Farm.

The opposing armies jockeyed for position during the next weeks, but the American strength was growing. Burgoyne saw that his British Army was being hemmed in. He decided to lead a force of 1,500 men, which included Generals Philips, Riedesel, and Fraser, on 7 October to test the American defenses on Bemis Heights. Gates then sent a message, "Order on Morgan to begin the game." Morgan's Riflemen fanned out again to hit

Figure 31. Burgoyne's defeat.

the British on the left—over almost the same ground where they had fought the previous Battle of Freeman's Farm. Once more wild turkey calls echoed through the woods, as sharpshooters took up positions as skirmishers. Morgan called several of his best marksmen around him. Pointing to the British general he said, "That officer is General Fraser; I admire him, but he must die; our victory depends on it. Take your stations in that clump of bushes, and do your duty." Within 5 minutes General Fraser fell mortally wounded. The British fell back to their lines.

Now far outnumbering the British, the Americans followed when they retreated to Saratoga. The British were nearly surrounded and Burgoyne saw that he was in a tight spot. He sent a message asking him from British forces at New York, but Americans captured the messenger. Nevertheless, a British force did start up the Hudson from New York, but it was too late. Burgoyne surrendered his entire army. After the surrender, Burgoyne met Daniel Morgan. Extending his hand, the British general said, "My dear sir, you command the finest regiment in the world" (fig 31).

The American victory at Saratoga led directly to an alliance with France. It was a turning point in the war, and one of the de-

cisive battles of world history. It was well that Americans had such a victory at Saratoga, for during the next two years there was little else to brighten the dismal picture. Darkest of all was the miserable winter of 1777–78 which Washington's little Continental Army spent at Valley Forge, in Pennsylvania. Yet, in those cold, dark days at Valley Forge, the United States Army had its real beginning.

Washington's men went into Valley Forge in December 1777 a battered, sick, and hungry lot. During the first month, over 2,000 of the men were unfit for duty for lack of shoes and clothing. By February this number was 4,000. Lafayette, a young Frenchman who had offered his services to Washington, commanded a division at Valley Forge. He reported, "Their feet and legs froze until they grew black, and it was often necessary to amputate them." Food was as scarce as clothing. Time after time Washington ordered provisions, but they failed to come. The soldiers' diet was likely to contain little more than "fire-bread" and water, or a gravy of boiled flour and water which they called "bleary," or a sort of hash which they called "lobscouse." Bad food kept many soldiers weakened with diarrhea, or "quickstep" as they called it (fig 33).

Of the number of foreign soldiers who volunteered their services to the American cause, probably none gave more valuable service than did Steuben at Valley Forge. Steuben was a veteran of Frederick the Great's Prussian Army, and now he brought his skill as a drillmaster to Washington's Continentals. When he found no uniform drill regulations, he wrote them. He organized squads and companies and drilled them so that they could teach others. As inspector General of the Army, Steuben insisted on strict camp discipline and sanitation.

Many American soldiers had learned to use a musket or rifle during life on the frontier. Some had had military experience in earlier colonial wars in the service of the British, but most soldiers needed lots of training in fighting as members of a team, and it took practice to learn to reload the musket in a hurry.

Americans were not too fond of the bayonet but Steuben insisted that they learn how to use it. The bayonet gave some protection for a man when the enemy came upon him before he could get his gun reloaded, and it was a valuable weapon for making a charge.

Though not many uniforms were to be found at Valley Forge, Steuben demanded that men be as neat as possible. Blue coats were the favorites, and the Corps of Artillery had blue coats with red linings. Washington knew the moral effect of riflemen against the British and he liked to have ordinary musketeers dye their

clothes butternut brown so they would look like the feared riflemen. Men who had served over three years in the Army "with bravery, fidelity, and good conduct" could wear a "Badge of Distinction"—a strip of white cloth on the left sleeve. A 6-year veteran could add a second stripe. This was a fore-runner of present-day service stripes or "hash marks," and good conduct medals.

From Valley Forge, Allan McLane led his light troops to harass the British; and for their daring raids on British supply columns and loyalists smuggling provisions to the British, they became known as "market stoppers." Later the mounted legions of "Light Horse Harry" Lee and William Washington played an important part in winning victories.

The men who set the tradition for the United States Army were the men who stood fast through the misery of Valley Forge, and came out trained soldiers.

In 1778 the Continental Congress authorized three engineer companies in the Engineer Department, with three companies, and Du Portail, a Frenchman who in 1779 became the Commander of the Corps of Engineers, gave it the corps' motto which it still carries: "Essayons," which means, "Let Us Strive." Under the leadership of Du Portail and the skillful Kosciusko, the Engineers established headquarters at West Point.

Down the Hudson River, a few miles from West Point was Stony Point, another strategic location which, in 1779, remained in British hands. Washington sent General "Mad Anthony" Wayne with 1,350 men to take the place. A marsh separated the point from mainland, and the British had dug works and set up pointed poles against possible attack. Wayne decided to make the attack at night, 16 July, and gave orders that no one should fire a shot. They would rely on the bayonet alone. Wayne divided the force into two columns, and after midnight they stole across the marsh. Wayne's own column attacked the left of the British defenses, while the other attacked the right of the British fortifications. An alarm brought heavy cannon and musket fire, but the two columns charged and killed or captured the entire garrison. Americans had learned well Steuben's lessons on using the bayonet.

THE WAR MOVES SOUTH

The rest of the war belonged to the South. Already bands of horsemen under Francis Marion, "The Swamp Fox," and Thomas Sumter, "The Carolina Game Cock," had harassed the British no end. Now British forces under Cornwallis were trying to knock out the Revolution in the South. Nathaniel Greene, Washington's

Figure 32. General Francis Marion, the "Swamp Fox," crossing the Pee Dee River in South Carolina.

Figure 33. Valley Forge—1777.

best subordinate general, commanded the Army in the South, and though he was outnumbered, he led Cornwallis on a merry chase through the Carolinas (fig 32).

Greene sent Daniel Morgan with a detachment to cooperate with Sumter in harassing the British forces. For his part, Cornwallis, early in January 1781, sent out General Tarleton with a force of infantry and cavalry to destroy Morgan's force. Tarleton tried to set a trap, but Morgan avoided it, and then made a better trap. Morgan prepared for battle on a rolling meadow half cleared of trees, called The Cowpens.

The American force included both militiamen and Continentals. Morgan put his Continentals into a line on the brow of a low hill. He placed the militia well out t . he front of the Continentals and stationed William Washingto cavalry behind the hill. He figured that the poorly trained militia could not stand long, so he told them to fire at least two volleys at "killing distance," and then to fall back to the rear of the Continentals' hill and reorganize.

The British had to march most of the night to get there, but in "eager-beaver fashion" Tarleton attacked at sunrise. The militia opened a killing fire, and then ran for cover as they were told. The British thought they had the whole Army on the run.

Spreading out, the Redcoats hit the Continental line which bent back but did not break. At just the right moment, Colonel William Washington's cavalry hit the unguarded British right flank. Meanwhile Morgan hurried back to reorganize the militiamen. Within 10 minutes they hit the British left. Now the Continental line charged. At the Cowpens it was Tarleton's force which was destroyed in a battle which has become a classic. Morgan's men lost 12 killed and 60 wounded.

Victory at The Cowpens, however, did not relieve Greene's Army from Cornwallis. Greene's men marched into North Carolina, and fought Cornwallis on even terms. The Americans were losing battles—"We fight, get beaten, rise, and fight again," Greene said—but they were winning a campaign.

As Cornwallis overran Virginia, Lafayette led a small force to meet him but could not risk an open battle. At the same time Washington had his main American Army near New York, and because of his threat to British forces there, the superior British commander in New York ordered Cornwallis to send him reinforcements. Then Cornwallis received new orders. He was to fortify a naval base in the lower Chesapeake Bay. He chose Yorktown as the site for the base and in August 1781, transferred his whole army there. Now Washington decided to catch Cornwallis. A French fleet arrived in the Chesapeake and blocked British escape by sea. Leaving a detachment to watch New York, Washington's Army hurried southward, together with a French force under Rochambeau. On the night of 6 October Washington's Allied forces opened trenches around the British position and on the 9th the artillery opened fire at a range of 600 yards.

On 11 October Americans opened a second siege line, or parallel, 300 yards from the British. Now they had to take a pair of key enemy redoubts. As Wayne's men at Stony Point, they were to rely only on the bayonet. The most dangerous assignment in this kind of attack was that of the volunteers who led the way. This advance party was called a "Forlorn Hope," a term from the Dutch meaning "lost troop." Sergeant Daniel Brown of Connecticut led this "Forlorn Hope" across the field under the light of bursting shells. Quickly they covered the 200 yards to the redoubt. Without pause they went down into the ditch and climbed up the other bank, over the sharpened poles. The British opened fire, but they had little effect as the Americans swarmed upon them with bayonets. In less than 5 minutes the Americans had the redoubt. They had lost 40 men. A French force took the other redoubt, but they used less stealth, and it cost them 92 casualties. The next night Cornwallis tried to ferry his army across the York River, but a storm swamped his boats.

Figure 34. Surrender of Cornwallis.

On 19 October Cornwallis surrendered. American and French columns drew up along each side of the road, and the British marched out while the band played a popular tune, "The World Turned Upside Down." The surrender of Cornwallis at Yorktown ended major fighting in the Revolution, but the war dragged on for more than a year (fig 34).

At his headquarters in Newburgh, New York, 7 August 1782, Washington issued an order establishing an award for military merit—the Purple Heart. It was the first military decoration in history to be open to men of all ranks. Now the Purple Heart is awarded to all who are wounded in action against the enemy. But in the beginning it was equivalent to the Medal of Honor. One of the first winners of the Purple Heart was Sergeant Daniel Brown for his bravery in leading the "Forlorn Hope" at Yorktown.

CHAPTER 10

THE WAR OF 1812

ACTION IN THE NORTH

Violations of rights on the high seas led Congress in 1812 to declare a second war against Great Britain. A series of spectacular naval duels added something to American prestige, but they played no part in deciding the war. The decision rested upon the Army and cooperating naval fleets on the inland lakes.

After the American loss of Detroit in 1812, General William Henry Harrison—"Old Tippecanoe"—assembled a force to strike back into Canada. Commodore Perry cleared the way with a brilliant naval victory against a British fleet on Lake Erie. He sent a message to Harrison: "We have met the enemy, and they are ours." "Old Tip" marched his men aboard boats and ferried them across to the Canadian shores. They met a force of British and Indians on 5 October 1813 at the Thames River. The Americans attacked and scattered the Indians and killed or captured the British (fig 35).

After a series of poor showings on the part of overage commanders and green recruits, Winfield Scott, then a 28-year-old brigadier general, set up a rigorous training schedule for his troops near Buffalo, New York. Like Steuben at Valley Forge, Scott spent long hours drilling his men. After two months of intensive training, Scott's men were ready for action. He was anxious to have them in neat new uniforms. The uniform consisted of blue coatees and overalls, and leather "tombstone" caps. But there was shortage of blues, and Scott put his men in gray—the color which state militia usually wore. (The present day dress uniform of the West Point cadet corps was adopted in tribute to the gray-clad victors at Chippewa.)

On the night of 3–4 July 1814, Scott's brigade crossed the Niagara River (fig 36) into Canada and approached the British near the Chippewa River. Ancestor regiments of the present day 6th Infantry advanced on the left, and ancestors of the present day 2d Infantry and 5th Infantry advanced in the center. A battery of artillery supported on the right. Scott formed his units

Figure 55. Captain Perry at Lake Erie in the War of 1812.

Figure 36. American "Regulars" advancing on British at Chippewa, Upper Canada, 5 July 1814.

into a V-formation, the point to the rear. The effect was like that of Daniel Morgan at The Cowpens—the Americans came up on both ends of the British line. The British commander noticed the gray uniforms. "Why, those are nothing but Buffalo militia," he said. But when a British cannon tore a gap through the lines, and the gray-clad soldiers kept going in their steady advance, the British commander changed his tune. "Those are regulars," he shouted with an oath. When 70 yards from the British, Scott galloped to the front of the 6th Infantry (as it is called now) and called out: "They say that Americans can't stand the cold iron. I call on you instantly to give the lie to that slander! Charge!" A cheer went up as the men lowered their bayonets and charged. The British lines, as Scott reported it, "mouldered away like a rope of sand."

Three weeks later a force of 2,900 Americans met a British force of 3,000 in another battle along the Niagara—Lundy's Lane. Once more American soldiers proved their ability to stand up against a superior force. British artillery was holding up the American advance when Colonel Miller brought up his reserve regiment (now the 5th Infantry). General Brown pointed out the British main battery and asked Miller if his regiment could take it. "I'll try, Sir," the Colonel said, and late that evening the British guns fell. Miller's reply, "I'll try, Sir," still is the motto of the 5th Infantry—the oldest regimental motto in the Regular Army.

WASHINGTON IS CAPTURED

The darkest point in the War of 1812 came in August 1814, when a British force landed in Maryland, crossed the upper Potomac at Bladensburg, and marched on Washington. A force of militia gathered to meet the invaders, but when the British crossed the river and fired a few rockets, the untrained militia ran. Only a small force of 500 regulars, joined by a similar force of sailors and marines in a "unified" effort, stood their ground. But the British marched on to the capital.

Fortunately, when the British turned toward Baltimore they found that city effectively defended. The British commander was killed in the attack there, and after the British fleet bombarded Fort McHenry, guarding Baltimore's harbor, during the night 13–14 September, they withdrew. It was during this bombardment that Francis Scott Key, detained for the night on a British ship, wrote down the words for "The Star Spangled Banner." Soon everyone was singing the new song.

THE END OF THE WAR

One big effort remained, and ironically it ended after peace already had been signed. Now the British decided upon an invasion of the South—through New Orleans. General Andrew Jackson—"Old Hickory"—gathered together a few regulars and a much larger number of militiamen and local recruits, and set up a defense along both banks of the Mississippi. He expected the British to come up the river along the north bank, and there he organized his main position. The lines stretched from the levee along the river to a swamp on the right, and the men dug trenches and set up barricades of cotton bales. On 8 January 1815 the British, in precise formation, attacked "Old Hickory's" works, but the Americans were far superior. At 300 yards range they fired with an accuracy which the British never had seen in Europe. Jackson put his best sharpshooters in front, and the others kept them supplied with ready-loaded rifles. The British veterans were mowed down by the hundreds before they withdrew leaving more than 2,000 killed, wounded, and prisoners out of a total of 5,000 men in the assault. American losses were insignificant (fig 37).

In honor of their part in the Battle of New Orleans, the 7th Infantry now wears an insignia showing a cotton bale and a pair of crossed rifles.

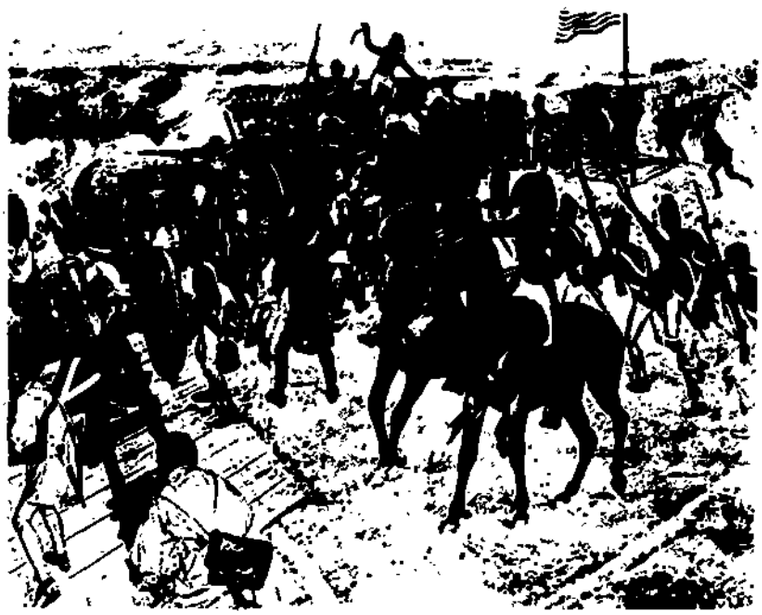


Figure 37. The Battle of New Orleans.

CHAPTER 11

THE WAR WITH MEXICO

PALO ALTO AND MONTEREY

War with Mexico was the result of the annexation of Texas to the United States on 1 March 1845, at which time the United States inherited the Texans' conflict with Mexico—a conflict marked by the heroic Texan stand at the Alamo (fig 38) and their complete victory at San Jacinto. The fighting started when Mexican forces ventured north of the Rio Grande and Americans under General Zachary Taylor—"Old Rough and Ready,"—met them on 8 May 1846 at an elevation known as Palo Alto. After an hour's artillery duel, the Americans repulsed Mexican attacks all day long. With the coming of night the Mexicans withdrew. Another battle the next day at Resaca de la Palma put the Mexicans to flight, and they scrambled back (fig 39) across the Rio Grande by ferry, by fords, by swimming. As soon as news of those first victories reached home, people everywhere began taking up the slogan of the soldiers—"On to the Halls of the Montezumas!"

In weeks of waiting, the men on the Rio Grande were beginning to fear that they would see no action. But as autumn approached it became clear that the Mexicans were preparing real resistance. The country had been torn by revolution. But revolution also had developed skilled fighters and now the war united all parties in complete confidence of victory. Able to outnumber the American troops almost everywhere, Mexican leaders had little respect yet for their foe, and they welcomed battle.

Organizing his force of 6,000 men into four divisions, in September, Taylor headed toward Monterey and the Sierra Madre Mountains. Monterey guarded the pass through the mountains. Mexican troops outnumbered the Americans, but they needed more. Approaching the fortified hills of the city from the north, "Old Rough and Ready" attacked from two sides (fig 40).

On the night of 22 September, men closed up to Independence Hill and waited in a pouring rain. Early in the morning they began the almost vertical climb. Sometimes they crawled. Suddenly Mexican guards opened fire. With a yell the Americans

Figure 38. The Alamo.

rushed up. Sixty feet from the top, firing began. Soon they had the western approaches to Monterey.

Meanwhile other fighting had been going on across the city. Presently Americans broke in from both directions. Though they had no special training in street fighting, almost instinctively they began scrambling to the roofs, breaking holes in house walls, and dropping shells into buildings. On 24 September the Mexican flag came down, and American soldiers marched into the city to the strains of "Yankee Doodle."

BUENA VISTA

Early in 1847, Taylor continued his operations in northern Mexico. At Buena Vista, American forces faced a much larger Mexican Army under General Santa Ana, the "Napoleon of the West."

Many gullies and a deep-channeled stream broke up the old flood plain in the bottom of the pass just south of the little village of Buena Vista. The road up which Santa Ana was advancing north ran along the stream and through the pass. The Americans placed most of their troops on a series of ridges to the right of the road. Santa Ana arrived in front of the American position in the morning of 22 February 1847 with a small advance party. Fearing

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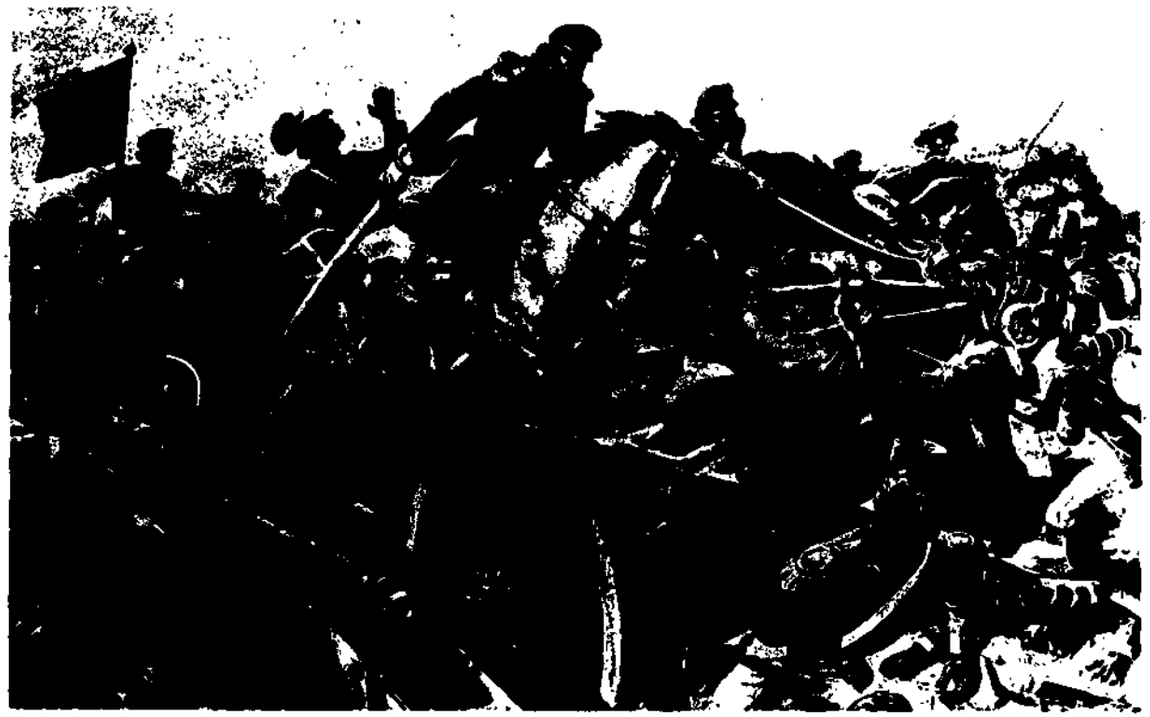

Figure 39. The 2d Dragoons (now 2d Armored Cavalry) at Resaca de la Palma.

Figure 40. The siege of Monterey.

that his escort might be attacked and overpowered, he sent a note to General Taylor, telling him that the Americans were surrounded and might as well surrender. Naturally "Old Rough and Ready" turned him down, but the main Mexican force had now arrived and Santa Ana was safe. The Mexicans sent troops up the side of the mountains to the left of the American positions and outflanked them. The rest of the day was taken up by American counterattacks against this Mexican move and Mexican efforts to hold the advantage gained.

A drizzling rain fell all that night, and it was bitterly cold. American tents were on the wagons, and the Mexicans had none. There was no fuel for fires. A prisoner of war said that Santa Ana had 21,000 men. In reality about 4,800 Americans faced about 15,000 Mexicans. Long before daybreak, men on both sides were ready for anything which would relieve their chattering teeth.

Santa Ana had reveille sounded in his units one after the other to create an even greater impression of numbers. Santa Ana's tactics were French, an advance by column. The first Mexican attack came straight up the road against the American center, but cannon on the mountain slope and in the pass, and musket fire all along the line, drove it back. Soon another Mexican column appeared, advancing at parade step against the American left, white belts and polished buckles shining. Three cannon and the 2d Indiana Infantry opened fire at 100 yards, stopping the advance. Though other enemy troops kept coming, and Mexican cannon were firing into their sides, the 2d Indiana held their ground for half an hour. Then, because losses were so heavy, an order came to retreat. The result was almost a disaster. Men retreating started to run, and other outfits had to pull back. "One charge more!" the Mexicans were shouting. At this point Captain Braxton Bragg saw that another charge would overrun his artillery battery (this battery later became Battery B, 1st Field Artillery) so he ordered it to withdraw down the slope. While retreating, Lieutenant Thomas, commanding one of the gun sections, suddenly stopped, unlimbered his guns, and prepared for action. Bragg asked what he was doing, and the lieutenant shouted back, "For God's sake, Captain, get the battery into play and save the day!" Quickly Bragg ordered the whole battery into action. Loaded with canister and grapeshot, they opened fire at pointblank range. The charging Mexicans broke before such fire. Just then General Taylor came riding up. Waving an old wornout straw hat over his head, he called out, "*Give them a little more grape, Captain Bragg.*" (Insignia of the 1st Field Artillery now shows a round of grapeshot.) Then Taylor saw the Kentuckians coming, and the

General rose in his stirrups shouting, "Hurrah for old Kentuck! That's the way to do it. Give 'em !" Coming up at a run were Jefferson Davis and his Mississippi Rifles, and the 3d Indiana with them. John Washington's artillery battery (now Battery A, 6th Armored Field Artillery) then blasted other formations of enemy with such a storm of grapeshot as to break them up completely. What had been a near defeat turned into a great triumph. That night the Mexican army, leaving the road strewn with debris and wounded men, retreated.

ACTION IN THE WEST

While Taylor's men were fighting in northern Mexico, General Stephen Kearney was marching with a force of 1,600 men from Fort Leavenworth, in the summer of 1846, to lay claim to the great Southwest. Kearney left Santa Fe on 25 September 1846 for the Pacific coast. Turning westward at El Paso, he met Kit Carson with news that Commodore Stockton of the US Navy and Captain John C. Fremont—the "Pathfinder"—of the Army Engineer Corps already had won control of California. On arriving there, however, Kearney found the California population less friendly than had been expected. Fremont seemed to have the area around San Francisco Bay and the Sacramento Valley pretty much in hand, but the situation was not so good in the south. A detachment of sailors and marines under Commodore Stockton had won and then lost Los Angeles and Santa Barbara, and a small garrison lay besieged in San Diego. Stockton finally was able to relieve that garrison and Kearney's men fought their way in to join forces. Together they marched northward to Los Angeles and restored American control.

VERA CRUZ TO MEXICO CITY

General Winfield Scott, "Old Fuss and Feathers," now determined to bring the war to a close by a seaborne expedition to the gulf city of Vera Cruz, and then a strike at Mexico City. His army arrived on that foreign shore without accident, and without loss of a man. By midnight on 9 March 1847, 10,000 men surrounded Vera Cruz, but Mexican forces held the city of Vera Cruz until bombardment and siege brought them to surrender.

At Cerro Gordo 8,500 Americans faced about 12,000 Mexicans entrenched in a mountain pass. But Captain Robert E. Lee, engineer on Scott's Staff, found a route where they could get through to attack the Mexicans in the rear. Key to the Mexican position was a steep hill known as El Telegrafo (there was a semaphore flag signal tower—or "telegraph," they called it—on the hill). Men

of the 3d and 7th Infantry Regiments stormed up the hill and fought their way to the top.

By September, Scott's men were marching through the Valley of Mexico, approaching the capital city. One obstacle—Chapultepec—remained before them. Chapultepec was a hill rising nearly 200 feet above the plain. A massive castle stood near its summit. Cliffs and crags guarded its sides. The castle housed the Mexican military academy and young cadets formed with the soldiers to defend their hill. All day long, 12 September, American artillery battered at the great stone walls of the castle (fig 41). After more bombardment the next day, American infantrymen advanced. Columns first attacked from the west and from the south. Then others came up, and the place was surrounded. But now they could go no farther without scaling ladders. The first ladders were set up and men began climbing; but the Mexicans hurled them to the ground. Other regiments were coming up. Soon there were enough ladders in place for men to scramble up 50 abreast. Though some of the cadets fought to the death rather than give up, this commanding hill now was in American hands. Mexico City, two miles away, was at their mercy. (The 6th Infantry later added scaling ladders to its regimental insignia to indicate its part in the taking of Chapultepec.)

At dawn on 14 September, General Quitmen, minus one shoe, marched with his soldiers into Mexico City; the 3d Cavalry, then a regiment of mounted riflemen, led the way into the capital. Its men rushed up to raise the Stars and Stripes over the National Palace and flew their regimental colors from the balcony. When "Old Fuss and Feathers" rode in and saw what had happened he said, "Brave Rifles! You have been baptized in fire and blood and come out steel!" (The inscription, "Brave Rifles" now appears on the regimental insignia of the 3d Cavalry.) While the other troops marched into the city, General Scott climbed the stairway of the "Halls of the Montezumas" to write his dispatch of victory.

Figure 41. The storming of Chapultepec.

CHAPTER 12

THE WAR BETWEEN THE STATES

BULL RUN AND THE PENINSULAR CAMPAIGN

When controversy in 1861 broke into the Nation's most tragic war, men held doubts as to where their loyalty should be—to their States, or to the Federal Government. Though military men traditionally remain out of politics, such a split in the Nation brought division in the Army. "Where is my duty?" was the question. For Robert E. Lee of Virginia, duty lay with the home State. For George H. Thomas, also of Virginia, duty lay in support of the Federal Government. But more than two-thirds of the Regular Army remained with the North.

Union troops marched out from Washington in July 1861. As people cried "On to Richmond," the Federal forces under Brigadier General Irwin A. McDowell marched into Virginia in high spirits. Congressmen and Government officials went along to watch "the rebellion crushed by a single blow." The Confederates, under Generals P. G. T. Beauregard and Joseph E. Johnston, met them near Manassas Junction, along Bull Run Creek. The result was confusion piled upon confusion as two ill-trained, ill-disciplined armies locked in fierce combat. Defeat would come to whichever side ran first. At first it seemed that Federal troops had the upper hand, but after the exhaustion of ten hours of fighting, Southern reinforcements arrived to turn the decision. The battalion of regular infantry—detachments from the 2d, 3d, and 8th Infantry Regiments—stood its ground and protected the retreat. Bull Run sobered the North, but in the South, success at Bull Run added to their confidence. Now they felt sure that they could whip the Yankees without any training.

Military men knew better. On both sides Northern and Southern generals determined to build their forces into effective teams (fig 42). Major General George B. McClellan, now commanding the Federal Army of the Potomac, was particularly successful in rejuvenating the Eastern army of the United States for field service.

In the spring of 1862 the Army of the Potomac ferried down to the end of the peninsula between the York and James Rivers,

Figure 42. Civil War gun squad.

and began a cautious movement toward Richmond. Confederate forces, first under Johnston and later under Lee, stopped the Federal drive. Then, the Confederate Army of Northern Virginia, aided by Jeb Stuart's cavalry, forced McClellan to retire to the James River in a series of battles known as the Seven Days. By July the Federal drive to capture the Southern capital had been stalled.

WAR IN THE WEST

First signs of major victory for the Union, meanwhile appeared in the West. "When in doubt, fight" was the motto of Ulysses S. Grant, and he determined to open a route into the western part of the Confederacy, With cool courage, and a knack for finding the enemy's weak points, he led a combined naval-land expedition up the Tennessee and Cumberland Rivers in February 1862. With the aid of a flotilla of gunboats under Flag Officer A. M. Foote, he captured Fort Henry on the Tennessee, 6 February 1862. Then he moved swiftly across the dozen miles to the stronger Fort Donelson on the Cumberland. When the naval attack failed, Grant's soldiers surrounded the Confederate defenders. The freezing weather, divided command, and inability to escape led the Confederate commanders Floyd, Pillow, and Buckner to surrender.

Grant's blunt terms were: "No terms except unconditional surrender can be accepted. I propose to move immediately upon your works." With Donelson's surrender, the Confederate line in the West crumbled. All of Tennessee, northern Mississippi, and northern Alabama lay open to the armies of the Union.

The Confederates under General Albert Sidney Johnston recovered from these early defeats. Early in April, 40,000 Confederates struck Grant's encamped army on the banks of the Tennessee at Pittsburg Landing, or Shiloh. The Union army, on an offensive mission, had not expected an attack and had not entrenched. They also anticipated reinforcements from another Federal force under Major General D. C. Buell. Thus, Grant's soldiers were unprepared for the Confederate onslaught which struck them on 6 April. By nightfall they had been pushed back against the river. But the Confederate victory had been costly for Johnston had been killed. That night Buell's men arrived on the field and the next morning Grant counterattacked. The demoralized Confederates soon retreated but there was no pursuit. Grant came in for much criticism for being surprised, but President Lincoln loyally sustained him; "I can't spare this man; he fights."

Except for the battle of Perryville, Kentucky, in October, and the action at Murfreesboro (Stone's River) on the last day of the year, little was accomplished by either side in the West in late 1862. Not all Union objectives had been secured, but the results were impressive. Missouri, Kentucky, and most of Tennessee were in Union hands, and the Federals controlled most of the Mississippi River. The only points on that river which the Confederates still held were Vicksburg and Port Hudson. These gave them communications with the trans-Mississippi West.

Vicksburg was the key and it was strongly fortified. But early in 1863 Grant decided to take it. Five failures before the town only made him more determined and more bold. He resolved to march his men down the west bank, cross the river far below the town, and come up on Vicksburg from the opposite direction. In 18 days Grant's men crossed the Mississippi, marched 200 miles through hard country, fought and won four battles, took Jackson, the state capital, and arrived in the rear of Vicksburg. But the town's fortifications were too strong. Grant could not break through the 7-mile line of works.

All during the night of 21 May mortar shells from river gunboats burst over Vicksburg. Then at 2 a.m. every cannon along the front opened fire. At 10 o'clock the order came to attack. Blue-clad men charged out of their entrenchments. They fought viciously, but the Confederate defenders stood their ground.

Grant's men then dug in for a siege. This meant weeks of dig-

ging trenches, constant exchanges of cannon and rifle fire, and preventing Confederate counterattacks. Inside the town the situation was becoming desperate as weeks went by without food and supplies. Lieutenant General John C. Pemberton, commanding the Vicksburg garrison, saw that there was no escape. He met with Grant—they had served together in the same division in the Mexican War—and surrendered 4 July. The honor of being "First at Vicksburg" went to the 13th Infantry, and this legend became a part of the 13th's insignia.

Vicksburg was a decisive battle of the war, but others in the west were to follow. General Rosecrans and a Federal force occupied Chattanooga, Tennessee, without a battle, but Confederates under General Braxton Bragg still occupied high ridges above the city. Rosecrans led his troops out across that hilly ground in pursuit. At Chickamauga, Bragg's forces turned to give battle (20 September 1863). Fierce Confederate attacks soon threw the Federals into confusion. A mistaken order opened a gap, and the Confederates poured through. The Union right wing, and then the center, crumbled. But the left, under George H. Thomas, stood fast. Nothing could budge it, and this stand made it possible for other Union forces to come back. Even after, Thomas was known as the "Rock of Chickamauga," and sharing in that title was the 19th US Infantry, which stood its ground all day. Members of the 19th still wear that name on their insignia.

After Chickamauga, Union forces retreated into Chattanooga. Now came the Federals' turn to be surrounded without any supplies. General Grant telegraphed Thomas to hold his position at all costs. Thomas wired back, "We will hold the town till we starve." Finally supplies got through from Bridgeport, Tennessee, by steamboat and wagon train. This supply route soon got the name, "The Cracker Line." In a 3-day battle at Missionary Ridge and Lookout Mountain—The "Battle Above the Clouds"—the Union forces made their position secure.

During a lull on Lookout Mountain a soldier from the East, proudly wearing his red star badge of the XII Corps, met a man of the XV Corps. "What is your badge?" he asked. The man just tapped his cartridge case and said, "Forty Rounds." This became the badge of the XV Corps—a cartridge case with the motto, "Forty Rounds." (The proud 13th Infantry preserved this emblem in the crest of its regimental insignia.)

GETTYSBURG

Even as the siege of Vicksburg was coming to a close, another decisive battle was being fought in the East. After victories at Fredericksburg and Chancellorsville, in Virginia, General Robert

E. Lee pushed on to make an all-out effort for complete victory by an invasion of the North. In June 1863, Lee led his splendid Army of Northern Virginia—about 75,000 strong—across the Potomac, through Maryland, and into Pennsylvania.

On 30 June a part of Lee's army was in camp about ten miles from Gettysburg. Marching toward that village the next morning, Confederate brigades ran into Federal cavalry and infantry. At first they thought they were merely facing local militia. But as they reached the edge of a woods, intense firing broke out, and a line of men with bayonets came toward them—it was the famed "Iron Brigade," soldiers of the Army of the Potomac, not militia. Thus began the Battle of Gettysburg, the "high tide of the Confederacy." Neither side had planned to fight at Gettysburg, but initial clashes led to a general concentration in the fields around the sleepy Pennsylvania town.

Directing the initial Federal defenders around Gettysburg was Major General John F. Reynolds, a native Pennsylvanian. He mounted the ridge near the Lutheran Seminary and saw beyond his own scattered battlelines more and more columns in gray coming toward him. Turning for a view to the rear he could see the town, and then, on the other side of it, the ground which seemed to dominate the area. The key feature seemed to be the big hill—up near the old cemetery.

The hills just south of Gettysburg had the shape of a giant fishhook. Cemetery Hill formed the bent part of the hook. The barb was a lower knoll called Culp's Hill, to the north and east. Little Round Top and Big Round Top, at the southern end of the formation, formed the eye of the fishhook. Paralleling this smaller fishhook was a similar formation to the west, Seminary Ridge. These features would become renowned before the next few days had passed.

Reynolds saw that the ground around Cemetery Hill would be best for defense. He sent a note to Major General George G. Meade, commanding the Army of the Potomac, with that recommendation. Here was the place for the Northern army to stand and fight. Then, turning toward his present task he fell dead of a sharpshooter's bullet in the head.

During the afternoon the outnumbered Union troops gave way—back through Gettysburg they retreated, and retired to Cemetery Hill. That night was one of feverish activity on both sides. Lee arrived and set up headquarters on Seminary Ridge. Meade, on the other side, arrived at Cemetery Hill and worked to organize a defensive line southward to the Round Tops.

Heavy fighting erupted on 2 July as Lee sought to outflank both ends of the Federal line. The Confederates thus made strong at-

tacks against Culp's Hill and at positions in front of the Round Tops, on the other end. Federals held on the right, though Confederates were at the slope of the hill and momentarily achieved local success. On the left Longstreet's troops drove the Union forces back across a wheatfield and through a peach orchard. Then Major General G. K. Warren, Meade's chief engineer, rode up. To his dismay he found that the Round Tops had been left unguarded. Grey-clad infantry were already climbing up the lower slopes. Warren gathered up what men he could find and raced for the summit. His men held the hill with bitter hand-to-hand fighting among the boulders and thickets. Darkness closed on the second day of the bloody action, and both sides braced for the final decision.

Lee was outnumbered at Gettysburg, but in this situation he knew he could win only by attacking. After trying the flanks of the Federal line, Lee decided to attack the center on 3 July. He directed 15,000 men to make the charge. All morning the units moved around Seminary Ridge. Pickett's Division, which had arrived the night before, would lead the charge. This assault formation was nearly a mile long. But it would have to march across nearly a mile of open fields to reach the Federal positions.

At 1 p.m., 159 Confederate field guns opened a softening barrage on Union positions. Not all the Federal artillery could fire on Seminary Ridge, but 77 guns replied, and during the next hour the batteries kept up fire in the greatest artillery duel ever to take place on the American continent. (The 18th Artillery shows on its regimental badge a fishhook signifying participation here in the Federal fishhook-shaped position.) In order to save ammunition, replace damaged pieces, and cool the guns, the Union artillery chief ordered "cease fire." The Confederates, whose own ammunition was short, thought this meant that Union artillery had been knocked out. At 3 p.m. Pickett's men started moving forward (fig 43).

In perfect formation this grey column moved across the fields. With a wild "rebel yell" they drove through shot and shell toward the Union lines. A few Confederates struggled right into Union battery positions. Cushing's Battery A of the 4th US Artillery stood fast (fig 44). Here marked the "high-water mark" of the Confederacy. But soon Pennsylvanians and New Englanders counterattacked and cut down or drove back Pickett's charging column. It turned back across the fields, followed by Union fire. The remnants reached Seminary Ridge shattered and defeated.

In three days at Gettysburg, Union forces had suffered 23,000 casualties, including over 3,000 killed, and the Confederates had lost over 28,000. There, in dedicating the national cemetery, Lin-

Figure 43. Pickett's charge.

coln paid tribute to those who gave "the last full measure of devotion." "The world will little note nor long remember what we say here," he said, "but it can never forget what they did here."

To numbers of the heroes of Gettysburg went a new decoration—the Medal of Honor. This award had been established for the Army in 1862; in 1863 it was made permanent and remains the country's highest military award.

THE WAR COMES TO A CLOSE

Early in 1864 General Grant was made the general-in-chief of all the Federal Armies. Grant made his headquarters with the Army of the Potomac, now one of the finest armies in the world. It was well-equipped, had an efficient supply and transport service —its wagon trains would have reached 65 miles in a single line, had a highly developed signal corps which lay telegraph wire to brigades by reels mounted on mules, and had experienced leaders and trained men.

On 4 May, Grant sent the Army of the Potomac south of the Rapidan River. It met Lee's army on the 5th and there followed days of intense battling through the forests of Virginia known as the Wilderness.

The battle continued subsequently around Spottsylvania Courthouse where the Federals hit both sides and the nose of a salient which the Confederates held in their lines. In some of the bloodiest fighting of the war men fought across this corner which came to be known as the "Bloody Angle."

Figure 44. Cushing's battery.

It was a costly, dirty business, but it was here that Grant wrote in a dispatch: "I propose to fight it out on this line if it takes all summer." It did take all summer, and winter, too, as Grant's men fought on tenaciously—and Lee's forces contested every foot—in the best tradition of the American soldier. Conflict surged through the thickets from the North Anna, down to Cold Harbor, and on to Petersburg.

As Grant moved closer to Richmond he found the Confederate defenses stronger and stronger. He decided to move to the south of the capital, and, as at Vicksburg, to attack from the other direction. In June 1864, the Federal Army marched past Richmond, on the east, and crossed the James River over a 2,100-foot pontoon bridge. But Lee's army followed around, and renewed attacks failed as the opposing armies dug in around Petersburg, to the south of Richmond. But Lee's army followed, stopped Grant's flanking thrust, and the two armies dug in around Petersburg, to the south of Richmond, but astride the supply routes below that city.

In July the Federals tried to blast their way through the defenses. A regiment of Pennsylvania coal miners dug a tunnel under the Confederate works. Relays of soldiers then put 8,000 pounds of powder into this mine. At 4:44 a.m. on July 30 they touched it off. A terrific explosion shook the earth. More than 250 men went up with it. A crater over 250 feet long and 30 feet deep appeared in the ground. Federal troops poured through, but

the startled Confederates recovered, and in the bloody "Battle of the Crater," they drove the Federals out.

Warfare around Petersburg then became a stabilized, trench warfare. Grant extended his lines to the left, in a westerly direction, cutting the various supply routes to Petersburg and Richmond. The men dug bombproof shelters and connecting trenches and set up wire entanglements. Lee tried to break through the Federal position, but he could not make it. Then, early in April 1865 he saw the situation was desperate. He marched his men out to the west, and Union forces occupied Richmond. Soon after, Lee surrendered at Appomattox Courthouse (fig 45).

While Grant battled Lee in Virginia, the western armies of the Union under Major General William T. Sherman carried out a strategic maneuver designed to split the remainder of the Confederacy in half. In May 1864 Sherman's toughened veterans—105,000 strong—moved against General Joseph E. Johnston's smaller Confederate forces guarding Atlanta. By early fall this Confederate rail center had been captured and the defenders scattered.

Sherman now cut loose from his supply lines in the historic "March to the Sea." His purpose was to destroy the farms, storehouses, and the will-to-fight in the very heart of the Confederacy.

Figure 45. Petersburg—1865.

By Christmas Sherman's men had reached the sea at Savannah. Their commander offered the city as a Christmas present to the Nation.

General John B. Hood had managed to gather the remnants of Johnston's old army together in an effort to break Sherman's drive to the sea. But instead of opposing him in battle, Hood embarked upon an offensive campaign of his own, toward the Union supply base and rail center at Nashville, Tennessee. The Federal leaders were hard pressed to collect troops to oppose the Confederate drive, but late in November, units under Major General John Schofield and Major General George H. Thomas engaged Hood in two significant battles. In the actions at Franklin and Nashville, the Federals smashed Hood's cold and understrength army. A scattering of the Confederates got back across the Tennessee River into Alabama, but Hood's army was never again an offensive threat.

Even as Grant was forcing Lee to give up Petersburg, Sherman's "legions" were pouring northward through the Carolinas in an effort to link up with the Army of the Potomac. But Lee's surrender at Appomattox came too quickly. Opposition to Sherman surrendered at Durham Station, North Carolina, in late April. Scattered actions continued in the trans-Mississippi West, but the main fighting was over.

Although in many respects, as in infantry tactics, the Civil War was similar to those of the 18th century, it was remarkably modern in other ways: railways, telegraph, steamships, armor, rifled artillery and small arms, trenches, economic warfare—all these have a contemporary ring. And the war was vast. The armies were larger, the degree of industrial mobilization was higher, the battlefields more spacious than the world had yet seen. For these reasons, and because its battles illustrate the principles of war and furnish many examples of good and bad leadership, the Civil War provides a fertile field of study to the military student.

CHAPTER 13

THE INDIAN WARS

WAYNE'S LEGION

After the Revolution only a small Army was retained which guarded the forts on the western frontier. After the enactment of the Northwest Ordinance in 1787, settlers began pouring into the Ohio River country and troubles with the Indians immediately developed. With an enlarged Army, two unsuccessful campaigns were made against the Indians in 1790 and 1791. In 1792 the Army was again increased in size and organized as the "Legion of the United States," a composite force of all combat arms under one command. The hero of the Revolutionary War battle at Stony Point, General Anthony Wayne, was placed in command.

As leader of the "United States Legion," General Wayne was hard as nails. He insisted on absolute perfection in drill, discipline, and firing. Probably the men of the Legion griped as they polished their cartridge boxes and sewed patches on uniforms they had torn in the service of their country. No doubt the newer soldiers in the Legion could see no sense in the old man's "spit and polish," but they washed and polished and drilled and fired. The old soldiers knew that cleanliness and precision go hand in hand with clean weapons—and the ability to use them in combat—and even the newest soldier realized the general's formula one hot summer day in 1794 when America's new Regular Army met its test on the battlefield.

General Wayne spent most of 1792 and 1793 in training his troops and in October 1793, after an effort to arrive at a peaceful solution of the Indian problem had failed, the Legion moved slowly and methodically, building a series of forts along the line of march. After spending the winter at one of the forts, the Legion continued to march northward. The Legion stopped to build Fort Defiance at the junction of the Miami and Anglaise Rivers in Ohio and at the end of July went on to meet the Indians (fig 46).

It was the 20th of August when the Legion faced Indians supplied and egged on by the British and set up for battle in a strong position on the banks of the Maumee River in Ohio. A tornado had

Figure 46. The advance of the Legion, 1794—Indian Wars.

left a wide path of fallen trees through the woods; hence the Battle of Fallen Timbers was a natural name for this engagement. The uprooted trees and tangled branches made a good cover for the redmen. Even their faces, bright with war paint, were hidden. In their natural trenches the Indians waited to mow down the regular troops. These same Indians had fought with soldiers before and won. But this was a different army—one that kept on coming when it should have melted away before bullets shot from the cover of fallen timbers. General Wayne had placed his men with order to fire once and then drive the Indians from cover with their bayonets. Infantrymen fired and then plunged forward with fixed bayonets. They drove the savages out of the cover of fallen trees into the open prairie where the Indians were at the mercy of Wayne's dragoons and mounted volunteers. The Indians fled after losses twice as great as those of the Legion. Here at the Battle of Fallen Timbers our first permanent Regular Army, which had learned well the lessons of drill and combat practice, brought the first peace to a savage frontier, but it was only a temporary peace.

ACTION EAST OF THE MISSISSIPPI

In 1811, an Indian Chief, Tecumseh, had organized many Northwest tribes of Indians into a confederation and prepared an uprising which would force unauthorized white settlers from the Indian lands. William Henry Harrison, later President of the

United States, led forces to keep these Indians in check. He camped, 5 November 1811, for the night on a rise of ground where Tippecanoe Creek flows into the Wabash. During the night Indian braves attacked the camp and after a sharp fight they were driven off. Harrison then proceeded to Tecumseh's village and ordered it be burned. With Harrison's victory at Tippecanoe, the back of Indian resistance in the Northwest was broken and the Army was soon to push on to new frontiers.

In 1813 the Creek Indians (in what is now Alabama) encouraged by Tecumseh's early successes, went on the warpath that ended with the massacre of over 500 people at Fort Mims. In 1814 Andrew Jackson, "Old Hickory," with a force of 2,600 Regulars, volunteers, and militia attacked the fortified Indian camp at the Horseshoe Bend of the Tallapoosa River and completely defeated the Indians. The remaining hostile tribes fled into Spanish Florida.

In 1819 the raids of the Seminole Indians from Spanish Florida into Georgia caused General Jackson to raise a force of 1,500 volunteers and 1,500 friendly Creek Indians. With this force General Jackson cleaned out the nests of the marauders and captured Pensacola. This action was known as the First Seminole War. Two weeks after Jackson evacuated Spanish territory and returned to the north, Spain ceded Florida to the United States. But that was not the last heard from the Seminoles. The Second Seminole War began after the Seminoles gave up their lands by treaty in 1836 and then refused to move west of the Mississippi River. For 6 years in the forests and swamps of Florida the Seminoles resisted the Army and a host of volunteers. Finally a campaign of extermination succeeded in routing the Indians out of the swamps and permitted the war to be officially ended in 1842. In the Old Northwest the last Indian uprising was quelled when the Indian Chief Blackhawk and his followers were defeated in the Battle of Bad Axe in 1832. The Army had cleared the country from the Atlantic to the Mississippi and a man could stake out a claim anywhere in this vast region without fear of the redman's tomahawk.

EXPLORING THE WEST

While the Army had made safe the country east of the Mississippi, Army explorers had traveled from the Mississippi to the Pacific mapping the great plains, surveying the towering Rockies, and reporting on Indians, animals, and resources of this vast inland Empire. Between 1803 and 1806 the Army sent Captain Meriweather Lewis and Lieutenant William Clark along with 27 men to travel the entire continent from east to west and back again from

west to east. They took accurate surveys, plotted maps, and made friendships with some Indians who had never seen a white man. They fought grizzly bears and rattlesnakes; they forded great rivers and covered endless plains (fig 47).

At about the same time, another Army explorer, Captain Zebulon Pike, traveled from the upper Mississippi through the Indian and buffalo country as far west as the Rockies. Here he gave his name to a great mountain, Pikes Peak, which long beckoned to adventurous spirits back East who vowed to make "Pikes Peak or Bust."

When an eager public found out about their explorations, it became better acquainted with the vast lands beyond the Mississippi and their undeveloped riches. To the suffering and daring of these soldier-explorers the settler owed the trailblazing of the West.

WINNING THE WEST

During the Civil War the regulars were withdrawn from the West and the Indians, relatively unchecked, terrorized the region beyond the Mississippi. Much of the work of the Army in the first half of the century was undone. At the close of the war, after the

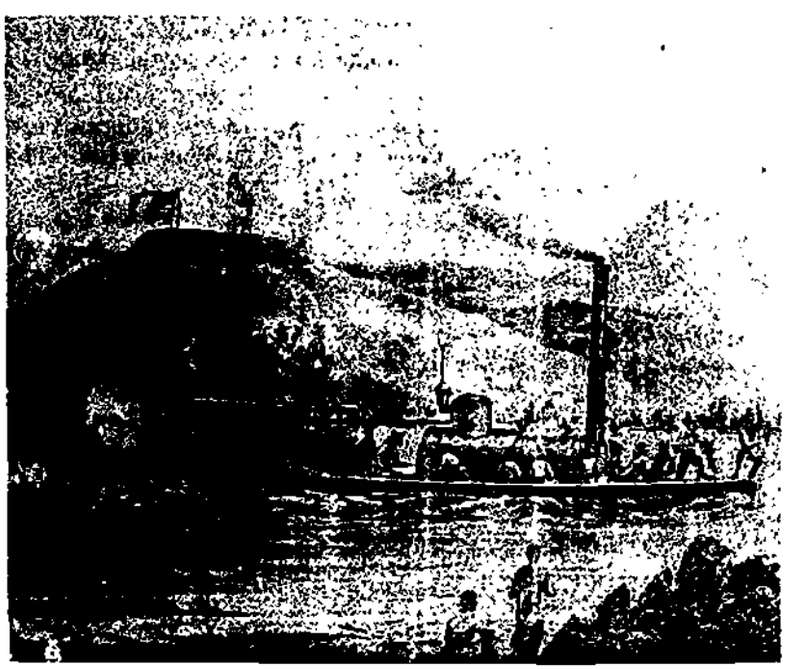

Figure 47. Army exploration of the west, 1857–58.

large Federal forces were disbanded, a small regular Army, well salted with veterans of the recent campaigns, turned its attention, among other commitments, to pacifying the Indians (fig 48).

A quarter of a million red men peopled the West, their very existence threatened by the white march of empire and the slaughter of their main source of subsistence—the buffalo. They fought for their way of life, but the outcome was inevitable. From 1865 to 1891 the Army met the Indians in 13 different campaigns and well over a thousand separate engagements involving such tribes as the Apache, Bannock, Cheyenne, Comanche, Modoc, Nez Perce, Paiute, Sioux, and Ute.

Through this final quarter century of Indian troubles the Army was parceled out over the remote frontier, charged not only with fighting the Indians, but with controlling them on reservations, guarding and operating stage lines, safeguarding settlers, protecting railroads, installing telegraph lines, restricting the depredations of desperadoes, and keeping watch over labor disputes. Its record is doubly impressive when it is realized that the Army carried out these tasks effectively despite declining strength, inadequate appropriations and pay, inefficient organization, wide dispersion, a provincial existence, and a hostile society.

Under these conditions it is understandable that the Army suffered some reverses. Ironically, such setbacks as the Fetterman massacre near Fort Phil Kearny in 1866 and the Custer massacre on the Little Bighorn River a decade later dramatized frontier

Figure 48. Frontier soldiers attacked by an Indian war party.

conditions and brought the attention of the Nation and the government to the problems of developing the West.

Some of the greatest names and deeds in Army and American history are connected with the Indian Wars. Among the leaders there were Generals George Crook, Nelson A. Miles, and Ranald S. MacKenzie, as well as O. O. Howard, E. R. S. Canby, and Wesley Merritt. There were Captain James W. Powell, whose small detail held off a tremendously superior force of Indians in the Wagon Box Fight on the Bozeman Trail in 1867; Lieutenant Charles B. Gatewood, who entered the Apache stronghold in Mexico in 1886 to persuade Geronimo to surrender; and Captain Richard H. Pratt, who became interested in Indian education and was responsible for the establishment of the Carlisle Indian School. Gallantry and accomplishment during the Indian Wars were of course not reserved to the commissioned officer. Sergeant Richard P. Hanley with the Reno battalion at Little Bighorn moved within the Indian lines alone and under heavy fire to retrieve a stampeded pack mule loaded with ammunition, while in the same action Private Abram B. Brant moved through enemy fire to bring water to the wounded. Both men were awarded the Medal of Honor for exploits matched by many of their comrades over the 25-year period.

If the massacre of Captain William J. Fetterman and his 80-man detachment by an overwhelming force of Sioux Indians in December 1866 was a dramatic opener to the period we have come to know as the Indian Wars, the massacre of Chief Big Foot and some 145 of his Miniconjou Sioux by a superior Army force at the Battle of Wounded Knee in December 1890—the last pitched battle with the Indians—brought the period dramatically to a close. Not only had the Indians been pacified, but transportation, communications, and settlement extended across the continent, and law and order had generally come to the land. By the turn of the century the West had been won and the United States Army had a major role in the winning.

CHAPTER 14

THE SPANISH-AMERICAN WAR AND THE BOXER REBELLION

THE WAR IN CUBA

An insurrection broke out in the Spanish colony of Cuba in 1895 against the rule of Spain. The American people, normally sympathetic to the aspirations of colonials for independence, favored the insurgent cause. The spark that touched off the Spanish-American War was the blowing up of the battleship *Maine* in Havana Harbor. Although several important battles of the war were naval, such as Commodore Dewey's victory at Manila Bay, success on the sea had to be followed up by taking and holding the land. When the war began in April 1898, the Army had only 28,000 men. Individually the troops were well trained, but the Army as a whole was unprepared for war in practically every other respect. The warlike mood of the country helped enlistments and by the middle of the summer 200,000 men had joined. But these troops had to be organized, equipped, and trained as a fighting force.

The war was looked upon as a glorious national picnic that nearly everyone wanted to attend. Not until the volunteers were exposed to the hardships of camp life in the southern United States did enthusiasm decline. There, instead of picnic conditions they found utter confusion. Volunteer officers were untrained, equipment and supplies short, sanitary conditions disgraceful, food tainted, medical services woefully inadequate, and weapons and ammunition obsolete.

The Army first sent two Regulars, Lieutenant Henry H. Whitney and Lieutenant A. S. Rowan, as scouts to Cuba and Puerto Rico to find out the condition of the enemy forces. Rowan delivered the famous "Message to Garcia," the leader of the Cuban revolt against the Spanish. The message affirmed American support to Garcia against Spanish rule. In turn, the two Americans brought back information that the insurgents would cooperate in any military campaign in Cuba. His mission to this day symbolizes the spirit and determination of the American soldier.

The first troops under Major General William S. Shafter did not reach Cuba until two months after war was declared, when 17,000 men landed at Siboney and Daiquiri, to the west of Santiago Bay. The landing was without incident, even without opposition. But soon the great heat, the swamps, and the rugged country brought on malaria and yellow fever.

Led by two dismounted cavalry columns, one of Regulars and one of Roughriders, they pushed through the dense, mosquito-filled jungle over muddy trails. Hidden snipers took a bloody toll. The "yellow canaries," as the Spaniards were dubbed, were first met at Las Guasimas, an outpost which covered the road leading to Santiago. The Spaniards withdrew after a bloody skirmish in which the Americans suffered about twice as many casualties. But from then on in to Santiago, the Americans had to fight hard all the way. The road to the city followed a valley covered with jungle and crossed by a broken ridge called San Juan Hill. Here the Spaniards had dug in and fortified the top; two miles north of the road the Spaniards had built a blockhouse, trenches, and barbed wire traps at El Caney. The advance toward El Caney was slow and painful. Some 500 Spanish troops in a strong position protected by barbed wire, resisted stubbornly until their ammunition gave out and they were forced to retire. Losses were heavy on both sides (fig 49).

As our soldiers stormed El Caney, at San Juan another fierce battle was raging. On the morning of the attack thousands of men slogged forward on the narrow jungle trails raked by Spanish artillery. It was not until noon that they reached the open spaces before the Spanish fort on the hill. Suddenly blue-shirted infantrymen were charging up the slope under a withering fire from the Spaniards on top. It was here that Lieutenant Jules G. Ord called to his men, "All who are brave, follow me," and charged up the hill at their head, to fall dead at the top.

Meanwhile, on Kettle Hill on the north side of San Juan, the Roughriders and dismounted cavalry were advancing. The Roughriders were led by Lieutenant Colonel Theodore Roosevelt who, along with Colonel Leonard Wood, had helped to organize them. Colonel Leonard Wood, who first commanded the Roughriders, had served with the Army during the Indian Wars as had many of the Roughriders. Alongside the Roughriders the Negro troopers of the 9th and 10th Cavalry fought as they pressed up the bloody slopes and finally gained the top. The Army now proceeded to invest the Spanish in Santiago. The American fleet under Admiral Sampson sank the Spanish squadron at Santiago as it attempted to escape and the Spaniards surrendered the town on 16 July 1898.

After the fall of Santiago an American army under General

Figure 49. Blockhouse at San Juan.

Miles landed in Puerto Rico and had liberated most of that island from Spanish rule, with few losses, when hostilities ceased in August 1898.

THE PHILIPPINES

Meanwhile on the other side of the world, 12,000 miles away; another American naval-land force was testing the might of the Spanish Empire in the Philippines. On 1 May 1898, Commodore George Dewey's Far Eastern Squadron had sunk the Spanish fleet in Manila Bay. The United States Government then sent an expeditionary force to capture the islands. On 4 July 1898, the convoy stopped to raise the United States flag over Guam Island in the middle of the Pacific. They arrived before Manila, where Filipino rebels were already besieging the Spanish who held the city. Rain came down without end. In trenches half filled with water and sweating in blue serge, like their comrades in Cuba, they first fought the mud, mosquitoes, heat, and tropical diseases which killed more men than bullets. After a few night skirmishes, they prepared for a general attack on Manila. Although his position was hopeless, the Spanish commander did not want to surrender without at least a show of resistance. The commanders of

the opposing forces arranged what was supposed to be a bloodless battle, but before the Spaniards struck their colors, several casualties were suffered by both sides (fig 50).

When the war ended, Puerto Rico, Wake and Guam Islands, and the Philippines were ours. The Hawaiian Islands had been annexed to the United States at their own request and a new nation, Cuba, had been given its freedom by the United States.

But fighting did not end in our new territory in the Philippines. Emilio Aguinaldo, leader of the Philippine rebels, who had at first helped the Americans to drive out the Spanish, desired to establish an independent Philippine Republic. Growing tension between Aguinaldo's men and the Americans finally broke out in open warfare in February 1899. He lost little time in launching bloody guerrilla warfare against the American Army. Three years of bitter fighting followed with little quarter given or asked. By June 1901 the Americans had won and, except for spasmodic outbreaks which lasted for years; the insurrection was over.

The capture of Aguinaldo is a story stranger than fiction. General Funston, who had won the Medal of Honor for gallantry in the Philippines, found out the location of Aguinaldo's secret hideout in the jungles of Luzon. He knew that the guerrilla chief

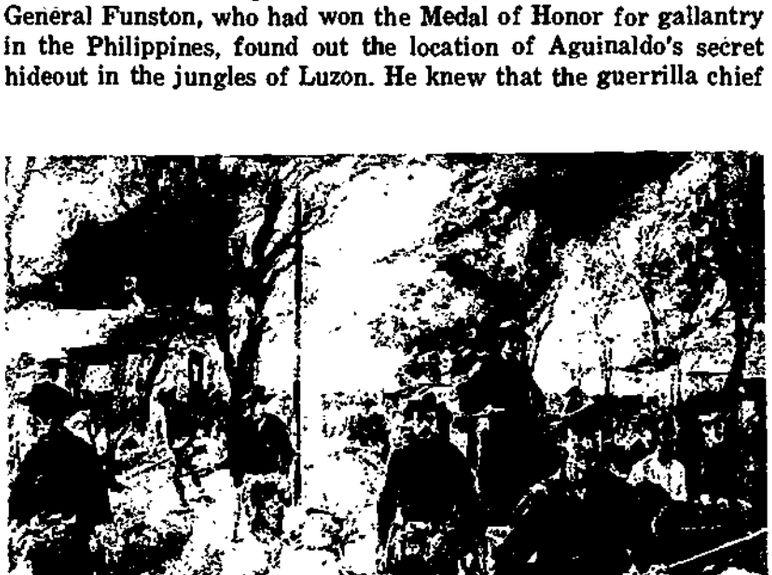

Figure 50. Philippine insurrection.

would simply vanish in the jungle if troops in large numbers went out after him, so he hatched a daring plan.

On the night of 4 March 1901 a small party of men was quietly set ashore on northern Luzon by the U.S.S. *Vicksburg*. A former Philippine rebel who had just pledged his loyalty to the United States led them. Funston pretended to be a prisoner of this rebel and his men, who had now also joined the United States forces, and they pretended they were to take him to Aguinaldo as a prisoner. They made their way through steaming jungles and unfriendly villages where one slip might have meant death.

Aguinaldo and his men were caught off guard, and 11 days later the successful raiders met the *Vicksburg* again; their mission was accomplished. General Funston had his man. Aguinaldo's capture took the heart out of the rebel uprising.

The savage Moros started a small war of their own against the new government; they were eventually conquered.

In some respects the months between May 1900 and June 1901 were the most difficult of the insurrection. In September the garrison at Balangiga on Samar was surprised and only 22 of the 74 men survived. This was the worst defeat suffered by the Army during the Philippine Insurrection, but with the pacification of Samar in the following months, organized resistance came to an end.

THE BOXER REBELLION

Over a period of many years China had grown gradually weak. Imperialistic European powers helped themselves to Chinese territory and extorted favorable economic and commercial concessions. In the summer of 1900, news flashed over the world that the "Boxers," a secret society of Chinese fanatics, who wished to drive all "foreign devils" out of China, had slain many foreigners and Chinese Christians living in China. Convinced that they were no longer safe in Peking, the foreigners and Chinese converts took refuge in the foreign legations, where they were besieged by thousands of Chinese, including some troops from the Chinese Army.

In July a large international force, including American land and naval troops, was formed to free the legations in Peking. In less than three weeks after receiving their orders the 9th Infantry and a marine detachment, although delayed by a typhoon, arrived from Manila. This was the first time that the Army participated in oversea operations with allied forces. Two battalions of the 9th Infantry took part in the allied attack on Tientsin on 13 July, which was taken after a long and murderous fight. Gallant Colonel Liscum of the 9th Infantry was mortally wounded in the attack

and as he fell dying he called his last brave words to his men, "Keep up the fire." (Men of the 9th still wear that motto on their regimental shield.)

At the time of the capture of Tientsin, positive and detailed reports were received that all the foreigners and Chinese Christians in the legations in Peking had been massacred. The Allied commanders of the relief force, upon receipt of this news, decided to halt at Tientsin and wait for reinforcements before they moved to avenge their countrymen. But on 20 July word was received that the legations were still holding out and it was decided to move against Peking immediately. The American contingent numbered 2,500 men made up of the 9th and 14th Infantries. a battery of the 5th Artillery, a troop of the 6th Cavalry, and a battalion of marines. Early in August the allied relief force of 18,000 men began its march on Peking. Several sharp skirmishes were fought and losses were serious but by 14 August the Allies were at the gates of Peking. Peking was a completely walled city, the walls from 30 to 50 feet high and 20 to 40 feet wide on top. Chinese rifles and cannon raked the approaches to the city with fire. The Americans, the 14th Infantry leading, scaled the wall at a partially sheltered angle. Led by musician Calvin P. Titus (who for this feat gained the name "First Over the Wall Titus" and the Medal of Honor), the men scrambled up the bare face of the wall by climbing on spaces where the bricks had fallen; they pulled rifles and ammunition up after them. The 14th gained entrance, and planted the regimental colors on the wall—the first foreign flag to fly there. While they then drove the Chinese southward in the city, the British contingent entered another gate and, unopposed, relieved the besieged legations. The following day, after hard fighting, the Americans had reached the inner gate of the Forbidden City when the fighting came to an end.

Many of the Americans left by that winter and the remainder were withdrawn the following May, but the 15th Infantry remained in China for many years. Its regimental insignia bears the motto "Can Do," a phrase of pidgin English picked up from the Chinese which shows the spirit of the 15th; they "Can Do" anything. Soldiers had arrived in Peking in time to save their fellow Americans and to show the world that the United States Army could and would protect its citizens in whatever country they were attacked.

CHAPTER 15

WORLD WAR I

AMERICA ENTERS THE WAR

Shocked by stories of German atrocities in 1914, by the sinking of the Lusitania in 1915, and by Germany's ruthless submarine warfare in 1916 and 1917, the American people developed sympathies for the Allied nations. When news of the Zimmerman Note gave evidence of German meddling with American affairs, the Nation went to war.

The decision of the United States to enter the War came at a crucial time. On the western front, French and British forces had been bled white by almost 3 years of murderous trench warfare. In the east, Russia's armies, torn by defeat and revolution, were falling apart and anxious for peace. If the Russians quit the war, massive German forces could be shifted to the western front to overwhelm the Allies. Could America, with the men and the will to turn the tide, have the time to raise an army and send it overseas? French Poilus and the British Tommies in the trenches asked the same question: "Can we hold out long enough?" The outcome of the war and the fate of the world lay with the "Yanks" of the US Army.

The Nation was far from ready for large-scale combat. The Regular Army and National Guard together had about 158,000 men on duty along the Mexican border. By the end of the war this small number of troops had expanded into a great force of nearly 4 million men. But it took a year after the US declaration of war to get a considerable number of our soldiers into the trenches in France.

John J. Pershing was chosen to lead the AEF ("American Expeditionary Force"). He was a seasoned campaigner with more than 30 years of distinguished service of command in combat. He had fought Apache and Sioux Indians, had showed cool bravery under fire at San Juan Hill, had subdued guerrillas in Philippine jungles, had observed new techniques of warfare in the Russo-Japanese War, and had led the Punitive Expedition into Mexico against Pancho Villa.

The Western Front was a vast tangle of trenches, barbed wire, dugouts, and a no-man's land full of shell craters between the lines. For months at a time the position of the armies locked in struggle would change but little. In the summer of 1917, when American troops began to arrive, the Western Front extended for more than 400 miles north of the Swiss border to Nancy and Metz, northwest through St. Mihiel, Verdun, Rheims, and Soissons; and curved north again through Ypres to the English Channel.

The machinegun dominated the fighting, and no one knew how to break the stalemate. "If it could have been produced in sufficient numbers and employed all along the front," an observer later wrote, "the tank would have been the cure for the machine-gun." The British had designed a tank based on the American caterpillar tractor and had first used the new weapon at the Somme in September 1916 with complete surprise. Machinegun bullets bounced off the sides of these iron monsters which carried their crews through barbed wire jungles, across trenches, and through enemy positions. But there were not enough to carry through to victory. Men fought with rifles, bayonets, hand grenades, flame-throwers, poison gas, and airplanes, and the machine-gun reigned supreme.

The first of the American Expeditionary Force arrived in France in June of 1917. On 4 July American soldiers massed before the tomb of a gallant Frenchman who had come to aid the hardpressed army of George Washington 140 years before. The simple words spoken on that occasion came deep from the heart of a grateful republic to the battered land of France: "Lafayette, we are here." On the night of 20 October 1917, the first US troops entered the line. Units of the 1st Division took positions along the line with French units, and under French command. Men and weapons went across the Atlantic slowly at first, but gradually American strength built up behind the Western Front. By March 1918, more than 1,000 men per day were landing in France and before the Armistice the flow had increased to more than 10,000 a day. In all, over 2,000,000 men went across the Atlantic.

AMERICANS IN ACTION

The 28th of May, 1918, is a memorable date in the history of World War I. It was then that the 1st Infantry Division made the first attack against the entrenched Germans at Cantigny. It was highly important that the attack be a success, since British and French soldiers would be watching closely to see how Americans stood up in battle. To this end they planned the attack far in advance and in the most minute detail. They left nothing to chance

and even rehearsed the attack itself behind the lines on ground like that of the coming battle. The 28th Infantry was chosen to make the assault.

The day before the attack the Germans, sensing that something was up, raided the whole frontline and drenched it with deadly gas shells. That night the 28th Infantry moved up and got set for the pushoff. Two companies of the 16th Infantry were employed as the reserve. From 4:45 a.m. to 6:45 a.m. the Americans shelled Cantigny. Then at "zero hour" the doughboys went over the top of the trenches and advanced across shell-torn fields closely behind a curtain of their own artillery fire, the famous "rolling barrage." Heavy guns shelled the German rear areas to prevent them from bringing up supplies or more soldiers. French tanks and flamethrowers gave their help to the American doughboys. Within 45 minutes they had killed, captured, or wounded every German within their zone of advance. The 28th Infantry, supported by elements of the 18th Infantry, 1st Engineers, and Division Artillery, dug in and beat off bitter German attacks for 2 days.

The Germans realized that if they were to win the war, they would have to knock out the French and British before the Americans got there in large numbers. To meet this threat the Germans prepared several great drives. In one drive they advanced rapidly toward the Marne River and, meeting little resistance, started toward Paris. Reserves rushed from all sections of the front. The 2d Division and the 3d Division moved quickly to the danger sector to help the Allies hold the line. On 31 May the 3d went into action at Chateau Thierry amid cheers of the French who at last saw relief in sight. The very presence of Americans raised the morale of the Allies who had now been fighting for four years. Here American machinegunners held off the Germans who tried to cross the Marne at Chateau Thierry just where the French had blown up a bridge. The French general, Duchesne, expressed admiration for the 3d's ability by saying, "It prevented the enemy from crossing the Marne. In the course of violent combat it inflicted severe losses on the enemy and covered itself with glory by its bravery and ability."

As the 3d lent its strong arm to the French at Chateau Thierry, the 2d Division met a German advance which threatened Paris itself. Hurrying north to aid the 1st Division, the 2d turned aside in the nick of time to confront the Germans who had been moving forward for days. The French, worn out with battle, had been unable to stop them. The 2d beat back the attacks and stopped the drive on Paris.

These victories, and also the hard-won capture of Belleau

Wood and Vaux by the 2d Division, confirmed the American reputation. The Germans realized that they faced brave, determined, and skillful soldiers. But they hoped that there was still time to crush the Allies before more Americans could cross the sea and enter into the trenches.

Toward the end of March, 1918, Ludendorff and Hindenberg launched the first of five great offensives. The first and second struck the British entrenchments in the Somme area near Amiens, Armentieres, and the valley of the Lys. Trying to push the British army into the English Channel, these two hammer blows reeled the line back 37 miles by mid-April in the Somme area and 17 miles by the end of the month along the Lys River. American engineer, air, and medical units helped stem these drives. The third blow hit Chateau Thierry, but the French held the line with American help and kept the Germans from crossing the Marne. The fourth attack sought to flatten the line between the salients of Cantigny and Chateau Thierry, gained a 7-mile advance along the line running south to Noyon, and was halted in part by the 1st Division.

General Gouraud, who had charge of the sector around Rheims, suspected that the Germans were planning an attack and he raided the German lines to pick up some prisoners for questioning. He learned that the Germans were ready to attack in large numbers, that an artillery barrage would begin about midnight, and that the infantry would shove off at 3:30 on the morning of 15 July. Gouraud ordered the French artillery to start firing one-half hour earlier than the enemy bombardment. The sudden barrage caught the Germans by surprise, but their attack opened on schedule. The artillery thundered and the infantry rushed forward. But Gouraud had outfoxed them. He had withdrawn most of his men from the front battle position so that the first German blow was a dud. From the second battle position the Americans and the French smashed into the attacking Germans. The Germans went no farther; the attack at Rheims had failed.

Of the American units which smashed this attack and held the line with the French, the French general spoke of the American 42d (Rainbow) Division as follows: "It had the honor of rivalling its French comrades in courage and daring. Its men went under fire as if to a football game, with shirt sleeves rolled up. In one trench where they worked with our men, one could count 60 bodies in less than 75 feet. The Germans who have seen them at work can no longer doubt that they are here, or even as our soldiers say, 'quite a bit here.' "

SECOND BATTLE OF THE MARNE

Meanwhile, on the Marne River, in conjunction with the offensive at Rheims, the Germans opened an attack on the 3d Division with a great barrage of artillery; then under a cover of fog and a smokescreen they began crossing the stream. The 3d fought hard, inflicted a heavy loss, and sank many boats, but was unable to stop the overwhelming rush. The Germans succeeded in crossing.

General Dickman prepared to counterattack and although his French commander advised him to wait, the 3d struck anyway and threw the enemy back across the river. From this action the 3d Division is known as the "Rock of the Marne" (fig 51). The men of the 38th Infantry wear a regimental insignia bearing a chevron broken in the center to indicate that the 38th broke the point of the German drive on the Marne, a crest of a boulder to signify the 38th's strength as the "Rock of the Marne," and the motto, "Rock of the Marne." The 10th Artillery, which supplied the guns and gunners in support of the 38th, also commemorate this action with a pair of crossed cannon supporting a rock as the charges on the shield of their distinctive insignia.

Lieutenant Lovejoy of the 38th Infantry described the battle as follows: "Day was just breaking; and through the mist, fog, and smoke one could see the boats and rafts loaded to the gunwales with enemy infantrymen and machinegunners set out for the southern bank. That was about 3:30 o'clock, yet not one crossed that day in the center of the sector, in front of Company H, or on the right in front of Company E. Men of the 38th, who had escaped the hours of shelling, met every attempt with rifle and automatic-weapon fire. Scores of those boats were shattered and sunk or else disabled and sent drifting harmlessly down the river. Hundreds of the enemy jumped into the water and were drowned. Those who reached our side by swimming were either killed or captured. Soldiers wounded in the early morning remained at their automatic rifles or in their rifle pits unflinchingly until killed. One man of Company G was later found lifeless with his rifle and pistol empty, and in front of him a heap of 12 dead Germans. Another private's body was found surrounded by five of the enemy, all killed by a bayonet; but his own rifle was clutched in his hands, ready for more work when he was stopped by a bullet from a machinegun. At this time Company G was really the pivotal point of the attack, because in front of this company the Germans had erected a pontoon bridge over which swarmed a host of machinegunners. By means of a second pontoon bridge, the enemy was enabled to direct a flanking fire on

the left. But Company G made heroic counterattacks in the course of which it took more than 400 prisoners, in spite of overwhelming odds."

Pershing wrote: "A single regiment of the 3d Division wrote one of the most brilliant pages in our military annals. It prevented the crossing at certain points on its front, while on either flank, the Germans who had gained a footing pressed forward. Our men, firing in three directions, met the German attacks with counterattacks at critical points and succeeded in throwing two German divisions into complete confusion, capturing 600 prisoners."

THE BIG PUSH

In the late summer of 1918, the First American Army was given the task of erasing the bulge in the German lines at St. Mihiel. The bulge was to be pinched off by a careful attack on each face with a holding force pressed against the tip.

At 1 o'clock in the morning of 12 September 1918 a terrific bombardment by nearly 3,000 guns began. It lasted for 4 hours. Every gun in the Army fired and made the night as bright as day. Just before dawn of that foggy, rainy morning the rolling barrage began. The signal came to go over the top and waves of troops moved forward until they reached the German barbed wire. Under cover of American shells, infantrymen cut their way through belts of barbed wire, swept across the shell craters and traps of no man's land, and took the German positions. The American Army captured more than 15,000 enemy soldiers.

Within 2 weeks of St. Mihiel the Allied Armies under Marshal Foch of France began the great attack which shattered the German Army and led to its surrender. Foch assigned the Meuse-Argonne sector to the Americans who prepared for the offensive with great secrecy. All men and weapons moved entirely under cover of darkness; during daylight they stopped all activity and kept in concealment. At night, roads leading into the area were jammed with men and guns. On most of the front, French soldiers stayed in outpost positions until the last minute to keep the Germans from seeing any Americans or capturing any who might indicate an attack was coming. The gigantic movement of about 600,000 men into the area was kept a secret. Finally, on the night of 25 September the First Army stood on its new front ready for the battle that was to begin at dawn. On the evening of 26 September, after one day of fighting, the strong German first position was in American hands. The zone of the American advance was bordered on its right by the Meuse River. Its left included the Argonne Forest. As Grant's army had plunged into

Figure 51. Rock of the Marne.

the Wilderness in 1864, so Pershing's I Corps plunged into the Argonne in 1918. The forest was a mass of barbed wire strung from tree to tree; death was everywhere. Carefully hidden machinegun nests sprayed fire into advancing Americans. Yet the Americans advanced. The Lost Battalion was typical of the heroism which all units displayed.

In the Argonne Forest on 2 October the 77th (Statue of Liberty) Division was ordered to seize and hold certain German positions. Under Major Charles W. Whittlesey, six companies of the 308th Infantry, later joined by a company of the 307th Infantry, and parts of two companies of the 306th Machinegun Battalion, advanced as directed without regard for its flanks and in spite of heavy losses to carry out the mission of the 77th Division. As units on each side slowed down, this battalion found itself deep in the German positions with contact cut off. Germans quickly cut around behind them, and, by stringing new barbed wire and setting up new machinegun positions, blocked them off completely from the main body of Americans. The Germans surrounded them so closely that German artillery which had plastered them at first did not fire because of danger of hitting their own men. But the Germans hit the Lost Battalion with everyhing else they had: rifles, machineguns, trench mortars, and grenades. After two days of this, Major Whittlesey sent out a message with the last of his carrier pigeons: "Men are suffering from hunger and exposure and the wounded are in very bad condition. Cannot support be sent at once?" They had no chow, no coffee, no blankets, and very little to smoke. They became more nervous and exhausted as hours of battling somehow passed. They fought the Germans until they fell either from exhaustion or bullets. The moans of the wounded spurred them on. They became weak with hunger.

Morale was high and the men wanted to fight, but the smell of death and the constant hammering of German guns left their mark. Heroic efforts to break through to the Lost Battalion failed. For four days they went without food and practically without water. Even attempts to drop them food by plane failed; and five men were killed in desperate attempts to creep out to get the food packages that fell nearby. Private Hollingshead volunteered to rescue a food package dropped by plane, but got hit in the knee and captured in his attempt. The Germans treated him well; and after some time sent him back with a message to the Lost Battalion asking for surrender. Some men who lived through it later said that Major Whittlesey shouted, "Go to - - ," in the general direction of the Germans. As a matter of fact he said, "No reply is necessary." As word of the surrender

note passed along from one foxhole to another, the men saw red. In a few minutes they met the worst attack the Germans had made, and drove it back.

Abe Krotoshinsky of Brooklyn, who volunteered to go back and guide a relief party to the pocket, slipped out, practically touching German machinegunners on his way, found the American lines, and guided the men of B Company, 307th, through the underbrush to his battered comrades. The Lost Battalion was relieved, after losing nearly half its strength in combat casualties.

In another part of the forest Corporal (later Sergeant) Alvin C. York was fighting with the 328th Infantry, 82d (All-American) Division. When the 328th came under heavy machinegun attack, Corporal York was in a support platoon and was one of 15 doughboys assigned to Sergeant Early to silence those machineguns. York put it down in his diary this way: "October 8th, Argonne Forest, France. And they was to give us a barrage. So the time come and no barrage and we had to go without one. So we started over the top at 6:10 a.m. and the germans was Putting their machineguns to working all over the hill in front of us and on our left and right. So I was in support and I could see my pals getting picked off until it almost looked like there was none left. So there was 17 of us Boys went around on the left flank to see if we couldn't put those guns out of action. So when we went a round and fell in behind those guns we first seen to germans with a Red Cross Band on their arm. So we ask them to stop and they did not so some of the Boys shot at them and they run Back to our right. So we all run after them . . . . . and when we jumped across a little stream of water that was there they was a Bout 15 or 20 Germans jumped up and throwed up their hands and said Comrade. So the one in charge of US boys told us not to shoot they was going to give up anyway. So by this time some of the Germans from on the hill was shooting at us. Well I was giving them the Best I had and by this time the Germans had got their machineguns turned around and fired on us so they killed 6 and wounded 3. So that just left 8 and then we got into it right. By this time So we had a hard Battle for a little while."

Here York's diary is not very clear as to what York himself did at this point. However, among the three wounded boys was Sergeant Early who was in command. York took command, and leaving six of his men to guard the prisoners, he laid into the machinegunners single-handed. Every time he saw a German, he just shot him. First he shot lying on his belly in the prone position. This was the way he had often shot at targets in his home mountains of Tennessee. Every time a head came up, York

shot it down before anybody had a chance to draw a bead on him. Although he was right out in the open, machinegun bullets spitting fire and cutting up all around missed him. This all took only a few minutes. Suddenly six Germans jumped out of a trench and charged him with fixed bayonets. York picked them off as they came at him; the last man he shot first, then the fifth, then the fourth, and so on. He had shot wild turkeys like that at home. He didn't want the front ones to know that he was getting the back ones, and they kept on coming until he got all six of them. York leaves all this out of his own modest account.

He continues, "and I got hold of a german major and he told me if I wouldn't kill any more of them he would make them quit firing. So I told him alright if he would do it now. So he blew a little whistle and they quit shooting and come down and give up. So we had about 80 or 90 Germans there disarmed and had another line of Germans to go through to get out. So I called for my men and one of them answered from behind a big oak tree and the others were on my right in the brush so I said let's get these germans out of here. So one of my men said it is impossible so I said no lets get them out. So when my men said that this german major said how many have you got and I said I have got plenty and pointed my pistol at him all the time—in this battle I was using a rifle or a 45 Colts automatic pistol. So I lined the germans up in a line of two's and got between the ones in front and I had the german major before me. So I marched them straight into those other machineguns and got them." York does not mention that he marched the prisoners from the German lines to his own and then back of American lines most of the time under heavy shellfire. He was ordered to report to General Lindsay, his commander, who said, "Well, York, I hear you have captured the whole . . . . German Army." York told him "No, sir, I only captured 132."

A young farmer from Bedford County, Virginia, named Jesse Maxey, a private in the 47th Infantry, did some hard fighting in the Argonne. He wrote to his wife a description of his experiences which are typical of those of many doughboys. He describes action in the Argonne as follows: "Well the time came for us to go ahead so we got up and gave a loud yell and away we went. Our machineguns went to clicking away and our shells singing over our heads. The smoke and fog was so thick we couldn't see more than three or four yards ahead of us. We would drop in old shellholes and lay thair and try and listen and look ahead of us to see if Jerry was trying to come over to meet us. We went on over the hills our shells falling on ahead of us and our

machineguns clicking away over our heads. You could not hear anything for them as the bullets from our machineguns was singing over our heads like a sworm of bees and our shell whistling way up in the air and we could hear them bursting way on ahead of us. Finly we came to thair trenches and thair we got lots of prisoners, another fellow and myself got 13 out of one little dugout. We got close up to the dugout, and we seen a machinegun setting in the mouth of the dugout so we stopped and decided what to do. So I asked him what he wanted to do, go up and get the machinegun or stay thair and keep his eye on the dugout until I could crawl up and get the gun, so he decided he would let me go. So he crawled up to where he could cover the hole and shoot any of them if they came out. Of course we didn't know whether for sure thair was anyone in thair or not, but we could not risk it anyway, so I crawled up to the dugout and got the gun. I did not dare to get up and aim to carry it so I drug a way laying down. Of course I didn't carry it very far, just far enough so no one could step out and get hold of it without us getting him for sure. We hollered for them to come out and here they come with thair hands up hollowing "Kamerad" 13 of them. I wish I had that machinegun back home. We taken the feed box

Figure 52. Pershing in Paris.

out of the machinegun and threw it as far as we could si if we had left any Germans around there they could not use it."

After 2 weeks of constant fighting, American troops cleared the Germans out of the Argonne, and at the end of another month of steady hammering against the best of the Kaiser's soldiers they reached the banks of the Meuse at a point opposite Sedan. They had driven the enemy back 30 miles and broken his whole line of defense from Metz to Sedan, liberating 150 towns and cities, and capturing 16,000 prisoners and nearly 4,000 cannon and machine-guns. Four days after the 1st Division reached the banks of the Meuse, the Germans accepted terms of surrender laid down by Marshal Foch and signed the armistice. Eleven a.m., 11 November 1918, thousands of guns on a line extending from Holland to Switzerland were quiet. The news flashed around the world and America went wild in celebration (fig 52).

The war over, many men stayed in Europe; the Third Army spent eight months there as an Army of Occupation, and some American troops remained in Germany until January 1923. The shoulder patch of the Third Army still bears an A and an O for Army of Occupation.

American achievement in the war had been enormous. Two million men had been moved across the ocean and into combat. The war cost $32 billion in money. But a more tragic measure of its cost was the 50,000 white crosses over the graves of our fallen soldiers.

CHAPTER 16

WORLD WAR II: PACIFIC

LOSS OF THE PHILIPPINES

While Japanese diplomats in Washington negotiated for peace, Japanese planes struck without warning at Pearl Harbor. It was more than a bombing attack. Within minutes it became a battle with Americans fighting back at planes with blood-red suns on their wings, and within hours it became the war cry of a people determined to avenge wrong. The first shock quickly gave way to action as trained men jumped to their posts. Angry soldiers and sailors saw their comrades killed, their planes destroyed, their ships sunk in a matter of minutes. Men grabbed rifles and machineguns and hit out against strafing Japanese planes. They fought to put out fires. Som even managed to get off the ground in damaged planes and fly outnumbered against Japanese invaders. When the smoke cleared, the Japanese had knocked out the United States fleet moored at the naval base and shot up most of the planes in Hawaii. Ships and planes could replace those bombed, but 2,345 lives lost in action during the first two hours of combat in World War II could never be replaced.

Ten hours after Japan struck Pearl Harbor, she bombed Clark Field in the Philippines. The Japanese were softening the islands for a land invasion. Strafing and bombing continued until 3 days later when a scout car crew of the 26th Cavalry in northern Luzon flashed an urgent radio message back to its headquarters that Japanese troops were landing in the Philippines. Large invasion fleets with thousands of men stood out at sea waiting to come in. No American soldiers opposed the Japanese landings on the north coast of the big island, and Japanese infantry, artillery, and tanks were soon sweeping south along jungle roads toward Manila, the capital city of the Philippines. As General MacArthur planned how to defend Manila against the invaders, someone remarked: "General, the American flag flying from your headquarters makes a swell target for bombers." MacArthur looked up from his maps and said quietly, "Take every normal precaution, sir—but we'll keep the flag flying."

The fate of the Philippines was sealed; it had been sealed on 7 December when American naval and air power in the Pacific was knocked out. The force in the Philippines was a lost army almost surrounded by Japanese. The Japanese occupied China to the west and the Marianas, Caroline, and Marshall Islands in the mid-Pacific. Ships could not supply or take away the defenders of the Philippines; only submarines could smuggle in a few supplies. Cut off from all outside help and surrounded by Japanese, American and Philippine soldiers could only fight a delaying action. The garrison retreated into the mountains and mosquito-filled jungles of Bataan Peninsula where exhausted soldiers held back the enemy for 4 months. They lived on monkey, water buffalo, and finally their horses and mules. More than 20,000 of them became sick. In March, MacArthur was ordered to Australia. A PT boat slipped through the blockade to take him to Mindanao where he boarded a B–17 bomber. General Jonathan Wainwright took command; retreat to the island fortress of Corregidor began.

On 9 April the Japanese overwhelmed the defenders of Bataan in fierce hand-to-hand fighting. On 6 May they swarmed across the channel and took Corregidor. When Bataan and Corregidor fell, there was no escape. The Japanese took prisoner 36,853 Americans and Filipinos on Bataan. On Corregidor the number was 11,574. The Army fought until it could fight no more. The Philippine Campaign was our greatest military disaster. The end left survivors with nothing but MacArthur's promise, "I shall return." Yet some Americans escaped into the hills and fought as guerrillas until MacArthur's return (fig 53).

The infamous "March of Death" began at daylight on 10 April when thousands of prisoners, after their surrender, were marched long hours under a broiling tropical sun to prison camp. Many were sick and there was almost no food. Numerous prisoners died during the 85-mile march. Of those who survived this terrible ordeal, large numbers died in prison camps.

THE JAPANESE ADVANCE IS STOPPED

During the early months of 1942 the Japanese were on the loose everywhere in the Southwest Pacific; their armies were riding high. In an effort to cut off Australia, they struck through New Guinea and the Solomon Islands. The Japanese landed at Buna, Gona, and Sanananda. The Australians stopped them first. Then, joined by Americans, they drove the Japanese back to their landing bases which they finally recaptured. This, and Guadalcanal were the first steps on the long road back; in swampy jungles at Buna and Sanananda in New Guinea the American soldier

Figure 53. Close-in jungle fighting.

stopped the southward march of the Japanese Empire (fig 54 and 55).

Guadalcanal was mainly a Marine show until reinforced Japanese forces threatened to push them off the island. The 25th (Tropic Lightning) Division and the American Division came ashore to help. With the 147th Infantry they turned the tide and drove the Japanese from Guadalcanal.

In Guadalcanal and New Guinea and many an atoll and island, the jungle was on the side of the Japanese. It was their green armor. They could live on a little rice in the bush for weeks. They had trained for years to know the jungle; they had fought it and won; it was on their side. Americans had little or no jungle experience except in Panama and the Philippines. New Guinea and Guadalcanal were more than island victories; they were first and great lessons not only in how to lick the enemy but in how to lick the jungle.

CHINA, BURMA, AND INDIA THEATER

"Uncle Joe" or "Vinegar Joe" Stilwell was a natural to command the CBI Theater. He had lived many years in China and knew the Chinese and Far East peoples. He was as regular and down-to-earth as the scuffed GI shoes he wore when tramping through the Burma jungle. He was blunt and often profane; he said exactly what he thought. He knew soldiering inside out. He

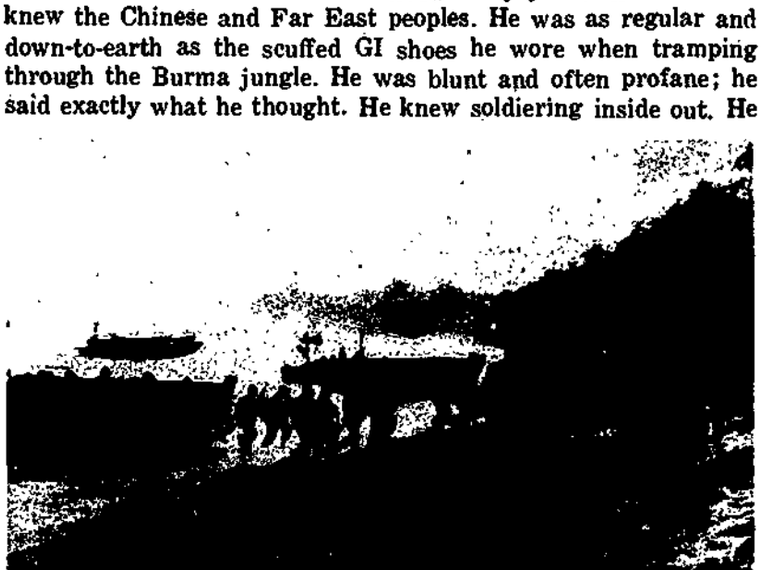

Figure 54. Invasion landing on New Guinea.

Figure 55. U.S. troops advance inland in New Guinea.

had the three stars of a lieutenant general, but most of the time he tramped around the front in a mud-stained field jacket with no insignia and his battered old felt infantry campaign hat clamped on his head. He was a tough, frank old Army man who was determined to do his job well.

He was above all a combat soldier. He was usually found wherever firing was the heaviest. He went first to Burma where in a last-hope attempt he tried to bring together British and Chinese soldiers fighting there. But Japanese soon cut off the British and Chinese and trapped Stilwell with a small party of American soldiers. It was now a matter of walking out of Burma, or of waiting to be seized by the Japanese. Putting on his old campaign hat, Stilwell chose to walk.

The survival of his party depended entirely on their obedience and cooperation. There were disease, jungle, enemy, elephants, tigers, snakes, even hunger and exhaustion to meet and avoid. Stilwell led and organized the march. He commanded respect that was almost like worship, not because he was a three-star general, but because he was a good soldier, an efficient leader, and a man. He led the daily march—he was then 60 years old—counting cadence at 105 paces to the minute. He checked marching order. He inspected food and rationed individual portions. He cursed, snarled, and tongue-lashed—and he brought every man through alive.

Underweight from his ordeal in Burma, exhausted by his march out, his wiry frame worn thin by dysentery and jaundice, Stilwell began right away to plan the reconquest of Burma. Nine thousand Chinese soldiers escaped from Burma to India. He began training them and others at a military camp at Ramgorh.

Stilwell trained the Chinese with American Army instructors and in December 1943, he launched the second Burma campaign with them. On the map, the campaign for north Burma was a line that wriggled from one unpronounceable name to another. The road to Mandalay was about the only place Americans had ever heard of. On the ground it was rain, heat, mud and sickness. It was snakes in camp at night; K-rations and dried rice; snipers and ambush; rustling jungle at night. It was hike, kill, and die. Stilwell was in the jungle from January until July of 1944.

To help the British recover northern Burma and clear the way for construction of the Ledo Road, General Frank Merrill called for volunteers for "a dangerous and hazardous mission." His volunteers, who were all longtime veterans in jungle training and jungle war, were to operate in the rear of the main Japanese lines cutting supply routes and communications. They arrived in India in November 1943 and began hard training under British General Wingate of "Wingate's Raiders" fame. In the spring of 1943 the 77th Infantry Brigade under General Wingate had prowled northern Burma for 4 months worrying the Japs, gathering information and cutting Japanese communication lines. They had put one railway out of action for 4 weeks and in June had fought their way out and back to India.

When Merrill's Marauders, about 2,700 in number, veterans of Guadalcanal and many another battle, entered the jungle country of north Burma they saw it was jungle even thicker than the Solomons. Clothes were damp all the time, even in the driest part of the year; weapons rusted if not taken apart and oiled every day. The mountains, forests, and rivers of Burma were imposing and beautiful, but they were obstacles. The jungle swarmed with enemies—animals, bugs, snakes, disease, and of course, Japanese.

One particularly tough unit of Marauders called themselves the "Dead End Kids." They had fought the Japanese already in the jungles of Guadalcanal, New Guinea, and New Georgia. Near Walambum they ran into about 90 Japanese who attacked with their familiar battle-cry "Banzai." As each attack came, Sergeant Henry Gasko, a Japanese-American in the Marauders, would translate orders he could hear Japanese officers shouting to their men. With this advance information on where the Japanese would strike next, the Dead End Kids could shift their automatic weapons in time to meet each attack successfully.

Another group of Marauders also far behind enemy lines set up a roadblock and fought off numerous enemy charges. Finally, they forced the enemy to withdraw with a loss of 800 men. The Marauders had only eight men killed, or one American to 100 Japanese.

The Marauders worked behind the enemy lines killing literally hundreds of the enemy, destroying roads, blowing up ammunition dumps and enemy headquarters. In April came their most difficult mission; they were to strike at Myitkyina Airport itself. This was the prize toward which all the Allied troops in Burma—British, Indian, Chinese—were pushing. Its capture deep in enemy-held territory would knock out the principal airbase from which enemy planes had attacked transport planes flying supplies over the Hump to China. Stilwell reinforced the Marauders with 5,000 Indian and Chinese soldiers giving a total strength of about 7,000. The Distinguished Unit Citation officially records their success. The Marauders were officially credited with killing 2,000 of the enemy in 6 weeks.

THE GILBERT, MARSHALL, AND MARIANA ISLANDS ARE INVADED

To the infantrymen, jammed in assault boats, Makin Atoll looked pretty beat up after the Army, Air Force, and Navy had pasted it with more than four million pounds of bombs and naval gunfire. Coconut trees along the shore were twisted and shattered. It was 20 November 1943—almost two years after Pearl Harbor. The Army in the middle Pacific was launching its first punch at Makin Atoll in the Gilbert Islands. The 27th Division, including the 165th Infantry which won fame in World War I as the "Fighting 69th," was going into its first battle. Determined Japanese defended Makin, dug in like rats in deep underground tunnels, pillboxes, blockhouses, and foxholes. They had to be pried and blasted out. They fought like maniacs. If they weren't underground they were overhead, strapped into palm trees with machineguns.

The Japanese had a defensive line about 2,500 yards long. Direct assault was out of the question, but the 27th, supported by tanks and engineers, set up two miles west of the Japanese line. The first day was the worst. Heavy sniper and machinegun fire met men moving in from the beaches. Farther inland, pillboxes and blockhouses had to be blasted to bits.

On the second day tanks really got going. They would run a tank up to a dug-in Japanese position and blast it with 75-mm guns. Then the engineers would run in with a TNT charge, poking it into the dugout with a long pole. That did the business.

They cleaned out each one with grenades after that. Typical of the fighting was that done by Sergeant Edward O'Donnel who killed ten of the enemy singlehanded before he was killed himself.

After Makin, in the Gilbert Islands, Americans skirted the fringe of the Marshall Islands and struck at the heart. They hit Kwajalein. H-hour was 9:10 a.m. on a clear, hot morning. Landing craft, ducks, and LCT trailed white sprays in the water as they crawled toward battered beaches. That was 31 January 1944. It began when the 7th Air Force came in from Makin, 491 miles away, and raked the atoll with their bombs. Amphibious tanks lumbered down the ramps of LST and pointed their way toward Kwajalein beach. Behind them, crouched in ducks and seagoing tanks, was the oldest Regular Army infantry division in the Pacific, the 7th, the men who were the first to take any Japanese-held territory in the Pacific at Attu in the Aleutians. When the 7th hit the beach they pitched in with the same businesslike skill they had shown in their drive toward Metz in 1918. They accounted for 2,500 Japanese killed in foxholes, caves, and concrete dugouts.

The first night on the beach Privates Willard Lenz and Edward L. Rice were ambushed by a large number of Japanese. They were trapped on a far part of the beach. Each had only a carbine. They could hold off the enemy about ten minutes with the carbines. Rice, or maybe it was Lenz, shot the lock off an abandoned tank. They climbed aboard and grabbed a .30 caliber machinegun. As the enemy moved in, they mowed them down. The enemy kept moving in like that all night. Rice and Lenz used rags to change red-hot barrels. They burned their hands as the rags caught fire again and again. In the morning they looked out on piles of the enemy—a number sufficient to shoot up a couple of our platoons.

Japanese opened up on a patrol that Ramie K. Lauson was with and pinned the patrol down with crossfire. The patrol stayed down and sweated. Somebody said he would give a lot if a tank were handy. Lauson listened, suddenly got to his knees and, keeping low, made a run for it. The Japanese opened up. He hit the ground; everyone held his breath. But, in a minute, he was up again and running hard, knees high, really taking off. Within an hour, Ramie was back with a tank, and the tank blasted the machinegun emplacements and rescued the patrol.

After the capture of Saipan and Tinian, in the Marianas, the last vital island in the chain was Guam. A new type of Pacific fighting d[illegible]. These were not flat, palm fringed atolls where the tricky [illegible] fell back or fell dead. They were large islands where tanks and artillery could be used with greater effect. Sai-

pan and Tinian were bloody fights on a large scale, but Guam, for the men of the 77th Division, is remembered as a contest of wits and fighting skill, usually in the dark. American power had returned to its lost base. Guam again became a United States naval base, but even larger than it was before the Japanese moved in. The Air Forces landed in the Marianas with their B-29s and had an air gateway to Tokyo, now nearer than ever.

RETURN TO THE PHILIPPINES, OKINAWA, AND THE END OF THE WAR WITH JAPAN

Late in 1944 information from the Navy indicated that enemy-held Leyte was ripe for invasion. As a great task force, assembled in Honolulu, was steaming toward the island of Yap, a bold change came in plans: Substitute Leyte in the Philippines for the original destination of Yap. On 20 October this task force and other men, veterans of Southwest Pacific fighting, stormed ashore at Leyte. After 948 days MacArthur was back on the soil of the Philippines (fig 56).

Surprise caught the Japanese unprepared on Leyte. The veteran Pacific fighters of the Sixth Army knocked out most of the defenders including the enemy division which had helped in the conquest of Bataan. But the Japanese made a desperate effort to hold and they rushed reinforcements to Leyte. The campaign was decided in a last-ditch fight in the mountains. A final hour attempt by the Japanese to knock out a major airbase ended in fail-

Figure 56. Return to the Philippines.

ure. Leyte made a good springboard from which to liberate nearby islands.

Even before the Leyte Campaign ended, a task force struck the island of Mindoro. Then, on 9 January 1945, the Sixth Army landed in northern Luzon. The Japanese fell back into the mountains to make a last stand. In Manila, they had to be blasted and burned out yard by yard (fig 57).

Guarding the sea approach to Manila's harbor stands Corregidor, a Gibraltar-like rock that juts out of the bay to a height of 500 feet. Now 6,000 Japanese manned its defenses. The 503d Parachute Infantry Regiment dropped on Corregidor in one of the most daring airdrops ever attempted. The paratroopers had to land on the summit of the great fortress—a mere pinpoint of a drop area, but it worked. They dropped and set up above the enemy. The next day an infantry regiment landed on the beach and joined them. The earlier defeats at Corregidor and Bataan were now avenged.

Easter morning, 1945, when American soldiers landed on Okinawa they penetrated the inner defenses of Japan. This island is only 350 miles from the Japanese homeland. Nearly 120,000 Japanese troops manned strong defenses in the rugged hills of southern Okinawa. Against elaborate enemy positions built around hillside caves, ancient tombs, and the stone rubble of ruined villages the Americans fought a slow, tedious campaign. Okinawa was a continuous assault, hill by hill, cave by cave.

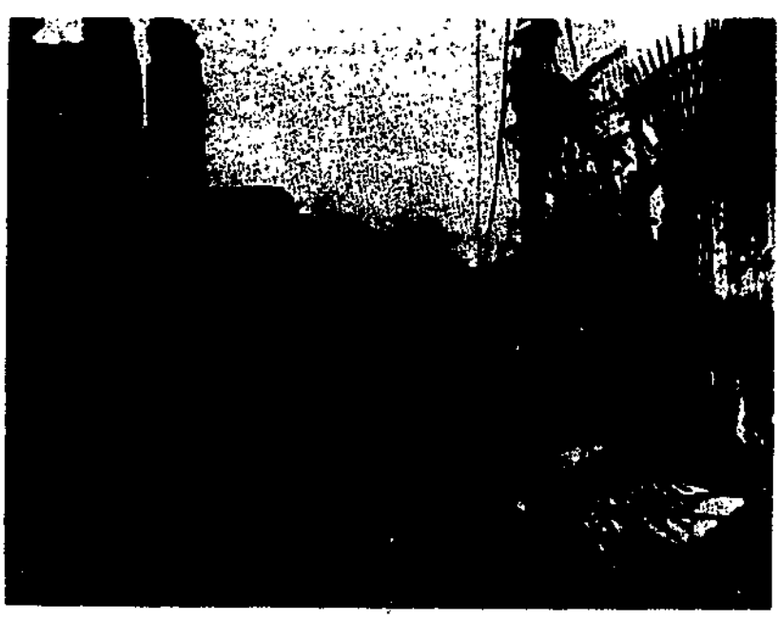

Figure 57. U.S. troops move into old walled city, Manila.

The Americans hit the beaches expecting the worst, banged into seawalls, and stormed ashore expecting to meet sheets of machinegun, mortar, and small arms fire. The beaches were practically undefended. The Japanese had decided to play hard to get. They had decided not to lose thousands on the open beaches but to make Americans pay dearly, fighting over hills honeycombed with caves. By the end of the first day Americans expanded their beachhead to a depth of three miles, and captured two airfields; by the end of the week one-third of Okinawa was in American hands.

The walkover ended on the ninth day. From then on, every yard was gained at a cost in lives. The enemy fought to the death; every American charge they met with half a dozen counterattacks. By day, Americans went forward with flamethrowing tanks. The artillery hammered the enemy at night. All attempts to bring back wounded lying between the lines met Japanese charges and machinegun fire. Fighting was continuous and without quarter. On one point 14 men of the 77th Division stood off eight Japanese banzai attacks in one night.

In this battle of heroes there was one man in particular whom no one who was there will ever forget: Private First Class Clarence Craft. On 31 May, he was with the 382d Infantry Regiment of the 96th Division pinned down at the foot of a hill called Hen Hill. It was honeycombed with the enemy. At the top was a long trench and from here Japanese were pouring fire into the Americans below. The 96th Division had been trying to take the hill for 12 days. The Japanese were picking them off, cutting the regiment to pieces.

Suddenly Craft stood up in full view and charged the hill alone. By a miracle he was not hit. Maybe he was moving too fast, or the Japanese couldn't believe what they saw. Maybe he was just plain lucky. Loaded with grenades, Craft charged up the hill shooting from the hip. Enemy fire filled the air around him. As he rushed forward the men below couldn't believe their eyes. He reached the top of the hill. For a full 30 minutes he stood completely in the open and hurled grenades into the enemy trench. And all the time he was doing it, his company was held back by intense enemy fire. Craft stood there on the top of the hill and pitched grenades like a crazy man. He pitched until the enemy broke and ran. He then jumped into the trench and fired his rifle pointblank at the enemy who were left. He drove them down the trench into a cave. The "immortal PFC" threw a satchel charge into the cave which failed to go off. He went in the cave, relit the charge, and threw it a second time, sealing the enemy forever in the cave. When Craft's company finally caught

up with him they found 70 of the enemy on the hill, but they were all dead. Craft was still looking for more. Later, when they told him he was getting the Medal of Honor, somebody asked why he had done it. "You see guys getting killed all around you," he said. "You get mad. So you go ahead."

Japan's last stand: When the Japanese line finally cracked, and the Japanese staggered back and ran to commit hara-kiri, or throw themselves from ledges into the sea, over 110,000 of the enemy had been killed. The American forces had lost 12,200 men.

Americans now looked at the Japanese mainland. Twenty-one Army divisions with supporting outfits had thrown the Japanese for a loss from New Guinea to Okinawa. The Navy, the Air Force, and six Marine Divisions had helped the Army to do its job. Preparations began for the invasion of Japan, but the atom bomb showed them their cause was hopeless. On 2 September 1945, the Japanese surrendered to General of the Army MacArthur as Supreme Allied Commander (fig 58).

Figure 58. Surrender of Japan.

CHAPTER 17

WORLD WAR II: EUROPE

NORTH AFRICA

In October 1942, shortly before the American and British invasion of North Africa, General Mark Clark made a top-secret trip by submarine to Algeria. The plan was to coordinate the landings with help from the anti-Nazi French. That conference cleared the way for the African invasion and led ultimately to the bitter Italian campaign which smashed enemy forces in the Mediterranean.

Shortly after midnight, 8 November 1942, soldiers under General Dwight D. Eisenhower hit the beaches of North Africa in the first American blow against the Germans and Italians. One American force and one mixed force of Americans and British had sailed from Great Britain to land in Algeria, while another American force had sailed from America all the way across the Atlantic to land near Casablanca in French Morocco. A battalion of American paratroopers flew 1,500 miles from Britain to help capture airfields near Oran, in Algeria.

There were no German troops in Morocco and Algeria and French defenders put up only a short fight. Within 48 hours the Americans and British had won all their immediate objectives. They had completed the biggest oversea invasion up to that time, and they had learned lessons which would make possible even greater amphibious operations.

Now the race for Tunisia began. While the British Eighth Army drove an Italian-German army westward from Tripoli, American, British, and French forces in French North Africa pushed eastward through Algeria, catching the Germans in a great pincers in Tunisia. But the Germans were determined to fight it out. A German counterattack drove through the Kasserine Pass for a 21-mile gain. Americans recovered from that setback, and began moving forward again, first under General George S. Patton, then under General Omar Bradley.

The Germans had organized a whole series of positions and the key fortress of the area was Djebel Tahent, or Hill 609. This flat-

topped hill with wall-like cliffs at several points dominated open country on all sides. It was the objective of the 34th Division.

All day on 28 April the valley echoed with the rumble of shells and the splitting of rock as American artillery kept up a steady bombardment. At 5 o'clock the next morning, the infantrymen jumped off. Men of one battalion worked their way up to three rocky knolls at the base of the hill. In hard, tricky fighting the men snaked their way forward in and out among the rocks. At dusk one battalion had advanced half a mile up the southern slopes.

Another 5 a.m. attack continued the advance the next day. Tanks of the 1st Armored Division joined infantry battalions moving up under fire from the hill. After cleaning out the foothills and the machinegun nests beyond, they fought their way to the top before nightfall. The enemy struck back at dawn the next day. Men of Company F, 168th Infantry, spotted the attacking force early. When the Germans were within 200 yards, the Yanks opened up. The surprise and the volume and accuracy of the fire broke up the attack.

Troops of the II Corps entered Bizerte on 7 May, and during the next three days the American, British, and French cut off all escape from Cape Bon Peninsula. German and Italian forces surrendered more than 250,000 men to the Allied Armies.

SICILY

After weeks of air bombardment on the island of Sicily, the American Seventh and the British Eighth Armies in July 1943 sailed across the Mediterranean Sea from North Africa for an invasion of that steppingstone to Italy.

A high wind sprang up the night before D-day and a heavy sea was running when the invasion fleet shoved off. High winds made more dangerous the airborne landings of advance units of the 82d Airborne Division. Paratroopers scattered as far as 35 miles away from their intended drop zones. In small groups, or alone, paratroopers ambushed supply trucks, cut up telephone lines. The 1st, 45th, and 3d Infantry Divisions and the 2d Armored Division hit the beaches and began to advance. In a way the high winds had been helpful—they had put the enemy off guard.

The day after the landings the Hermann Goering Panzer Division hit the US 1st Division. Enemy tanks broke through the frontlines and headed for the beaches. Ships off the coast "joined the Army" as their big guns poured fire into attacking tanks. The Fighting First attacked. After hard fighting it knocked the German panzer tanks back from the beach.

Other divisions went forward. The 2d Armored ("Hell on

Wheels") and 3d Infantry ("Rock of the Marne") Divisions covered 72 miles in 2 days, and then the 45th Division spearheaded a drive eastward along the northern coast. When the 3d Division reached Messina, remaining enemy forces had fled into Italy. Sicily had been conquered in 38 days.

The capture of Sicily made possible an invasion of the European mainland. While British troops, in a diversionary effort, crossed the narrow straits of Messina into southern Italy, Americans and British of the Fifth Army's invasion forces set sail from African and Sicilian ports to land on the Italian mainland at Salerno.

ITALY

Announcement of the Italian surrender came on the eve of this formidable invasion. In the first minute of 9 September, loudspeakers on the troop transports called the first boat teams to their stations. Soldiers clambered down nets into landing craft. Soon the dark sea was alive with snubnosed craft circling to reach their proper positions. At last the landing craft turned east into a line behind the guide boats 6,000 yards from the Salerno beaches. From the north, where the British were firing a bombardment on their beaches, came the dull boom of heavy naval guns. Near Salerno, flares and fires burning on the mainland lit up the sky. But Americans were heading for the beaches south of Salerno without naval bombardment; they were trying for surprise. Ahead of the 36th Division the beaches were dark and quiet. Soldiers jumped into the shallow water, waded to the narrow strip of sand, and started inland.

During the first hour of the landings, Private J. C. Jones of Company E, 143d Infantry, found about 50 men lost from their outfits. He guided them off the beaches through bursting shells and small arms fire, and they wiped out some key machinegun nests on their way. Sergeant Manuel Gonzales of Company F found a German 88-mm gun firing from the sand dunes toward the landing craft. Machinegun tracers set fire to his pack, but he wriggled out of it and crawled up through bursting grenades toward the gun. Then he threw his own grenades; they killed the gun crew and blew up the ammunition.

The land west of the Sele River was gently rolling, with scattered buildings and a few small patches of woods. Low hills furnished long fields of fire for the defenders. On a knoll near the river stood a tobacco factory. Its five large buildings formed three sides of an open square. Whoever held this tobacco factory commanded the flatlands and the roads around it. On 11 September, a German panzer division held it, and it lay in the zone of the American 45th ("Thunderbird") Division.

Tanks attached to the 45th made the first move. Enemy half-tracks and antitank guns in outlying buildings and strawstacks were knocked out, but near the factory heavy German fire opened up and knocked out seven American tanks. At midnight Germans still held the tobacco factory and the river crossings. American and British battalions all along the line were having a rough time.

German counterattacks struck back at the Allies the next day, but men of the 157th Infantry and their supporting tanks continued their attack against the tobacco factory. After an hour's fight, Americans held the factory. But again German tanks and infantry counterattacked and Americans fell back. Artillery and naval gun fire blasted the enemy column to a halt, and late in the afternoon men of the 157th moved up under a smokescreen and retook the factory.

The next day the Germans counterattacked in full fury. Tanks and infantry drove the Americans back out of the tobacco factory, surrounded a battalion of the 157th Infantry, and smashed through a gap in the lines toward the 158th and 159th Field Artillery Battalions. Both artillery battalions stripped gun crews to a minimum and posted all available men on a slope to dig in and hold with rifles and machineguns. Sweating gun crews poured artillery fire on the German columns at a rate of eight rounds per minute per gun. All-out efforts, called for, were made by the allied air forces, and powerful 16-inch naval guns sent streams of shells into the German concentration area.

While the men reorganized and dug in for new onslaughts, American reinforcements came in by parachute and boat. More days of determined fighting saved the beachhead. In the evening of 18 September the 157th Infantry got back into the tobacco factory. The Germans were in retreat, and the port of Naples fell before the invading onslaught, assuring the success of the invasion.

After capturing Naples the Allies chased the Germans to the Volturno River, 20 miles to the north, where the Germans dug in for a fight. On the night of 12 October 1943, while massed artillery, machineguns, and mortars joined in a fake attack down the river, the 7th Infantry spearheaded the 3d Division attack at a hairpin loop of the river.

Carrying guide ropes, rubber pontoons, and improvised rafts, soldiers of the 7th marched to the river bank and assault parties waded and swam the cold, swift stream to anchor guide ropes on the far side. As the boats started across, trees used for anchoring guide ropes pulled out; rubber pontoon boats drifted far downstream; the improvised rafts broke up in the swift current. Fortunately enemy machinegunners, blinded by smoke shells, and occupying a higher bank, fired too high. As men got across the river

they gathered under cover of the north bank and then moved upstream until they could get up the bank and spread out in the fields. Other men waded the river, holding rifles over their heads with one hand and grasping guide ropes with the other to keep from being swept off their feet. Similar actions in the divisions all along the Volturno made the Fifth Army's crossing secure.

Just after crossing, Sergeant Raymond Oliver led his squad 400 yards along the river toward an enemy machinegun which was holding up the company. A German raised up and threw a grenade that wounded two men; Oliver charged and killed the German with his carbine. Then he moved his squad to within 50 yards of the machinegun and led a 20-minute fight which knocked it out.

As soon as the Allies broke through one barrier in Italy, the Germans had another ready. Their winter line was a succession of interlocking defenses. Each mountain had to be taken, each valley cleared, and then there were more mountains ahead and still another main defense line to be broken. Men now got a foretaste of conditions under which they would fight for months to come.

When the Fifth Army jumped off in Operation Raincoat in December, the 142d Infantry fought its way up Mount Maggiore. It prepared for counterattack. Rain fell steadily; the only shelters were a few caves in the mountainside. The men had taken up all the ammuntion they could carry, a few mortars, and no food but "D" ration chocolate bars. The only way of getting other supplies up was to pack them over rough, muddy trails. Under constant enemy fire, trails were so steep that men had to crawl some of the way and haul the packs up by rope. A round trip of 3 miles took 12 hours. Planes attempted to drop rations to these positions, but the 142d Infantry on Mount Maggiore was able to recover only one pack of "K" rations from three drops. For 3 days men lived on one "K" ration each, and they got their water from snow or shellholes. Sleep was out of the question.

On the flats, jeeps and trucks could churn through the mud; on the worst slopes, only men climbing upward a few inches at a time with a case of rations or a can of water on their backs, could make the grade. But there were miles of trails where only the mule could carry the ammunition and food. At the beginning of November the 45th Division had 32 animals; by the end of December it had over 500. There was such a shortage of animals that they were soon worn out or worked to death. Under such conditions the Fifth Army fought toward the Liri Valley. It was the gateway to Rome, but it came to be known as the Valley of the Purple Heart.

Reinforced concrete pillboxes, often built in stone houses and

on mountain sides, portable pillboxes—called "steel crabs"—barbed wire, and minefields made the Gustav Line, guarding the Liri Valley, a tough position to crack. Cassino was the key position in the defense (fig 59).

In January, the Allied Command decided to have the Fifth Army try an end run. General Clark sent the 3d Division, together with a British division, Rangers, and Commandos around the enemy line by water. They landed near Anzio, 50 miles behind the Gustav Line. The bold move caught the Germans by surprise, but after easy Allied landings, the Nazis rushed divisions to stop this threat. The Germans threw attack after attack against the beachhead. For the first time Fifth Army troops were fully on the defensive. For 4 months they were hemmed in while enemy guns, from 88-mm to giant 280-mm railroad guns, raked the whole area. Smoke generators on the beaches lay screens of artificial fog which helped to reduce the accuracy of enemy artillery and bombing planes. Every night one to a half dozen German air raids would come, and artillery fire would step up in an attempt to cripple the port operations, the lifeline of the beachhead. Ammunition and gasoline dumps were blown sky high by this incessant shelling and bombing. The battle of the beachhead remained a struggle until the Germans were whipped.

Shortly after the first landings at Anzio, the 34th and 36th Divisions opened the battle for Cassino itself. The mountain defen-

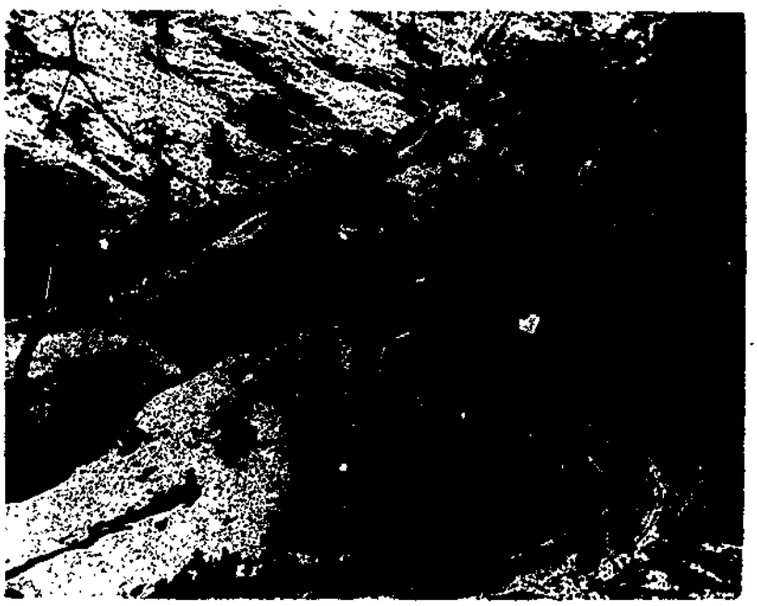

Figure 59. US troops advancing near Mt. Grande, Italy.

ses were practically impregnable, but finally in May, American, British, Canadian, French, Indian, Polish, and New Zealand troops of the US Fifth and British Eighth Armies took Cassino and joined up with troops breaking out of the Anzio beachhead. Their squeeze opened the way to Rome. On 4 June Allied Forces marched into the Eternal City.

Allied armies chased the Germans 50 miles north of Rome, then they ran into more of the mud, mountain, and mules warfare, and pursuit slowed as extended supply lines, demolitions, and stiffening enemy resistance hampered the movement of our

Figure 60. US troops pass the Leaning Tower of Pisa.

troops. The last 50 miles of our advance to the Arno were studded with hard-fought engagements.

By mid-August the Pisa-Rimini line had been reached at most points (fig 60). The enemy still had behind him the Gothic Line—a series of fixed defenses in depth in the rugged Apennines even stronger than the Gustav Line. Fifth Army's mission was to press continuously to divert enemy strength from other fronts. That mission was accomplished and by the last of September some of the Gothic line positions had been penetrated. Allied troops, after two months' struggle from mountain to mountain in a campaign which for intensity and sustained action matched any fought by an allied Army, dug in for the difficult winter. In April, a strong attack was launched. Within a week the Allied Forces broke into the Po Valley. Then a drive into the foothills of the Alps, spearheaded by the 10th Mountain Division, and the conquest of Italy had been completed.

THE NORMANDY INVASION

On 6 June 1944, Americans of the 82d and 101st Airborne Divisions and British troops of the 6th Airborne Division clambered aboard their planes and the invasion was on. As they winged their way toward France, the men thought to each other, "This is it!" And sharing the same thought were men on 5,000 vessels moving across the channel below in the greatest amphibious invasion in history, all under General Dwight D. Eisenhower. Troop carrier planes ran into clouds as they approached the French coast, and then flak began bursting all around them. Fog and flak scattered the planes, and paratroopers were scattered miles apart when they landed. But the troopers fought wherever they landed. As the Germans rushed a patrol to find the parachutists in one area, others would land in the opposite direction (fig 61 and 62). Paratroops and glider troops gathered as best they could to do their jobs.

In one place Sergeant Harrison Summers of the 502d Parachute Infantry gathered 15 men after daylight and led them down a road toward the houses of a German barracks area. At the first house the sergeant walked up and kicked open the door. Inside, Germans were firing out the windows and did not even look up until Summers sprayed them with his tommy gun. Four Germans dropped, and the others ran to another house. Now Lieutenant Elmer Brandenberger joined the group, and while Private William Burt fired a machinegun at the house, he and Sergeant Summers ran for the door. An explosion knocked down the lieutenant, but Summers smashed the door and entered firing. One long burst of his tommy gun got all six Germans inside. As

Figure 61. D-day briefing by General Dwight D. Eisenhower.

Figure 62. D-day, Normandy.

Summers started for the next house a captain from the 82d Division joined him, but a sniper got the captain before they had moved 20 yards. Private John Camien joined the sergeant, and taking turns with carbine and tommy gun, they cleaned out the next five buildings and killed 30 Germans. Then the two men rushed toward a bigger building. They kicked open the door of a troop messhall. At the tables sat 15 Germans. Summers cut them down as they started to get up.

Next was a two-story barracks. An attack on that failed and resulted in four paratroopers killed and four wounded. But Private Burt fired tracers from his machinegun into a haystack. It started a fire which spread to an ammunition shed. As shells began to explode, about 30 Germans came pouring out from the shed—only to be shot down as they ran for the barracks. Then Sergeant Roy Nickrent arrived with a bazooka. He fired seven rockets into the barracks, and the last one set fire to it. The remaining Germans—about a hundred—made a dash for safety. Just then other paratroopers came up from the west, and men from the 4th Division—men who had come in over Utah Beach—came up. Between them they wiped out the German garrison. It was 4 p.m. Summers and his group sat down in the last house and had a smoke.

While similar groups of paratroopers and glidermen fought through the meadows and orchards, other soldiers were fighting bitter battles on the beaches. As British and Canadians went in to the left, men of the 4th Division led the way to Utah Beach, and, surprising the Germans, they quickly moved inland. They fought across hedgerows and streams to link up with the airborne outfits.

On Omaha Beach the going was tougher. Men of the 1st and 29th (Blue and Gray) Divisions moved across underwater obstacles and mines; machinegun and cannon fire from pillboxes swept the beach. Rangers attacked up a cliff for a Nazi gun battery. They brought up ladders to make the climb; when they found the guns already knocked out, they attacked inland. By nightfall on D-day, all beaches were secure and the Allies were in France to stay.

St. Lo was a key to German defenses in the American sector of Normandy, and until it could be taken, General Bradley's First Army would not have room to get set for an all-out drive.

Hedgerows crisscrossed the country around St. Lo. There were banks of dirt two to four feet thick and three to six feet high. Trees or shrubs grew from their tops. They inclosed fields of irregular shapes and sizes about 50 yards wide and a hundred yards long. Many sunken roads and trails ran between hedgerows

in all directions. The Germans made full use of this ground. They put machineguns at the corners and riflemen and machine pistols along the hedge. In the trees snipers and artillery observers watched for attacking Americans. Each meadow and each hedgerow became a battlefield for an American platoon or squad. While some men stayed behind their own hedgerow and sprayed the one to the front with machinegun and rifle fire, small groups worked their way up the sides of hedgerows toward the German positions and rooted them out with grenades or rifles. When possible, artillery would blast the hedgerows ahead. Day after day the slow Battle of the Hedgerows went on. Finally on 18 July, men of 29th Division pushed into St. Lo from the east while the 35th (Santa Fe) Division drove in from the north. They found the town completely leveled.

On 25 July General Bradley attacked to break out of Normandy. Bombers flew in to drop 4,700 tons of bombs on a strip seven miles wide and two miles deep. The 9th, 4th, and 30th Divisions followed through. More divisions poured through the break and fanned out west, south, and east. The Battle of the Hedgerows had become the Battle for France.

RACE ACROSS FRANCE

Hitler decided a desperate gamble—a counterattack to Avranches and the sea to cut off the lead of the American forces. General Bradley decided to let the Third keep going; the First Army would stop the counterattack. German panzer divisions recaptured Mortain; they surrounded two battalions of the 30th (Old Hickory) Division. But tanks and men broke through to the "Lost Battalions" and American soldiers stopped the attack. Now the allies caught the Germans in a pocket between the British and Canadians on the north and Americans on the south.

After destroying two German field armies in the Argentan-Falaise pocket, the Allies turned eastward and crossed the Seine River. French and American troops liberated Paris, then Americans, British, and Canadians raced towards the Siegfried Line on the German frontier. General Courtney Hodges' First US Army, at Mons, Belgium, caught a confused mass of Germans trying to get back to Germany. Parts of three German armies were moving eastward, away from British attacks along the coast, unaware that Americans stood between them and the fatherland. Air and ground attack killed thousands of the enemy and wrecked hundreds of wagons and trucks and guns. Nearly 30,000 surrendered. Men of the First Army continued eastward into Belgium, took Liege, crossed Luxembourg. and on 11 September entered Germany.

Meanwhile, the Third Army of General George S. ("Old Blood and Guts") Patton raced across France to the east. The enemy had no means of checking the Third Army drive. Tanks and trucks filled with soldiers overran Orleans, Rheims, Chalons, Verdun, Toul, Nancy. On 11 September, the Third met columns of the Seventh US Army which had landed, together with French forces, on the Riviera of southern France and then came up the Rhone Valley. But along the Moselle River—in the area of Metz and Nancy—German defense stiffened. Allied drives came to a stop.

East of Nancy, Americans fought for Sugar Loaf Hill, a hill from which Germans could direct artillery fire on the city. A battalion took the hill one afternoon, but the Germans recaptured it that night. The corps commander ordered another attack. The next day the Americans took it back. That night they beat off the German counterattack.

Some time later strong German attacks threatened defensive positions of a division in Gremecey Forest, east of Nancy. The corps commander gave permission to withdraw to stronger positions behind a small river. But when Patton heard about it he said, "Withdraw, _____, we'll attack!" He called for the 6th Armored Division. This outfit was in the rear area repairing equipment. But that night it moved up, and at dawn the tankers swept around the woods, shooting it up as they went, and through the towns to the front. Two hundred prisoners came back; infantrymen got back their old positions and kept them.

The Siegfried Line was a continuous network of pillboxes and entrenchments (fig 63) extending along the western boundary of Germany from the Dutch border to Switzerland. The reinforced concrete pillboxes had walls and roofs four to eight feet thick, and they housed machineguns or 37-mm guns and their crews. Where there was no river or ditch in front of them, the Germans had built rows of concrete dragons' teeth as tank obstacles. While an Allied airborne effort attempted and failed to get around the Siegfried Line at Arnhem, the First US Army was attacking to get through it at Aachen, a German city of 160,000 peacetime population.

By 30 September units of the 1st Infantry had Aachen nearly surrounded. The 30th Infantry, the same division which had broken the Siegfried Line in the Meuse-Argonne in 1918, joined in the fight, but it was slow-going. One area holding up the 1st was a fortified hill—Crucifix Hill—which dominated the southern approaches. Men of the 18th Infantry attacked the maze of pillboxes on the hill, but heavy fire pinned them down. Captain Bobbie Brown of Company C got a pole charge—a pole with a charge

Figure 63. US troops pass through a break in the Siegfried Line.

of TNT on one end—and went after the first pillbox a hundred yards away. He crawled under machinegun fire, and then ran to the bunker, rammed his explosive through the firing slit, and jumped back as the pillbox blew up. Brown returned to his assault platoon, got another pole charge, and ran through mortar and machinegun fire to knock out a second and then a third pillbox. Other companies of the battalion advanced up other slopes of the hill, and it fell to American hands. Other hills came under control in the same way.

On 13 October the 26th Infantry (1st Division) fought into the edges of Aachen and 3 days later troops of the 1st and 30th Divisions linked up to complete a ring around the city. For seven days they fought "from house to house and sewer to sewer." They kept out of streets as much as possible and advanced through blocks of buildings by blowing holes through the walls with bazookas or blocks of TNT from one building to the next. With rifles, submachineguns, and grenades, they fought their way to the top of six-story buildings, and then sometimes would have a fight back down again as more Germans came in after them. Self-propelled 155-mm guns (Long Toms) and tank destroyers moved up through the rubble in the streets to blast away at bunkers and cellars and houses in the next block. Surrender came on 21 October, and the first large German city was in American hands.

THE BULGE

In the hilly forests of the Ardennes, American soldiers bedded down on the night of 15 December with no more worry than ever in this "quiet sector" of the Western Front. They awoke to the roar of cannon, the chatter of machineguns, and the rumble of tanks. Sleepy men in division rear areas looked out in the mist to see trucks of Germans rolling through the area. Tanks smashed through an artillery airplane field before the pilots could get to them. Twenty-four German divisions—including 12 panzer—were attacking through the thinly held Ardennes in Hitler's last great bid to smash the Allies in the West. But American soldiers fought back. The 2d Armored Division and 2d Division, in one of the great division actions of the war, withstood attacks of a German corps for 36 hours until others could join it; they held the First Army line in the north. The 2d Armored Division slugged it out with a German panzer division to prevent the Germans from reaching a primary objective, crossing of the Meuse River. The great fight of the 7th Armored Division at St. Vith, while German columns rolled far to the west, disrupted the whole German schedule, and it helped make possible the buildup of a defense line.

The 101st Airborne Division and Combat Command B, 10th Armored Division, were surrounded by the Germans at the important road center of Bastogne. When the German commander sent a note stating that the only way the American Forces could be saved from total annihilation was to surrender the encircled town, the American commander, General McAuliffe, is reported to have sent a one word reply—"Nuts."

The Third Army still was attacking in the Saar 125 miles south of the Ardennes, when the German breakthrough occurred. Within 2 days after receiving orders the Third Army had pulled back from its attack in the Saar (the Seventh Army took over there), had hundreds of guns and trucks rolling northward, and had three divisions attacking through the snow toward Bastogne. On 3 January "Lightnin' Joe" Collins' VII Corps opened the big First Army counterattack from the north. After 12 days of slow attack through woods and hills, the two Armies were approaching each other. A Third Army patrol hiked 20 miles in the freezing weather to make first contact with First Army troops near Houffalize. Now Americans turned eastward and pushed the remaining German forces out of the bulge.

In order to keep troops of General Devers' Southern Army tied up, the Germans launched an attack in Alsace even as they continued to attack in the Ardennes. As in the north, American soldiers stopped this threat, and again individual and small unit ac-

tion played a big part in turning the trick. In one sector of Alsace the 15th Infantry—the "Can Do" regiment—held a defensive position. Commanding Company B was Second Lieutenant Audie Murphy, a man who had entered the Army as a private, had earned a commission on the battlefield, and had won the Distinguished Service Cross and the Silver Star. One day in January six German tanks and waves of infantry attacked Company B. Murphy ordered the company to withdraw to the woods, but he remained at his command post to direct artillery fire. A tank destroyer behind him took a direct hit and started to burn—and the Germans kept coming. Murphy ran to the burning tank destroyer, climbed to its deck, and opened fire with the .50 caliber machinegun. Germans got as close as 10 yards, but he mowed them down. After his fire had killed about 50 infantrymen, the German tanks turned back. Murphy got back to his company and organized a counterattack which drove the Germans out. His action won the Medal of Honor.

CROSSING THE RHINE

After elimination of the bulge (fig 64), one great barrier yet remained before the Western Allies—the Rhine River. As Allied armies neared the river the Ludendorff Railroad Bridge at Remagen still stood. A 3:15 p.m. on 7 March 1945, men of the 9th Armored Division came in sight of the bridge. They learned from a German prisoner that the bridge was to be blown up at 4 o'clock. It took 35 minutes for men of Company A, 27th Armored Infantry Battalion, to reach the approaches to the bridge. Tanks went into position nearby to cover the crossing. The enemy set off a charge that blew a crater in the approaches, but men of Company A went around it; at 10 minutes till 4 they ran out on the long span. Another charge went off out on the bridge and it knocked out some supports and flooring, but the men raced on. The cap went off on a 500-pound charge of TNT, but failed to set it off. Engineers hurried onto the bridge and began cutting wires and throwing charges into the river. When they got to the main cable, their small pliers would not cut it, but Sergeant Dorland smashed it with three shots from his carbine. German machinegunners in the towers of the bridge sprayed the running Americans until Sergeants Joseph Delisio and Mike Chinchar went up after them. Sergeant Alexander Drabik reached the opposite side, and quickly men fanned out. Some cleared out a tunnel. Others started up the steep hill, and there they got into a fight. Men held to roots on the hill, while Germans shot at them and rolled rocks down toward them. But other troops soon were streaming across the bridge, and the First Army had a bridgehead across the Rhine. A sign

Figure 64. Drive through Germany.

Figure 65. Surrender of Germany.

appeared on the bridge: "Cross the Rhine with Dry Feet Courtesy of the 9th Armored Division."

When the American Ninth and First Armies linked up on 1 April near Lippstadt they had encircled the industrial Ruhr Valley and bagged over 300,000 Germans in what General Marshall called the biggest pocket in the history of warfare. From here Allied Armies raced across Germany. Americans drove into Austria, into Czechoslovakia, and to the Elbe River within 50 miles of Berlin. On 7 May 1945, representatives of the German High Command surrendered at General Eisenhower's headquarters at Rheims (fig 65).

CHAPTER 18

KOREA

INVASION OF SOUTH KOREA

Following World War II, the United States looked forward to an era of peace. Our active Army settled down to routine training in the United States and occupation duties in Asia and Europe. Russia, our ally of the last war, after a period of seeming cooperation in world affairs, suddenly authored incident after incident which irritated the peoples of nations outside her sphere of direct influence. China turned to the communist doctrine, and the nations comprising the Soviet Block isolated themselves behind an impenetrable curtain of secrecy, distrust, and fear. Tensions mounted in this cold war between West and East.

The major break in the growing tensions in the international situation came not in Europe as expected, but in Asia, in the country of Korea. In the aftermath of World War II, this peninsular land became divided politically, the division marked by the 38th parallel of north latitude which crosses Korea at its waist. North Korea became a Soviet satellite, South Korea an independent republic. On 25 June 1950, the North Korean Army, supported by Soviet made tanks and aircraft, struck suddenly and unexpectedly across the 38th parallel. Caught by surprise and ill-prepared for major military operations, the South Korean forces were forced back with heavy losses. Seoul, the capital fell on 28 June, and the invaders continued south with the objective of occupying all of Korea.

Acting quickly and firmly, the United Nations voted to support the South Koreans and called on member nations to furnish such assistance to the South Korean Government as they deemed necessary to repel the aggression, and restore international peace and security in the area. On 27 June, American air and naval forces entered the conflict. On 30 June, the employment of American ground forces was authorized.

On 1 July 1950, a task force consisting of half a battalion combat team from the 21st Infantry, 24th Infantry Division, under command of Lieutenant Colonel Charles B. Smith, was sent to

Korea from Japan by air to do what it could to hold the North Koreans while the rest of the division was en route. Four days later this tiny task force met the main enemy column which was headed toward Taejon. For 7 hours it put up an epic fight against an entire North Korean division. Finally the Americans were forced back. By this time the rest of the 24th Division had arrived and taken up defensive positions north of Taejon. The 25th Infantry Division and the 1st Cavalry Division, also on occupation duty in Japan, arrived in Korea soon afterward. On 20 July, after a gallant but hopeless 2-day fight, the 24th Division was forced to fall back from Taejon.

The small forces available prevented the establishment of a continuous front and facilitated the use by the enemy of tactics of infiltration and envelopment. Under constant threat of encirclement, the United Nations forces were gradually forced back until a perimeter defense was established around their supply base at Pusan—a position that could be held until sufficient reinforcements could arrive to permit a counter offensive to be launched.

On 31 August Sergeant Ernest R. Kouma, Company A, 72d Tank Battalion commanded a tank covering the movement of troops forced to withdraw in face of an attack by 500 enemy who had crossed the Naktong River. The hostile force overran two of the tanks in his unit, destroyed one and forced another to withdraw, leaving Sergeant Kouma's tank the only obstacle in the path of the onslaught. Remaining in position, his tank fought off enemy attacks throughout the night. Finally, when the enemy surrounded the tank, Sergeant Kouma leaped from the turret, exposing himself to a hail of small-arms fire, manned a .50 caliber machine gun on the rear deck, and delivered point-blank fire into the fanatical foe. Machinegun empty and although wounded, Sergeant Kouma fought with pistol and grenades. After 9 hours of constant combat and close-in fighting his tank withdrew, destroying three hostile machinegun emplacements and using up all ammunition before reaching friendly lines. In this action Sergeant Kouma killed an estimated 250 enemy soldiers. He was awarded the Medal of Honor for his bravery and devotion to duty.

For 6 weeks the North Korean forces strove to break through the perimeter, first by successive blows and later by almost simultaneous attacks around the entire perimeter. A serious threat during this period occurred in the southwest, when a North Korean force assembled for an attack from Chinju toward Masan, whose capture might have resulted in the loss of Pusan itself. To meet this menace, a limited offensive was launched toward Chinju which hit the enemy and disorganized him so completely that for the time being the danger to Pusan from that direction was eliminated.

ADVANCE TO THE MANCHURIAN BORDER

Despite the precarious position of the Eighth Army in Korea, General MacArthur, Commander in Chief of all United Nations forces, carefully husbanded the limited troops available and assembled a striking force for offensive operations. In a difficult amphibious operation, which achieved complete surprise, the X Corps, under General Edward Almond, moving from Japan, landed successfully at the west coast port of Inchon, in rear of the main enemy forces, on 15 September. Seoul, not far east of Inchon, was captured on 26 September, thus severing the enemy's main supply line into southern Korea (fig 66).

The day after the landing at Inchon, the Eighth Army at Pusan initiated a general offensive. On 26 September, units from Pusan and Inchon joined up near Suwon, south of Seoul. The advance isolated large numbers of North Korean troops in southwestern Korea. Many were captured, many escaped to the north in small groups or donned civilian clothing and merged with the populace, while a number took to the mountains to conduct guerrilla warfare.

United Nations forces advanced into North Korea against negligible resistance by the disorganized and demoralized North Koreans. On 19 October, Eighth Army troops took Pyongyang, the North Korean capital. While the X Corps, after making another

Figure 66. The landing beach at Inchon.

landing at Wonsan on the east coast, moved northeastward, the Eighth Army drove north and northwest.

CHINESE COMMUNIST INTERVENTION

On 24 November the Eighth Army began an offensive which was intended to take it to the Manchurian border. The advance was stopped suddenly the next day when strong Chinese Communist forces, which had been assembled secretly in Korea, struck the right wing of the advancing Eight Army. Confronted with numerically superior forces, the Eighth Army began a withdrawal.

The Eighth Army withdrew to the south, avoiding successive enemy efforts to envelop its right. By 15 December it had occupied a strong defensive position just south of the 38th parallel.

On 31 December, the Chinese Communist and North Korean forces attacked this line on a broad front. Indifferent to losses, the enemy attacked in successive waves and forced another Eighth Army withdrawal.

Meanwhile, the Chinese Communist forces attacked X Corps in the east. Like the Eighth Army, X Corps withdrew southward. While the withdrawal of X Corps right flank was uneventful, its left flank had to fight every step of the way. Moving to the port of Hungnam, they established a defense perimeter to make possible evacuation by sea. The day before Christmas, evacuation of the entire force was completed. Shortly thereafter X Corps became part of the Eighth Army.

The withdrawal of the Eighth Army and X Corps had been hampered on the one hand by streams of civilian refugees (containing many North Korean soldiers in civilian clothing) and on the other hand by increasing activities of guerrilla bands behind their lines. The enemy attack lost its momentum by the middle of January, and the Eighth Army halted its withdrawal south of Seoul.

THE UNITED STATES STRIKES BACK

On 25 January the Eighth Army inaugurated a series of limited objective attacks. Consolidating each gain before again moving forward, inflicting maximum punishment on the enemy when forced to move back under heavy communist counterattacks, the Eighth Army reached the 38th parallel on 31 March and 3 weeks later established a strong defer sive position 20 miles beyond (fig 67).

On 22 April the Communists initiated a spring offensive, with the principal effort in the west, which gained up to 35 miles. The Eighth Army returned to the attack and by mid-May had re-

Figure 67. 2d Infantry Division in Korea.

gained almost half the territory that had been lost. On 15 May the Communists resumed the offensive, with the principal effort now in the east. Immediately, the Eighth Army launched a major counterattack. On 10 July, when cease-fire discussion began at Kaesong, the line held was essentially the same as when the Communist spring offensive had begun on 22 April.

END OF HOSTILITIES

Both sides agreed in late June 1951 to discuss an armistice. After truce talks began, ground action slowed to a virtual halt, except for limited and local operations at various points along the line. Although both sides engaged only in sporadic fighting during the next two years, while the truce talks were in progress, some of the actions were severe in nature and both sides suffered considerable casualties (fig 68).

On 28 October 1951, in the vicinity of Chong-dong, First Lieutenant Lloyd L. Burke, Company G, 5th Cavalry, was pinned down with the leading elements of his company by intense enemy fire coming from three bunkers directly in his line of advance. Dashing alone to an exposed vantage point, Lieutenant Burke threw several grenades at the bunkers, then with his rifle made an assault on one bunker and killed the entire crew. He then closed in on the center bunker, lobbed grenades through an opening, and killed three remaining members of the crew with his pistol. Followed by his men, he then charged the third bunker, catching enemy grenades in the air and throwing them back at the enemy as he ran forward. After capturing the third emplacement, enemy fire again pinned his men down. Lieutenant Burke then secured a light machinegun and three boxes of ammunition

Figure 68. Patrol in Korea.

and dashed through heavy fire to an open knoll where he poured crippling fire into the ranks of the enemy, killing 75 of them. Although wounded, he called for more ammunition and destroyed two mortar positions and a machinegun emplacement. He then cradled the machinegun in his arms, and killed 25 more enemy as he led his men forward to overrun the enemy position. His inspiring leadership and personal bravery resulted in the deefat of approximately 300 enemy soldiers by only himself and 35 comrades. He was awarded the Medal of Honor for his part in this action.

Only 16 days before the action which resulted in the award of the Medal of Honor to Lieutenant Burke, another action occurred which resulted in the award of the Medal of Honor to PFC Ernest E. West of Company L, 14th Infantry. When the patrol of which he was a member was ambushed with numerous casualties, he ordered the platoon to withdraw while he attempted to rescue the platoon leader who lay wounded in an exposed position. Braving intense enemy fire, he reached the officer. While attempting evacuation he was attacked by three enemy soldiers employing grenades and small arms fire. Shifting his body in front of the officer, he killed the assailants with his rifle, then carried the man to safety. Although critically wounded and with one eye shot out, he returned to assist other wounded. While evacuating two more men, he was again attacked by three of the enemy. Leaving the two wounded men, he closed on the enemy and in a short but furious struggle killed them. He then helped the wounded men to safety.

On 27 July 1953, all hostilities were ended when an armistice agreement was signed.

Names such as Noname Ridge, Million Dollar Hill, Bloody Ridge, Bunker Hill, and Heartbreak Ridge indicate the type of action and terrain encountered by our troops in Korea. The seemingly endless mountains, the bitter cold winters, and the limited road net all combined to make the Korean campaign one that will be long remembered by those who participated and survived. The intensity of action can be measured in part by the number of Medal of Honor winners in certain units—eight in the 7th Infantry (Cotton Balers), six each in the 9th and 17th Infantry, five each in the 23rd and 27th Infantry, four each in the 31st and 38th Infantry, and three each in the 14th, 15th, 19th (Rock of Chickamauga), 35th and 223d Infantry, 5th Cavalry, and 187 Airborne Infantry. Other units whose members won the Medal of Honor are the 5th, 21st, 24th, and 32d Infantry, 15th Field Artillery, 3d, 8th, and 13th Engineer Combat Battalions, 8th Cavalry, 72 Tank Battalion, and the 2d and 16th Reconnaissance Companies. Individuals and units once again lived up to the traditions and added to the achievements of the Army.

CHAPTER 19

THE ARMY SINCE KOREA

INTERNATIONAL RELATIONS AND THE ARMY

The Korean Armistice did not reduce world tensions sufficiently to justify the United States in bringing down its guard, but it was a landmark in a rapidly changing world. This can be seen in both our international relations and our military history.

Internationally the pugnaciousness of a rising Communist China, with its government at Peking, has threatened to upset the balance in Asia and has led to what may be an irreparable break between the two giant Communist nations, the Soviet Union and China. Communist China and the Soviet Union are potential dangers, but there is reason for hope as the Communist world changes more and more from a monolithic union into a quarrelsome alliance of states moved by conflicting national interests.

But change is not limited to the Communist world. One of the most striking political changes of the age, in process since 1943, but accelerating markedly in recent years is the rapid birth of newly independent countries—60 from 1943 to 30 November 1966. Many of these are in Asia, but most of them are in Africa. Altogether they represent about 46 percent of the 131 sovereign states of the world that are recognized as independent by the United States Government. Here is a fundamental change that already is having a major impact upon both United States diplomatic and military policy.

Unhappily, the threat of nuclear war has continued to hang over the world. This threat arose abruptly in October 1962 when intelligence sources discovered Russian ballistic missiles in Cuba. Confronted by the United States, which left no doubt that it would fight, the Soviet Union agreed to withdraw these weapons, but not before the world teetered unbelievingly on the edge of nuclear disaster.

Most of the world now came to realize that it could no longer afford nuclear weapons testing either above ground or under water because of the danger of peoples, born and unborn, from

radioactive fallout. Accompanying this conviction was the hope that a halt in testing might also lead to nuclear disarmament. The result was United States' negotiation with the Soviet Union of a treaty banning nuclear weapons tests in the atmosphere, in outer space, and under water. This was signed in Moscow in August 1963. By late 1966 the United States recognized approximately 96 countries as having bound themselves by its provisions. Absent from among these nations, whose number was impressive, were Communist China, Cuba, and France.

France, meanwhile, became the fourth nuclear power, after the United States, the Soviet Union, and Great Britian, and was intent upon maintaining an independent policy in foreign relations. Then, in late 1964, the Chinese Communists exploded an experimental nuclear device and since then have exploded several others. Much of the anxiety around the world at this development concerns not only the possible use to which Peking might put nuclear weapons once she has them, but also the awesome possibility that despite the test ban treaty other nations might decide that they, too, should have such weapons. If nation after nation were to enter a nuclear arms race, control of such arms might never be possible.

Still another factor in the international life of this period is the United Nations (UN), under whose auspices the United States fought in the Korean War. Besides playing a leading role in the UN, the United States had made collective security arrangements since 1949 with more than 40 nations united in such regional organizations as the North Atlantic Treaty Organization (NATO), the Southeast Asia Treaty Organization, and the Organization of American States. It may be noted, however, that because of President Charles DeGaulle's insistence upon an independent foreign policy for France, that country declared in 1966 that it would withdraw from the NATO military organization, although continuing to adhere to the North Atlantic Treaty, and that other NATO members, including the United States, in effect would have to relocate their troops on non-French soil. Through its commitments to these regional organizations, despite the French position, the United States continues to give concrete proof of its desire to maintain a peaceful world through organized international efforts.

To its friends the United States has also given direct assistance in the form of arms, technical assistance, and the promise of it own muscle, if needed, either for a limited effort to maintain independence, or for a major effort through one of the regional organizations.

Under the Military Assistance Program the Army has had

thousands of persons engaged in providing technical assistance and training to the armies of friendly foreign nations. As of 30 September 1966, for example, it had 2,771 of its personnel serving on military assistance advisory groups in 44 nations exclusive of Vietnam. It also had 280 training teams in about 30 nations during fiscal year 1966, and it provided military schooling both at home and abroad for many persons from various nations. The dollar value of the Army's aid in the form of grants to foreign countries, exclusive of Vietnam, was $417,600,000 for fiscal year 1967. The total of such aid, including that for Vietnam, for all the military services, amounted to $32,361,000,000 in the years 1950–66.

During trouble in both the Middle and Far East in 1958, the Army supplied both troops and equipment. In 1961, there was a buildup of US forces over new threats to the freedom of West Berlin. The most notable direct assistance given by the United States in recent years, however, has been the aid given the Republic of Vietnam. By means of military aid to South Vietnam, the United States assisted that country in defending itself against the insurgency of the National Liberation Front (the Viet Cong) and external aggression from North Vietnam. This aid included the assignment of US military advisors to South Vietnamese troops, the training of South Vietnamese soldiers, the provision of helicopters to support South Vietnamese combat operations, the provision of extensive logistical support, and a civic action program designed to help build up the country and make it self-reliant.

CONFLICT IN VIETNAM

The case of Vietnam illustrates graphically the danger and sacrifice the United States is willing to suffer on behalf of its policy of military assistance in opposition to aggressive Communism. Despite US intentions to provide assistance short of war, a changing situation produced a reappraisal that has led to overt military action. During 1964, both the North Vietnamese and the Viet Cong insurgents in South Vietnam increasingly attacked US forces and installations. In 1964 the North Vietnamese, whose capital is Hanoi, attacked US naval vessels in the Gulf of Tonkin. Later that same year the Viet Cong attacked the US air base at Bien Hoa with mortars and bombed officer quarters in Saigon. In February 1965, insurgents attacked a US Special Forces camp at Pleiku and an enlisted men's quarters in Qui Nhon. These attacks and the increasing enemy infiltration into South Vietnam from the North along the Ho Chi Minh Trail caused the United States and South Vietnam to retaliate with joint bombing raids across

the 17th parallel, which divides North and South Vietnam. Their purpose was to reduce the rate of infiltration from the North and to convince the Hanoi government to end its support of the insurgents in the South.

Throughout 1965 and 1966, the United States continued to provide military assistance to the South Vietnamese, but also became more and more involved directly in the conflict. By mid-1965, the first US Army ground forces had entered South Vietnam and were engaged in combat operations against the Viet Cong. US Army forces in South Vietnam rapidly increased from approximately 35,000 in mid-1965 to approximately 167,000 by June 1966, and to almost 195,000 by October 1966. By the latter date a total of 316,000 US forces were assigned to the Military Assistance Command, Vietnam, commanded by General William C. Westmoreland. By 1 July 1966, the overall strength of the Army had increased to 1,199,784 or the equivalent of 18 1/3 divisions.

On 28 July 1963 President Lyndon B. Johnson marked a new turning point in US policy toward Vietnam by announcing that the buildup or expansion of US military forces would continue in order to meet the requirements of the conflict in South Vietnam. To meet the demand for additional military personnel, the monthly draft calls were raised to 35,000. An especially notable feature of this buildup, however, was that the President did not order a mobilization of Reserves, as had been done during the Berlin Crisis in 1961, or call for economic controls. Nevertheless, by the end of 1966, the undeclared war in Vietnam had become the Nation's third major war in 25 years, having already surpassed the Korean War in the number of US forces involved. Although there was no international or United Nations command, as there was during the Korean War, the United States was not alone in aiding South Vietnam. By February 1966, troops, technical assistance, and economic aid had been variously provided or promised by 38 other nations. Of these nations, Korea, Australia, New Zealand, the Philippines, Spain, and Thailand had provided military assistance by the end of 1966, with Korea's contribution being by far the most substantial.

American offensive operations against the Communists were primarily of two kinds: search and destroy, and secure and hold operations. Search and destroy operations were conducted by troops "sweeping" through a designated area. Secure and hold operations usually followed these "sweeps" and were designed to enable the South Vietnamese government to extend its authority over areas from which the Communists had been cleared. Other types of operations were undertaken to protect South Vietnamese

peasants during the rice harvest and in the protection of convoys that transported their rice to market. Civic action programs providing, for example, medical treatment for peasants or the construction of schools and wells in South Vietnamese villages, were an integral part of US Army operations in South Vietnam. Similar operations were conducted by US Marines in the northern part of South Vietnam and all forces received air support from the US Air Force and Navy.

In early 1968, during the Tet New Year holiday, the Communists launched large scale attacks against many of the principal cities in South Vietnam. Although in some respects they did gain a psychological advantage as a result of these attacks in that antiwar activity in the United States increased, from a military point of view these offensives proved to be a failure since none of the major objectives were held.

In May 1968, the Communists finally agreed to open negotiations to end the war after President Johnson declared a moratorium on the bombing of North Vietnam, north of the 19th parallel. The fact that they had suffered heavy losses during the offensives early in the year no doubt also affected their decision.

A major turning point in the war occurred with adoption of the policy of Vietnamization by the United States. The purpose of the Vietnamization program was to strengthen the South Vietnameses' ability to defend themselves by improving their fighting capability. The turning over of responsibility for the conduct of the war to the South Vietnamese was gradual with American combat forces being withdrawn in phases. The South Vietnamese would first take over the direct combat missions with American forces continuing to provide logistical and combat support. Later, when the South Vietnamese armed forces were considered ready, they would assume the support responsibilities as well.

After the overthrow of the ostensibly neutral regime in Cambodia and its replacement by an anti-Communist government, President Nixon authorized a limited incursion into Cambodia to destroy enemy bases which were being used to provide fresh troops and supplies for operations in South Vietnam. On 29 April 1970, South Vietnamese troops entered Cambodia for the first time. This was followed 3 days later by a combined offensive by American and South Vietnamese forces. The limited nature of the American portion of this operation was clear as the last American troops left Cambodian soil on 29 June.

Since an important source of supplies and reinforcements had been effectively neutralized, the Communists found that they now had to rely on the Ho Chi Minh Trail as the main infiltration

route into South Vietnam. In order to check this source, 21,000 South Vietnamese forces with US support entered Laos on 8 Feb 71 with the objective of disrupting this essential Communist pipeline. Although the fighting was bitter and costly for both sides, the operation did result in hampering Communist operations in South Vietnam by slowing the flow of much needed supplies and men.

The initial phase of the conflict in Vietnam was largely a guerrilla war, which called to mind the Philippine Insurrection at the beginning of this century. The Communists did not have armored vehicles or helicopters, but were provided with automatic weapons, mortars, mines, and grenades, many of which were constructed by the guerrillas themselves, and sometimes with artillery. The insurgents were dedicated and stubborn fighters, were often well entrenched in elaborate networks of bunkers and tunnels, and were seldom deployed in battalion strength. They were adept at executing ambushes, terrorist attacks, and sabotage, but were reluctant to engage in large battles. More aggressive offensive operations against the Communists from 1965 to 1969, however, made such battles unavoidable and numerous large scale conventional engagements took place during this period.

Many military innovations have been made by the Army as a result of its experiences in South Vietnam, the most notable is the extent to which the helicopters have been used not only for rescue and medical evacuation purposes but for transporting troops into battle, providing suppressive fire and, as terrain permits, providing airborne command posts that enable commanding officers to view and direct operations as though they were on the ground.

The Vietnam Conflict was one of the most costly in our nation's history. A total of 45,000 men died in combat (30,200 were soldiers). Another 10,000 died from noncombat causes. Another 150,000 men were wounded seriously enough to require hospitalization.

The conflict has been characterized, as in any war, by such selfless devotion on both sides. By 30 June 1966, three Medals of Honor, 32 Distinguished Service Crosses, and 521 Silver Stars had been awarded to US Army personnel for heroism in Vietnam. The first of the three Medals of Honor, and the first to be awarded since the Korean War, went to Captain Roger Hugh C. Donlon, for conspicuous bravery at Camp Nam Dong, Republic of Vietnam, on 6 July 1964. The action at Nam Dong illustrates the character of much of the fighting in Vietnam as well as the heroism of men such as Donlon.

Nam Dong was a South Vietnamese guerrilla training camp. It also had an extensive civic-action program that hurt Viet Cong

recruiting and supply in the area. For these reasons the insurgents hoped to put the camp out of business. Donlon commanded US Special Forces Detachment A at Nam Dong and had as his executive officer a young West Pointer, Lieutenant Julian M. Olejniczak. Also in the detachment were several noncommissioned officers and an Australian chief warrant officer in addition to a small group of Vietnamese soldiers.

The Viet Cong began the battle without warning about 2:30 in the morning with a barrage of mortar and machinegun fire, which awakened the camp in seconds. Sergeant First Class Thurmon Brown ran to his mortar, Staff Sergeant Thomas Gregg, a senior medic, ran out of the dispensary, and Sergeant Terrance Terrin was knocked unconscious by enemy mortar fire while trying to save medical supplies; Terrin was dragged to safety by Sergeant John Houston. Houston was one of the two Special Forces soldiers killed during the battle.

Staff Sergeants Raymond Whitsell and Merwin D. Woods, Specialist 5 Michael Disser, and Sergeant First Class Vernon Beeson all began firing mortars for illumination. Houston, meanwhile, found Sergeant Keith Daniels and both of them, under fire, began sending radio messages. "The key to the whole thing is communications," Donlon was later quoted as saying. "Without it we had nothing." Donlon, Olejniczak, and Sergeant Gabriel Alamo began evacuating weapons and ammunition from a burning hut, and then Olejniczak and Alamo joined Disser at his mortar. Donlon, according to one account, also killed three enemy demolitionists at the gate of the camp and received a grenade wound in his stomach, the first of four wounds he was to receive before the fight was over.

Accompanied by Terrin and Houston part of the time, Donlon began making the rounds of the camp, although "raising your head was like suicide," as Olejniczak put it. Then they returned to the mortar pit just in time, for the Australian and Alamo were either mortally wounded or dead there and Olejniczak and Disser were wounded—with Viet Cong still coming in. With their wounds, Olejniczak and Disser had to crawl out to a nearby trench.

Donlon had Olejniczak cover him from the trench while he returned to the mortar pit to see if he could help the Australian and Alamo; he could not. He returned, however, with a recoilless rifle and subsequently retrieved other abandoned weapons, receiving one more of his wounds while so engaged. Later, as flare ships arrived and began dropping illumination flares, Donlon exposed himself again while searching for a radio. Finding it, he directed the planes.

The worst of the fight was over by 4:15 in the morning, but the shooting did not stop entirely until 10:00 that morning when the insurgents completed a disorganized retreat into the jungle. Throughout the fight Donlon encouraged his men by word and deed, although severely wounded himself and probably in danger of bleeding to death. Of the small complement of US soldiers and the Australian, three were dead and seven were wounded in the attack. Several Vietnamese soldiers were also killed, and their suffering and heroism, as well as that of their surviving comrades, would also make an inspiring story. Of the insurgents, over 50 were killed.

In awarding the Medal of Honor to Captain Donlon in a White House ceremony, President Johnson said: "It is given to us to draw new strength and inspiration from the gallantry and unhesitating bravery of this man's action under hostile fire."

MISSION IN THE DOMINICAN REPUBLIC

The mid-1960's not only witnessed US troops in Vietnam, but also in the Dominican Republic. The circumstances in the later case were quite different and, in part, quite unique. Efforts of dissident military elements to overthrow the existing Dominican government led to civil war in 1965. This, in turn, led to concern in Washington for US citizens who resided in the Dominican Republic and to fear that Communists might gain control of the little country as they had done in Cuba. President Johnson immediately ordered US Marines into the Dominican Republic. They were followed by battalion combat teams of the Army's 82d Airborne Division, who were airlifted from Fort Bragg, North Carolina. A cease fire was soon arranged between the rebel and government forces and US forces sealed off the rebel-controlled portion of the city of Santo Domingo. While political efforts were made to stabilize the situation, US forces were joined by forces of several other members of the Organization of American States. The resulting force, which was designated the Inter-American Peace Force (IAPF), came under the command of the Brazilian General Hugo Panasco Alvim and the deputy command of Lieutenant General Bruce Palmer, Jr., the commander of the US forces. Besides the United States and Brazil, Honduras, Nicaragua, Costa Rica, and Paraguay contributed forces, and El Salvador token support, to the IAPF. In October 1965 the IAPF occupied the entire former rebel zone and by December 1965 the United States had withdrawn all but a brigade and its support troops from the Dominican Republic. Following the election of a new Dominican president on 1 June 1966, the Organization of American States planned a gradual withdrawal of all its forces.

In late June the United States began the final withdrawal of its troops.

The experience was not without its casualties and its critics, but it could hardly be denied that it had set a historical precedent in the use of troops under an inter-American command that might have very significant results in the future.

EQUIPMENT, PERSONNEL, AND ORGANIZATION OF THE ARMY

After the Korean War the United States reshaped its military policy in the belief that it would need a considerable military establishment for a long time. With its "New Look" policy the Eisenhower Administration intended to provide the necessary military strength as economically as possible. Complicating the effort, however, were the fantastic changes revolutionizing the military as well as the other aspects of man's life. The world had entered an age in which weapons of terrible destructive power could be delivered either by long range missiles or manned aircraft. It was an age in which man could destroy the habitable globe if he did not take care. Changes of a far-reaching character were also taking place in signal communications and transportation.

The "New Look" placed great reliance on nuclear superiority as a deterrent and on instant massive retaliation if the deterrent should fail. Accordingly, the policy emphasized airpower and placed less reliance on individual and so-called "conventional" arms. Except in Europe and South Korea at that time, native forces, strengthened by United States materiel and advisory assistance, would bear the burden of initial defense. The Army continued to work for a balanced force, however, one that could fight both local and limited war or a nuclear war if it should come to that. Under the "New Look" the Army's strength dropped to 877,000 men and 14 divisions in December 1960.

Nuclear war, as the Army viewed it, would require a vastly larger combat area than the wars of the past. It would require a checkerboard disposition of units with wide gaps between them, and this in turn would require small, self-contained, and highly mobile tactical units that could operate over great distances. Nonnuclear war would not require such dispersal and mobility on the part of units. New types of combat organizations and new equipment had to be devised to meet the military needs of the new age. Above all, the Army had to have highly qualified and trained personnel to use the new techniques and equipment. This was so despite a great effort to reduce types of equipment and supplies to make them serve the purposes of both nuclear and nonnuclear war.

The difficulty of modernizing an army and keeping it modern will be seen especially in the fact that weapons become obsolete in only a few years. The expense alone is fantastic, with newer and more complicated weapons costing on the average at least twice as much as the old ones. Nevertheless, in the "New Look" period the Army's funds for replacing equipment were the same or smaller than formerly.

Among the nuclear weapons devised for the new Army were surface-to-air, surface-to-surface, and antimissile missiles in the form of both short and long range guided missiles and rockets. New conventional weapons and other equipment included recoilless rifles, flamethrowers, mine planters, bridges, armored tracked and wheeled vehicles, personnel and weapons carriers that could "swim," and other so-called off-the-road vehicles. Several firearms were made interchangeable with NATO weapons.

In 1956 the Army assumed responsibility for the antiaircraft defense of large metropolitan centers and important installations. To defend these places the Army used the ground-to-air NIKE missile with an electronic fire direction system called the Missile Master and tied them in with the early warning system of the Continental Air Defense Command. The Army manned the NIKE sites with both Regular and National Guard personnel.

The post Korea period saw communications and surveillance revolutionized to aid attack, defense, and mobility. Miniaturization of equipment was one aspect of these developments, while another was the application of radar and television to tactical surveillance systems as well as to longer range airborne systems. The development of communications satellites for strategic communications overseas is one of the most significant developments of the present day.

The Army also had psychochemicals that could incapacitate temporarily as well as more deadly weapons in the biochemical field.

Another development of the post Korea period was the development of Army aviation to the point that by mid-1966 there were 12,100 pilots and more than 8,300 aircraft in the Active Army and its reserve components. The use of helicopters in Vietnam to carry troops into battle and to provide fire support has been mentioned. Army aircraft, however, including slow moving fixed-wing aircraft, also served such purposes as surveillance, target location, evacuation of wounded, and the moving of supplies. Helicopters, of course, could take off and set down almost any place, but the fixed-wing craft in use needed only a relatively short space and hence were also suitable for tactical operations. A change in Army aviation occurred in April 1966 when the Army obtained

from the Air Force sole responsibility for developing and using armed and transport helicopters, as in its airmobile operations in Vietnam.

The Army began in 1956 to replace its triangular divisions, each of which had three infantry regiments, together with supporting troops (and which had replaced the old square divisions in the World War II period) with the pentomic division, whose basic strength was in its five battle groups, each of which was larger than a battalion but smaller than a regiment. The pentomic division had greater mobility than the triangular division, could disperse more readily, and had a higher rate of firepower, both nuclear and conventional. It was regarded as more suitable for nuclear warfare than the earlier division organizations. All Regular Army divisions were reorganized by 1958 and the National Guard and Reserve divisions by 1960.

Despite the utility of the pentomic division, however, another new organizational concept, called ROAD (Reorganization Objective Army Division), soon made its appearance. Its purpose was to provide forces suited to particular missions, environments, terrain, and foes. Under this concept the Army replaced the battle group structure with a division of three brigades composed of battalions that might vary in number, with the usual number being three. This new structure could be used for airborne, airmobile, armored, infantry, or mechanized divisions. A ROAD division would be larger than a pentomic division although not quite as large as the older triangular division; and it would have vastly more firepower. It was believed to be even better adapted to the demands of nuclear warfare than the pentomic division and to be suitable for conventional operations. All Regular Army, Guard, and Reserve divisions were reorganized as ROAD divisions by mid-1964. None was reorganized as an airmobile division, however, until the reorganization of the 1st Cavalry Division (Airmobile) in 1965.

Russia's opening of the Space Age in 1957 with the launching of Sputnik I, the first manmade earth satellite, led the Army to speed up its own astronautical work. In the autumn of 1959, however, it had to restrict its activities in the missile field to the development of tactical missiles. Tiros, a weather satellite, which demonstrated the military value in the 1962 Cuban crisis, was an Army development. By late 1966 the Army had responsibilities for a new communications system that would enable officials in Washington to speak to military and diplomatic officials in Saigon via a communications satellite.

In 1961, after the Kennedy Administration succeeded its Republican predecessor, the Government began placing greater em-

phasis on limited war capabilities. This emphasis continued into the administration of President Johnson. A new Berlin crisis in July 1961 caused an expansion in the Army's authorized strength from 870,000 to 1,081,000 and its active divisions to be made combat ready. The Army also reactivated two additional divisions, extended tours of active duty, increased draft calls and called up two National Guard divisions and thousands of reservists. The Berlin emergency and fighting in Vietnam and elsewhere brought expansion of the Army's Special Forces, as they came to be called, which had been organized for use in unconventional and psychological warfare, as well as in counterinsurgency.

The Army organized the Strategic Army Corps (STRAC) in 1957 for use in sudden emergencies anywhere in the world. Composed at first of four divisions, STRAC was to a great extent self-contained and self-sufficient. It was part of the Strategic Army Forces (STRAF), which included the other home based divisions that were in a lesser state of readiness. STRAC became stronger in 1961 when it combined, for joint operations, with the Tactical Air Command to form the US Strike Command (USSTRICOM). For USSTRICOM purposes it would be known as US Army Forces, Strike Command (USARSTRIKE). As such it demonstrated its importance both in the 1962 Cuban crisis and in the 1965–66 intervention in the Dominican Republic. As a component of USSTRICOM, it provided forces in both cases to augment the operational command of the Commander in Chief, Atlantic.

The Department of Defense received new responsibilities in the decade after the Korean War, one result of which was to make the Army to a greater degree than formerly an element in a unified military command structure. On the basic assumption that strategic and tactical policy should be completely unified, the Department of Defense Reorganization Act of 1958 established direct command channels from the Joint Chiefs of Staff to the unified and other commands of strategic planning and operations. This eliminated the military departments as the executive agencies within the chain of command, but the several departments and services continued to have responsibility for the preparation, provision, and support of their own forces in the various commands.

Increasingly technical requirements of warfare and the growing importance of the Joint Chiefs of Staff and the Department of Defense led to the beginning of a high-level Army reorganization in 1962. It was, indeed, the most thoroughgoing such reorganization "since the establishment of the General Staff in 1903." To make the General Staff more responsive to strictly staff func-

tions, the reorganization relieved it of such command-type functions as training, research and development, and procurement, thus leaving it free to concentrate upon planning, policy making, and general supervision.

Under that reorganization the United States Continental Army Command, which had replaced the old Army Field Forces in 1955, gained responsibility for virtually all individual and unit training. To provide doctrine, chart the Army's future, and be responsible for combat development, the Army established the Combat Developments Command.

Another new command was the Army Materiel Command, whose purpose was to centralize control over all Army operations in the areas of development, procurement, and distribution of all commodities and products. The functions given it were among those formerly belonging to the technical services and its control that was formerly shared by the Deputy Chief of Staff for Logistics and the Chief of Research and Development. About the same time certain supply functions common to all the services, such as the supply of food and clothing, became a responsibility of the Defense Supply Agency. As for the old technical services, the reorganization in the main either eliminated them or reduced them in size and mission. At the same time, responsibility for the assignment and careers of military personnel went to another new organization, the Office of Personnel Operations.

The Korean War, in which the Army National Guard and Army Reserve played an essential role, also demonstrated, as did the Berlin Crisis of 1961, that the Reserves were not able to provide operationally ready units during a limited mobilization. After the Berlin Crisis the Army sought to reorganize the reserve components into a more operationally ready force by closely integrating them with the Army, by reducing the size of the Reserves, and by providing improved equipment and additional training opportunities. In 1964, in proposing a realignment of the Reserves the Secretary of Defense sought to reduce the reserve troop program and to correct administrative and management difficulties by confining Reserve units to the National Guard. Although Congressional opposition prevented the realignment as proposed, the reserve force structure was reduced in 1965 through the elimination of 751 low priority Army Reserve units. Also, the Army established within the Ready Reserves the Selected Reserve Force. This force would receive additional training, equipment, and personnel and would be available for almost immediate utilization if needed.

During the years just passed, the Army gave considerable attention to its own personnel at the same time that it sought to

modernize its organization and equipment. It could not, of course, safely do otherwise, for it required, as no army of an earlier day, a high level of competence, particularly specialized competence, as well as a high morale. The Army improved its conditions and offered new inducements to both officers and enlisted men. For the latter it established new enlisted grades, a proficiency pay system, and increased reenlistment bonuses, and it reinstated permanent promotions. It also provided officers with greater opportunities for promotion and gave them more security while in the service. Personnel obtained coverage under the Social Security system, broader medical protection, and wider opportunities for higher education. At the same time, training received more emphasis than in the past and both entrance and retention standards became higher.

VARIED ROLES AND CHARACTER OF THE ARMY

History has given the Army many roles to play in both peace and war, and the years since the Korean War have not changed this general pattern. Personnel stationed in countries around the world serve as cultural ambassadors. In recent years, in Chile, Morocco, and elsewhere abroad, as well as at home, Army personnel have helped victims of earthquakes, fire, flood, and storm. The Army cared for the thousands of Hungarian refugees who came to this country in 1956–57. In 1957, 1962, and 1963—in Arkansas, Mississippi, and Alabama—the Army helped to maintain the law and to carry out Federal court decrees concerning racial discrimination.

As in the past the Army was no stranger to the construction of great public works, so in the period after the Korean War it helped construct the St. Lawrence Seaway, built up much of Okinawa, and developed airfields and ballistic missile sites for the Air Force. It also helped protect the Nation's natural resources.

The Army has played a major role in most of the Nation's wars and contributed to the national life through exploration, public works, policing, governing, carrying out the law, and maintaining order in civil disturbances. Its contributions in the period since the Korean War have been no less varied and valuable.

Whereas in times past the United States depended, except in wartime, upon a small standing army, that era had been left behind by the time of the Korean War because of the troubled state of the world. Reliance now was upon a large army created both from volunteers and a system of selective service. In 1965–66 the Army not only saw duty in the Dominican Republic, but once

again it became involved in a protracted oversea war. The outcome of this war is hidden in the future. The Army, however, can be counted upon to perform its duty. It is well equipped and trained. Its *esprit de corps* is high as it looks both to a worthy heritage and to a future of continued service to the Nation.

CHAPTER 20

FAMOUS ARMY LEADERS

INTRODUCTION

The list of famous Army leaders is a long one: Washington, Lee, Jackson, Stuart, Grant, Scott, Funston, Van Fleet, and Wainwright; to mention but a few. Biographies of all leaders past and present would fill many volumes. Consequently, only a few recent, outstanding leaders have been included in this text. Their lives are interesting and accomplishments great. As such they constitute challenging examples to all young Americans who are planning their own future career.

JOHN J. PERSHING

John Joseph Pershing was born near Laclede, Missouri, on 13 September 1869. He was appointed to the United States Military Academy from his native state and upon graduation was commissioned a second lieutenant of cavalry (fig 69).

He joined the 6th Cavalry and served with it at Fort Bayard, Fort Wingate, and Fort Stanton, New Mexico, spending considerable time in campaigns against the Apache Indians. He was transferred in 1890 to South Dakota, where he participated in campaigns against the Sioux Indians and commanded Indian Scouts at Pine Ridge Agency, South Dakota.

For the next four years, from 1891 to 1895, he was Professor of Military Science and Tactics at the University of Nebraska, and upon completion of that duty joined the 10th Cavalry at Fort Assinniboine, Montana. During the following summer he participated in a roundup of Cree Indians in the Northwestern States and their return to Canada.

After a short period as an instructor at the United States Military Academy he joined the 10th Cavalry, in 1898 sailing with it to Cuba, where he served with distinction in the Santiago Campaign. Upon his return to the United States he was on duty at Headquarters of the Army, Washington, D. C., in the Office of the Assistant Secretary of War, and as first Chief of the Division of Customs and Insular Affairs.

Figure 69. General of the Armies, John J. Pershing.

In September 1899 he traveled to the Philippines, to serve in various official capacities in the Department of Mindanao, in command at Illigan, in charge of Moro affairs at Camp Vicars, and in command of Vicars, participating in many operations against the Moros. He returned to the United States in 1903, to serve with the War Department General Staff, in Washington, D. C., and attend the Army War College.

He sailed for Japan in 1905 for duty as military attache. During the Russo-Japanese War he was an accredited observer with the Japanese Army and accompanied General Nuroki's army in later stages of the Manchurian campaign. He went to Europe in

1908 under special instructions pending the result of the situation in the Balkans and was designated as observer should open hostilities ensue.

He again sailed for the Philippines in 1909, where he assumed command of the Department of Mindanao. As Governor of the Moro Province his tactical handling of a delicate situation resulted in the pacification of the lawless tribes and the establishment of civil government among them. He served on the Mexican Border from 1914 to 1916, where he entered Mexico, in command of the Punitive Expedition, remaining there until February 1917.

He was designated by the President to lead the American Forces in World War I, and sailed for France in May 1917. On 3 September 1919, by act of Congress, he became General of the Armies. Upon his return to the United States in September 1919, he was assigned to duty in Washington, D. C. to 1 July 1921. On that date he was appointed Chief of Staff of the Army, in which capacity he served until his retirement, for age, in September 1924.

In 1923 he became chairman of the American Battle Monuments Commission, which was created by Congress for the purpose of commemorating the services of the American forces in Europe during the World War I. In November 1924 he was designated by President Coolidge as Ambassador to represent the United States in Peru during the centennial of the battle which marked the end of Spanish domination in South America. In June 1936 he was appointed, by the President, a member of a commission to prepare plans for the erection of a memorial within the Panama Canal Zone to General George W. Goethals, builder of the Panama Canal. On 27 June 1936 he took his seat in the French Institute, having been elected a member (foreign associate) of the Academy of Moral and Political Sciences.

The following decorations and awards are but a few of the many awarded him:

Distinguished Service Medal. "As a token of the gratitude of the American people to the commander of our armies in the field for his distinguished services, and in appreciation of the success which our armies have achieved under his leadership."

Tendered Thanks of Congress. "Resolved by the Senate and House of Representatives of the United States of America in Congress assembled. That the thanks of the American people and the Congress of the United States are due, and are hereby tendered, to General John J. Pershing for his highly distinguished services as Commander in Chief of the American Expeditionary Forces in Europe and to the officers and men under his command for their unwavering devotion and heroic valor throughout the war." Joint

Resolution of Congress, 18 September 1919, approved 29 September 1919.

Distinguished Service Cross. "General John J. Pershing, General of the Armies of the United States, retired, then brigadier general, US Army. For extraordinary heroism in action against hostile fanatical Moros at Mount Bagsak, Jolo, Philippine Islands, on June 15, 1913. He personally assumed command of the assaulting line at the most critical period when only a few yards from the last Moro position. His encouragement and splendid example of personal heroism resulted in the general defeat and prompt capture of the hostile stronghold."

Special Gold Medal. Awarded by act of Congress, 7 August 1946, "in recognition of his peerless leadership, heroic achievements, and great military victories, as Commander in Chief of the American Expeditionary Forces in Europe in World War I, and for his gallant and unselfish devotion to the service of his country in his contribution to the preparation for, and the prosecution of, World War II."

General Pershing goes down in history as the outstanding American general of World War I. His wisdom and tact in integrating the effort of the vast newly created American Army with that of our allies in defeating the powerful German Army was an outstanding accomplishment.

DWIGHT D. EISENHOWER

Dwight David Eisenhower was born on 14 October 1890, in Denison, Texas. He entered the Military Academy and was graduated in 1915. He was commissioned a second lieutenant of infantry and assigned to the 19th Infantry at Fort Sam Houston, Texas, where he served until 1917, with the exception of short periods when he was on detached service (fig 70).

General Eisenhower then served with the 57th Infantry at Leon Springs, Texas, as instructor in the Officers' Training Camp at Fort Oglethorpe, Georgia, and as instructor, Army Service Schools, Fort Leavenworth, Kansas.

He went to Fort Meade, Maryland in 1919, where he served until 1922 as executive officer and in command of various tank battalions. During this period he was graduated from the Infantry Tank School. He was then assigned to the Panama Canal Zone where he served as Executive Officer, Camp Gaillard, until he returned to Headquarters of the Third Corps Area, Baltimore, Maryland in 1924. He completed the Command and General Staff School, Fort Leavenworth, Kansas in 1926.

In 1926, General Eisenhower joined the 24th Infantry at Fort Benning, Georgia and in 1927 was transferred to Washington,

Figure 70. General of the Army, Dwight D. Eisenhower.

D. C., for service with the American Battle Monuments Commission. He was graduated from the Army War College in 1928 and returned to duty with the American Battle Monuments Commission. From November 1929 to February 1933 he was Assistant Executive, Office, Assistant Secretary of War, during which time he was graduated from the Army Industrial College. He then served in the Office of the Chief of Staff to September 1935.

In 1935 he went to Manila as Assistant to the Military Advisor, Commonwealth of the Philippine Islands, General Douglas MacArthur. He joined the 15th Infantry at Fort Ord, California in February 1940, and in November 1940 became Chief of Staff of

the 3d Division at Fort Lewis. He was assigned as Chief of Staff of the Third Army, San Antonio, Texas in 1941 and Deputy Chief in December 1941.

General Eisenhower was appointed Chief of the War Plans Division, War Department General Staff in February 1942, becoming Assistant Chief of Staff in charge of the Operations Division, Office of the Chief of Staff in April 1942. On 25 June 1942 he was designated Commanding General, European Theater.

On 8 November 1942 General Eisenhower commanded American forces landing in North Africa. He became Commander in Chief of Allied Forces in North Africa that same month. In December 1943 he became Supreme Commander, Allied Expeditionary Forces, planning and coordinating the land, sea, and air forces for the Normandy invasion, 6 June 1944. He was promoted to the rank of General of the Army 20 December 1944. The German High Command acknowledged defeat and signed the unconditional surrender which terminated the war in Europe on 8 May 1945. Shortly after the cessation of hostilities, he was appointed Military Governor of the United States Occupied Zone in Germany with headquarters at Frankfurt, Germany.

In November 1945 he was appointed Chief of Staff of the Army, in which capacity he served until February 1948. He became president of Columbia University on 7 June 1948.

On 16 December 1950, after the North Atlantic Treaty Nations agreed on a defense organization for Europe and requested General Eisenhower to head it, President Truman designated him as Supreme Allied Commander, Europe, and gave him operational command of the US Army Forces, and the US Air Forces, Europe, and the US Naval Forces, Eastern Atlantic and Mediterranean. He retired from active service 31 May 1952, and resigned his commission July 1952. He was elected President of the United States on 4 November 1952 and assumed office on 20 January 1953. On 22 March 1961 Eisenhower was reappointed to the active list of the Regular Army of the United States by Congress with the rank of General of the Army.

General Eisenhower's great talent for organization and his ability to weld diverse elements into a powerful team are clearly evident throughout his career. No other man in history has created an allied organization of free nations to work so closely together. The difficult task of liberating Europe and destroying the power of what had been the most potent military force the world had ever seen must be credited to no small degree to the ability of this outstanding soldier and leader. As evidenced by his election to the highest office in the land, perhaps no man in our history has so completely gained the confidence of the people of the United States.

GEORGE C. MARSHALL

George Catlett Marshall was born at Uniontown, Pennsylvania on 31 December 1880. He graduated from the Virginia Military Institute in 1901 and entered the Army as a second lieutenant of infantry the same year (fig 71).

He served with the 30th Infantry in the Philippines until he was transferred to Fort Reno, Nevada in 1904. He then attended the United States Infantry-Cavalry School where he graduated with honors in 1907. The next year, after graduation from the Army Staff College, he became an instructor at that school. In 1913 he returned to the Philippine Islands where he served for 3 years.

From 1917 until 1919 he served with the American Expedition-

Figure 71. General of the Army, George C. Marshall.

ary Forces in France. During this period he was on the General Staff of the 1st Division, Chief of Operations of the 1st Army, and Chief of Staff of the 8th Army Corps. From 1919 to 1924 he was Aide-de-Camp to General John J. Pershing.

He was transferred to China in 1924 where he commanded the 15th Infantry until 1927 when he was assigned to the Army War College as an instructor. Following this assignment, his next service was with the Infantry School as Assistant Commandant, where he remained until 1932 when he assumed command of the 8th Infantry. From 1933 to 1936 he was Senior Instructor to the Illinois National Guard. He then became Commanding General of the 5th Brigade.

During July 1938 General Marshall was ordered to Washington, D. C. for duty as Chief of the War Plans Division, General Staff. Three months later he became Deputy Chief of Staff. During September 1939 he was appointed Chief of Staff after a 3-month period as Acting Chief of Staff. He was promoted to General of the Army 16 December 1944. He served as Chief of Staff until November 1945.

In November 1945 the President sent General Marshall to China as his special representative with rank of Ambassador. In the early part of 1947 he retired from the Army to serve as Secretary of State for the next 2 years. He was restored to active duty on 1 March 1949 and became Secretary of Defense 13 September 1950. Exactly one year later he resigned at his own request.

General Marshall, sometimes described as "good citizen Marshall," is worthy of emulation by American youth who aspire to serve their country well. Famous soldier and statesman, he has served this Nation well both in war and peace. General Marshall as Chief of Staff in World War II directed the Army operations in global warfare of a scale never approached in any other war. Foreseeing that the United States would become involved in World War II, he exerted all his influence to converting meager peacetime forces into an organization which could fight and win. As Secretary of State and later Secretary of Defense, his calm, good judgment is well known to the American people.

DOUGLAS MacARTHUR

Douglas MacArthur was born at Little Rock, Arkansas 26 January 1880. He entered the United States Military Academy in 1899 and was commissioned a second lieutenant of engineers in June 1903 (fig 72).

Shortly after he was graduated from the United States Military Academy, he sailed for the Philippine Islands. Upon his re-

Figure 72. General of the Army, Douglas MacArthur.

turn to the United States in 1904, he served as Assistant and Acting Chief Engineering Officer, Pacific Division, until October 1905. He was then ordered to Tokyo where he served as aide to his father, Lieutenant General Arthur MacArthur, until September 1906. While on this detail he was given a confidential mission which took him to many countries throughout Asia.

Upon his return to the United States, he was assigned to duty with the 2d Battalion of Engineers at Washington Barracks, D. C., and, in addition served as Aide to President Theodore Roosevelt until August 1907. In April 1908, he joined Company K, 3d Battalion of Engineers at Fort Leavenworth, Kansas. Here he

served as company officer and also as an instructor in the Mounted Service School and the Army Service School. His 4-year tour at Fort Leavenworth was interrupted by periods of service at San Antonio, Texas and in the Panama Canal Zone.

He was assigned to duty in the Office of the Chief of Engineers from 1912 until April 1913; as Superintendent of State, War, and Navy Building, until November 1913; and as a member of the General Staff Corps until September 1917. From April until September 1914 he accompanied our Expedition to Vera Cruz as a member of the General Staff.

He conceived the idea of the Rainbow (42d) Division and, as Chief of Staff, helped direct its organization and training. He arrived with this division in France during October 1917. He later commanded the 42d Division until November 1918, and served in the Army of Occupation in Germany until 1919.

Upon his return to the United States, he served in the Office of the Chief of Staff, Washington, D. C., until June 1919. He was Superintendent of the United States Military Academy to June 1922, during which time he modernized the courses in military training.

From West Point he was sent to the Philippine Islands where he served at Headquarters Philippine Department until November 1922, in command of the District of Manila until June 1923, and in command of the 23d Infantry Brigade at Fort William McKinley to January 1925. Returning to the United States, he commanded the Fourth Corps Area, Atlanta, Georgia to July 1925; and the Third Corps Area, Baltimore, Maryland to September 1928.

In 1928 he returned to the Philippines where he served 2 years as Department Commander. Upon his arrival in the United States in September 1930, he commanded the Ninth Corps Area, San Francisco, to October 1930. He became Chief of Staff of the Army on 21 November 1930. Upon completion of his duty as Chief of Staff in October 1935, he was appointed Military Adviser to the Commonwealth Government of the Philippines.

As conditions in the Orient became critical, on 26 July 1941 he was designated Commanding General, United States Army Forces in the Far East, when Japanese forces overran Luzon and the loss of the Philippines was imminent. The President ordered General MacArthur from Corregidor to Australia for the purpose of organizing and leading rescue forces back for the liberation of the Philippines. On 18 April 1942 he was made Supreme Commander of the Southwest Pacific Area.

With insufficient strength to justify aggressive action, he mustered all available forces to stop the enemy advance at Gona in

December 1942. The next year he assumed the offensive, and after many hard fought island invasions, landed on Leyte on 20 October 1944. On 5 July 1945, the liberation of the Philippines was completed. He was promoted to General of the Army on 18 December 1944.

On 6 April 1945 General MacArthur was named Commanding General, United States Army Forces in the Pacific. Three months later his Okinawa-based Air Force had launched air strikes against Japan itself. On 14 August 1945, the President announced the appointment of General MacArthur as Supreme Allied Commander to receive the Japanese surrender and command the occupation forces, in addition to his duties as commander of the US Army Forces in the Pacific. In January 1947 he was designated Commander in Chief of the Far East Command, retaining his position as Supreme Commander for the Allied Powers in Japan.

On 25 July 1950, a month after the North Korean Communists had invaded South Korea, General MacArthur assumed command of the United Nations Command in the Far East, organized to direct United Nations Forces in the defense of South Korea.

General MacArthur was relieved as commander of the United Nations Command in the Far East, Commander in Chief of the Far East Command, and Supreme Commander for the Allied Powers in Japan on 11 April 1951. He then returned to the United States, arriving in San Francisco 17 April.

Among his many American and foreign awards and decorations, the following are a few of the outstanding citations for American military awards:

Medal of Honor. "For conspicuous leadership in preparing the Philippine Islands to resist conquest, for gallantry and intrepidity above and beyond the call of duty in action against invading Japanese Forces, and for the heroic conduct of defensive and offensive operations on the Bataan Peninsula. He mobilized, trained, and led an army which has received world acclaim for its gallant defense against a tremendous superiority of enemy forces in men and arms. His utter disregard of personal danger under heavy fire and aerial bombardment, his calm judgment in each crisis, inspired his troops, galvanized the spirit of resistance of the Filipino people, and confirmed the faith of the American people in their Armed Forces."

Distinguished Service Cross. "For heroism in the Salient du Feys France March 9, 1918. When Company D, 168th Infantry, was under severe attack in the Salient du Feys, he voluntarily joined it, upon finding that he could do so without interfering with his normal duties, and by his coolness and conspicuous courage aided materially in its success."

Oak Leaf Cluster to the Distinguished Service Cross. "As Brigade Commander, General MacArthur personally led his men and by the skillful maneuvering of his brigade made possible the capture of Hills 288, 242, and the Cote de Chatilon, October 14, 15, and 16, 1918. He displayed indomitable resolution and great courage in rallying broken lines and in reforming attacks thereby making victory possible. On a field where courage was the rule, his courage was the dominant feature."

Distinguished Service Medal. "He served with credit as Chief of Staff of the 24th Division in the operation at Chalons and at the Chateau Thierry Salient. In command of the 84th Infantry Brigade he showed himself to be a brilliant commander of skill and judgment. Later, he served with distinction as commanding general of the 42d Division."

General MacArthur's career, which began with his outatanding academic accomplishmenta at the Military Academy, has been one of brilliant achievement. His splendid military judgment, his own confidence in the right of his cause, his belief in the successful outcome of his campaigns, and his military bearing, have become almost legendary in the minds of the American people. He became during World War II a bulwark around which the American people, shaken by defeat at Pearl Harbor and in the Philippines, rallied to defeat our enemies in the Pacific area.

OMAR N. BRADLEY

Omar Nelson Bradley, was born in Clark, Missouri 12 February 1893. He was graduated from the United States Military Academy in 1915, and appointed a second lieutenant of infantry (fig 73).

He served with the 14th Infantry during World War I and rose to the rank of major, reverting to captain in 1920 in the postwar reduction of the Army.

After World War I he was assigned ROTC duty at South Dakota State College and taught mathematics from 1920 to 1924 at the United States Military Academy. He graduated from the advanced course of the Infantry School in 1925, was ordered to duty in Hawaii, and was in charge of National Guard and Reserve Affairs for the Hawaiian Islands from 1927 to 1928.

He was graduated from the Command and General Staff School and assigned as tactics and weapons instructor at the Infantry School in 1929. Four years later he was assigned to the Army War College, graduating in 1934. He taught tactics at the United States Military Academy until assigned as plans and training officer of the school. In June 1938 he reported to Washington, D. C., and was assigned Assistant Secretary of the General Staff,

Figure 73. General of the Army, Omar N. Bradley.

serving until February 1941, when as brigadier general he was sent to Fort Benning.

General Bradley was promoted to major general shortly after he took command of the 82d Infantry Division in February 1942. Four months later he transferred to command the 28th Infantry Division at Camp Livingston, Louisiana. Early in 1943 he was selected as personal representative of General Dwight D. Eisenhower in the North African field and given command of the II Corps in April 1943.

General Bradley commanded the First US Army in the Normandy invasion and also served as Commanding General, 1st US Army Group, later 12th Army Group. August 1, General Bradley divided the American divisions into two armies, First and Third under command of General George Patton, and turned the com-

mand of First Army over to General Courtney Hodges. He retained command of the 12th Army Group, which eventually comprised the combat forces of the First, Third, Ninth, and Fifteenth Armies, numbering more than 1,300,000 combat troops—the largest body of American soldiers ever to serve under one field commander.

On 15 August 1945 General Bradley became administrator of Veterans' Affairs and head of the Veterans' Administration. He relinquished this post 1 December 1947, to familiarize himself with Army problems before taking office as Chief of Staff 7 February 1948, succeeding General of the Army Dwight D. Eisenhower.

General Bradley was sworn in as the first Chairman of the Joint Chiefs of Staff, Department of Defense, 16 August 1949 and was reappointed 16 August 1951 for a 2-year term which expired 15 August 1953. He was promoted to General of the Army 22 September 1950.

General Bradley also served as the first chairman of the Military Committee of the North Atlantic Treaty Organization from October 1949 until August 1953.

General Bradley came out of World War II with a reputation of being the most skillful American field commander of World War II. His fame as an unassuming officer who avoided publicity, his deep concern for the individual soldier, his insistence upon being up front, won him the title of the "GI's general."

MATTHEW B. RIDGWAY

Matthew Bunker Ridgway was born 3 March 1895 at Fort Monroe, Virginia. He was graduated from the United States Military Academy in 1917, and appointed a second lieutenant of infantry in the Regular Army (fig 74).

In June 1917 he was assigned to the 3d Infantry and in September 1918 he was assigned to the United States Military Academy as an instructor of Spanish.

He was graduated from the Company Officers course at the Infantry School in 1925 and given command of a company of the 15th Infantry in China and later was assigned to the 9th Infantry at Fort Sam Houston, Texas.

From December 1927 until January 1929 he was given various duties involving work in South America. In 1930 he graduated from the Advanced Course at the Infantry School and was given further duty with the American Electoral Commission in Nicaragua.

In 1930 he was sent ot the Panama Canal Zone for duty with

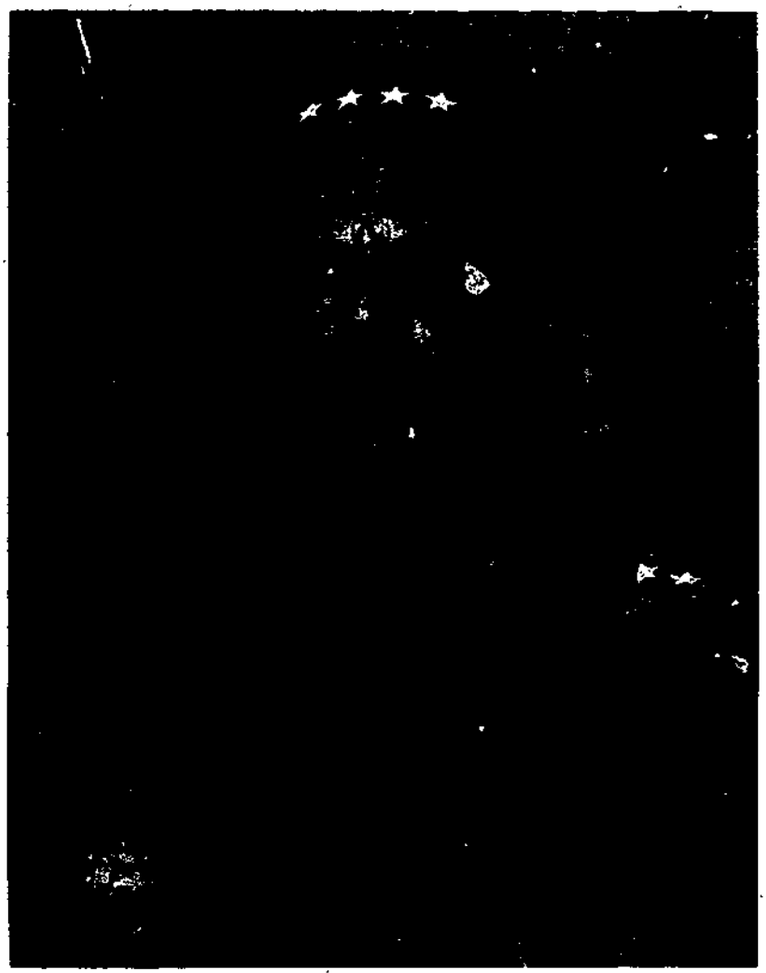

Figure 74. General Matthew B. Ridgway.

the 33d Infantry and in the spring of 1932 he was assigned to the Philippine Islands.

He graduated from the Command and General Staff School in June 1935 and from the Army War College in 1937.

General Ridgway, in March 1942, was designated assistant commander of the 82d Infantry Division and in June 1942 became commanding general. In April 1943 he took the division (now redesignated 82d Airborne) to North Africa where he was responsible for planning and executing the first large-scale airborne assault in the history of the Army—the attack on Sicily.

From September to November 1943 he led the 82d Airborne Di-

vision in the Italian Campaign. In June 1944 he parachuted with the leading elements of his division into Normandy where he played a major role in the invasion of western France. In August 1944 he was selected to command the XVIII Airborne Corps.

General Ridgway returned to the United States with his corps in August 1945, for redeployment to the Pacific. The same month he was flown to the Philippines in advance of the XVIII Corps to prepare for its participation in the proposed invasion of Japan. In September 1945 he was assigned to command the Mediterranean Theater of Operations, and was appointed Deputy Supreme Allied Commander, Mediterranean.

Effective 3 January 1946, General Ridgway was assigned to represent General of the Army Dwight D. Eisenhower as United States Army representative on the Military Staff Committee, United Nations, and in addition was designated Senior U. S. Delegate to the Inter-American Defense Board, and assumed chairmanship of the Board.

On 23 June 1948 General Ridgway was assigned as Commander in Chief, Caribbean Command, at Quarry Heights, Canal Zone. In September 1949 he was transferred to Washington, D. C., and became Deputy Chief of Staff for Administration, US Army, and in November 1950 assumed additional duty as chairman, Inter-American Defense Board.

General Ridgway was transferred to the Far East Command 23 December 1950, and assumed command of the Eighth Army in Korea on 26 December 1950.

On 11 April 1951 General Ridgway was appointed Supreme Commander for the Allied Powers, Commander in Chief of the United Nations Command in the Far East, and Commander in Chief of the Far East Command in Japan. He was appointed a general in May 1951.

In May 1952 General Ridgway was named Supreme Commander, Allied Powers, Europe, with headquarters at Paris, France, succeeding General of the Army Dwight D. Eisenhower.

In July 1953 he relinquished his command as Supreme Commander, Allied Powers, Europe, and in August 1953 was appointed Chief of Staff, United States Army. He retired in 1955.

General Ridgway came on the American military scene when airborne capabilities were beginning to be developed. He was a pioneer in this field both as a commander of airborne troops in battle and as a developer of this art. General Ridgway, the confident fighting general of the Eighth Army in Korea, is well known to all American citizens. General Ridgway executed in a superb manner his responsibilities which have included the most important positions in our Army of today.

MAXWELL D. TAYLOR

Maxwell Davenport Taylor was born in Keytesville, Missouri, 26 August 1901. He attended Kansas City Junior College, was graduated from the United States Military Academy in 1922, and was commissioned a second lieutenant in the Corps of Engineers.

He was first assigned as a student officer in the Engineer School. Upon completion of this course in February 1923, he was transferred to the 17th Engineers. In May 1923 he went to Hawaii for duty with the 3d Engineers (fig 75).

In June 1926 he returned to the United States. He transferred to the Field Artillery in July 1926, and served with the 10th Field Artillery until June 1927, when he sailed for Paris, France,

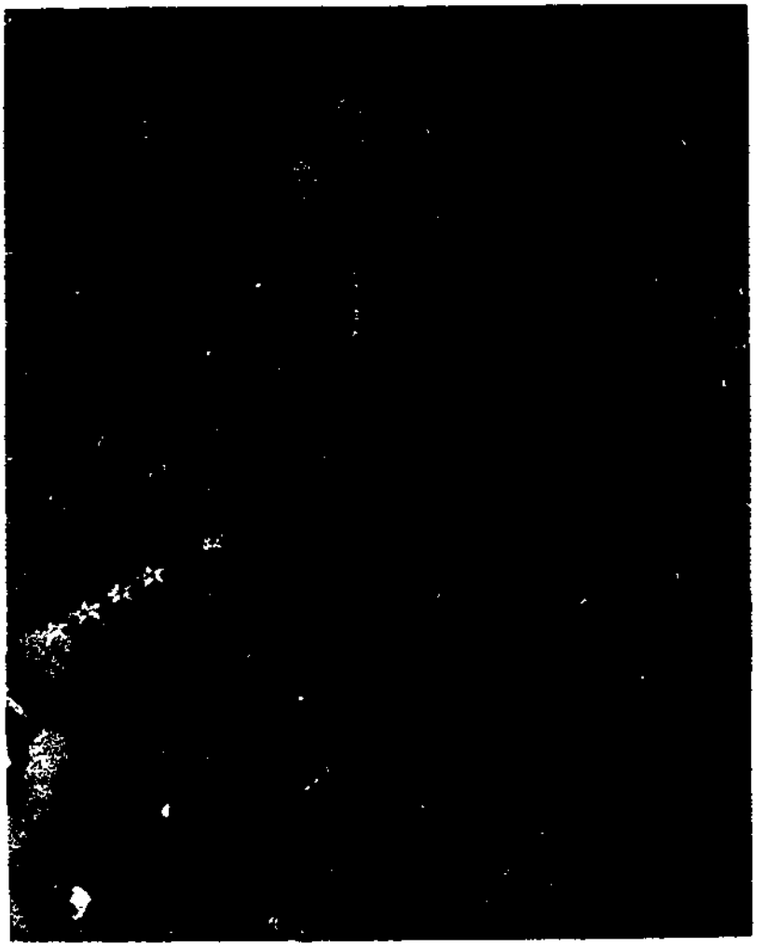

Figure 75. General Maxwell D. Taylor.

to study the French language in preparation for service at the United States Military Academy.

Returning to the United States the following September, he was ordered to the United States Military Academy as an instructor of French and subsequently was assistant professor of Spanish. In August 1932 he entered the Field Artillery School. In August 1933 he entered the Command and General Staff School.

Upon his graduation from the 2-year course in June 1935, he sailed for Japan and the following November was stationed with the American Embassy at Tokyo as a student of the Japanese language. In September 1937 he was detached for duty at Peking, China, as Assistant Military Attache, and in December of that same year returned to his post in Tokyo.

In June 1939, he sailed for the United States to enter the Army War College. At the completion of this course, in June 1940, he went on a special mission to nine Latin American countries in connection with hemisphere defense.

In December 1940 he assumed command of the 12th Field Artillery Battalion. In July 1941 he was assigned to Washington, D. C., for duty in the Office of the Secretary of the General Staff, where he remained until July 1942, when he became Chief of Staff of the 82d Infantry Division. In this capacity, he personally assisted in the development of the first airborne divisions of the Army, becoming artillery commander of the 82d Airborne Division on 4 December 1942.

He went overseas with his division in March 1943, and took part in the Sicilian and Italian Campaigns. In "Crusade in Europe," General Eisenhower records General Taylor's mission to Rome on 7 September 1943, when he was sent by British PT boat and Italian corvette through enemy lines to Rome 24 hours ahead of the planned airborne operation and scheduled invasion of Italy, to confer with leading Italian authorities in order to inform the Allied commander whether or not an airdrop on the airfields about Rome should be attempted in view of possible violent German reaction. General Eisenhower wrote: "The risks he (General Taylor) ran were greater than I asked any other agent or emissary to undertake during the war—he carried weighty responsibilities and discharged them with unerring judgment, and every minute was in imminent danger of discovery and death." A year later, in March 1944, he became commanding general of the 101st Airborne Division which he led in the airborne invasion of Normandy on 6 June 1944; the airborne invasion of Holland on 17 September 1944; and the campaigns of the Ardennes and central Europe.

In September 1945 he returned to the United States for duty as Superintendent of the United States Military Academy.

In February 1949 he was assigned to European Command headquarters as chief of staff, and the following September became the first United States Commander, Berlin. He was appointed Assistant Chief of Staff for Operations, G3, in the Department of the Army, February 1951.

In August 1951 General Taylor became Deputy Chief of Staff for Operations and Administration of the Army. He was appointed to succeed General James A. Van Fleet as Commanding General, Eighth U.S. Army in Korea, and assumed command on 11 February 1953. He was promoted to general on 23 June 1953.

Effective 20 November 1954, General Taylor was placed in command of the United States Forces, Far East. On 1 April 1954 he was placed in command as Commander in Chief of both the Far East Command and the United Nations Command.

General Taylor became Chief of Staff of the United States Army on 30 June 1955, retiring 1 July 1959. On 9 August 1962 General Taylor came out of retirement to become chairman of the Joint Chiefs of Staff, a position he held until 22 June 1964. The next day he was appointed Ambassador to South Viet Nam.

MARK W. CLARK

Mark Wayne Clark was born in Madison Barracks, New York, 1 May 1896. He was graduated from the United States Military Academy and commissioned a second lieutenant of infantry in April 1917 (fig 76).

Soon after he was promoted to captain, he joined the 11th Infantry of the 5th Division in France, where he was wounded in action in the Vosges Mountains. He was assigned next to General Staff Headquarters, First American Army, and participated in the St. Mihiel and Meuse-Argonne offensives and later served with the Third Army in Belgium and Germany.

He was assigned to the Office of the Assistant Secretary of War from 1921 to 1924 and was graduated from the Infantry School, Fort Benning, Georgia, in 1925. He then served three years at the Presidio of San Francisco with the 30th Infantry and from 1929 to 1933 was an instructor of the Indiana National Guard.

He was graduated from the Command and General Staff School at Fort Leavenworth, Kansas, in 1935. He then served for a year as Deputy Chief of Staff for the Civilian Conservation Corps, VII Corps Area, at Omaha, Nebraska, before entering the Army War College. Upon graduation in 1937 he was assigned to Fort Lewis, Washington.

In March 1940 he became an instructor at the Army War College. The following August he was named Assistant Chief of Staff for Operations of the General Headquarters, US Army. In Janu-

Figure 76. General Mark W. Clark.

ary 1942 he became Deputy Chief of Staff of the Army Ground Forces and in May 1942 was named Chief of Staff of that organization.

He was assigned as Commanding General of the II Corps in England in June 1942. The following month he was named Commander of the Army Ground Forces in the European Theater of Operations and in October 1942 became Deputy Commander in Chief of the Allied Forces in the North African theater. In those capacities, General Clark played a leading part in planning the invasion of North Africa.

In October 1942, shortly before the actual invasion, he made a

dramatic and hazardous, but highly successful, trip by plane and submarine from London to French North Africa for a secret rendezvous with a group of French officers to arrange details of the proposed landings.

As Deputy Commander in Chief of the Anglo-American invasion forces, he flew from Gilbraltar to Algiers on the day following the landings, 9 November 1942. He immediately took into protective custody Admiral Jean Francois Darlan, Cabinet Minister in the German-dominated French government at Vichy and Commander in Chief of all French forces, who was in Algiers visiting an ill son. General Clark induced Admiral Darlan to repudiate the Vichy regime and order all French forces in Northwest and West Africa to cease resistance to the Americans and British. This order and the collaboration between the Anglo-American and French forces which followed greatly facilitated the conquest of North Africa by the Allied Powers.

In January 1943 General Clark was designated Commanding General of the Fifth Army and completed the successful invasion of Italy in September 1943. On 4 June the Fifth Army captured Rome, the first Axis capital to be liberated from the enemy. Early in December 1944 General Clark was placed in command of the 15th Army Group, comprising all fighting forces in Italy. He held that command until the close of hostilities in Europe. In June 1945 General Clark was appointed Commander in Chief of the US Occupation Forces in Austria and US High Commissioner for Austria.

On 19 June 1947 General Clark assumed command of the Sixth Army, with headquarters at the Presidio of San Francisco, California. He was appointed Chief of Army Field Forces at Fort Monroe, Virginia, in September 1949.

General Clark was appointed Commander in Chief, Far East Command, in April 1952, serving simultaneously as Commander in Chief, United Nations Command, Commanding General, US Army Forces, Far East, and governor of the Ryukyu Islands. On 27 July 1953 he signed a military armistice agreement between the United Nations Command and the military commanders of the North Korean Army and the Chinese People's Volunteers at Munsan-ni, Korea.

In October 1953 he relinquished his posts as Commander in Chief, Far East and United Nations Commands; Commanding General, US Army Forces, Far East, and governor of Ryukyu Islands. He retired from the military service, at his own request, on 31 October, in Washington, D. C. General Clark became president of The Citadel, the military college of South Carolina, in Charleston, South Carolina, on 1 March 1954.

General Clark gained fame as a skillful organizer, administrator, and trainer of our Army. As commander of the United States forces in Italy in World War II and as Commander in Chief, Far East Command, during the Korean War he is well known for doing magnificent work in most difficult assignments. General Clark in retirement continued to serve in the interest of defense and the American people, as head of an institution of learning famous for the production of leaders.

GEORGE S. PATTON, JR.

George Smith Patton, Jr., was born in San Gabriel, California, on 11 November 1885. He was appointed to the United States Military Academy from California in 1904, and upon graduation was commissioned a second lieutenant of cavalry in June 1909 (fig 77).

After serving at Fort Sheridan, Illinois, until December 1911, he served at Fort Myer, Virginia, and Fort Bliss, Texas. In 1916 he participated in the Punitive Expedition into Mexico as aide to General John J. Pershing.

As a member of General Pershing's staff, he sailed for France in May 1917. He organized and directed the American Tank Center at Langres and also organized the 304th Brigade of the Tank Corps, which he commanded. Transferred to the Meuse-Argonne sector with his brigade, he was wounded in September 1918.

After returning to the United States in March 1919, he commanded the 304th Tank Brigade at Camp Meade, Maryland, until September 1920. He then commanded a squadron of the 3d Cavalry at Fort Myer, Virginia, until November 1922. After graduation from the Cavalry School, Fort Riley, Kansas, in 1923, and from the Command and General Staff School, Kansas, in 1924, he was detailed to the General Staff Corps and served for 4 years at the headquarters of the First Corps Area, Boston, Massachusetts, and in the Hawaiian Islands.

He then served for 4 years in Washington, D.C., in the Office of the Chief of Cavalry, 1928–31, and at the Army War College, 1931–32. Upon graduation from the Army War College, he was again ordered to Fort Myer, where he remained on duty with the 3d Cavalry until April 1935.

He served with the General Staff in the Hawaiian Islands for 2 years. In July 1938 he assumed command of the 5th Cavalry at Fort Clark, Texas, where he remained until ordered to Fort Myer, Virginia, to command the 3d Cavalry in December 1938. In July 1940 he was ordered to Fort Benning, Georgia, for duty with the 2d Armored Division as Brigade Commander. He was assigned as Commanding Officer of the 2d Armored Division, Fort

Figure 77. General George S. Patton, Jr.

Benning, in April 1941. He became Commanding General of the 1st Armored Corps at Fort Benning in January 1942.

In November 1942, when American forces landed in North Africa, he was commanding the units landing on the west coast. In February 1943 he became Commanding General of the Western Task Force, and subsequently assumed command of all American forces in the Tunisian Combat Area.

He became Commanding General, Seventh Army, in July 1943, serving in this capacity until March 1944, when he was assigned to the European Theater of Operations and was given command of the Third Army. In October 1945 he assumed command of the

Fifteenth Army in American-Occupied Germany, and on 21 December 1945, died in Germany as a result of an automobile accident.

General Patton was at his best as a "field soldier." He symbolizes the spirit of the offensive in battle. A firm believer in attacking rather than defending, he was never happier than when his columns were rolling against the enemy. Famous for his colorful appearance, his insistence upon strict discipline, and his love of the combat soldier, General Patton was one of the most successful fighting generals our Army has ever produced. This daring soldier was often a controversial figure because of his audacious actions and statements. However, his critics would agree that when the "chips were down" few soldiers of any army at any time were his equal in battle.

EARLE G. WHEELER

Earle Gilmore Wheeler was born 13 January 1909 in Washington, D. C. He served in the District of Columbia National Guard from August 1924 to July 1928, when he entered the United States Military Academy. Upon graduation in June 1932, and being commissioned a second lieutenant of infantry, his first duty station was the 29th Infantry at Fort Benning, Georgia. Following completion of the Infantry School course in 1937, he served with the 15th Infantry in Tientsin, China, during the Sino-Japanese incident (fig 78).

In 1940 he became a mathematics instructor at West Point, and from 1941 to 1942 served with the 36th Infantry Division at Fort Sam Houston and Camp Bowie, Texas. Following graduation from the Command and General Staff College in February 1942, he commanded the Second Battalion, 141st Infantry, 36th Infantry Division, until September 1942. He then became Assistant Chief of Staff for Operations (G3) of the 99th Infantry Division at Camp Van Dorn, Mississippi.

In 1943 he was assigned as Chief of Staff of the 63d Infantry Division which was deployed to Europe in late 1944. The 63d Division was committed during the Battle of the Bulge in December 1944 and was later to breach the Siegfried Line near Sarabrucken in March 1945. The division, exploiting the breakthrough, reached Heidelberg by Easter and crossed the Danube 25 April. The Division was then pulled from the line and, with three other divisions, was readied to assault Hitler's Redoubt in the Bavarian Alps. General Wheeler was selected to lead the assault regiment. The German surrender canceled the need for this operation.

Returning to the United States after the war, he joined the fac-

Figure 78. General Earle G. Wheeler.

ulty of the Field Artillery School, Fort Sill, Oklahoma, in December 1945, as an instructor in combined arms.

In 1946 General Wheeler was sent to Paris, France, as Assistant Chief of Staff for Supply (G4) of Western Base Section, serving subsequently as Acting Chief of Staff and then Deputy Chief of Staff (Operations) of the United States Constabulary in Heidelberg and Stuttgart, Germany.

Upon graduation from The National War College in July 1950, he was assigned to the Joint Intelligence Group in the Office of the Joint Chiefs of Staff.

General Wheeler was named Commanding Officer of the 351st

Infantry in Trieste in 1951 and a year later, as a brigadier general, became Inspector of Training for Allied Forces, Southern Europe, at Naples. In 1954 he was named Assistant Chief of Staff for Plans and Operations, Allied Forces, Southern Europe.

Returning to the United States in 1955, he became Director of Plans in the Office of the Deputy Chief of Staff for Military Operations, Department of the Army, and was promoted to major general in December 1955. He became Assistant Deputy Chief of Staff for Military Operations in July 1957.

General Wheeler arrived at Fort Hood, Texas on 30 October in 1958 to become Commanding General of the 2d Armored ("Hell on Wheels") Division. In March 1959 he became Commanding General of the III Corps at Fort Hood, as well as the 2d Armored Division.

In April 1960 General Wheeler was named Director of the Joint Staff in the Office of the Joint Chiefs of Staff, a position he held until nominated for four-star rank and assignment on 1 March 1962 as Deputy Commander in Chief of the United States European Command.

General Wheeler returned to Washington in September 1962 and became Chief of Staff of the United States Army on 1 October 1962.

He assumed the post of Chairman of the Joint Chiefs of Staff in Washington on 6 July 1964.

HAROLD K. JOHNSON

Harold K. Johnson was born in Bowesmont, North Dakota on 22 February 1912. He was graduated from high school in Grafton, North Dakota in 1929, and from the United States Military Academy, West Point, New York in 1933 as a second lieutenant of infantry (fig 79).

General Johnson's service includes a tour of duty with the 3d ("Old Guard") Infantry Regiment at Fort Snelling, Minnesota; the 28th Infantry at Fort Niagara, New York; and the 57th Infantry, Philippine Scouts at Fort McKinley, Philippine Islands. Upon the fall of Bataan in April 1942, he participated in the death march from Bataan and later was imprisoned by the Japanese at Camp O'Donnell, Camp Cabanatuan, and Bilibid Prison in the Philippine Islands.

He was moved to Japan from the Philippine Islands in the winter of 1944–45 after the Americans had landed on Leyte. The ships on which he was moved were twice subjected to Allied air attack and damaged to the extent that they could not proceed. In April 1945 he was moved from Japan to Korea, where he was liberated by the 7th Division when they made their occupational landing in Inchon on 8 September 1945.

Figure 79. General Harold K. Johnson, Army Chief of Staff.

Upon his return to the United States, he attended the Command and General Staff College at Fort Leavenworth, Kansas and served for 2 years on the faculty. After attending the Armed Forces Staff College at Norfolk, Virginia, he was assigned to the 7th Infantry Regiment stationed at Fort Devens, Massachusetts.

He took the 1st Provisional Infantry Battalion to Korea in August 1950, where he joined the 1st Cavalry Division in the defense of the Pusan Perimeter, later participating in the pursuit to the north, the encounter with the Chinese in late 1950, and the

subsequent withdrawal to South Korea. During this period he commanded both the 5th and 8th Cavalry Regiments of the 1st Cavalry Division.

In February 1951 he joined the I Corps in Korea where he served until October 1951 as Assistant Chief of Staff, G3.

Upon his return to the United States, he was assigned to the Office of the Chief of the Army Field Forces at Fort Monroe, Virginia. He attended The National War College, graduating with the Class of 1953. He then was assigned the Office of the Assistant Chief of Staff, G3, of the Department of the Army, where he served as Chief of the Joint War Plans Branch, Assistant to the Chief of the Plans Division, and as G3 Executive Officer until his departure for Fort Carson, Colorado in January 1956 to serve as Assistant Division Commander of the 8th Infantry Division.

The division gyroscoped to Germany in the late summer and fall of 1956. After serving 20 months as Assistant Division Commander, 8th Division, he was assigned to Seventh Army Headquarters in Stuttgart-Vaihingen as Chief of Staff. Then, in April 1959, he was moved to Headquarters, United States Army, Europe, as Assistant Chief of Staff, G3. In December 1959 he was assigned as Chief of Staff of the Central Army Group, a NATO Headquarters concerned with planning for the employment of French, German, and United States troop operations in Central Europe in peacetime and for the control of these forces in the event of an armed conflict.

In August 1960 he returned to the United States and assumed the position of Commandant, United States Army Command and General Staff College, Fort Leavenworth, Kansas, where he served until February 1963. Upon reassignment to the Army General Staff in Washington, D.C., he served successively as Assistant Deputy Chief of Staff for Military Operations and as Acting Deputy Chief of Staff for Military Operations, and was appointed Deputy Chief of Staff for Military Operations on 1 July 1963. He was also the Army Operations Deputy, Joint Chiefs of Staff, in which capacity he, in conjunction with the other Service Operations Deputies, acted on matters for the Joint Chiefs of Staff.

He was appointed Chief of Staff of the United States Army on 3 July 1964, the 24th in line of succession since the inauguration of the Army General Staff in 1903, and the youngest Chief of Staff since General MacArthur.

WILLIAM CHILDS WESTMORELAND

William Childs Westmoreland was born in Spartanburg County, South Carolina, 26 March 1914, and graduated from Spartanburg High School in 1931. He attended the Citadel, the

military college of South Carolina, for one year and was then appointed to the United States Military Academy, West Point, New York. At the United States Military Academy he was first captain and regimental commander and was commissioned as a Second Lieutenant in the Field Artillery upon graduation on 12 June 1936.

His initial assignment was with a regiment of horsedrawn 75mm guns, the 18th Field Artillery, at Fort Sill, Oklahoma. In March 1939, he joined the Eighth Field Artillery of the Hawaiian Division at Schofield Barracks, Hawaii. Here he served as battery officer, battalion staff officer, and battery commander. In May 1941, as a captain, he was assigned to the just organized Ninth Infantry Division at Fort Bragg, North Carolina, as operations officer of the 34th Field Artillery Battalion (155mm Howitzer).

In April 1942, he assumed command of the 34th Field Artillery Battalion and moved with it later that year to Morocco, North Africa. He commanded the battalion in combat in Tunisia and Sicily. During combat in Tunisia, his battalion was awarded the Presidential Unit Citation.

During the campaign in Sicily, General Westmoreland's battalion was successively attached to the 82d Airborne Division, and the 1st Infantry Division before returning to its parent division. In March 1944 he was named executive officer of the Ninth Infantry Division Artillery while the division was staging in Southern England preparatory to the invasion of the Continent. Following D-day, he fought with the Ninth Infantry Division through France, Belgium, and into Germany. In October 1944 he was named chief of staff of the division, serving in that capacity in continuous combat from the German border to the Elbe River.

In June 1945, General Westmoreland assumed command of the 60th Infantry Regiment in Germany and in January 1946 was transferred to the 71st Infantry Division and, as commander of that division, returned it to the United States for inactivation.

Following training at Fort Benning, Georgia, he earned the Parachutist and Glider Badges and assumed command of the 504th Parachute Infantry of the 82d Airborne Division at Fort Bragg, North Carolina in July 1946. In August 1947, he was named chief of staff of the 82d Airborne Division, serving in that capacity for the next 3 years.

He was appointed an instructor at the Command and General Staff College at Fort Leavenworth, Kansas, in August 1950. Later that year he was designated an instructor at the newly organized Army War College, also at Fort Leavenworth, and in June 1951 moved to Carlisle Barracks, Pennsylvania, with the Army War College, serving as a member of the faculty until July 1952.

On 1 August 1952, he assumed command of the 187th Airborne Regimental Combat Team in Korea. While under his command, the unit was twice committed to combat and during the interim was deployed to Japan as theater reserve. The Republic of Korea awarded his unit the Distinguished Unit Citation. During this period he was promoted to brigadier general at the age of 38. In August 1953 he was awarded the Master Parachutist Badge.

In November 1953 he reported for duty as Deputy Assistant Chief of Staff, G1, for Manpower Control. In 1954, he attended the Advanced Management Program of the Harvard Business School in Boston, Massachusetts. He was named the Secretary of the Army General Staff in July 1955.

On 1 December 1956, the Chief of Staff of the Army, General Maxwell D. Taylor, pinned a second star on General Westmoreland, making him at that time the youngest Major General in the Army.

General Westmoreland assumed command of the 101st Airborne Division "Screaming Eagles" at Fort Campbell, Kentucky, on 2 April 1958.

In July 1960, General Westmoreland was appointed Superintendent of the US Military Academy at West Point. He was transferred to Fort Bragg, North Carolina in July 1963 at which time he became Commanding General, STRAC and XVIII Airborne Corps.

In January 1964, he reported to duty at the US Military Assistance Command, Vietnam. He was assigned first as Deputy Commander, then Acting Commander and finally, in August 1964 was made Commander, US Military Assistance Command, Vietnam.

General Westmoreland became the Chief of Staff of the Army on 3 July 1968.

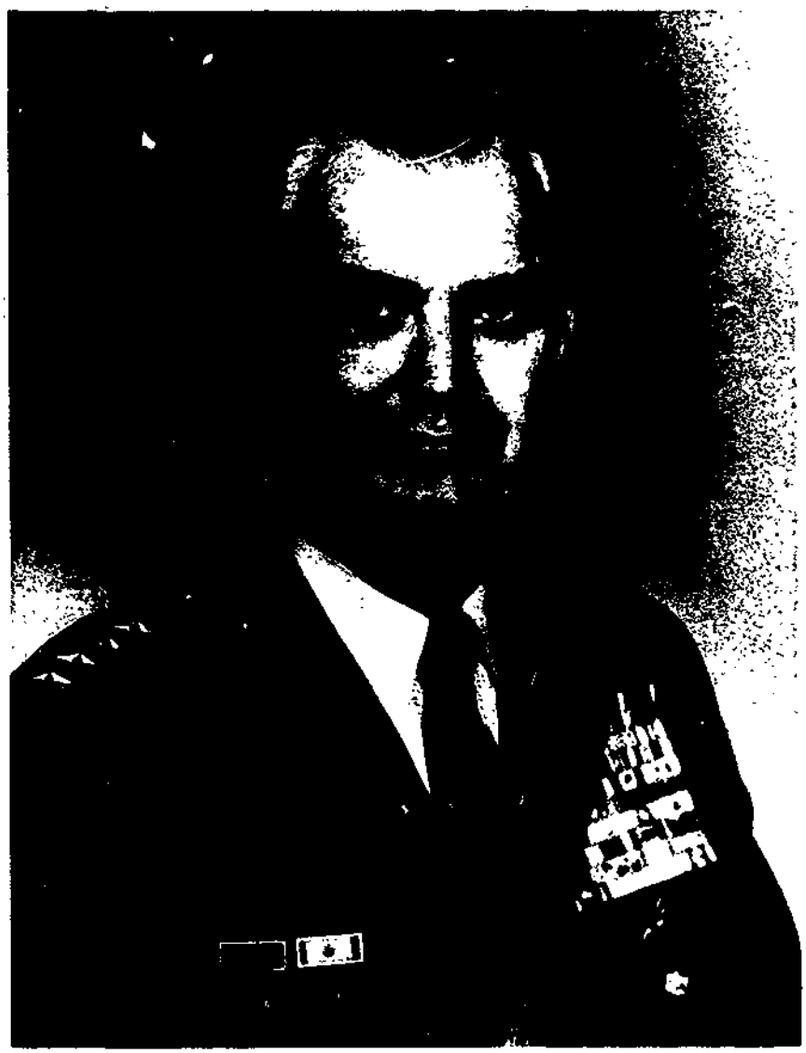

Figure 80. General W. C. Westmoreland, Army Chief of Staff.

PART THREE

COURTESIES TO THE FLAG, AND THE CODE OF CONDUCT

CHAPTER 21

US FLAGS: SALUTES AND HONORS

HISTORY OF THE MILITARY SALUTE

For many centuries men of arms have used the salute, not only as a gesture of greeting, but also to express mutual trust and respect.

The custom of saluting with the right hand dates back to the days of early history, when all men went armed and all strangers were possible enemies. In the age of chivalry, knights were mounted and wore steel armor which covered the entire body, including the head and face. When two friendly knights met, it was the custom for each to raise his visor and expose his face to the view of the other. This was done with the right hand, the left being used to hold the reins. It was a significant gesture of friendship and confidence, since it exposed the features and also removed the sword hand from the vicinity of the weapon.

Armed men other than knights usually wore no visor. On appropriate occasions, they held up the right hand, palm open. This gesture proved that no weapon was held in the hand and indicated that the meeting was a friendly one. The civilian customs of tipping the hat to a lady and waving to a friend, have the same origins.

The hand salute between military personnel is simply an extension of this age-old custom. Army regulations now prescribe that all Army personnel in uniform salute when they meet and recognize persons entitled to the salute, except in public conveyances, such as trains and buses, or in public places such as theaters, or when the salute would be manifestly inappropriate or impractical.

The most important of all military courtesies is the salute. The

manner of executing the salute is an indication of the individual's attitude toward his duties as a military man and the state of training and morale in the unit of which he is a member. Executed willingly and smartly, it indicates pride in himself and his unit and confidence in his ability to perform his military duties well. A sloppy, grudging salute indicates neglect or ignorance of his duties, lack of confidence in his ability to perform them, and lack of pride in the military team of which he is a member.

PERSONAL HONORS

Distinguished military and civil officials (fig 81) are entitled to specified salutes and other personal honors. These consist of gun salutes, certain marches played by the band, and ruffles and flourishes played by the field music (drums and trumpets). A "flourish" is a brief trumpet fanfare; a "ruffle" is a roll on the drums given as the flourish is sounded.

The gun salute has the same symbolic meaning as the hand salute. By discharging his weapon, the saluter disarms himself, thus displaying friendliness and trust toward the person being saluted.

Twenty-one guns comprise an international salute. This type of salute was officially recognized by the United States in 1875. Originally, British warships fired seven guns as a salute, while shore batteries fired three for each one from the vessel. This was done because gunpowder then in use deteriorated rapidly at sea, and had to be conserved. With improvements in powder, 21 guns became the common salute for both ships and shore batteries. Eventually all nations adopted the British custom.

THE FLAG OF THE UNITED STATES

On 14 June 1777, the Continental Congress in Philadelphia enacted the first legislation relative to the establishment of the national flag. The enactment stated: "Resolved that the flag of the United States be 13 stripes alternate red and white, that the union be 13 stars white in a blue field representing a new constellation." The resolution described the flag in such general terms that the arrangement of the stars was not specified. Neither was the number nor the positioning of the points of the stars included. Although most of the 13-star flags were made with the stars arranged in a circle, others were made with the stars placed in rows on the blue background. Some of the stars had five points; others had six or eight. In some flags the stars were positioned with one point upward; in others they were arranged differently. The designer of the flag is unknown. Although some au-

Grade, title, or office	Number of guns		Ruffles and flourishes	Music
	Arrival	Departure		
President	21	21	4	National Anthem or "Hail to the Chief," as appropriate.
Ex-President or President-elect	21	21	4	National Anthem.
Sovereign or Chief of State of a foreign country or member of a reigning royal family.	21	21	4	National Anthem of foreign country.
Vice President	19	----	4	March.
Speaker of the House of Representatives.	19	----	4	Do.
American or foreign ambassador, or high commissioner while in country to which accredited.	19	----	4	National Anthem of United States or official's country.
Premier or prime minister	19	----	4	National Anthem of official's country.
Secretary of Defense	19	19	4	March.
Cabinet member, President pro tempore of Senate, governor of a State, or Chief Justice of the United States.	19	----	4	Do.
Deputy Secretary of Defense	19	19	4	Do.
Secretary of the Army	19	19	4	Do.
Secretary of the Navy or Air Force	19	19	4	Do.
Director of Defense Research and Engineering.	19	19	4	Do.
Chairman, Joint Chiefs of Staff	19	19	4	General's or Admiral's March as appropriate.
Chief of Staff, United States Army; Chief of Naval Operations; Chief of Staff, United States Air Force; or Commandant of the Marine Corps.	19	19	4	Do.
General of the Army, Fleet Admiral, or General of the Air Force.	19	19	4	Do.
Chairman of a Committee of Congress.	17	----	4	March.
Assistant Secretaries of Defense and General Counsel of the Department of Defense.	17	17	4	Do.
Governor of a Territory or foreign possession within the limits of his jurisdiction.	17	----	4	Do.
Under Secretary of the Army	17	17	4	Do.
Under Secretary of the Navy or Air Force.	17	17	4	Do.
Generals, Admirals	17	17	4	Generals or Admirals March as appropriate.
Assistant Secretary of the Army	17	17	4	March.
Assistant Secretary of the Navy or Air Force.	17	17	4	Do.
American envoys or ministers or foreign envoys or ministers accredited to the United States.	15	----	3	Do.
Lieutenant general or vice admiral.	15	----	3	Generals or Admirals March as appropriate.
Major general or rear admiral	13	----	2	Do.
American ministers resident and minister resident accredited to the United States.	13	----	2	March.
American chargés d'affaires and chargés d'affaires accredited to the United States.	11	----	2	Do.
Brigadier general or commodore	11	----	2	Generals or Admirals March as appropriate.
Consuls general accredited to the United States.	11	----	----	March.

Figure 81. Salutes and honors.

thors have credited Betsy Ross of Philadelphia with the design. there is no documentary evidence that she had any part in designing the flag (fig 82).

The first change in design of the flag was prescribed in 1794 when Congress passed an act requiring that the flag consist of 15 white stars in a blue field and 15 stripes, alternate red and white. The occasion for this change was the admission of Vermont in 1791 and Kentucky in 1792 as states of the union.

In 1818 Congress provided—

> "That from and after the fourth day of July next, the flag of the United States be 13 horizontal stripes, alternate red and white: that the union be 20 stars, white in a blue field.
>
> "That on admission of every new state into the Union, one star be added to the union of the flag, and that such addition shall take effect on the fourth of July then next succeeding such admission."

Since 1818, no further legislation dealing with the design of the flag has been passed. When a new state is accepted into the Union, one star is added to the flag on the Fourth of July next succeeding such admission. No law covers the arrangement of the stars in the blue field, and as the states were admitted to the Union the practice of arranging the stars varied until the 48-star flag of 1912 when President Taft issued an executive order prescribing the six rows of eight stars each. The arrangement of the stars in both the 49- and the 50-star flags was established by Executive Orders of President Eisenhower. Since the advent of statehood for Alaska and Hawaii, the new flags depict 50 stars.

The colors used in the Flag of the United States are, traditionally, white for purity and innocence, red for hardiness and valor, and blue for vigilance, perseverance, and justice.

TYPES, NOMENCLATURE, AND DISPLAY OF FLAGS

General. In the military service there are several names for the Flag of the United States, including flag, color, standard, and ensign. In general, the term "flag" is applicable regardless of size and use, but the other terms have special usages, e.g.:

a. A color is a specific flag indicative of the spirit and tradition of either the United States or the office, position, or organization represented. The term "color," when used alone, implies the national color. The term "colors" implies both the national and the organizational or individual color (fig 83). National colors may be made of banner cloth (synthetic material with the appearance of heavy silk), with embroidered stars, or may be made of bunting, with appliqued stars. All colors of banner cloth are fringed on three sides and some have attached cords and tassels. Colors may be 4 feet 4 inches hoist by 5 feet 6 inches fly, and 3 feet hoist by 4 feet fly. Flags are authorized for certain high governmental officials, general officers, and organizations. A partial list is as follows:

(1) The President of the United States.

(2) The Vice President of the United States.

(3) The Secretary, Deputy Secretary, and Assistant Secretaries of Defense.

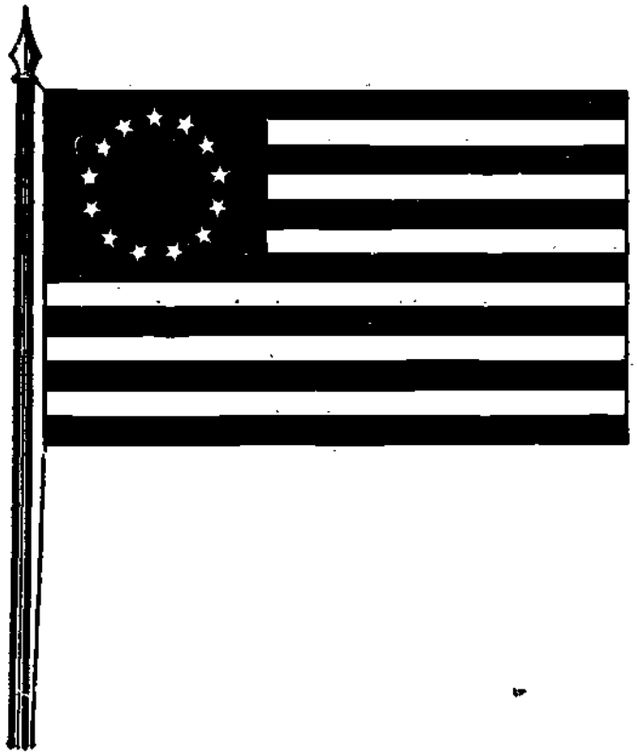

Figure 82. Design of one of the 13-star flags.

(4) The Secretaries, Under Secretaries, and Assistant Secretaries of the Army and Air Force.
(5) Chairman of the Joint Chiefs of Staff.
(6) Chief of Staff of the United States Army.
(7) Chief of Staff, United States Air Force.
(8) General of the Army (5-star general).
(9) General Officers.

b. A standard is interchangeable with the term "color" inasmuch as it concerns organizations, except that dismounted organizations traditionally use the term "color," and mounted, mechanized, and motorized organizations traditionally use the term "standard." Most of these flags are 3 feet hoist by 4 feet fly.

c. An ensign is a naval term for square or rectangular flags of any size, flown from ships, tenders, launchers, small boats, and aircraft.

Sizes. There are several sizes of flags as distinguished from colors, standards, or ensigns. The most commonly used ones are—

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Figure 83. A national color and organizational color.

a. The garrison flag, 38 feet by 20 feet, which is flown on holidays and other important occasions as follows:

New Year's Day, 1 January.
Inauguration Day, 20 January every fourth year.
Lincoln's Birthday, 12 February.
Washington's Birthday, 22 February.
Easter Sunday (variable).
Thomas Jefferson's Birthday, 13 April.
Loyalty Day and Law Day, USA, 1 May.
Mother's Day, second Sunday in May.
Armed Forces Day, third Saturday in May.
National Maritime Day, 22 May.
Memorial Day, 30 May (half-staff until noon).
Flag Day, 14 June.
Independence Day, 4 July.
National Aviation Day, 19 August.
Labor Day, first Monday in September.
Constitution Day and Citizenship Day, 17 September.
Gold Star Mother's Day, last Sunday in September.

Columbus Day, 12 October.
Veterans Day, 11 November.
Thanksgiving Day, fourth Thursday in November.
Christmas Day, 25 December.

b. The field flag, 6 feet, 8 inches hoist by 12 feet fly, which is displayed with the field flags authorized for specified civilian and military personnel.

c. The post flag, 19 feet by 10 feet, which is flown in pleasant weather when neither the garrison nor field flag is hoisted.

d. The storm flag, 9 and 1/2 feet by 5 feet, which is flown in inclement weather.

e. The grave decorating flag, 7 inches by 11 inches.

Use and Display. The Flag of the United States represents the living country and is considered as a living thing, the union being the honor point. The right arm is the sword arm and therefore the point of danger; hence, the right is the place of honor. The edge of the flag which is toward the staff is the right edge. The union of the flag, and the flag itself when in company with other flags, is always given the honor point, the marching right, the flag's own right, i.e., the left of an observer toward whom the flag is approaching (fig 84).

a. When foreign national flags are displayed with the Flag of the United States, they will be comparable in size by area with

Figure 84. National color in procession with single other flag.

the Flag of the United States; and the flagstaffs or flagpoles will be of equal height.

b. When state flags are displayed with the Flag of the United States, they will be comparable in size by area and not larger than the Flag of the United States. They will be displayed from flagstaffs of equal height or lower than the Flag of the United States.

c. When the national colors are used for ceremonies by motorized and mechanized organizations, they will be carried on vehicles specifically designed for color and color guards. The position in line from right to left will be the national color, the organizational flag, and the individual's flag (which will be displayed only when a general officer is commanding).

d. When the Flag of the United States and another flag are displayed together from crossed staffs as against a wall, the Flag of the United States will be on the right, i.e., the flag's own right, or the left of an observer facing the wall, and its staff will be in front of the other flag (fig 85).

e. When a number of flags are grouped and displayed from staffs radiating from a central point, the Flag of the United States will be in the center and at the highest point of the group (fig 86).

f. When a number of flags are displayed from staffs in a row, the Flag of the United States will be on the right of the line (i.e., the left of an observer facing the display).

g. However, if no foreign national flags are involved, the Flag of the United States may be placed at the center of the line provided it is displayed at a higher level.

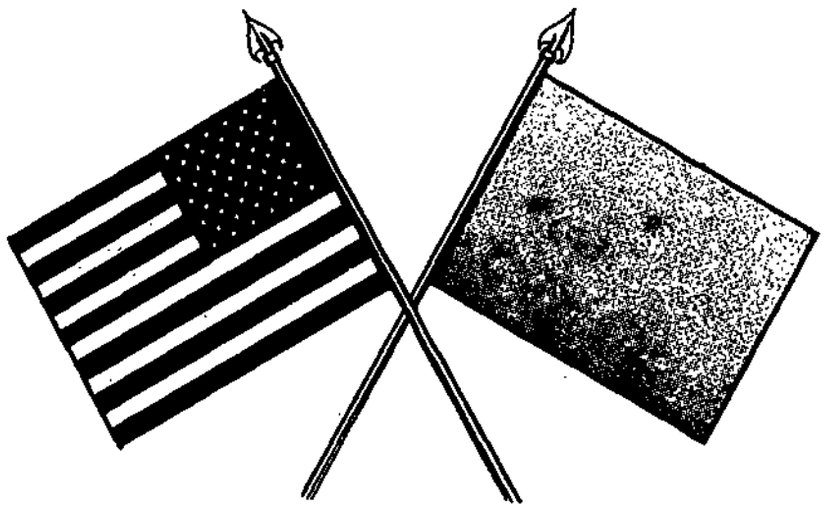

Figure 85. The Flag of the United States displayed with another flag from crossed staffs.

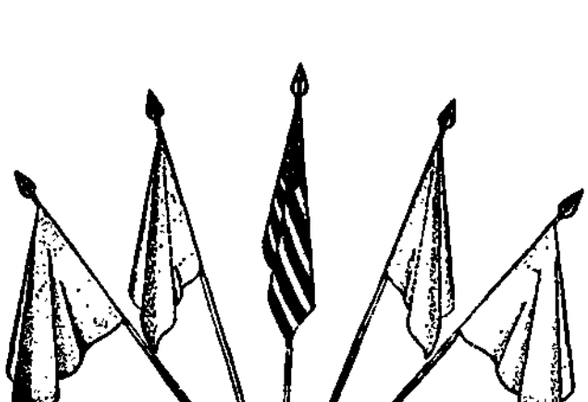

Figure 86. The Flag of the United States displayed with flags of states, cities, or societies.

h. When the Flag of the United States is displayed either horizontally or vertically against the wall, the union will be uppermost and to the flag's own right, i.e., to the observer's left (fig 87).

i. When the Flag of the United States is displayed in a chapel in front of the chancel, it will be on the congregation's right as they face the chaplain. If displayed within the chancel, it will be on the chaplain's right as he faces the congregation. Other flags in the same display will be on the wall opposite the Flag of the United States or on the chaplain's left as the case may be (fig 88).

j. In general, the Flag of the United States will be displayed flat or hanging free. It will not be draped over doorways or arches, tied in a bowknot, or fashioned into a rosette.

When used on a rostrum, it will be displayed above and behind the speaker's desk. It is never to be used to cover the speaker's desk nor draped over the front of the platform. For this latter purpose, as well as for decoration in general, bunting of the national colors may be used, and since the union of the flag always goes to the honor point. the colors will be arranged with the blue above, the white in the middle, and the red below.

k. No lettering or object of any kind will be placed on the Flag of the United States.

l. No flag or pennant will be flown above the Flag of the United States.

m. The Flag of the United States, when flown at a military post

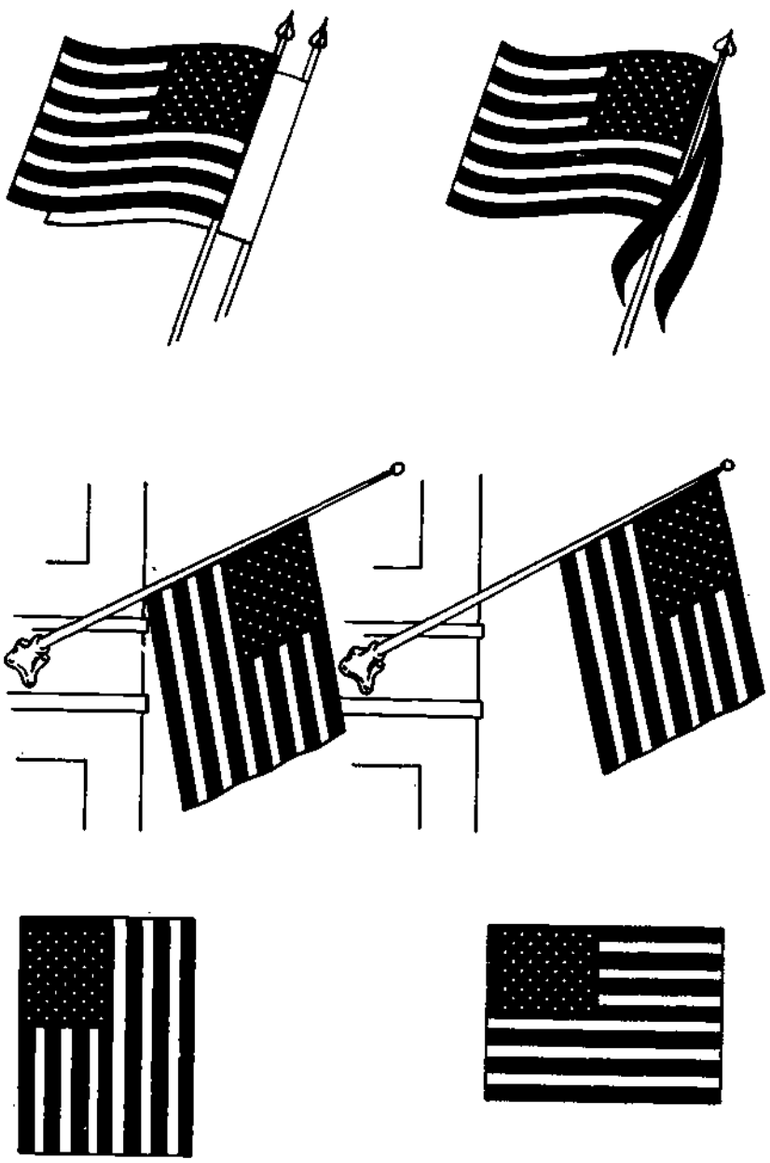

Figure 87. Display of the national flag.

or when carried by troops, will not be dipped by way of salute or compliment.

n. Half-staff (fig 89).

(1) When the Flag of the United States is displayed at half-

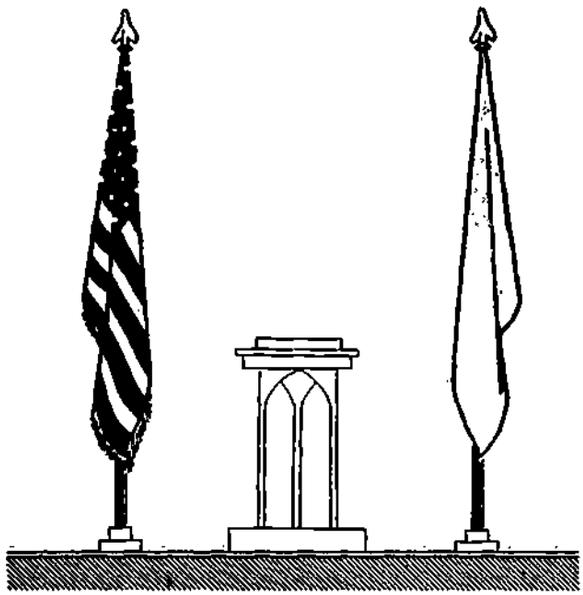

Figure 88. Flags displayed within a chancel.

staff, it is first hoisted to the top of the staff and then lowered to the half-staff position. Before lowering the flag, it is again raised to the top of the staff.

(2) All military posts in sight of each other display their flags at half-staff upon the occasion of one doing so. The same rule is observed toward all vessels of war.

(3) A flag in any position below the top of the staff is technically in the half-staff position, but, in general, the middle point of the hoist of a flag at half-staff should, in the case of unguyed flagstaff of one piece, be halfway between the top of the staff and the foot thereof, or in the case of flagstaff with crosstree or guy cables, halfway between the top of the staff and the crosstree or point of attachment of the guy cables. Local conditions such as a liability of fouling the flag may, however, dictate other positions; a graceful one, having the top of the flag the depth of the hoist below the top of the staff.

o. Lowering and folding the flag.

(1) When the Flag of the United States is lowered from staff, no portion of it will be allowed to touch the ground either in lowering or in folding. Before being completely detached from the halyards, the flag should be folded into the shape of a cocked hat (fig 90).

(2) During the ceremony of hoisting or lowering the flag, or

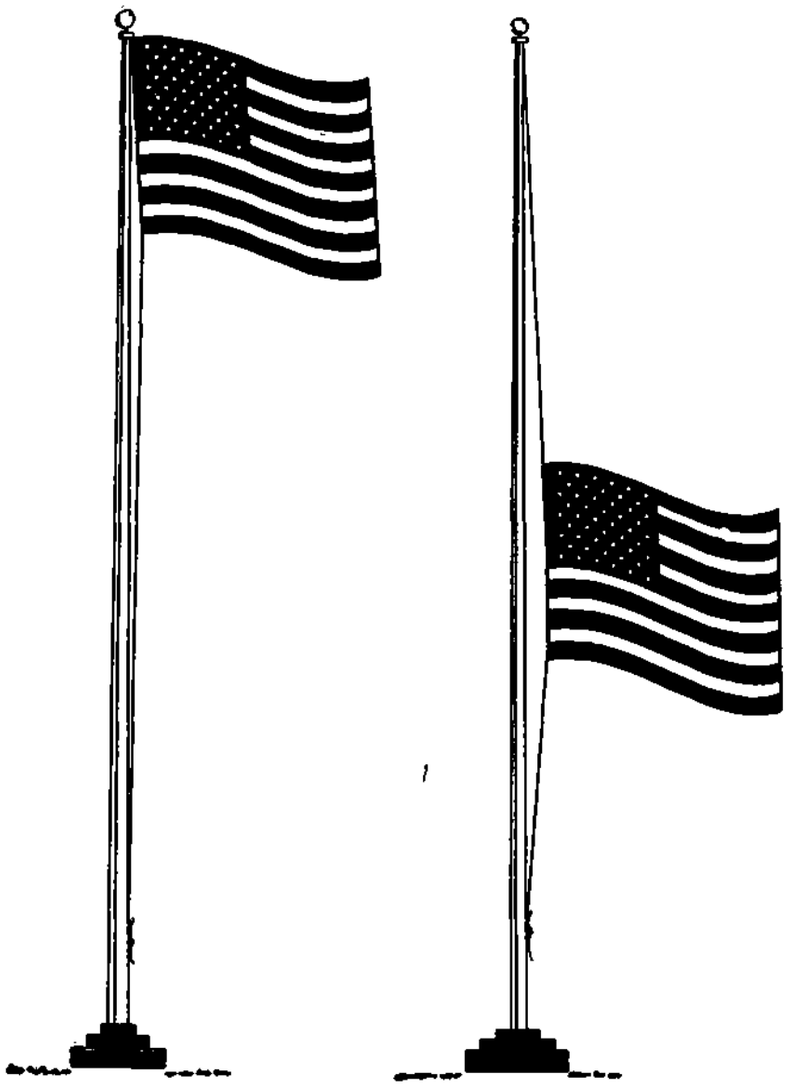

Figure 89. Display of the flag.

when it is passing in a parade or in a review, all persons present, except those actually engaged in hoisting or lowering the flag at reveille and retreat, should face it, stand at attention, and salute. Men not in uniform should remove their headdress with the right hand and hold it at the left shoulder, with the hand over the heart. Men not in uniform and without headdress should stand at attention and place the right hand over the heart. Women not in

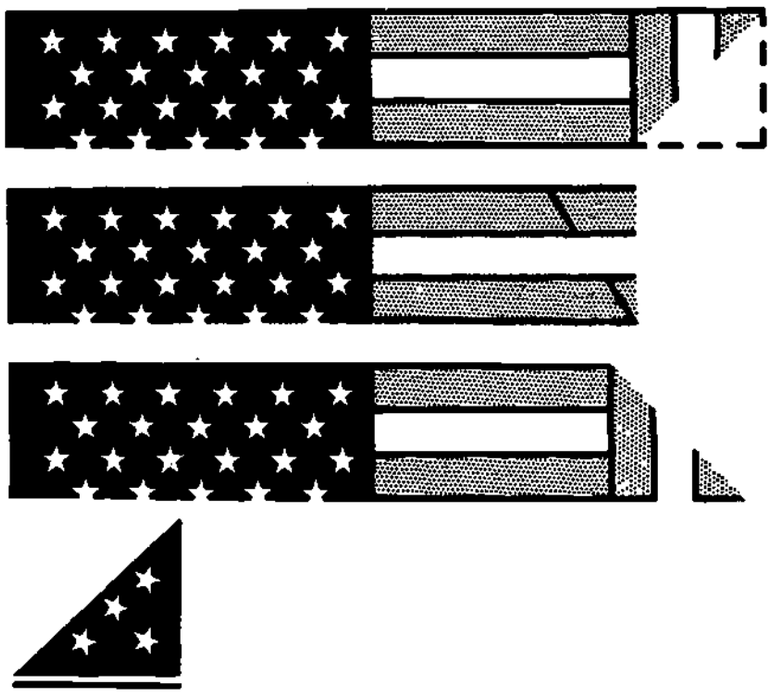

Figure 90. Method of folding flag.

uniform should salute by placing the right hand over the heart. The salute to the flag in a moving column is rendered as the flag passes (fig 91).

p. Use at military funerals.

(1) The Flag of the United States is used to cover the casket at the military funeral of any of the following named persons:

Any member of the military forces in active service.

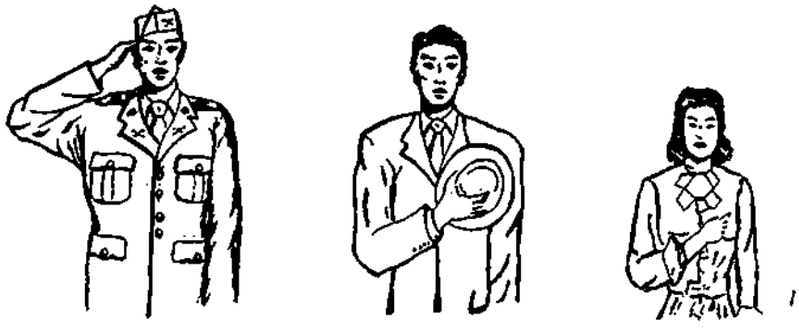

Figure 91. Saluting the flag.

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Members of the National Guard.
Members of the United States Army Reserve.
Members of recognized military organizations.
Former members of the military service who have been honorably discharged therefrom.

(2) The manner of placing the Flag of the United States on the casket will be the reverse of that prescribed for displaying it vertically against a wall. It will be placed lengthwise on a closed casket, with the union at the head and over the left shoulder of the deceased (fig 92). When a full couch casket is opened, the flag will be removed, folded to a cocked hat, and placed in lid at the head end of the casket and just above the decedent's left shoulder. When a half couch casket is opened, the flag will be folded on the lower half of the casket so as to be in same relative position as when displayed full length on a closed casket. The casket will be carried foot end first. The flag will not be lowered into the grave and it will not be allowed to touch the ground. The interment flag will be used and when furnished at Government expense may be given to nearest of kin at the conclusion of the interment.

q. Flags carried by troops will not be half-staffed; they will not be placed in mourning unless ordered by the Secretary of the Army. When so ordered, two streamers of black crepe seven feet long and about 12 inches wide will be attached to the staff below the spearhead of the national and organizational colors (fig 87).

Care of Flags.

a. General. All flags, colors, and standards manufactured of banner cloth will be rolled carefully on a cardboard tube and

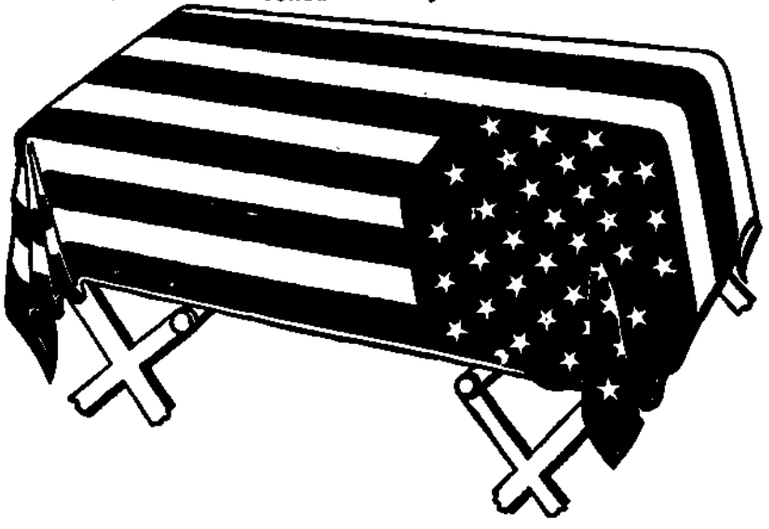

Figure 92. Flag placed over a casket.

wrapped with tissue paper. In no circumstances will articles of this character (banner cloth) be folded or jammed into a tube, because folding or creasing has a tendency to cause the material eventually to split, thus shortening the life of the article. Flags, colors, and guidons, never will be rolled on the staff while wet or damp, but will be hung out flat until dry. When flags are not in use they will be cased.

b. Shipment. In shipping banner cloth flags or colors, care will be exercised to see that they are rolled on a cardboard tube, covered carefully with tissue paper, heavily wrapped and tied, and marked legibly to insure safe delivery.

c. Preservation. Flags (especially those manufactured of banner cloth) are expensive items of equipment and particular attention will be given to their preservation in order to obtain maximum service. They will be thoroughly protected from moisture and dust which cause brittleness and rot. There are no prescribed methods of preparing, treating, mounting, or displaying flags retained for historic purposes.

d. Cleaning. When deemed advisable, flags may be cleaned in the manner best suited for the material of the flag.

e. Repair and Replacement. Whenever a banner cloth color or streamer requires reconditioning or replacement, it will be forwarded to the commanding officer, US Army Support Center, Philadelphia, Pennsylvania 19101. Should the cost of reconditioning be found unwarranted by the US Army Support Center, it will be returned to the organization and a new color or streamer will be furnished as replacement. All unserviceable banner cloth colors or streamers so returned will be numbered and retained in one repository as a momento of service by the organization to which they belong. A synopsis of service bearing the same number will be filed with the records of the organization.

Disposition of Flags of the United States.

a. Old or worn-out flags will not be used either for banners or for any secondary purpose. When a flag is in such condition that it is no longer a fit emblem for display, it will not be cast aside nor used in any way that might be viewed as disrespectful. If not preserved, it will be destroyed as a whole, privately, preferably by burning or by some other method lacking in any suggestion of irreverence or disrespect to it as a military emblem.

b. The United States Army flag, and national and organizational colors of banner cloth will not be burned. They will be retained in accordance with *e* above.

Other Descriptive Markers and Flags. Among other common flags are the *guidon* which is a swallow-tailed flag carried by compa-

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nies, batteries, and designated detachments as unit markers, and the *pennant*, a triangular-shaped flag which is used—

a. To mark the turning point or limitation on parade grounds.

b. On a government ship to distinguish it from a merchant ship.

c. To denote the presence of homeward-bound troops on a government ship.

d. By military depots or similar establishments when authorized to display the Army and Navy award pennant.

The United States Army Flag.

a. Authorization. The United States Army flag, the design of which is based on the seal of the Department of the Army, was authorized in 1956 by Executive Order (fig 93).

b. Description and streamers.

(1) Upon a white rectangular background is the design of the Army seal in ultramarine blue. This seal is above a scarlet scroll upon which is lettered in white, UNITED STATES ARMY. Below the scroll the arabic numbers "1775" are inscribed.

(2) Streamers depicting each official campaign marked with the appropriate year are attached below the spearhead of the flagstaff.

Figure 93. The United States Army Flag.

c. Display and position.

(1) The United States Army flag will be approximately displayed inside offices or headquarters building at the discretion of the appropriate unit commander. It will be displayed to the left of the United States flag.

(2) The Army flag, when displayed during ceremonies and parades, will take position precedence over other organizational flags as well as those flags representing the Navy and the Air Force. If on line with the United States flag, the United States Army flag will be displayed on adjacent left position. When the United States flag is being carried in the center and forward of organizational flags, the United States Army flag is carried on the extreme right of the line of flags.

CHAPTER 22

THE CODE OF CONDUCT

INTRODUCTION

During the Korean War a small number of American prisoners of war dealt with their Communist captors to the detriment of their fellow prisoners and their country and its allies. This collaboration with the enemy, which was in violation with well-established principles of the law of war and military law, led to the promulgation, on 17 August 1955, of a formalized Code of Conduct by the President of the United States. This code reiterates the principles which have traditionally guided American fighting men and reaffirms the duty of every soldier to resist his country's enemies, in mind and spirit, in combat and in captivity. Its purpose is to increase unit fighting strength and to fortify an individual's will to resist an enemy.

To insure the achievement of the standards prescribed by the code, *all* members of the Armed Forces must be instructed and periodically reinstructed in each of its articles, sentence by sentence. They must be made to understand the importance of every article and the tremendous demands it puts upon personal honor and individual heroism. Every soldier must be trained so that he is equipped both mentally and physically to counter and withstand all types of enemy pressure. He must be assured that all soldiers, even as prisoners of war, continue to be of special concern to the United States; that every available means will be employed by the Nation to establish contact with, to support, and to gain the release of prisoners of war; and that the laws of the United States provide and will continue to provide for the support and care of dependents of members of the Armed Forces.

Code of Conduct for Members of the United States Armed Forces

I

I am an American fighting man. I serve in the forces which guard my country and our way of life. I am prepared to give my life in their defense.

EXPLANATION

A member of the Armed Forces is always a fighting man. As such, it is his duty to oppose the enemies of the United States regardless of the circumstances in which he may find himself, whether in active participation in combat, or as a prisoner of war.

II

I will never surrender of my own free will. If in command I will never surrender my men while they still have the means to resist.

EXPLANATION

As an individual, a member of the Armed Forces may never voluntarily surrender himself. When isolated and he can no longer inflict casualties on the enemy, it is his duty to evade capture and rejoin the nearest friendly forces.

The responsibility and authority of a commander never extends to the surrender of his command to the enemy while it has power to resist or evade. When isolated, cut off or surrounded, a unit must continue to fight until relieved or able to rejoin friendly forces by breaking out or by evading the enemy.

III

If I am captured I will continue to resist by all means available. I will make every effort to escape and aid others to escape. I will accept neither parole nor special favors from the enemy.

EXPLANATION

The duty of a member of the Armed Forces to continue resistance by all means at his disposal is not lessened by the misfortune of capture. Article 82 of the Geneva Convention pertains. He will escape if able to do so, and will assist others to escape. Parole agreements are promises given the captor by a prisoner of war upon his faith and honor, to fulfill stated conditions, such as not to bear arms or not to escape, in considerations of special privileges, usually release from captivity or lessened restraint. He will never sign or enter any parole agreement.

IV

If I become a prisoner of war, I will keep faith with my fellow prisoners. I will give no information nor take part in any action which might be harmful to my comrades. If I am senior I will take command. If not, I will obey the lawful orders of those appointed over me and will back them up in every way.

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EXPLANATION

Informing or any other action to the detriment of a fellow prisoner is despicable and is expressly forbidden. Prisoners of war must avoid helping the enemy identify fellow prisoners who may have knowledge of particular value to the enemy, and may therefore be made to suffer coercive interrogation.

Strong leadership is essential to discipline. Without discipline, camp organization, resistance, and even survival may be impossible. Personal hygiene, camp sanitation, and care of sick and wounded are imperative. Officers and noncommissioned officers of the United States will continue to carry out their responsibilities and exercise their authority subsequent to capture. The senior officer, noncommissioned officer, or private (including comparable grades in the other services, see AR 600–15) within the prisoner of war camp or group of prisoners will assume command according to rank (or precedence) without regard to Service. The responsibility and accountability may not be evaded, except when an individual is prohibited by appropriate Service regulations from assuming command (AR 600–20 governs for Army personnel). If the senior officer, noncommissioned officer, or private is incapacitated or unable to act for any reason, command will be assumed by the next senior. The legal responsibility for obeying the lawful orders of superior United States military personnel remains unchanged in captivity. If the foregoing organization cannot be effected, an organization of elected representatives, as provided for in Articles 79–81 Geneva Conventions Relative to Treatment of Prisoners of War, or a covert organization, or both, will be formed.

Prisoners' representatives may send periodic reports on the situation in the camps and the needs of the prisoners of war to the representatives of the Protecting Powers.

Every representative elected must be approved by the Detaining Power before he has the right to commence his duties. Where the Detaining Power refuses to approve a prisoner of war elected by his fellow prisoners of war, it must inform the Protecting Power of the reason for such refusal.

In all cases the prisoners' representative must have the same nationality, language, and customs as the prisoners of war whom he represents. Thus, prisoners of war distributed in different sections of a camp, according to their nationality, language, or customs, shall have for each section their own prisoners' representative, in accordance with the foregoing paragraphs.

V

When questioned, should I become a prisoner of war, I am

bound to give only name, rank, service number, and date of birth. I will evade answering further questions to the utmost of my ability. I will make no oral or written statements disloyal to my country and its allies or harmful to their cause.

EXPLANATION

When questioned, a prisoner of war is required by the Geneva Convention and permitted by this Code to disclose his name, rank, service number, and date of birth only. A prisoner of war may also communicate with the enemy regarding his individual health or welfare as a prisoner of war and, when appropriate, on routine matters of camp administration. Oral or written confessions true or false, questionnaires, personal history statements, propaganda recordings and broadcasts, appeals to other prisoners of war, signatures to peace on surrender appeals, self-criticisms, or any other oral or written communication on behalf of the enemy or critical or harmful to the United States, its allies, the Armed Forces, or other prisoners are forbidden. A detainee is required to adhere to the same standards as are required of a prisoner of war.

It is a violation of the Geneva Convention to place a prisoner of war under physical or mental torture or any other form of coercion to secure from him information of any kind. If, however, a prisoner is subjected to such treatment, he will endeavor to avoid by every means the disclosure of any information, or the making of any statement or the performance of any action harmful to the interests of the United States or its allies or which will provide aid or comfort to the enemy.

Under Communist Bloc reservations to the Geneva Convention, the signing of a confession or the making of a statement by a prisoner is likely to be used to convict him as a war criminal under the laws of his captors. This conviction has the effect of removing him from the prisoner of war status and according to this Communist Bloc device denying him any protection under terms of the Geneva Convention and repatriation until a prison sentence is served.

VI

I will never forget that I am an American fighting man, responsible for my actions, and dedicated to the principles which made my country free. I will trust in God and in the United States of America.

EXPLANATION

The provisions of the Uniform Code of Military Justice, whenever appropriate, continue to apply to members of the Armed

Forces while prisoners of war. Upon repatriation, the conduct of prisoners will be examined as to circumstances of capture and through the period of detention with due regard for the rights of the individual and consideration for the conditions of captivity.

A member of the Armed Forces who becomes a prisoner of war has a continuing obligation to remain loyal to his country, his service and his unit.

A member of the Armed Forces who is forceably detained by a foreign state or entity must never give up hope. He must resist all attempts at indoctrination and remain loyal to his country, his service, and his unit.

The life of a prisoner of war is hard. Prisoners of war who stand firm and united against the enemy will aid one another in surviving this ordeal.

PART FOUR

HYGIENE, FIRST AID, AND FIELD SANITATION

CHAPTER 23

HEALTH OF THE ARMY

INTRODUCTION

History of past wars shows that more deaths and disabilities among soldiers have resulted from disease than from battle. Disastrous epidemics have impeded military operations, have contributed to the defeat of armies, and have influenced the course of history. Nevertheless, most illnesses can be prevented. Prevention of disease requires the cooperation of every individual in the Army. Attention to disease prevention, along with the medical care and supervision provided our troops, has greatly reduced disease rates in our modern Army. Even so, disease is still the chief cause of disability and time lost from duty. It is an ever-present potential enemy of our Army, especially in the field where living conditions do not compare favorably with those found in community life.

RESPONSIBILITIES

In order to successfully combat disease, teamwork is essential; all men must recognize and fulfill their individual and collective responsibilities.

Each unit commander is responsible for the health of his command. He issues the orders and enforces them. Further, he must continually stimulate the inherent urge and desire to be healthy that exists within his men. This function calls for the intelligent application of health principles as they apply to men in all walks of life. Although he is responsible, the unit commander cannot be expected to be an expert in all fields. He therefore depends upon the Army Medical Department for sound, timely advice upon which to base his orders relative to maintaining health in his unit.

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The Army Medical Department is responsible for investigating, reporting on, and making recommendations relative to all matters which may affect the health of the Army and for the execution of health measures which require skilled technical training such as artificial immunization, inspection of foods, physical examinations, and proper medical treatment.

The Corps of Engineers is responsible for the design, construction, and operation of many facilities and services necessary for the comfort, health, and well-being of our troops. Buildings and installations such as living quarters, water and sewage treatment plants, and services such as heat and light, and sometimes insect and rodent control, ar among the responsibilities of the Corps of Engineers.

The Quartermaster Corps is responsible for the provision of food and mess equipment for the Army; for the operation of Army bakeries, laundries, and mobile shower units; and for the provision of clothing, footwear, and tentage. Moreover, most of the supplies and materials used for insect and rodent control and for the sanitation of barracks and messes are provided by the Quartermaster Corps.

From the foregoing, it is obvious that the health of the Army is dependent upon the combined efforts of the unit, the unit commander, the Army Medical Department, the Corps of Engineers, the Quartermaster Corps, and, above all, the individual himself. He, by pride, regulation, and discipline, must adhere to the required principles of good living and good health. One individual's ignorance of, or indifference to, the need and reasons for these regulations and practices of military sanitation and hygiene can undo much of the combined efforts of the many services working for his welfare. The *major* responsibility for the prevention of disease and the maintenance of health rests upon the *individual*.

CHAPTER 24

PERSONAL HYGIENE

DEFINITION

Personal hygiene refers to those measures or precautions which every person should take with the primary objective of maintaining his own health and physical well-being. It requires the application of a few common sense rules, the observance of wholesome habits, and the avoidance of excesses of all kinds. It is a phase of the larger subject of hygiene, which deals with the principles and laws of health. These principles and laws are basic and are laid down by nature. Community cleanliness is merely the result obtained within a compact group in which all members obey the principles of personal hygiene. An important byproduct is the prevention of the spread of communicable disease. Therefore, the application by each individual of health-saving personal hygiene measures is the cornerstone of the maintenance of group health and of preventive medicine. Personal hygiene is the basis of military hygiene. Military sanitation is the Army way of keeping soldiers healthy and preventing the spread of disease; it includes personal, military, and group hygiene.

RESPONSIBILITY FOR PERSONAL HYGIENE

Before being allowed to enlist in the Army, the individual is given a thorough physical examination to determine the absence of disease. It then becomes his duty to keep himself in the best possible physical condition. In so doing, attention to personal hygiene is of great importance.

IMPORTANCE OF EARLY MEDICAL TREATMENT

One should not make the mistake of underestimating the value of prompt medical attention. Although sick call is held at a regularly stated time, medical attention is available 24 hours a day to any man who feels sick, thinks he has acquired a disease, or who has been injured. All that one must do is to report to his first sergeant or noncommissioned officer in charge of quarters (if on

duty, he reports first to his immediate officer or noncommissioned officer in charge) who will then send him to the medical officer for examination. Men should not hesitate to report on sick call for fear of being accused of "goldbricking." They may have a disease which will spread to other men in the unit, or their ailment may become worse by delay or by self-treatment. Frequent visitors to the dispensary who have no apparent disease require special attention by their medical officer, chaplain, unit officers, and noncommissioned officers, because these men may be having trouble adjusting themselves to their environment or duties. Frank and sympathetic discussion of their difficulties in these cases will often be helpful.

CAUSES OF DISEASE

Most acute diseases, and many chronic ones, are caused by various organisms commonly called germs. The usual ways in which disease-producing germs gain entrance to the body are as follows:

By eating food or by drinking water or other liquids which contain the germs.

By breathing certain germs which float in the air.

By entrance through the skin, the germs having been injected into the body by the bites or fecal deposits of certain insects, or introduced through cuts, scratches, or abrasions.

By contact with diseased persons.

MEASURES TO IMPROVE GENERAL HEALTH

Every individual has some degree of natural resistance to infection. This resistance is improved by any measure which serves to improve his general health. Among the measures serving that purpose are the following:

Protection from cold and chilling by suitable clothing, blankets, and shelter.

Adequate and proper food.

Physical training, including athletics.

Sufficient sleep (at least 7 to 8 hours each night).

Avoidance of undue fatigue. (This is particularly important in training camps in the presence of epidemics of respiratory diseases.)

Recreation of a suitable nature. (The morale of an organization has a definite relation to the physical condition of its members.)

Keeping the face, body, hands, and feet clean.

CARE OF THE BODY

Bathing. An unclean body may favor the entry of disease germs. Therefore, the entire body should be bathed once daily when facilities permit. In the field, when bathing facilities are not available, the body should be scrubbed frequently with a wet cloth and soap. When bathing, one should pay particular attention to his armpits, the areas between his legs, and to his feet. One should dry himself carefully, particularly under the arms, between the toes, and in the crotch. It should be remembered that most germs thrive in warm, moist areas.

Hands. The hands should aways be washed with soap and warm water before eating and after visiting the toilet. Short fingernails are less likely to break and are easier to keep clean than are long ones.

Clothing. Underwear and shirts should be changed and washed with each bath but not less frequently than twice each week. If laundry facilities are not available, clothing should be crumpled up, shaken well, and exposed to sunlight for at least two hours. Sunlight has a powerful germicidal effect against many organisms which attack the skin.

Mouth. Teeth should be brushed at least twice each day. They should always be brushed before retiring. They should be cleaned on both the inside and outside surfaces by brushing away from the gums and toward the cutting surfaces. Any particles that remain between the teeth should be removed with dental floss or a rubber gum massager, care being taken not to injure the gums. If teeth ache, or gums bleed, or if one discovers a cavity, he should make arrangements to be seen at the dental clinic.

Feet. Battles and wars still are being won by the foot soldier. Proper care of the feet is essential to the maintenance of physical fitness. Serious foot trouble usually can be prevented by observance of the following simple rules of foot hygiene. Only footgear issued by the Army should be worn in the field. Expert fitting at the time of issue is absolutely essential. There should be no binding or pressure spots; neither should the footgear be so large that it will permit the foot to slide forward and backward when walking.

Hair. The hair should be kept neatly trimmed and brushed. At least once a week the hair and scalp should be shampooed with soap and water. The face should be clean shaven. Combs, brushes, and razors are not to be shared with other persons.

RULES FOR AVOIDING DISEASE

Instructions given by the medical officer, the published sanitary regulations which are applicable to each situation, and the unit

sanitary orders must be applied effectively to maintain the health of each individual and of the unit as a whole. Sanitary discipline must be enforced to permit the development and maintenance of hygienic living conditions and well-trained men. Poor sanitary standards are accompanied by sickness, substandard morale, and an unsatisfactory state of unit and individual training. The following general principles are basic requirements for avoiding diseases:

Water. All water used for drinking and cooking purposes must be properly treated or taken from authorized sources. Canteens must be kept clean at all times and filled with authorized water only.

Mess Sanitation. Sanitary mess facilities must be provided. All utensils and mess gear must be clean and disinfected. Food must be stored properly, selected and prepared carefully, and served in a sanitary manner. Unauthorized foods must not be eaten. All regulations pertinent to the handling of foods and places where food is served must be rigidly enforced.

Waste Disposal. Human, animal, and kitchen wastes must be disposed of in a sanitary manner. Adequate and properly maintained latrines must be provided. Appropriate steps should be taken to enforce all phases of waste disposal discipline.

Protection From Insects. The proper use of insect repellants, insecticides, gloves, head nets, and bed nets, and the proper wearing of impregnated clothing are imperative in regions where insect-borne diseases are present. Suppressive and curative drugs are also available for malaria control. These measures for individual protection must be enforced and, whenever possible, all camps and bivouacs should be located in areas where the insect population is not great.

Protection From Rodents. Food must be stored under ratproof conditions. Rat-infested areas should be avoided whenever possible.

Avoidance of Contact With Infected Persons. Infected persons must be kept away from well persons at all times, since through close association respiratory disease can be transmitted by secretions from the mouth and nose, while venereal diseases are capable of transmission by direct contact with contaminated persons.

Provision of Proper Clothing. The correct type of clothing must be worn in accordance with existing climatic conditions. Clothing should fit properly. Wet clothing, particularly shoes and socks, should be changed as soon as opportunity permits.

Proper Housing. Overcrowding must be prevented and correct ventilation of barracks and tents must be effected. Regulations governing proper housing should be known by all and enforced to prevent the spread of communicable diseases and to permit proper rest.

CHAPTER 25

FIRST AID: BURNS, FRACTURES, AND MAJOR WOUNDS

GENERAL

First aid is the care given casualties before regular medical or surgical treatment can be administered by medical personnel. The Army Medical Service has the finest equipment available, and its personnel have been trained in the most modern methods of saving life and easing pain. However, these medical personnel cannot be everywhere at once; there may be times when the soldier must depend on his own knowledge and skill to save his own life or the life of someone else.

The soldier is taught first aid procedures and is issued a first aid pouch containing a packaged sterile dressing, and a packet of sodium chloride-sodium bicarbonate mixture (fig 94).

In administering first aid, it is important to know what to do and what not to do. Calmness and gentleness are essential.

When rendering first aid to a wounded man, take a good look at the wounds, but keep your hands off! Wounds are the most common condition needing first aid. Always look for more than one wound. If the wound was caused by a missile, it may have come out at another point. Before you treat a wound, you must see all of it to find out exactly where it is, how large it is, and how much it is bleeding. Usually, it is best to cut the clothing away from the wound. Pulling clothing over the wound increases the danger of infection. Moving the wounded parts may make the wound worse and cause needless pain. Keep the wound clean. Keep your hands away from it. Cover it with a sterile dressing immediately to prevent infection.

The four life saving measures in first aid for the wounded are: STOP THE BLEEDING, CLEAR THE AIRWAY, APPLY DRESSINGS AND BANDAGES, ADMINISTER SHOCK CONTROL. You should memorize these four procedures and learn the simple methods of carrying them out. Now is the time to learn! Prompt and correct first aid treatment for wounds will not only speed healing, but save lives.

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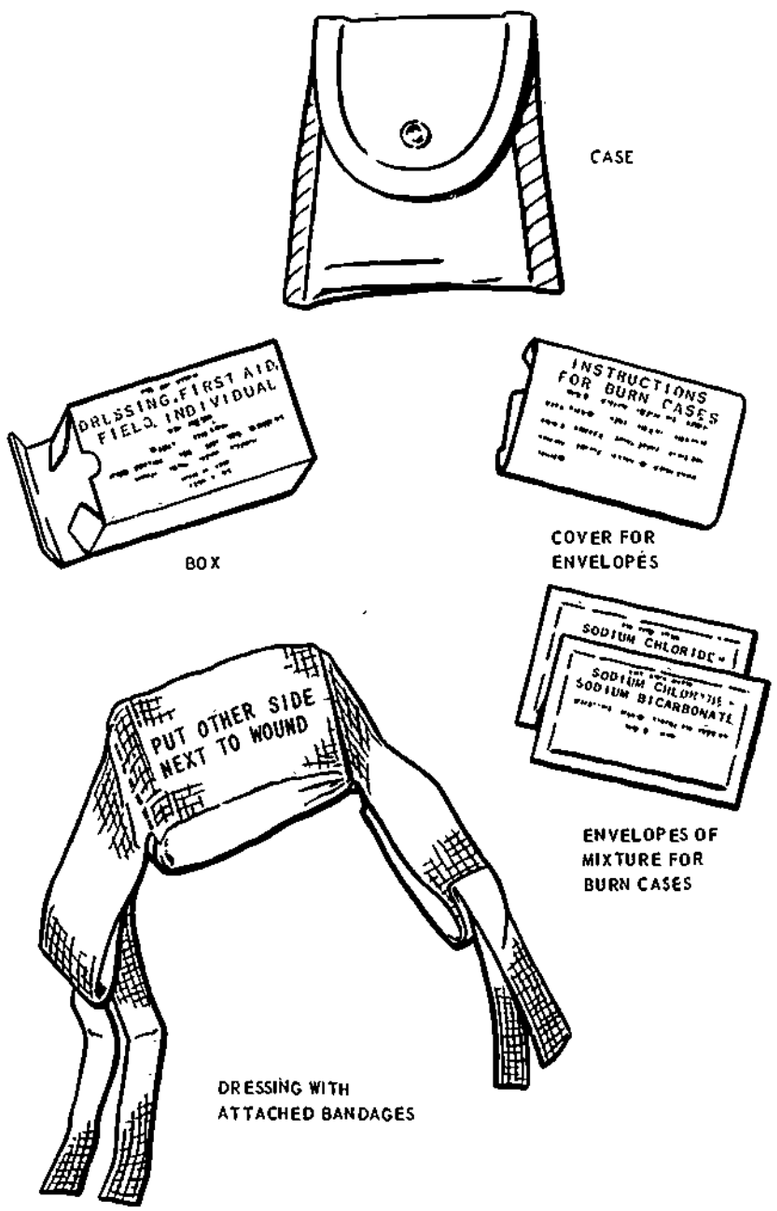


Figure 94. First aid pouch and contents.

STOP THE BLEEDING

a. Lifesaver step one. Stop the bleeding! The importance of pressure.

(1) Uncontrolled bleeding causes shock and finally death! To stop bleeding, place the opened first aid dressing over the wound and exert firm, evenly distributed pressure on the dressing with the palm and fingers of the open hand (fig 95). To control severe bleeding, you may have to continue this pressure exerted by the hand on the wound dressing for 5 to 10 minutes. Pressure exerted on the wound area acts to control bleeding in two ways: it compresses the bleeding vessels, thus reducing the blood flow into the wound area; and it helps to hold blood in the wound until clotting can occur. After 5 to 10 minutes, pressure exerted by the hand can usually be replaced by pressure exerted by the dressing tails wrapped around the injured part.

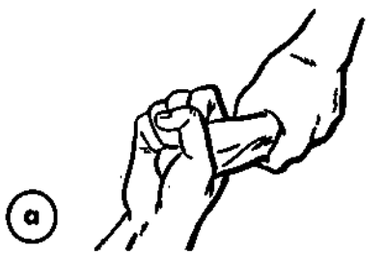
(2) If severe bleeding from a wound or wounds of the arm or leg does not slow down considerably after application of pressure to the wound area, then a tourniquet should be applied.

b. But remember: unnecessary use of a tourniquet may be dangerous; it should be used *only* if pressure over the wound area and elevation *fail* to control the bleeding! Application of a tourniquet, however, should not be expected to stop *all* bleeding *immediately.* Veins will continue to bleed until the limb has been drained of the blood already in it. An improperly applied tourniquet may cause increased bleeding and therefore may be worse than none.

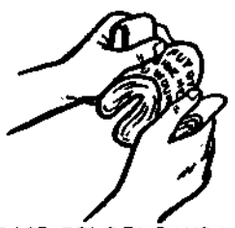
(1) When the tourniquet is required, place it as follows (see fig 96 for instructions in applying a tourniquet): For amputations of the foot, hand, arm, or leg and for bleeding from the *upper* arm or thigh: place the tourniquet just above the wound or amputation. For all cases of bleeding from the hand, foot, forearm, or lower leg except amputations: place the tourniquet immediately *above* the elbow or knee. In all cases: place the tourniquet *between* the *wound* and the *heart.*

When possible, protect the skin by putting the tourniquet over the smoothed sleeve or trouser leg. Mark the casualty in some way to indicate that a tourniquet has been applied. Indicate also the time it was applied.

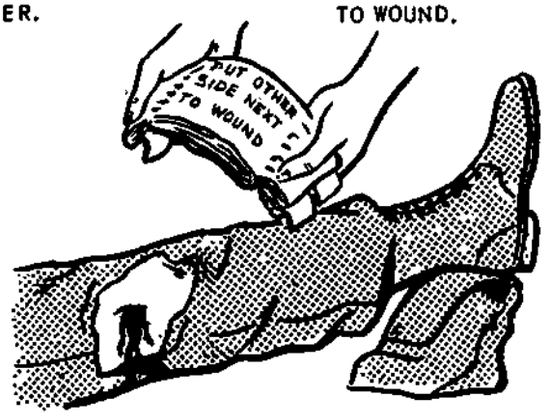
(2) Once a tourniquet has been applied, the wounded man should be seen as soon as possible by a medical officer. The tourniquet should not be loosened by anyone except competent medical personnel. *Repeated loosening of the tourniquet* by inexperienced personnel is extremely dangerous and can result in considerable blood loss which will endanger the life of the casualty. Inspect the tourniquet and wound dressing frequently to see if the tourni-



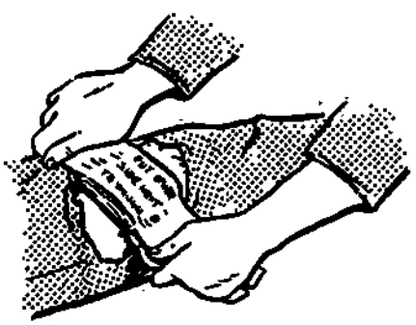
(a) REMOVE WRAPPED DRESSING WITH ATTACHED BANDAGES FROM BOX AND PLASTIC BAG; THEN TWIST TO BREAK PAPER WRAPPER.



(b) GRASP FOLDED BANDAGES WITH HANDS, BEING CAREFUL NOT TO TOUCH SIDE OF DRESSING WHICH GOES NEXT TO WOUND.



(c) CONTINUING TO HOLD FOLDED BANDAGES, PULL DRESSING OPEN.



(d) PLACE DRESSING ON WOUND WITHOUT ALLOWING IT TO TOUCH ANYTHING ELSE.

(e) WRAP BANDAGES AROUND THE PART AND TIE THE ENDS SECURELY.

Figure 95. Steps in applying dressing.

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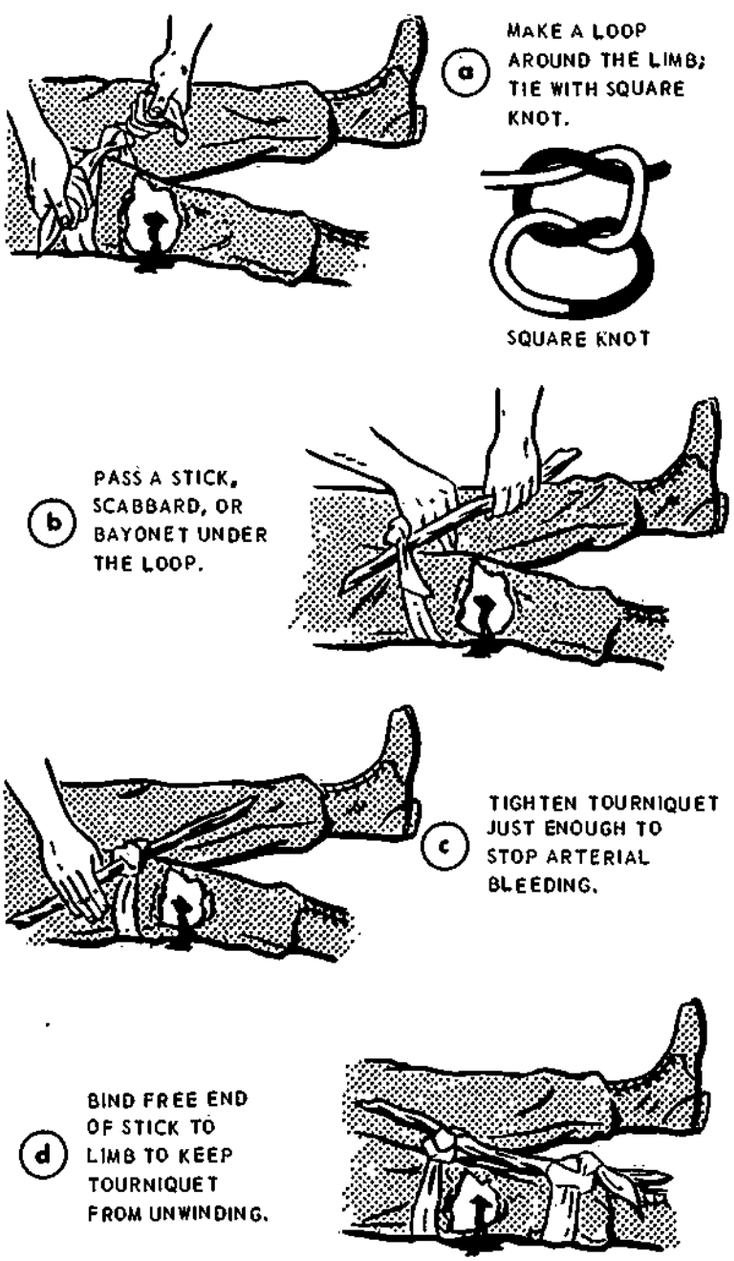


Figure 96. Apply a tourniquet this way.

quet has slipped or if there is any sign of further bleeding. In extremely cold weather, extremities with tourniquet applied are subject to cold injury, and therefore should be protected from the cold, but remember to leave the tourniquet exposed especially if the casualty has not been marked to indicate that a tourniquet has been applied.

CLEAR THE AIRWAY

In order for air to flow to and from the lungs, the airway must be unobstructed.

To clear the casualty's upper airway, turn his head to one side and quickly remove from his mouth any vomitus, mucus, or debris by running your fingers behind his lower teeth and over the back of his tongue. This process should not take more than a second or two.

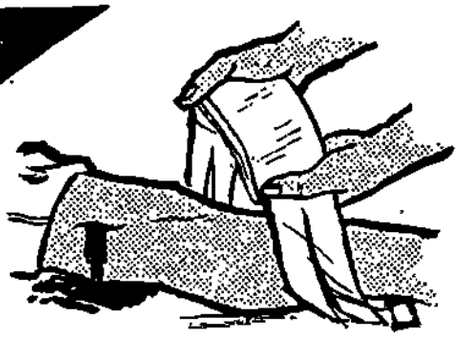
If the casualty is wearing removable dentures (full or partial) take them from his mouth and put them in his pocket. Return the casualty's head to the "chin up" position.

APPLY DRESSINGS AND BANDAGES

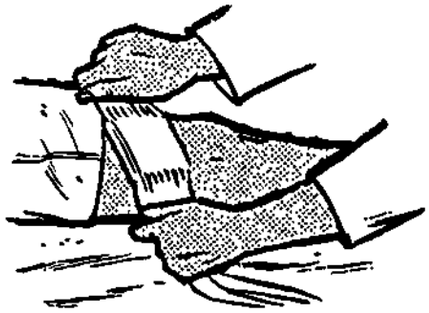
The first aid dressing, if properly applied, protects the wound from the outside. It keeps dirt and germs out. It protects the wound from further injury. When applying the first aid dressing, do not try to clean the wound. If there is dirt or other foreign matter in the wound, leave it there! Simply apply the dressing. Do not touch the wound with your hands or with anything except the dressing. The tails of the dressing should be applied flat—not twisted. The tails should exert an even pressure over the entire surface of the dressing and should cover its edges to keep the dirt out (fig 97). Be careful not to tie the knot over the wound.

ADMINISTER SHOCK CONTROL

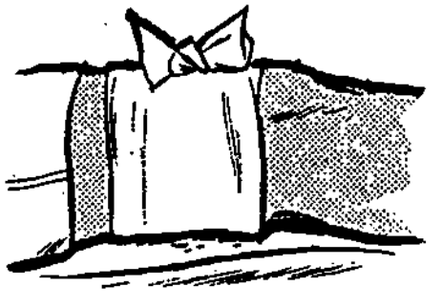
Shock is a condition of great weakness of the body. It can result in death. It may go along with any kind of wound; the worse the wound, the more likely it is that shock will develop. A person in shock may tremble and appear nervous; he may be thirsty; he may become very pale, wet with cold sweat, and may pass out. Shock may not appear for some time after an injury. *Treat the wounded man for shock before it occurs.* To prevent or treat for shock, make the casualty comfortable. Take off his pack and anything else he is carrying. Loosen his belt and clothes. Handle him very gently. Do not move him more than absolutely necessary. If he is lying in an abnormal position, and there are no apparent fractures, gently place him in a more normal and comfortable po-



❶ TEAR OFF PAPER AND GRAB DRESSING TAILS BY FOLDED ENDS. PULL OPEN.



❷ PLACE SOFT THICK CENTER DRESSING ON WOUND WITHOUT ALLOWING IT TO TOUCH ANYTHING ELSE



❸ WRAP THE TAILS OF THE DRESSING AROUND THE INJURED PART AND TIE THE ENDS SECURELY.

Figure 97. Protect the wound.

sition. If there is no head injury, jaw wound, or chest injury, position him so that his head and shoulders are lower than the rest of his body in order that blood may flow to his brain more freely. This may be accomplished by placing his pack or any other suitable object beneath his feet or, if the ground slopes, by turning him gently so that his head is downhill and his feet uphill. But remember—do not raise a fractured leg or move a casualty who has a fracture until after the fracture has been properly splinted. Keep the casualty comfortably warm by wrapping him with a blanket, a coat, a poncho, or a shelter half. Place the material beneath him also to afford additional protection from the ground. Remember—you want to keep him only comfortably warm—do not overheat him. If he is unconscious, place him on his side or on his belly with his head turned slightly to one side to prevent his choking on vomitus, blood, or other fluids. If the casualty is conscious, give him fluids by mouth. Warm stimulants, such as coffee, tea, or cocoa are excellent. However, do not give fluids to an unconscious casualty or to one who has a belly wound. And remember—*alcohol* is not a stimulant.

Although the life saving measures apply to all wounds, there are certain types of injuries which require special handling. Among these are burns, fractures, and wounds of the chest, abdomen, face, and jaw.

BURNS

Minor burns, called first degree burns, such as mild sunburn or a burn where only a small area is red and no blistering or charring of the area results, will normally require no immediate medical treatment. These cases should, however, be seen by medical personnel as soon as the situation permits. In the case of more serious burns, called second and third degree burns, where areas of over 20 percent of the body surface are burned and where blistering or charring of the flesh results, first aid should be instituted immediately. Severe burn casualties lose large quantities of body fluids and are highly susceptible to shock. In these more serious burn cases, and in all other burn cases where signs of shock appear, treatment for burn shock should be instituted.

Follow the procedure outlined above to prevent or treat shock but do *not* give the victim warm stimulants or plain water. Instead, administration of a cold salt or cold salt-soda solution by mouth should be accomplished provided the casualty can tolerate it without retching or vomiting. Salt sometimes acts as an emetic (causes vomiting). This is especially true in the case of *warm* salt water. Vomiting would tend to cause the victim to suffer further loss of body fluids and salt. In the first aid pouch there should be

a packet of sodium chloride-sodium bicarbonate. Follow the instructions on this packet. If this is not available, a solution consisting of one-half teaspoonful of common salt to a canteenful (or quart) of *cold* or *cool* water should be used. If bicarbonate of soda (common baking soda such as found in kitchens) is available, add one-quarter teaspoonful of the soda to the quart of salt solution. Administration of the salt (or salt-soda) solution must begin gradually and in small doses—only a few sips every few minutes and then gradually increased to a consumption of about a canteen of the solution per hour. It should be borne in mind that administration of the salt (or salt-sode) solution must be discontinued immediately should the victim begin vomiting or retching.

There is also a great danger of infection. Do not pull clothes away from the burned area; instead, cut the clothing and gently lift it off. Do not attempt to remove pieces of cloth that stick to the skin. Carefully cover the burned area with dry sterile dressings—apply no medications. If no sterile dressings are available, leave the burned area uncovered. No ointment, fats or grease, or soda should be applied to these more serious burns. Never break blisters or touch the burn.

FRACTURES

A fracture is a break in the continuity of the bone. Common signs of fractures are—

Tenderness over the injury with pain on movement.

Unnatural shape (deformity).

Swelling and discoloration (change in natural color of the skin). A fracture may or may not have all these signs.

If you are not sure, give the injured man the benefit of the doubt and treat the injury as a fracture.

There are two main kinds of fractures (fig 98):

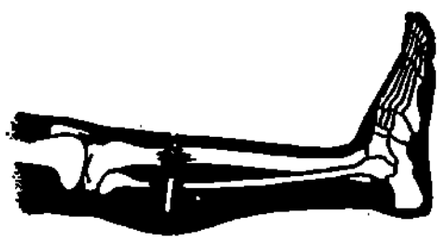
A *closed* fracture or a break in the bones without a break in the overlying skin.

An *open* fracture or broken bone that is exposed to contamination through a break in the skin. Open fractures may be caused by broken bones piercing the skin or by missiles which pierce the flesh and break the bone.

If you think a person has a broken bone, handle him with the greatest care. Rough or careless handling causes pain and increases the chances of shock. Furthermore, the broken ends of the bone are razor sharp and can cut through muscle, blood vessels, nerves, and skin. Remember—don't move a man with a fracture unless it is absolutely necessary. If you *do* move him, be gentle and keep the fractured part from moving by splinting it

① CLOSED FRACTURE

② OPEN FRACTURE



③ OPEN FRACTURE PRODUCED BY MISSILE

Figure 98. Kinds of fractures.

properly. If there is a wound with a fracture, apply a dressing as you would for any other wound. If there is bleeding, it must be stopped. Stop bleeding as previously described. Do not apply a tourniquet over the site of the fracture.

Most fractures require splinting. Persons with fractures of long bones should be splinted "where they lie" before any movement or transportation is attempted. Proper splinting greatly relieves the pain of a fracture and often prevents or lessens shock. Fixing the fragments of a broken bone by use of splints prevents the jagged edges of the bone from tearing blood vessels and nerves. In a closed fracture (one in which there is no break in the

skin), proper application of a splint will prevent the bone from piercing the skin and changing it into an open fracture (fig 99). If the fracture is open, splinting will prevent further injury to the wound.

First aid in the field may require improvising splints from any suitable material that is handy. Proper padding of splints over pressure areas is important. A good expedient is to supplement available fabric (shelter half, poncho, blanket, clothing) by incorporating leafy vegetation or grass into the roll of padding applied around the splint. Be sure to unload a rifle or carbine if it is to be used as a splint.

The quickest way to splint a broken bone in a leg is to tie both legs together above and below the fracture. In this way the uninjured leg will serve as a splint for the broken bone. You can use a belt, bandoleer, cartridge belt, rifle sling, or strips of cloth tied together. Do not move a man with a fractured leg bone unless it is necessary to get him off a road or away from enemy fire. If you

ROUGH HANDLING CAN CHANGE

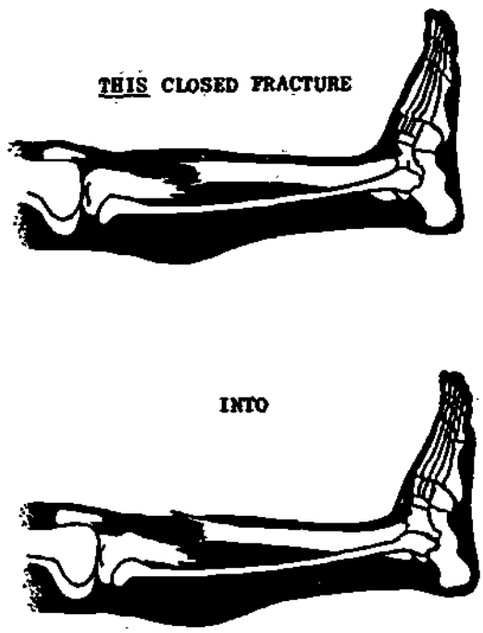


Figure 99. Effects of rough handling.

must move him, tie his legs together first, grasp him by the shoulders and pull him in a straight line with legs trailing (fig 100). Do not roll him or move him sideways. If you have time, you can make a good splint for the leg by using two long sticks or poles. Roll the sticks into a folded blanket from both sides. This pads the leg and forms a trough in which the leg rests. Bind the splint firmly at several places. Splints for fractures of the bones of the lower leg should extend from a point above the knee to a little below the foot. If the broken bone is in the thigh or hip, the inside splint should extend from the crotch to a little below the foot and the outside splint should extend from the armpit to a little below the foot (fig 101). Always be sure that the ends of the sticks or poles which contact the body are well padded.

When possible, keep the fractured bone of the arm from moving by supporting the arm with splints. This reduces pain and prevents damage to the tissues. Temporary splints can be made from boards, branches, bayonets, or scabbards. Splints should always be well padded with some soft material to protect the limb from pressure and rubbing. Bind splints securely at several places above and below the fracture but not so tightly as to stop the flow of blood. It is well to apply two splints, one on either side of the arm (fig 102). If an injured elbow is bent, do not try to straighten it; if straight, do not bend it.

A sling is the quickest way to support a fractured bone of the arm or shoulder, a sprained arm, or an arm with a painful injury. The arm should be bound snugly to the body to prevent movement. You can make a sling by using any material that will support all or a portion of the lower arm and hold it close to the body (fig 103, 104, and 105).

It is often impossible to be sure if a man has a broken back. Be suspicious of any back injury, especially if the back has been sharply struck or bent, or the person has fallen. The most important thing to remember is that if the sharp bone fragments are moved, they may cut the spinal cord. This can cause permanent paralysis of the body and legs or even death (fig 106).

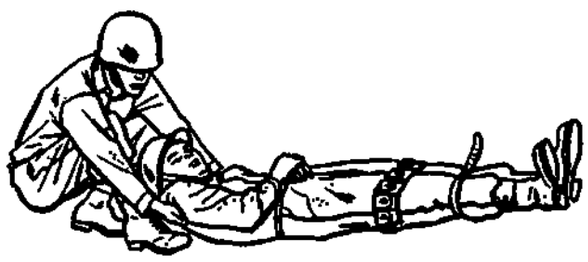


Figure 100. Broken leg.

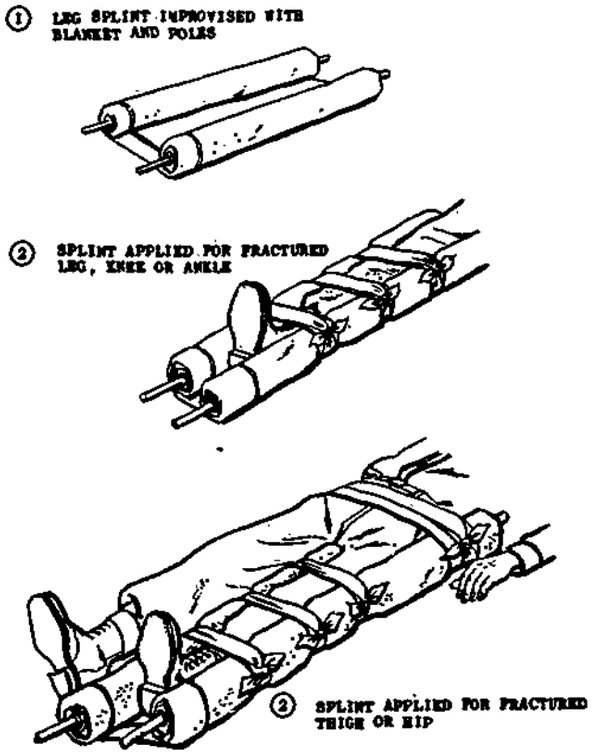


Figure 101. Improvised leg splint.

For a broken back, do the following:

Place a small roll, such as a bath towel or clothing under the natural curve of the back to support it and bend it upwards.

If the man must be moved, lift him onto a rigid litter, door, or board while keeping his head, neck, and back in alinement. It is best to have at least four men for this job (fig 107).

If the man is in a face down position, leave him face down. He may be carried face down on a litter.

Keep the casualty's body alinements straight and natural at all time and keep the air passages free.

But avoid—

Moving the casualty unless absolutely necessary.

Raising his head even for a drink of water.

Twisting his neck or back.

Carrying him face up in a blanket litter or other non-rigid type litter.

Turning a man over who has a broken back.

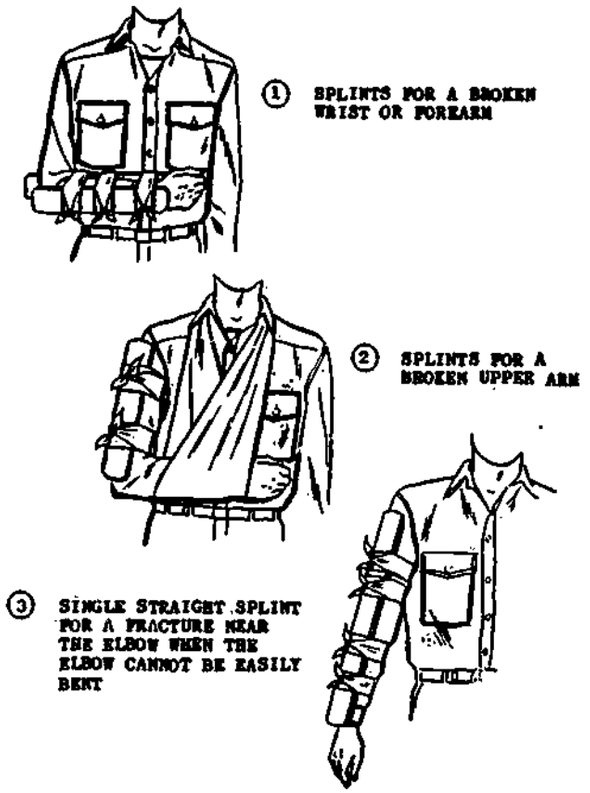


Figure 102. Splints for a broken arm (for clarity, padding not shown).

A broken neck is extremely dangerous. Bone fragments may cut the spinal cord just as in the case of a broken back. Keep the casualty's head straight and still. Moving him may cause his death. Keep the head and neck motionless by placing large padded stones or packs at each side of the head as support. Place a small roll made of a bath towel or clothing under the neck for support and padding. Raise the shoulders in order to place the roll under the neck. Do not bend the neck forward. Do not twist or raise the head in any manner. A good way to keep the head in the correct position is to immobilize the neck with a high collar-type splint. Such a splint tends to lengthen the neck and raise the chin so as to arch the neck backward. A collar-type splint can be made by wrapping a folded shirt, jacket, or newspaper around the neck. Use a belt, string, or strip of cloth to hold it in place, but be sure not to choke the casualty (fig 108). If the casualty must be moved, get help. One person should support the man's head and keep it straight while the others lift him. Transport

Figure 108. Sling made from triangular bandage.

him on a hard stretcher or board. Never turn a man over who has a broken neck!

When a bone gets out of place at a joint, the condition is called a dislocation. When the ligaments about a joint are torn, the condition is called a sprain. In either case, treat by elevation of the part and cold applications. If there is any doubt as to whether or not the condition is a fracture, treat it as a fracture. Do not attempt to reduce a dislocation, as permanent injury may be done.

MAJOR WOUNDS

Chest Wounds. Cover Up Airtight. Chest wounds which result in air being sucked into the chest cavity are particularly dangerous. The chest wound itself is not as dangerous as the air which goes through it into the chest cavity. Because of a valve-like action of the wound, during expiration air does not leave the pleural cavity but builds up pressure which not only collapses the lung on the injured side, but also will eventually partially collapse the other lung (fig 109). The casualty's life may depend upon how quickly the wound is made airtight. Have the casualty forcibly exhale (breathe out), if possible, and hold his breath while you seal the wound (fig 110). To seal the wound, apply the sterile side of the waterproof plastic wrapping of the first aid dressing over the wound.

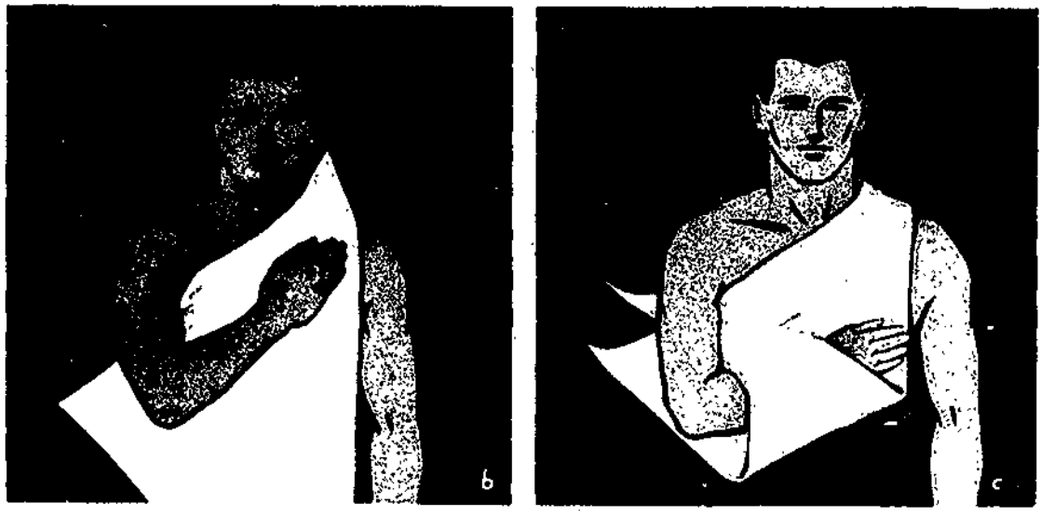


Figure 104. Sling made from triangular bandage without pressure on collarbone or shoulder of injured side.

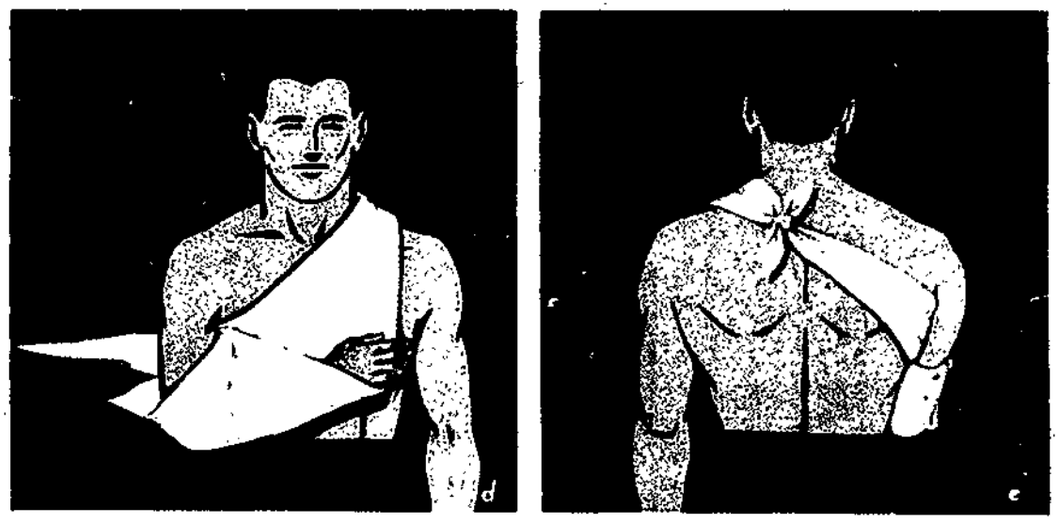


Figure 104—Continued.

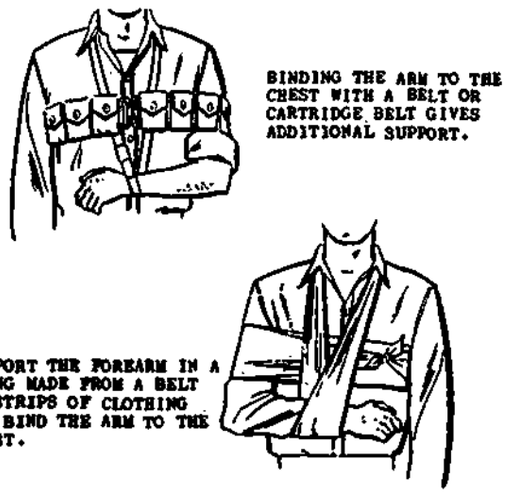


Figure 105. Improvised slings.

① IN THIS POSITION, BONE FRAGMENTS CUT THE SPINAL CORD

② IN THIS POSITION, BONE FRAGMENTS ARE IN PROPER PLACE AND WON'T CUT THE SPINAL CORD

Figure 106. Broken back.

Caution: Do not touch the inner surface of the dressing wrapper when it is to be used for this purpose. Apply the first aid dressing over the inner wrapper which covers the wound and exert pressure with the open hand (fig 110). This pressure may be maintained by an assistant or even by the wounded man himself if he is able. Anchor the dressing in place with the dressing tails. Due to the limited length of the dressing tails, you will have to use additional bandaging material, such as strips of clothing, shelter half, blanket, or poncho in order to create enough pressure over the dressing to make the wound

Figure 107. Support a broken back.

Figure 108. Broken neck.

airtight. The strips of bandaging material should overlap and should exert firm, evenly distributed pressure over the entire dressing (fig 110). If the casualty finds it more comfortable to sit up, allow him to do so. If he chooses to lie down, however, encourage him to lie on his *injured* side so that the lung on the *uninjured side can do the breathing.*

Belly Wounds. Dress Wound and Treat for Shock. Do not try to replace any organ, such as intestines, which may be protruding

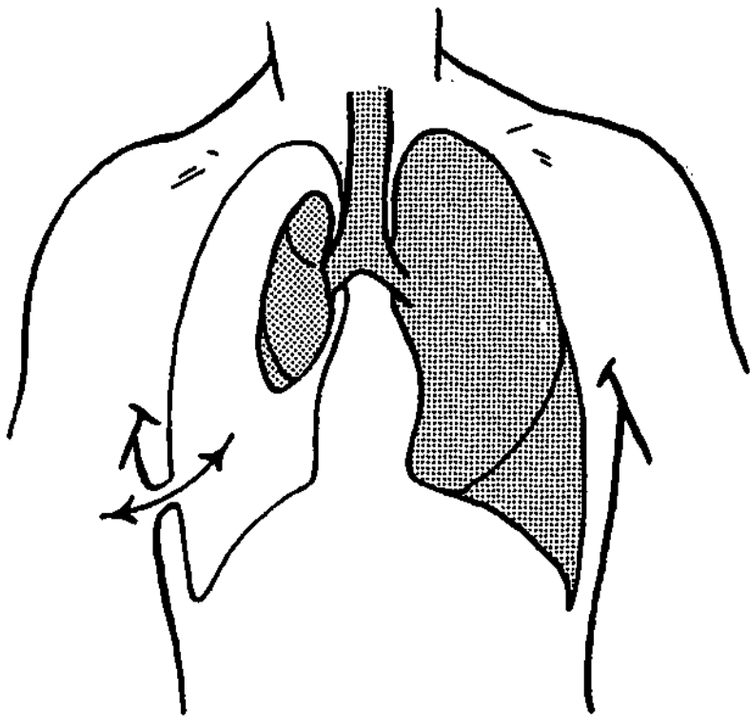


Figure 109. A sucking chest wound.

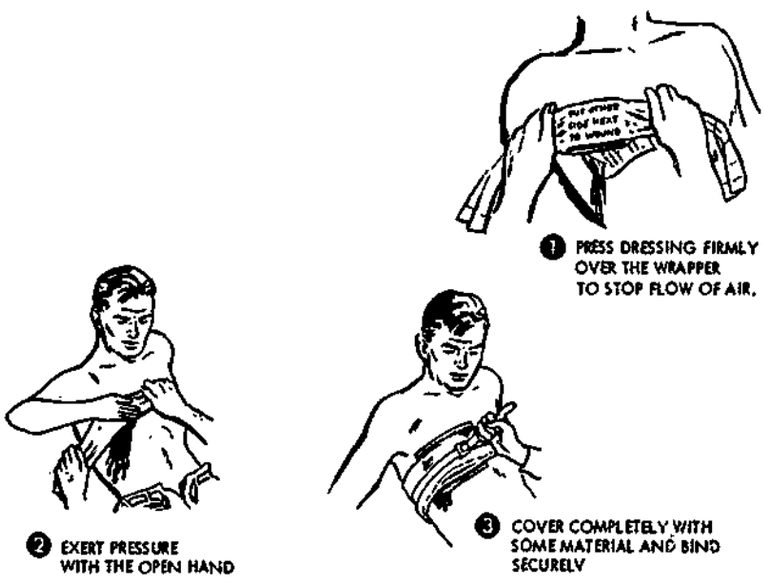


Figure 110. Sealing a sucking wound of the chest.

from the belly (fig 111). Cover the wound with a sterile dressing (from a first aid packet) and anchor it in place with the dressing tails (fig 111). Do not attempt to moisten the dressing, for this would be apt to introduce more germs into the wound. A *dry* sterile dressing only is used to cover the wound. Use an additional dressing if one does not completely cover the wound. Since the length of the dressing tails does not allow for more than one or two turns of bandage about the casualty's body, use additional strips of cloth to anchor the dressing (fig 111). *Do not bind the bandaging material tightly.* Internal bleeding of a belly wound cannot be controlled by a pressure dressing. Excessive pressure can cause additional injury. Do not give (or allow the casualty to take) food or fluids. Anything taken by mouth can pass out through the injured intestines and spread contamination in the belly. If evacuation is delayed, the casualty's lips may be moistened to help alleviate his thirst. Since the casualty is apt to vomit, position him on his side to prevent his choking.

Treat the casualty for shock before it occurs.

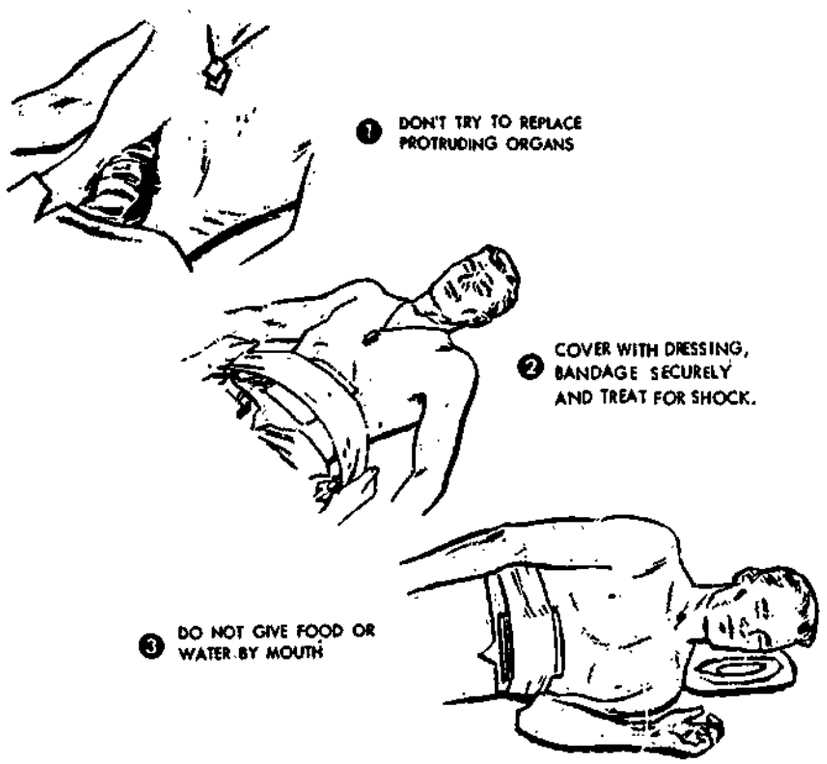


Figure 111. Belly wounds.

Jaw Wounds. See figure 112 for dressing procedure for jaw wounds.

JUNGLE FIRST AID

Use the normal first aid treatment, and then, if possible, cover the man with mosquito netting to protect him from flies and mosquitoes.

ARCTIC FIRST AID

The chance of death from freezing is almost as great as death from a wound. Take care of the wound and take measures to keep the man warm.

① STOP BLEEDING BY EXERTING PRESSURE WITH A DRESSING.

② TIE A DRESSING TO PROTECT THE WOUND AND SUPPORT THE FRACTURE

③ KEEP THE FACE DOWN AND TREAT FOR SHOCK

Figure 112. Jaw wounds.

CHAPTER 26

FIRST AID: COMMON EMERGENCIES

GENERAL

Some types of accidents occur frequently in civil life as well as in the Army. Every person should know how the principal signs or symptoms of common injuries and the simple first aid measures useful in their immediate care. The measures to be taken are all very simple and are usually effective. It is well for the layman to want to aid those who have met with an accident, but he must apply only the correct actions. The wrong thing may harm the injured person rather than help him. In case of doubt as to what to do, there is one important rule: obtain the services of medical personnel. While waiting for medical aid, measures should be taken to assist the casualty in being comfortable.

SPECIAL FIRST AID KITS

In addition to the first aid pouch which every soldier carries, special *first aid kits* will often be available. They contain such items as antiseptics, sterile gauze compresses (pads), roller bandages, scissors, forceps, tourniquets, and safety pins. Instructions for use of the contents are contained in the kits. Learn to use the items correctly *before* you need them.

MINOR WOUNDS AND BURNS

Small wounds, such as cuts, usually do not bleed very much and will not continue to bleed once a dressing has been applied. Precautions include the following:

Small wounds, such as cuts, usually do not bleed very much and will not continue to bleed once a dressing has been applied.

Infection is the principal danger; protect any break in the skin. Do not touch a wound with your fingers or allow clothes to touch it. Keep it clean.

Apply a dressing over the wound. There are dressings of various size in vehicle kits and other first aid kits.

Pick out a size which is large enough to cover the wound completely. Be careful not to touch the inside of the dressing with your fingers.

Burns are frequently encountered. They may be caused by dry heat, hot liquids, chemicals, electricity, or the rays of the sun. Serious burns (those in which there is blistering or charring or those in which large areas of the body are involved) should be treated in accordance with instructions contained in FM 21–11. Minor burns are those in which no blistering or charring exists and where only small skin areas are involved. They should be covered with gauze compresses (pads) of suitable size and bandage with materials found in the first aid kit. If no first aid kit is available, the dressing from the individual's first aid packet may be used. If no dressing is available, leave the burn uncovered.

FOREIGN BODY IN THE EYE

If a foreign body gets into the eye, do not rub the eye. If the particle is beneath the upper eyelid, grasp the eyelashes of the upper lid and pull the lid up and away from contact with the surface of the eyeball. Hold the eyelid in this manner until tears flow freely. The tears will frequently flush out the particle. If this technique fails, attempt to remove the foreign body as shown in figure 113.

If the foreign body is glass or metal or if the techniques described in *a* above and figure 113 do not readily remove the particle, blindfold *both* eyes of casualty and get him to medical aid. (If only one eye is blindfolded, the casualty will use his unaffected eye. Since eye movements are synchronized, use of the unaffected eye may result in movement of the *affected eye*, thereby subjecting it to further injury.)

FOREIGN BODY IN THE EAR, NOSE, OR THROAT

Never probe for an object in the ear. An insect in the ear may be removed simply by means of attracting it with a flashlight held to the ear. If this fails, it may be drowned or immobilized by pouring water into the ear. Foreign objects in the ear can sometimes be flushed out with water. However, if the object is something which will swell when wet (seed, particle of wood), do not pour water into the ear.

Probing into the nose will generally jam a foreign body tighter. Damage to the nasal passages can also result. Try to remove a foreign object from the nose by gently blowing the nose. If this fails, seek medical aid.

Coughing will frequently dislodge a foreign object from the throat. If this fails and the object can be reached, try to remove it

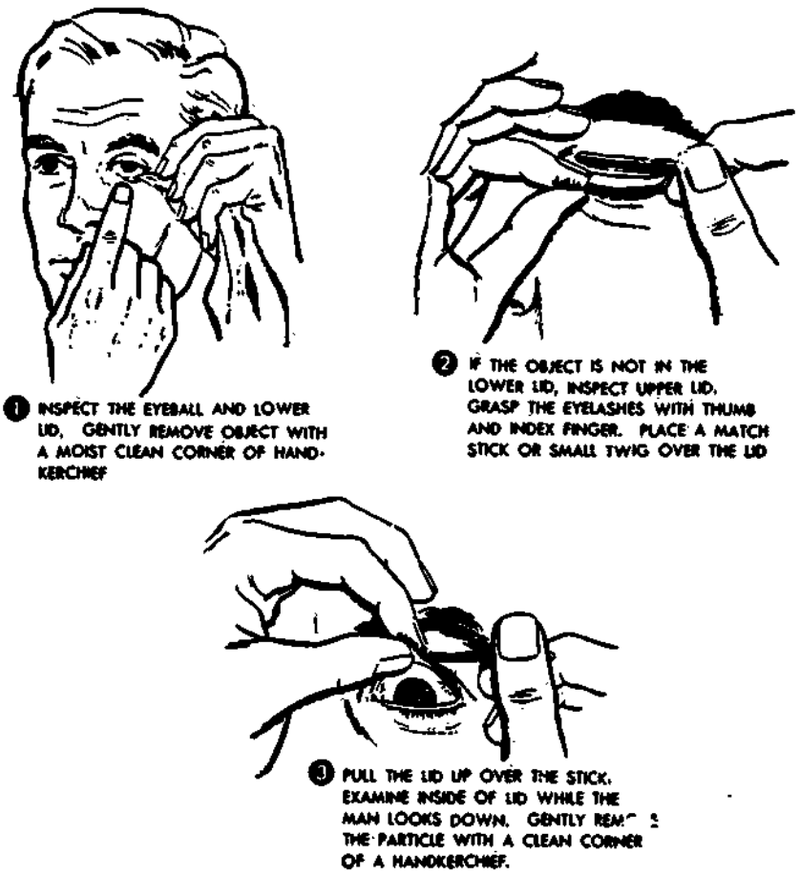


Figure 113. Removing an object from the eye.

with the fingers; but be careful. Do not push it deeper down the throat. If this fails, get medical aid.

CARE OF FEET

Prevention of foot trouble is the best first aid for feet. Keep them clean. Bathe them frequently. Dry thoroughly between the toes. Use issue foot powder twice daily. Change socks daily. If these simple rules are followed, there is far less chance that "athlete's foot" will develop. If you *do* get athlete's foot, get medical aid.

Do not cut a callus or corn—this can cause serious infection. Instead, get medical aid.

To avoid ingrown toenails, keep toenails clean and short; *cut toenails straight across—do not round them.*

Do not wear socks having holes or poorly darned spots. Do not

wear ill-fitting socks. Break in shoes before wearing them on a march. If a blister develops and medical aid is not available, follow the directions given in figure 114.

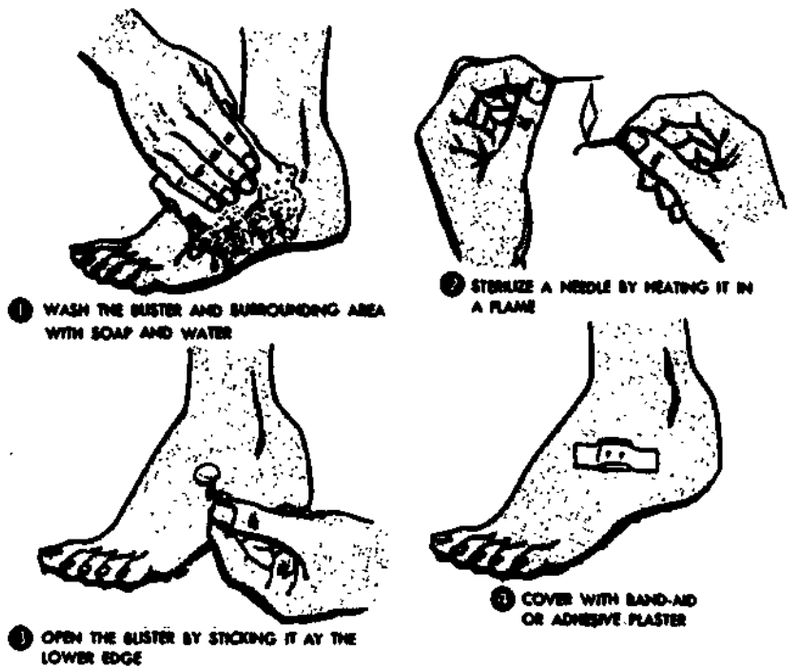


Figure 114. Care of blisters.

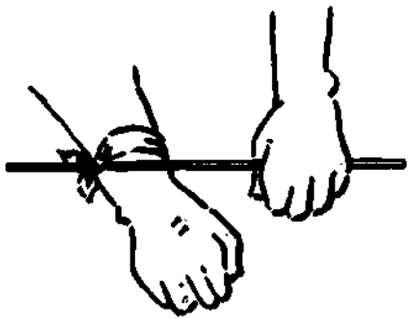
SNAKEBITE

Poisonous snakebites must be given immediate care. The bitten person should not be allowed to walk or run; he should be kept as quiet as possible. If you can, and if there is time, kill and keep the snake so that it can be identified and the proper antivenom serum given.

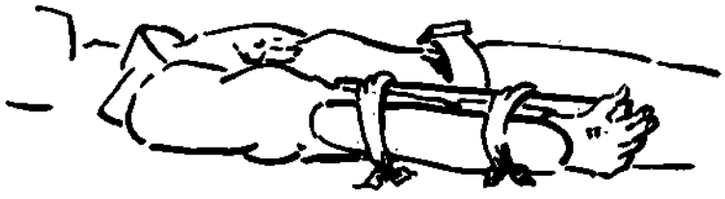
If possible, immediately place the injured part of the body lower than the heart. Do not allow the person to move. The injured part must be completely immobilized. Remember—snake venom spreads slowly unless circulation is stimulated.

If a person is bitten on the hand, arm, foot, or leg, apply a lightly constricting band two to four inches toward the heart from bitten area. Tighten the constricting band just enough to make the veins stand out under the skin. This band should never be so tight that it stops the pulse. If the swelling progresses up the bitten limb, move the band just above the swollen area (fig 115).

1 PLACE INJURY BELOW LEVEL OF HEART



2 APPLY A TOURNIQUET



3 USE SPLINT FOR IMMOBILIZATION

Figure 115. First aid for snakebite.

DO NOT cut or suck this wound. This is a procedure for medical personnel only.

Improvise a splint to maintain absolute immobilization of the affected part of the body.

In case the bitten person stops breathing, immediately start mouth-to-mouth artificial respiration and continue until he is able to breathe on his own.

It must be remembered that medical aid is urgent in the case of poisonous snakebites. The casualty should be evacuated either lying down in a vehicle or by litter to the nearest medical installation or unit. If it is possible, transport the patient with the injured part lower than his heart.

POISON PLANTS

Poison ivy, poison oak, and poison sumac cause skin irritation. Learn to recognize these plants, so you will know when you have touched them and can start first aid before a rash appears (fig 116). The sooner you give first aid for exposure, the milder the effects will be. Poison ivy is a creeper having three leaves on each stem. The leaves are shiny and pointed and have prominent veins. Poison oak and poison sumac are shrubs or small trees. If you discover that you have been exposed to a poison plant, wash the affected parts of your body promptly and thoroughly with water and strong soap. GI soap is good. The rash starts with redness and intense itching. Later, little blisters will appear. If a rash has already developed, do not wash it. Avoid scratching, for it will make the condition worse. Get medical attention.

UNCONSCIOUSNESS

It is often impossible to find out the cause of unconsciousness. Bleeding, heatstroke, or head injuries may have been the cause.

If you are not sure of the cause of unconsciousness, keep the casualty lying down. Do not move him unless it is absolutely necessary, and then do so very carefully. If he is cold, see that he gets warm. If he has suffered the effects of excessive heat, give him first aid according to referenced material above. Do not pour liquids into the mouth of an unconscious person. If you do, you may choke him. Remove false teeth, chewing gum, or other objects which might choke him. Take off his equipment. Loosen his clothing. Place him on level ground on his belly. Get medical aid.

If the casualty has merely fainted, he will regain conciousness in a few minutes. Let him lie quietly. Loosen his clothing. Apply a wet, cool cloth to his face. If he is about to faint while sitting up, lower his head between his knees so that blood may flow to his

head. Hold him so that he does not fall and injure himself. If he faints while sitting up, lay him down gently.

EFFECTS OF HEAT

The effects of heat can often be prevented by keeping living and working quarters as cool as possible; by keeping the head and body covered when in the sun; by wearing light, loose-fitting clothes; by taking plenty of salt with food; and by drinking enough water.

Heat exhaustion results from excessive loss of water and salt from the body. This condition is caused by heavy sweating. Symptoms of heat exhaustion are dizziness and faintness; signs are paleness and moist, cool skin. For first aid, lay the casualty down in a shaded area, loosen his clothing, and give him cool salt water to drink if he is conscious. (Prepare the salt water by dissolving 1/4 teaspoonful of table salt in a quart (or canteen) of cool water. The casualty should drink 3 to 5 canteenfuls in 12 hours.)

Heat cramps occur when a person has been sweating a great deal and has not been taking extra amounts of salt. He may be seized with muscle cramps, especially of the intestines, abdominal

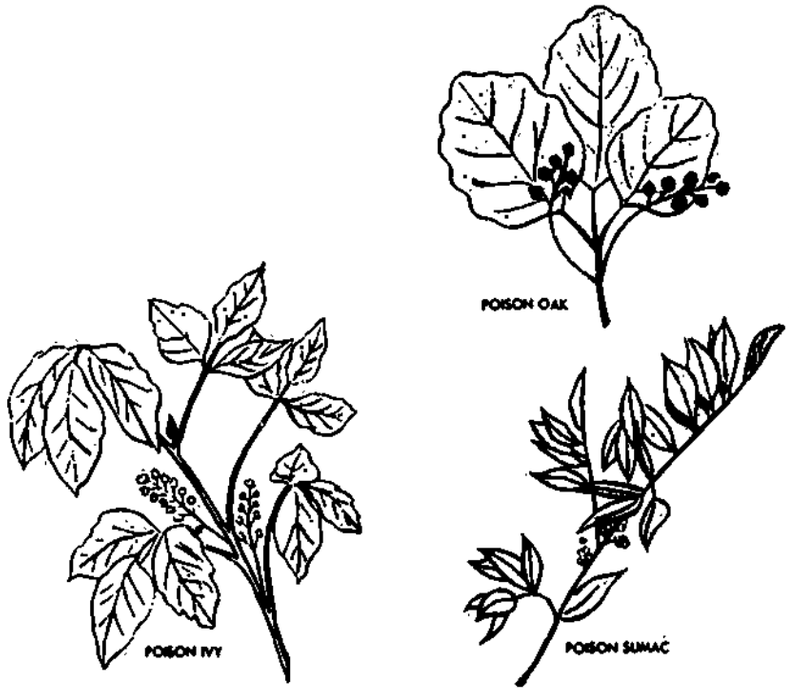


Figure 116. Poison plants.

wall, arms, or legs. Frequently, he vomits and is very weak. Give him large amounts of salt water as explained above.

Heatstroke, a very serious condition with a high death rate, is characterized by very high body temperature and unconsciousness. In hot surroundings a stoppage of sweating with hot, dry skin should serve as a warning. The casualty is bright pink in color and may become delirious. The single, most important objective in treatment is the lowering of his body temperature as rapidly as possible. The best way to do this is to immerse him in a cold water bath containing ice. If ice is not available, use the coldest water you can get. If a cold water bath cannot be provided, get the casualty into shade, remove his clothing, and keep his entire body wet by pouring water over him. Cool him by continuously fanning his wet body. *Get medical aid!* And remember—*cooling of the casualty's body must be continued even during his evacuation!*

EFFECTS OF COLD

Trenchfoot. This is a serious condition resulting from a combination of cold (but not freezing) weather and wet socks and footgear. It is so named because it often follows prolonged standing in cold, wet trenches or foxholes. Merely wearing wet socks and footgear for a long time will also cause it. Trenchfoot may be so serious that the feet have to be amputated. *You can prevent trenchfoot.* This is the way:

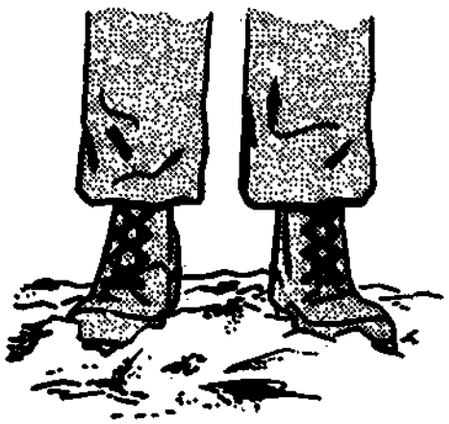
Avoid standing in water, snow, or mud-soaked areas as much as possible (fig 117). If the trench or foxhole contains water, bail it out or put some stones or branches at the bottom on which to stand. If you lie down, try to prop your feet up on a large rock or on your pack. This position will keep your feet dry and will help remove congestion due to long periods of standing.

Exercise your feet and legs whenever possible (fig 117). If you cannot do anything else, move your toes and ankles about in your shoes. Avoid cramped positions.

Massage your feet at least once every day (fig 117). Do it yourself or "pair off" with another man and massage each other's feet. A gentle massage for several minutes will help warm your feet and restore the flow of blood. Put on dry socks.

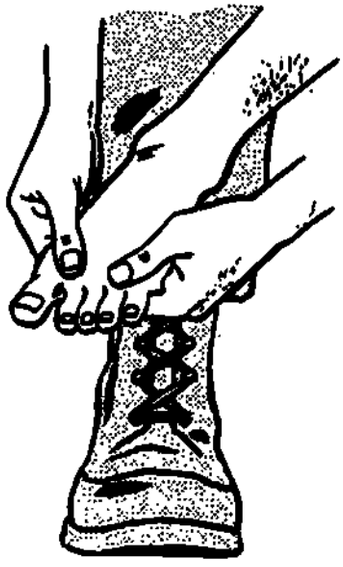
Clean and dry your feet and socks at least once daily. You should carry an extra pair of dry woolen socks and put them on as soon as you can after your feet become wet and cold. Dry your feet thoroughly, especially between the toes; and dry your socks and the inside of your shoes or boots as much as possible.

Avoid tight shoes, socks, laces, and straps, for these will interfere with blood circulation. It is important that footgear be



❶ AVOID STANDING IN WATER, SNOW OR MUD, WHENEVER POSSIBLE

❷ EXERCISE YOUR FEET



❸ MASSAGE YOUR FEET ONCE DAILY

Figure 117. Prevent trenchfoot.

loose fitting and waterproof. Socks should be large enough not to bind your feet.

Frostbite. Frostbite, or freezing of a part of the body, can be

avoided by wearing warm, loose clothing and by keeping dry. Proper footgear and mittens are especially important. If any part of your clothing becomes wet, dry it or change it at once. Remember that you can get overheated and perspire in cold climates, and that this perspiration will freeze inside your clothes later on. Avoid this by wearing fewer layers of clothing when you are exercising. Do not touch cold metal such as your mess gear or canteen with your bare hands or lips. Skin immediately freezes to such surfaces; to release it, warm the metal.

If a part of your body gets frostbitten, it becomes grayish or white and loses feeling. Frequently there is no pain, so keep watching one another's face and hands for signs. The face, hands, and feet are the parts most frequently frostbitten.

To treat frostbite—

Remove any clothes, such as boots, gloves, and socks that fit closely to the site of the injury.

Thaw the frozen part by placing it next to a warm part of your own or someone else's body, or by exposure to warm air. Do *not* rewarm by such measures as walking, massage, exposure to open fire, cold water soaks, or *rubbing with snow*.

Wrap the casualty in blankets and give him warm drinks.

After the part has thawed, wrap it *loosely* in dry sterile dressings. Do not apply ointments or vaseline gauze.

Do *not* open blisters.

Treat all persons with frostbitten feet or legs as litter patients. If an arm or hand is frostbitten, put the arm in a sling.

Get medical aid.

DROWNING

Drowning occurs whenever water, vomitus, or any other fluid enters the breathing passages in sufficient quantities to prevent air from entering the lungs and supplying oxygen to the vital centers of the body. Sometimes very small amounts of water or other fluids can cause drowning. Many casualties who appear lifeless may recover if artificial respiration is performed promptly and efficiently. Speed is essential. Every moment of delay cuts down the casualty's chance of survival. If in the water, it is frequently possible to start the mouth-to-mouth method of artificial respiration before the casualty is ashore, for as soon as his head is clear of the water and his mouth is within reach of the rescuer's mouth, rescue breathing should be started. If other rescuers can help carry the casualty ashore, rescue breathing should not be interrupted. After the casualty is removed from the water, place him in the proper position on his back. Valuable seconds

should not be wasted with turning the casualty in an attempt to drain water from the lungs.

ARTIFICIAL RESPIRATION

General Principles. In performing any method of artificial respiration you must always keep certain principles in mind:

Time is of prime importance. *Seconds count.* Begin at once. Do not take time to move the casualty to a better place; do not delay artificial respiration to loosen clothing, to warm the casualty, or to give stimulants. These measures are secondary; the most important thing to do is to get air into the casualty's lungs.

Quickly sweep your fingers through the casualty's mouth to clear out froth and debris, and draw his tongue forward.

Position the casualty properly in order to maintain an open airway. Gently tilt his head as far back as possible so that the front of the neck is stretched with the chin in a "jutting-out" position. Do not allow the chin to sag.

Begin artificial respiration and continue it, without interruption, until the casualty starts natural breathing or is pronounced dead. A smooth rhythm is desirable, but split second timing is not essential.

Never wait for a mechanical resuscitator to be brought to the scene of an accident, nor for an untrained operator to read instructions and learn to use the equipment. Instead, start artificial respiration without delay, and then, when a properly operating, approved mechanical resuscitator with a trained operator becomes available, use it.

If the casualty begins to breathe on his own, adjust your timing to assist him. Do not fight his attempts to breathe. Synchronize your efforts with his.

As soon as the casualty is breathing for himself, or when additional help becomes available, see that his clothing is loosened (or, if wet, removed), that he is kept warm, and is being treated for shock. Do not, however, interrupt artificial respiration to do this.

Preferred Method. The preferred method of artificial respiration is the mouth-to-mouth method and its variations. Since the variations of this method require special equipment which normally would not be available to the individual soldier, they will not be discussed in this manual. When correctly applied the mouth-to-mouth method and its variations permit more air to enter the casualty's lungs than any other known manual methods. Although the mouth-to-mouth method and its variations are the preferred methods, without special equipment (which is not presently available) these methods cannot be applied in a contaminated atmos-

phere. Therefore, while in a contaminated atmosphere, you should use the modified Silvester method which has been determined to be the best method presently available to the individual soldier for resuscitating a casualty while in a contaminated atmosphere. Learn *all* of the methods which follow in order that you will be prepared to use the appropriate method for the emergency indicated.

Mouth-to-Mouth (Thumb-Jaw-Lift) Method. (Preferred method —Clean atmosphere.) Proceed as follows:

Place the casualty on his back (face up). In this position, you can best care for his respiration. *Do not* put anything under his head, as it may flex the neck causing the air passages to be blocked.

Quickly clear his mouth of any foreign matter by running your fingers behind his lower teeth and over the back of his tongue (fig 118). Wipe out any fluid, vomitus, or mucus. This cleaning should not take more than a second or two since little time should be lost in getting air into the casualty's lungs.

If available (*do not* waste time looking for these materials), place a rolled blanket or some other similar material under the shoulders so that the head will drop backward. Gently tilt his head back so that the neck is stretched and the head is in the "chin-up" position (fig 118). This alines the air passages so that they do not become blocked by kinking or pressure.

Place your thumb into the corner of his mouth and grasp the lower jaw firmly (fig 118). Lift the lower jaw forward to pull the tongue forward out of the air passage. Do not attempt to hold or depress the tongue.

Figure 118. Mouth-to-mouth (thumb-jaw-lift) method.

❷ TILT HEAD BACK, GRASP LOWER JAW AND LIFT.

❸ PINCH NOSTRILS, OPEN YOUR MOUTH WIDE, AND BLOW UNTIL CHEST RISES. LISTEN AND LOOK FOR SIGNS OF THROAT OBSTRUCTION OR CLOGGED AIR PASSAGE. REPEAT 10 TO 20 TIMES A MINUTE.

Figure 118—Continued.

With the other hand, pinch the nose shut in order to prevent air leakage (fig 118).

Take a deep breath and open your mouth wide. Seal your mouth around the casualty's mouth and your thumb, and blow forcefully (except for infants and small children) into his mouth until you can see his chest rise (fig 118). (If the chest does not rise, hold the jaw up more forcefully and blow harder while making sure there is no blockage of the air passage and no air leakage around the mouth or nose.)

When his chest rises, stop blowing and quickly remove your mouth from his. Take another deep breath while listening for his exhalation. (If his exhalation is noisy, elevate the jaw farther.)

When exhalation is finished, blow in the next deep breath. The first five to ten breaths must be deep (except for infants and small children) and given at a rapid rate in order to provide rapid reoxygenation. Thereafter, continue breathing at a rate of 12 to 20 times a minute until the casualty begins to breathe normally.

Caution: **Excessively deep and rapid breathing may cause you to become faint, to tingle, and even lose consciousness. Therefore, after the five to ten breaths adjust your breathing to a**

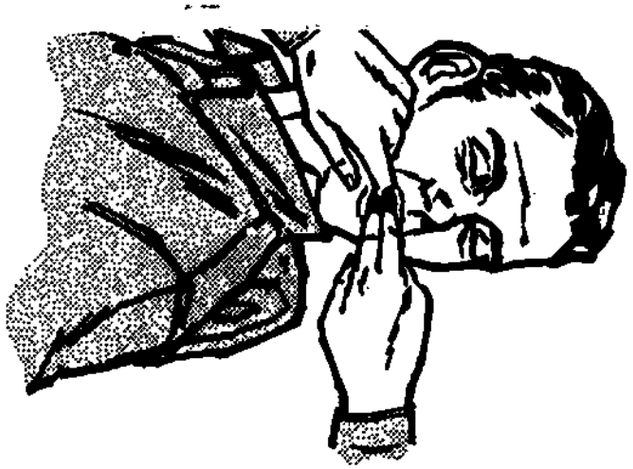


Figure 119. Mouth-to-mouth (two hands-jaw lift) method.

❷ TILT HEAD BACK. PLACE FINGERS OF BOTH HANDS BEHIND JAW, PUSH JAW UP.

❸ PRESS CHEEK FIRMLY AGAINST NOSE, OPEN YOUR MOUTH WIDE AND BLOW UNTIL CHEST RISES. LISTEN AND LOOK FOR SIGNS OF THROAT OBSTRUCTION OR CLOGGED AIR PASSAGE. REPEAT 10 TO 20 TIMES A MINUTE.

Figure 119—Continued.

rate of 12 to 20 times a minute with only moderate increase in normal volume. In this way, rescue breathing can be continued for long periods without fatigue.

After performing rescue breathing for a period of time, you may notice that the casualty's stomach is bulging. This bulging is due to air being blown into the stomach instead of the lungs. Although an inflation of the stomach is not dangerous, it makes inflation of the lungs more difficult. Therefore, when you see the stomach bulging to a marked degree, apply gentle pressure to the stomach with your hand between inflations.

Remember: Keep the air passages as clear of fluid and other obstructions as possible; keep the head back, the neck stretched, and the chin pulled forward; readjust position if air does not flow freely in and out of casualty; do not breathe too forcibly or too large a volume if casualty is an infant or small child; in infants, seal both the mouth and nose with your mouth and blow with small puffs of air from the cheeks, rather than blowing from the lungs; if you become distressed as a result of the shallow breaths, interrupt the blowing long enough to take a deep breath, then resume blowing.

Mouth-to-Mouth (Two Hands-Jaw Lift) Method. (Alternate method in a clean atmosphere when the casualty's jaws are so tightly closed that the thumb cannot be inserted.) Proceed as follows:

Place the casualty on his back, clear his mouth if possible, and position his head in the "chin-up" position (fig 119).

Grasp the angles of his lower jaw with both hands just below the ear lobes and lift the jaw forcibly forward to pull the tongue forward out of the air passage. If the lips are closed, push the lower lip toward the chin with your thumbs (fig 119).

Take a deep breath and open your mouth wide. Seal your mouth around the casualty's mouth, *press your cheek against his nose to prevent air leakage* (fig 119), and blow forcefully into his mouth until you see his chest rise.

Continue with rescue breathing as indicated above, while observing precautions.

Mouth-to-Nose Method. (Alternate method in clean atmosphere when neither of the methods above can be utilized. For example, casualties with severe jaw spasm or with wounds of the jaw or mouth.) Proceed as follows:

Place the casualty on his back, clear his mouth if possible, and position his head in the "chin-up" position (fig 119).

Grasp the angle of his lower jaw with one hand just below

❶ CLEAR MOUTH AND THROAT OF MUCUS, FOOD, OR FOREIGN MATTER.

Figure 120. Mouth-to-nose method.

the ear lobe and lift the jaw forcibly forward to pull the tongue forward out of the air passage (fig 120).

Seal your other hand over the casualty's mouth to prevent air leakage (fig 120).

Take a deep breath and open your mouth wide. Seal your mouth around the casualty's nose (fig 120), and blow forcefully until you see his chest rise.

When his chest rises, stop blowing and quickly remove your mouth from his nose. Take another deep breath while listening for his exhalation.

Continue with rescue breathing as indicated above, while observing precautions.

Chest-Pressure Air-Lift Method (Modified Silvester). (Preferred method—Contaminated atmosphere.) Proceed as follows:

Place the casualty on his back (face up) with his arms folded on his chest.

Quickly clear his mouth of any foreign matter by running your fingers behind his lower teeth and over the back of his tongue. Wipe out any fluid, vomitus, or mucus. If the casualty is not already masked, put his mask on. (If he is already masked, quickly remove the mask, wipe away any fluids that may have collected in his mask, and replace the mask.)

❷ TILT HEAD BACK, PLACE ONE HAND UNDER JAW AND LIFT WHILE SEALING LIPS WITH FINGERS OF OTHER HAND.

❸ OPEN YOUR MOUTH WIDE AND BLOW INTO NOSE UNTIL CHEST RISES. LISTEN AND LOOK FOR SIGNS OF THROAT OBSTRUCTION OR CLOGGED AIR PASSAGE. REPEAT 10 TO 20 TIMES A MINUTE.

Figure 120—Continued.

If available (*do not* waste time looking for these materials), place a rolled blanket or some other similar material under the shoulders so that the head will drop backward. Tilt his head back so that the neck is stretched and the head is in the "chin-up" position (fig 118). (If possible, keep the head in this position, since this alines the air passages so that they do not become blocked by kinking or pressure.)

Kneel on either knee at the casualty's head, placing your knee at one side of his head, and placing your opposite foot on the other side of his head.

Take the casualty's arms just above his wrists and place them over the lower ribs (fig 121). Rock forward and exert steady, uniform pressure almost directly downward until you meet firm resistance (fig 121). This pressure forces air out of the lungs.

Move his arms slowly outward from his body and upward above his head. Continue this motion of his arms and sweep them above his head and backward as far as possible (fig 121). Be sure to keep his arms straight throughout this maneuver as you raise them first vertically upward and then above his head. Lifting and stretching of the arms increases the chest size and draws air into the lungs.

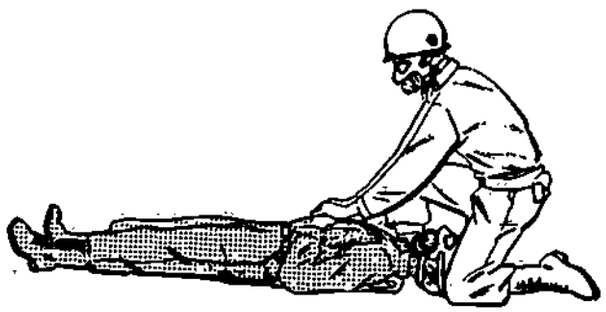
Slowly replace his arms on his chest and repeat the complete cycle.

The cycle should be repeated about 10 to 12 times per minute at a steady, uniform rate to the rhythm of (1) Press—(2) Lift—(3) Stretch—(4) Release—. Longer counts of equal length should be given to the "Press," "Lift," and "Stretch" steps; the "Release" period should be as short as possible.

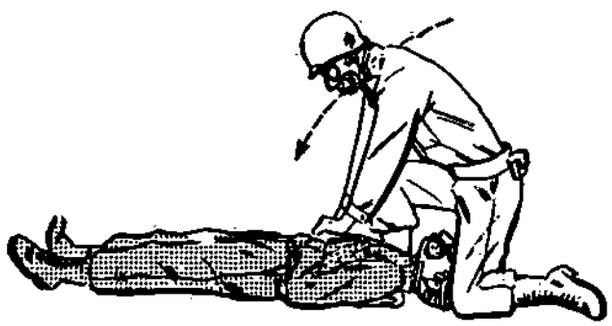
If you become tired or uncomfortable on one knee, you may quickly switch to the other knee. If it is more comfortable, you may kneel on both knees, although the forward and backward motion is easier to obtain while kneeling on one knee only.

When a second man is available, he may take over the chest-pressure armlift with practically no break in the rhythm. This is done by the first man moving off to one side while the replacement comes in from the other side. When the second man is ready, the casualty's arms are released during the "Stretch" and the new operator takes them and continues in the same rhythm.

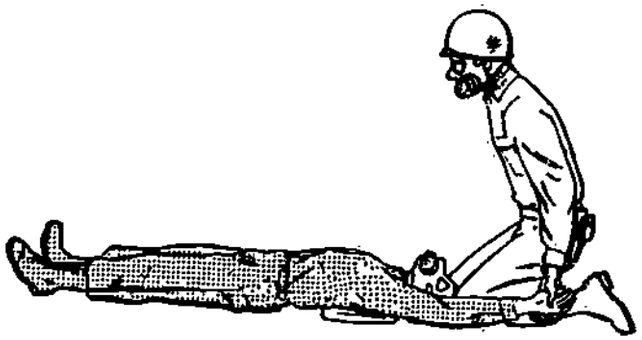
Remember: Keep the air passage as clear of fluid and other obstructions as possible. When it is necessary, remove the mask for a moment to empty fluids from the facepiece. While the mask is off, quickly sweep your fingers through the casualty's mouth to clear it of fluids or anything else that might interfere with breathing. Get the mask back on in a hurry. Keep the head



❶ GRASP THE PATIENT'S ARMS



❷ ROCK FORWARD AND EXERT STEADY PRESSURE DOWNWARD



❸ MOVE THE ARMS SLOWLY OUTWARD, UPWARD ABOVE THE HEAD AND BACKWARD AS FAR AS POSSIBLE.

Figure 121. Chest-pressure arm-lift method of artificial respiration (modified Silvester).

tilted backward as much as possible, so that the neck is stretched and the head is in the "chin-up" position.

Followup Care in Artificial Respiration. When the casualty is breathing normally, wrap him in a blanket. He should remain lying down until he is seen by a physician or his recovery seems assured. When he is conscious, give him a warm drink, such as coffee or tea.

ELECTRIC SHOCK

Electric shock accidents frequently result from contact with a "live" wire and occasionally occur when a person is struck by lightning. If a person has come in contact with an electric current, turn off the current if the switch is nearby but do not waste time looking for it. Use a dry wooden pole, dry clothing, dry rope, or some other material which will not conduct electricity, to remove the person from the wire. If a pole is not handy, simply drag the victim off the wire by means of a loop formed with your belt or a strip of dry cloth. Do not touch the wire or the victim while he is still in contact with the electrical source with your bare hands or you will also receive a shock. Stand on a dry board or a rubber raincoat if the ground is damp. Electric shock causes breathing to cease, so start artificial respiration immediately after freeing the person from the wire. Keep it up for at least two hours, unless he recovers sooner.

CARBON MONOXIDE POISONING

Carbon monoxide gas has no odor and kills without warning. Poisoning from this gas usually is caused by breathing motor vehicle exhaust gas. It frequently occurs when an engine is run with garage doors closed or when a person sits in a vehicle with the windows closed and the motor running. The same gas is formed by stoves in poorly ventilated shelters. The symptoms may be dizziness, weakness, headache, vomiting—then unconsciousness. If a person is overcome with carbon monoxide, get him into fresh air and, if necessary, start artificial respiration immediately. Keep him quiet. There is no excuse for carbon monoxide poisoning. It results from carelessness. Prevent it!

CHAPTER 27

DISEASE CONTROL

GENERAL

An understanding of the basic principles of sanitation is required of all officers and enlisted men in the Army. With a knowledge of the fundamentals, it is possible for them to accomplish the measures which are essential to the maintenance of good health and to prevent the spread of disease.

COMMUNICABLE DISEASE CONTROL

Definitions. Communicable diseases are those which can be transmitted from man to man or from animal to man. The term includes "contagious" diseases, which are those usually spread by direct contact or close association. These diseases cause a great loss of manpower during peace and war, hence it is necessary to diligently apply modern control measures constantly to prevent their spread.

Spread of Communicable Diseases. The three factors associated with the spread of these diseases are: the source, the means of transmission, and the susceptible individual. The source of disease may be a case (person who is actually ill with a disease), a carrier (person whose body gives off organisms capable of causing a disease while he is not actually ill), or an infected animal. Transmission is effected by contact when a disease is spread by physical contact (venereal diseases); of close association (respiratory diseases); by water and food when a disease is transmitted by the elimination of organisms in the urine or feces which, in some way, contaminate food and water that is to be consumed by a susceptible individual (typhoid fever and dysenteries); and by insects which spread disease germs by biting (malaria). Susceptible individuals are those who may develop a disease if appropriately exposed to the infection. This group is in direct contrast to those who are immune as a result of previous infection or through the use of vaccines.

Control Measures. Measures can be directed against sources by separating cases, carriers, and suspects from other troops (isolation); by daily examination (physical inspection) of all contacts during the disease incubation period; or by restricting the activities of those who have come in contact with cases of communicable diseases. The following general measures should be enforced:

Prevention of overcrowding.
Correct ventilation of barracks and tents.
Purification of water.
Careful selection and preparation of food.
Sanitation of messes.
Effective disposal of waste.
Control of disease-bearing insects and rodents.
Personal cleanliness.

Lastly, susceptibles are given every possible protection. Fundamentals of personal hygiene and recognized rules of health should be enforced to improve general health. Immunization (vaccination) against certain diseases is required by Army regulations, to include: smallpox, typhoid and paratyphoid fevers, tetanus, and others when indicated.

RESPIRATORY DISEASES

These diseases are spread by secretions from the mouth and nose, which are usually transmitted through close association with infected persons. The disease-producing organisms leave the body of a case or carrier in small droplets of moisture carried in the exhaled breath which may be inhaled by others. Sneezing, coughing, and talking increase the number of organisms transmitted in this manner. Harmful organisms may contaminate food, eating and drinking utensils, hands, or towels from which they may easily be carried to the mouths of others. There are established command measures outlined in Army publications for the prevention and control of respiratory diseases. Troops within the Zone of Interior should be allotted a minimum of 72 square feet of floor space per individual in barracks, whenever possible, and a minimum of 60 square feet per individual should be maintained under all circumstances. Further, no arrangements should be made to quarter more than 40 individuals in one room and under no circumstances should the space between beds be less than three feet. If the distance between adjacent beds is less than five feet, head-to-foot sleeping should be required. Double-bunking is permissible; however, 60 square feet of floor space per individual should be maintained. Classrooms, theaters, and recreation halls should have their capacity based on a minimum of 12 square feet

per individual. All mess personnel sick with respiratory disease must be excused from duty, referred to the dispensary for treatment and disposition, and not allowed to return to duty in the mess until declared noninfectious by a medical officer.

INTESTINAL DISEASES

The intestinal diseases include common diarrhea, bacterial food poisoning, dysenteries, typhoid and paratyphoid fevers, worms, and cholera. They are spread by contaminated food and water, by infected food handlers, and by water from natural sources which have become contaminated by drainage from latrines, sewers, and careless disposal of human waste. Prevention and control of these diseases depend upon cleanliness, strict sanitary discipline, and close attention to sources of food and water.

INSECTBORNE DISEASES

Such diseases as malaria, yellow fever, dengue, filariasis, typhus, trench fever, relapsing fever, rocky mountain spotted fever, tularemia, bubonic plague, and sandfly fever are transmitted by insects. As in the groups of diseases already described, it is necessary to have a source of infection, a transmitting agent (insect in this case), and a susceptible victim if the diseases are to be spread. The control of these diseases is essentially a matter of controlling the disease-carrying insects and the sources of infection. Particular attention is given to preventing the spread of malaria—it can only be accomplished by protecting men from the bites of infected mosquitoes through such means as the use of insect repellents, mosquito bars (nets), and insecticide sprays, and by utilizing a suppressive drug such as chloroquin and a curative drug, primaquin, either separately or in combined tablet form.

CHAPTER 28

INSECT AND RODENT CONTROL

FLY CONTROL

The fly transmits disease germs by vomiting, excretion, and actual body contact. Therefore, when a fly goes directly from a pile of human waste to our food, it has a threefold chance of transmitting germs. Hence, it is obvious that the only practical means of preventing flies from spreading disease are to kill them, prevent them from breeding, and keep them away from waste, food, and eating utensils. Breeding places are controlled and eliminated by prompt and effective disposal or treatment of waste matter. Residual-type insecticide sprays are effective killing agents when applied to the surface upon which flies usually rest.

MOSQUITO CONTROL

The diseases known as malaria, dengue, encephalitis, yellow fever, and filariasis are transmitted by mosquitoes. Each species and kind of mosquito has definite habits and characteristics which must be known before an effective control program can be started. There are, however, certain principles upon which all control programs are based. Control measures include: the selection of a campsite on high ground, at least a mile away from important breeding places and native villages; the use of insecticides; ditching, draining, and filling areas holding water; and the protective measures available to the individual, such as properly worn clothing, bed and head nets, repellents and insecticide sprays. For details covering the proper use of the bed net, see figure 122.

LOUSE CONTROL

There are three kinds of lice that infest man, namely: body lice, head lice, and crab lice, the first being chiefly responsible for transmitting louse-borne diseases. They transmit typhus, trench fever, and relapsing fever, all of which are particularly dangerous to the Army, since there are times when men are crowded to-

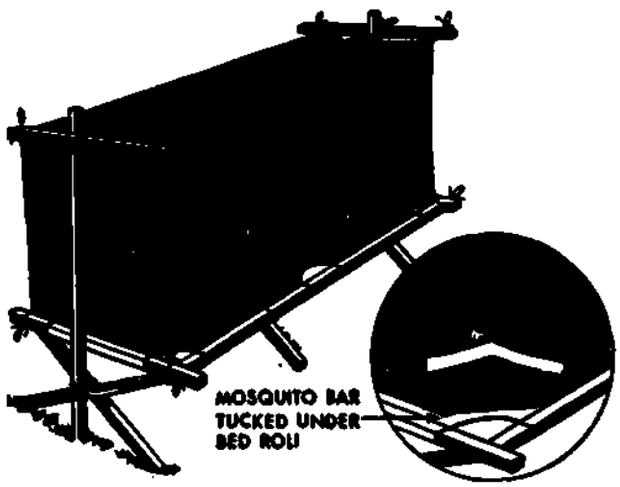


Figure 122. Mosquito bar on folding canvas cot.

gether in close quarters with few chances to bathe or to change clothes, thereby providing ideal conditions for the spread of the diseases by the rapidly multiplying lice. Lice are spread by contact with infested persons or when adult lice or eggs drop off into straw, debris, blankets, clothing, or onto latrine seats. They seldom transmit the disease by biting, since the germs are passed out of their bodies during defecation as they feed. However, the bites itch, and when scratched or when the louse is crushed on the skin, the germ-laden feces or crushed louse contents are rubbed into the minute skin abrasions, thereby inoculating the victim.

Lice are not readily found and usually they are present in large numbers before they are detected. Suspicion should be aroused when itching is noted. Men should look for lice, be able to identify them, and report infestation promptly (fig 123). When an infested individual is found, his roommates should be examined and if five percent or more of a unit is infested at one time, all personnel should be subjected to delousing procedures.

For individual control, insecticide louse powder is provided in 2-ounce cans. The powder is injurious to men if eaten and, therefore, it should not be allowed to contaminate food. Powder dusted into clothing will not destroy eggs, but will continue to kill any lice that may be hatched or acquired in the next three or four weeks (provided clothes have not been changed or laundered meanwhile). Insects are killed by the powder on mere contact even though they do not eat it, but it does not irritate the human skin. To get rid of head or crab lice, dust the hairy portions with

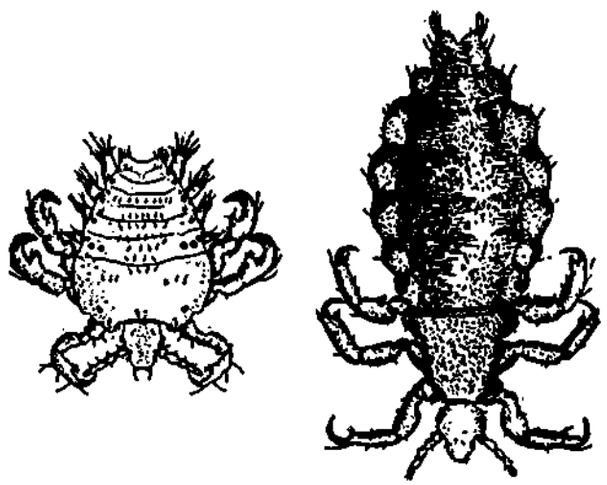


Figure 123. Crab louse (left); body louse (right).

powder; let it stay on at least 24 hours (2 or 3 days is better); and reapply the powder after 1 week and again in 2 weeks to eliminate the subsequently hatched crop.

Dust guns and sifter cans, using an insecticide powder mixture, are used to disinfest the body, extra clothing, blankets, and bedding. When insecticides are not available, a good soap and water bath or shower, shaving of hairy body areas, and clean clothing will usually suffice. Clothing and bedding are disinfested by using a methyl bromide gas chamber or delousing bag, or by dusting with insecticidal powder.

RODENT CONTROL

Of all animals living at the expense of man, rats are the most costly, not only because they destroy his property but also because they transmit serious diseases. Since they are frequently infected with the organisms, they may transmit diseases to humans by contaminating food with their excrement. The fleas which live on rats spread bubonic plague and endemic typhus. Because of the deadly effects of bubonic plague, rodent control measures should be supervised by medical service officers where this disease is or has been present. This applies with special force to the handling of dead rats in plague areas.

There are two types of control procedures: *suppressive*, designed to deprive rats of food and to keep them out of harborages; and *destructive*, aimed to kill rats by poisoning, trapping, fumigation, and hunting by animals which are natural enemies of rats.

Suppressive measures should include: ratproofing of all buildings by closing every ope[illegible] one-fourth of an inch in diameter or greater; storing of all food in ratproof containers or buildings; and constant attention to all details of mess management and waste disposal.

Destructive measures are carried on continuously. Poisoning is an effective control but it will not kill all the rats as some learn not to touch the bait. Trapping also has its limitations for it requires greater skill and labor than poisoning. The rats will avoid traps if they have plenty of food, or if they become suspicious of the traps. Therefore, a large number of traps are used in the beginning of a campaign and systematic trapping within buildings is carried on thereafter.

CHAPTER 29

WATER SUPPLY, WASTE DISPOSAL, AND MESS SANITATION

FIELD WATER SUPPLIES

Water from streams, shallow wells, ponds, swamps, and lakes is likely to transmit the various intestinal diseases. Therefore, all water supplies should be considered as unsafe, unless treated sufficiently to kill or remove all disease organisms. All troops must be trained to drink treated water only. The Corps of Engineers is responsible for procuring and treating water. This includes construction, maintenance, and operation of all facilities to collect, purify, and distribute the water supply. In isolated instances, small units and individuals may be required to disinfect their own drinking water.

The amount of water necessary for any given number of persons varies. The season of the year, the geographical location, and the tactical situation are factors which must be taken into consideration in arriving at a minimum requirement. In a hot, dry climate, a man performing normal duty may require as much as 2 or 3 gallons of water per day for drinking purposes; in a cooler climate, however, he may require only one-half to 1 gallon per day for the same purpose. Similarly, amounts required for cooking and personal hygiene vary greatly.

The water intake or the point of supply of a surface source should be as far away as possible from known sources of contamination. When a stream is used, the intake preferably should be upstream from any source of contamination. In lakes and ponds it is generally desirable to locate the intake as far from the shore as practicable, since the amount of contamination usually decreases in proportion with the increase of distance from the shore.

Purification in the field is accomplished by field mechanical purification equipment. Lyster (or water sterilization) bag method, canteen disinfection method, and by the individual method. The latter method is of great value to the individual, for water in issue canteens can be easily disinfected with issued

water purification tablets (iodine). One tablet is needed to every quart or canteenfull of clear water, though two tablets should be used if the water is muddy or off-color. Shake well to dissolve the tablets. In 30 minutes all harmful organisms will be destroyed, then the water will be safe to drink. When individual water purification tablets (iodine) are not available, the canteen disinfection method may be employed. An ampule of calcium hypochlorite (as used for Lyster bag chlorination) is emptied into a canteen of water, leaving a small air space in the canteen. Dissolve the calcium hypochlorite by thorough shaking. Using the cap of this canteen as a measuring device, empty one capful of the strong stock solution of calcium hypochlorite into each canteen of water which is to be disinfected. Shake each canteen thoroughly and allow the water to stand at least 30 minutes before drinking. Units not obtaining disinfected water from Engineer water sources use the 36-gallon Lyster bag, which is issued on the basis of one bag for each 100 men. The bag, suspended on a tripod or other support, must be clean and all water used to fill it to a mark 4 inches from the top should be strained through a clean cloth after settling. A glass ampule of calcium hypochlorite is broken, mixed into a paste which is then thinned with two-thirds canteen cup of water and emptied into the Lyster bag of water to give a chlorine dosage of 2.5 parts of chlorine per million parts of water. The water is stirred thoroughly with a long, clean, wooden paddle; faucets are flushed by drawing a half canteen cup from each faucet; the cover is placed over the top of the bag; 10 minutes later a faucet is again flushed; and a test is made on a sample to determine the chlorine content of the water. Some of the chlorine which is added will be consumed by organic material in the water. The remaining chlorine is referred to as "residual" chlorine. The chlorine residual should be not less than 1.0 per million parts. If the chlorine residual is too low, add more calcium hypochlorite as before and repeat the test after 10 minutes. The water is ready for use 30 minutes after the proper amount of calcium hypochlorite has been added. Printed instructions on the use of the chlorine residual test kit are furnished with the kit.

WASTE DISPOSAL

General. All wastes, such as human excreta (feces and urine), garbage, rubbish, liquid waste, and animal waste (manure), must be disposed of in a safe manner in order to prevent the spread of disease.

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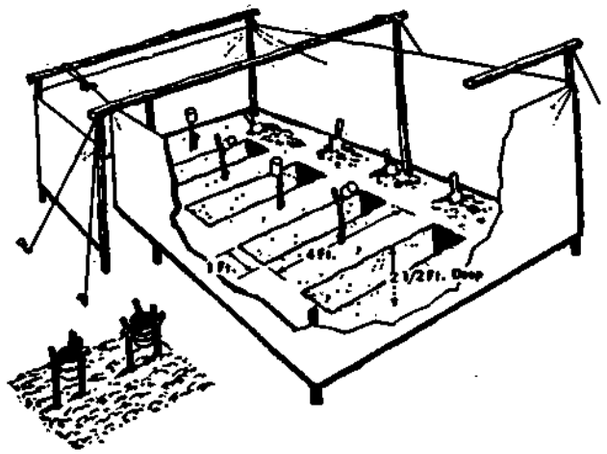

Figure 124. Straddle trench latrines for 100 men, with hand washing device.

Human Waste. Human feces and urine are frequent carriers of intestinal-disease germs; therefore, special precautions must be taken when troops are not using the waterborne sewage system of a permanent or semipermanent camp. On the march, during brief halts, each man digs, uses, and fills in a hole that is about 1 foot deep. During long halts or on bivouacs, one or more straddle trenches are used by all the men (fig 124). When conditions permit the establishment of a temporary camp, deep pit latrines (fig 125 and 126) and urinal troughs (fig 127) or soakage pits (fig 128) are constructed at least 200 feet away from the unit kitch-

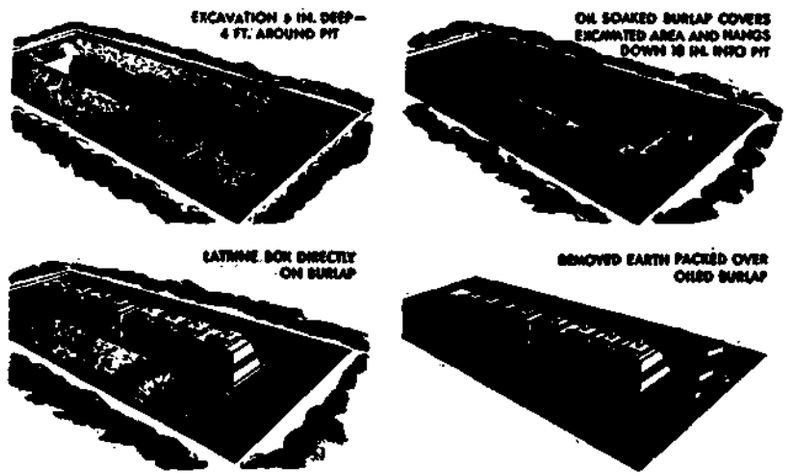

Figure 125. Cross-section of standard deep pit latrines.

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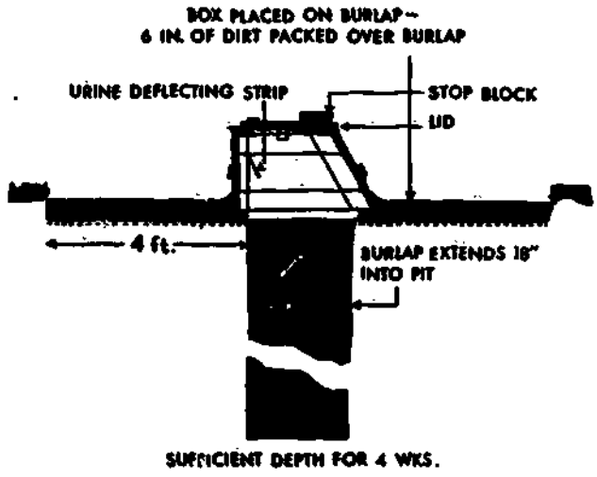


Figure 126. Deep pit latrines.

ens or from any spring or well. The standard latrine box for four men, eight feet long by 30 inches wide at the base, is normally used. The boxes must be kept flyproof and clean at all times. Fly control is accomplished by keeping the latrine area clean, adequate flyproofing, and use of residual-type insecticides. In addition to the latrine pits, soakage pits with urinals should be constructed and hand washing facilities must be provided.

Garbage. This is the solid and semisolid waste produced in the preparation or serving of food. By category, there are two forms: edible garbage, suitable for animal consumption; and non-edible garbage, worthless as animal food (e.g., coffee grounds, egg

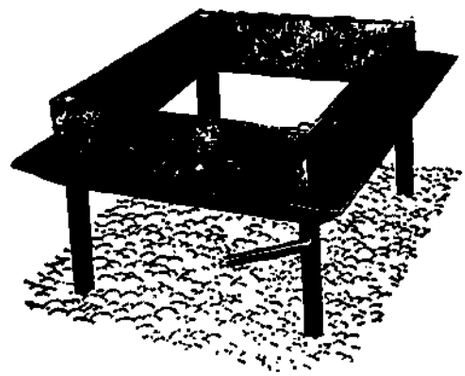


Figure 127. Soakage pit with trough urinal (ventilating shaft not shown).

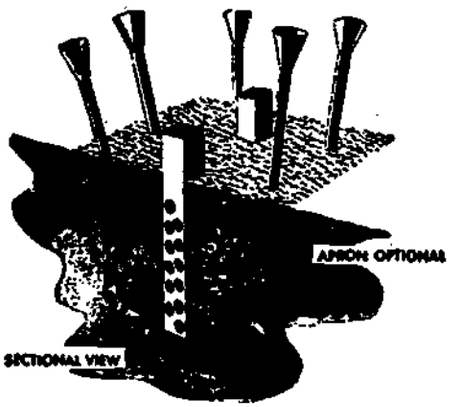


Figure 128. Soakage pit with pipe urinals and ventilating shaft.

shells, citrus fruit rinds, banana peels, vegetable stalks, fish heads, and scales). Ashes, sweepings, rags, boxes, cans, and paper are not to be considered as garbage. Garbage is collected daily and disposed of by sale or gift, hog feeding, burial, or incineration.

MESS SANITATION

General. A good mess contributes much to morale and efficiency —clean food is essential to health. Constant attention to all details of mess sanitation must be effected to prevent the spread of disease. Facilities of the mess must be maintained in the best manner possible. All mess buildings should be well screened. All food containers should be insectproof; cold storage equipment must be kept clean inside and out. Tables should be scrubbed with soap and water after each meal. Food must be inspected before preparation and before it is consumed. Food handlers must adhere to published standards.

Collective Cleaning of Utensils. When all eating and serving utensils of a unit are collected and washed, one of the following methods should be used:

If hot water is available: Wash in warm water (140° F.) containing soap or an approved detergent. Rinse in clear hot water (180° F.). Give a final disinfecting rinse in clear water at 180° F. for 30 seconds (when a thermometer is available to check temperature), or, if thermometer is *not* available, immerse for 30 seconds in clear boiling water. All utensils must be air dried.

If hot water is not available: Wash the utensils in water con-

taining soap or an approved detergent. Rinse in clear water. Immerse for not less than 30 seconds in a solution of "disinfectant, chlorine, food service." This solution is prepared by following the directions on the package. When this material is not available, immerse for not less than 30 seconds in a chlorine solution containing at least one level messkit spoonful of high-test calcium hypochlorite (water sterilization powder) in 10 gallons of water. These quantities will make a disinfectant solution which will normally suffice for disinfecting the personal mess gear of approximately 100 men. Allow all utensils to air dry.

Individual Cleaning of Mess Gear. In the field, usually, each individual cares for his own mess gear. Proper washing is important, otherwise food particles will remain and become breeding places for disease germs. Generally, three GI cans or other similar containers, put in a row, are used for this purpose. In each can is placed enough water to allow at least one quart of water for each man who will be using it for washing his messkit. Thus, large messes may require several washing lines depending upon the number of men they serve. The first GI can contains hot, soapy water (120° F. to 140° F.), the second and third cans contain clear water which is kept boiling throughout the washing period. For heating the water the Army provides an immersion-type water heater. This heater consists of a donut-shaped combustion chamber and a stack assembly welded together. It is heated by gasoline fire. The unit is placed directly in the water that is to be heated. A long-handled washbrush and a garbage can or pit are also needed in the messkit wash line. Procedure for individual messkit washing is as follows:

Scrape the food scraps remaining in the mess gear into the garbage pit or the garbage can.

Wash the gear in the first container of hot, soapy water using a long-handled brush.

Rinse the gear in the second can of clear, boiling water by dipping it up and down several times.

Disinfect the gear by immersing it in the third container of boiling water for several seconds.

Remove the gear and shake it to move the excess water.

Allow it to air dry. Replace messkit cover to keep out dust and vermin. Mess gear should be disinfected again before use by immersion in boiling water. In addition to killing any germs present and removing dust, the boiling water heats the mess gear and thereby helps to keep food warm.

PART FIVE

FUNDAMENTAL MILITARY KNOWLEDGE AND PROCEDURES

CHAPTER 30

HISTORIC CUSTOMS AND CEREMONIES

HAND SALUTE

Many Army *customs* originated long ago. The hand salute, for example, is so old that its origin is uncertain. Some say it began in late Roman times (1 A.D. to 500 A.D.) when assassinations were common. People who wanted to see public officials had to come before them with right hands raised to show that they did not hold a weapon. Knights in armor always raised visors with the right hand when meeting a comrade. This practice gradually became a way of showing respect, and in early American history sometimes involved removing the hat. By 1820 this was modified to touching the hat, and since then it has become the hand salute which is used today.

POSITION OF HONOR

You learn, as part of military courtesy, always to walk or sit to the left of your seniors, and this is another custom with a long past. Men fought for centuries with swords, and, because most men were right handed, the heaviest fighting occurred on the right. The shield was carried on the left arm, and the left side became defensive. Men and units that fought were proud of their fighting ability, and considered the right of a battle line to be a post of honor. When an officer walks on your right, he is symbolically filling the post of honor. You should walk on your senior's left, and stop when he does.

DRILL

When you drill you are doing what soldiers have done for more than 2,400 years. The way you are taught to get around as a

group doesn't much resemble the way it was done 1,000 or even 100 years ago, but the purpose is the same, to teach you to move together as a unit. Drill commands are about the same as at the time of the War of 1812, but 140 years ago the officer or noncom giving them began by saying, "Take care to face to the right. *Right, FACE!*" Another thing, if you had drilled at the time of the American Revolution you would have marched at a cadence of 76 steps a minute instead of the 120 that you use. Groups of men performed precise movements on battlefields, and the Army that could perform them best was often able to get behind the enemy, or on his flank, and thus beat him. Speed spoiled the winning exactness. Also, firearms were not able to shoot as far and as accurately in 1776, so a body of soldiers could take more time to approach the enemy. Drill today is used to move troops about in an orderly manner, develop coordination, and develop unit precision in response to the leader's command.

MASCOTS

American soldiers have always liked mascots, and several animals have come to symbolize the spirit of their outfits. Two of the most famous were Old Abe and Comanche. Someone in the 8th Wisconsin Infantry Regiment bought an eaglet from a Chippewa Indian in 1861 and took him to fight the Confederacy. The eaglet became Old Abe, and a sergeant carried him on a staff between the two colors of the regiment. During the battle he flew to the end of his tether, hovered over the fight, and screamed. He was in 36 battles, wounded in two, and a Confederate general offered a reward for him, dead or alive. His likeness now forms a part of the shoulder sleeve insignia of the 101st Airborne Division, which also came from Wisconsin.

A horse, Comanche, was the only "white" survivor of Custer's last stand on the Little Big Horn in 1876. Scarred as he was, the animal became a symbol to the 7th Cavalry of the fighting spirit of their outfit. The commanding officer published a general order relieving the animal of all work for the rest of its life and directed that ". . . on all occasions of ceremony . . . Comanche bridled, saddled, and draped in mourning, and led by a mounted trooper of Company I, will be paraded with the regiment."

REGIMENTAL CUSTOMS

You may have been in a regiment (brigade) or battalion where some custom with a long past is still in use. We can mention only three examples, and will begin with the 19th Infantry Regiment.

The 1st Battalion of the regiment held its ground for 2 days

during the Battle of Chickamauga in September 1863 and took such terrible punishment that at the end of the second day only half the battalion was still standing. A second lieutenant was in command, and ever since then a second lieutenant commands during the ceremonies of the 19th on its anniversary day.

The 2d and 3d Cavalry regiments turn out their color guards at some ceremonies in uniforms of the period of the Mexican War (1846 to 1848). This, of course, commemorates the hard service of those regiments against Mexico and against the Indians over a hundred years ago.

The third example is Troop A, 1st Reconnaissance Squadron, 103d Armored Cavalry Regiment, which has existed since 1774. This troop retains a "cornet" as one of its officers, because the junior officer of cavalry troops at the time of its organization in 1774, and until 1799, was so called in the American service. In addition to these examples, others are encouraged by the Department of Defense. Army Regulations direct that regiments (brigades), battalions, and companies pick the anniversary of an important event in their past and celebrate it each year as a *Unit or Organization Day*. That day is a holiday, and the traditions of the outfit are kept in the spotlight all day.

EUROPEAN INFLUENCE

It is well, in a world becoming smaller because of rapid communications, to remember that we are related to the people of Western Europe, and that some of the ceremonies of the Army are much older than the United States itself. We will look over a few of these and some younger ones too while we are at it.

To begin with, the right of a line, for reasons already explained, has been traditionally a post of honor. The same is true of the front of a body of men, and for the same reasons. Units formerly lined up for ceremonies according to the rank of their commanding officers, with the highest rank on the right. Squabbles arose in the Continental Army during the American Revolution over the posts of honor at ceremonies, so Washington used geography to settle them. He put the troops from the colony farthest south, Georgia, on the right and lined the others up in their geographical order from south to north. The modern method of avoiding quarrels over positions is as ingenious as Washington's; the slowest moving arm occupies the right at ceremonies and the others take place on the left according to their speed.

When you march in a parade, a review, or a guard mount, you will be in formations that are similar to those of Revolutionary times, but there are a few changes. Formations for ceremonies at the time of the Revolution were influenced by battle far more

than the ones you stand in; for battlelines were more like parades than they are now. Accurate and long-ranged guns have made those parade formations impossible on battlefields. During and before the Civil War, the field officers (colonels, lieutenant colonels, and majors) were posted behind the line in battle to keep the soldiers from retreating, and they began all ceremonies in their battle positions. Now they stand in front of the ranks throughout the ceremonies.

CEREMONIES

The parades of your battalion and brigade are opened by Adjutant's Call sounded on the trumpet, and this same call has opened parades of the American forces for 150 years. After some preliminaries, the adjutant orders the band to SOUND OFF and it at once plays three chords. The source of these chords is lost in the past. It is an interesting point that, as late as 1867, the command the adjutant gave the band was BEAT OFF instead of SOUND OFF because the music was usually furnished by drum corps. Having sounded off, the band marches in front of the troops and then countermarches to its original position. This march across the front of the line is said to have originated with the Crusades (1095 to 1260 A.D.). The troops offering themselves for holy service were drawn up in a long formation and the band countermarched only before those chosen to serve.

After the band has sounded off, the commanding officer may, if he wishes, give the troops some facings or movements of the manual of arms. This is the traditional way in which he establishes control over his command, and it has been practiced in the United States since the Revolution. Another parade custom is the march of the officers up to the commanding officer and back. This is now purely a matter of tradition, but it once had a use. The officers were called forward at the end of parades 125 years ago when the troops were already marching off the field. They were then given any instructions the commanding officer had for them and required to explain absences from the parade.

The ceremony of *Guard Mount* is older than the United States and has been more elaborate in the past than it is now. We have not, even when our Guard Mounts were at their most elaborate, retained the old uniforms, weapons, and movements as much as the British.

There are two more ceremonies we will mention. You will take part in one of them often, but the other one is less familiar. The one you are familiar with is *Retreat*, and its name may surprise you because it seems to refer to a defeat, but the term is taken from the French word *retraite*, referring to the evening cere-

mony. Other French words have come into use in the American Army without any change whatever and have only one meaning. The best examples are *reveille* and *lieutenant*. Even the bugle call sounded at retreat was first used in the French Army and dates back to the Crusades. When you hear it, you are listening to a beautiful melody that has come to symbolize the finest qualities of the soldiers of nearly 900 years. Retreat has always been at sunset and its purpose is to notify the sentries to start challenging until sunrise, and to tell the rank and file to go to their quarters and stay there. In our times the ceremony remains as a tradition.

The funerals of soldiers, more than any other ceremony, follow an old pattern, for mankind has always wished to honor its brave dead. A caisson carries the casket in the procession although caissons are no longer used for any other purpose. They were used during the 1800's because they were available on battlefields when other vehicles were not. Horses are no longer used in warfare any more than caissons, but if a man has been a member of one of the mounted branches (for example, cavalry that has become armor), a horse, draped in black, with empty boots reversed in the stirrups, may follow this casket. This symbolizes the fact that the former rider is now taking his first spiritual ride.

CHAPTER 31

CUSTOMS AND HONORS

MILITARY COURTESY

Military courtesy is basically no different from courtesy in civilian life, just good manners and politeness in dealing with other people. The experience of life has proven that courteous behavior is essential in human relations. The distinction between civilian courtesy and military courtesy is that military courtesies were developed in a military atmosphere and have become customs and traditions of the service. Most forms of military courtesy have some counterpart in civilian life. For example, you are required to say "Sir" when you talk to an officer. Throughout our history, young men and women were taught to say "Sir" to their fathers and other male elders. This tradition is still carried on and it is considered good manners for a younger man to say "Sir" when speaking to an older man. The use of the word "Sir" is also common in the business world, in the address of letters, and in any well-ordered institution. Military courtesy is not a one-way street. Enlisted men must be courteous to officers, and officers are expected to return the courtesy. Officers are required to respect their men as individuals, just as you respect officers. Without this basis of mutual respect, there can be no military courtesy and disharmony will result. In the final analysis, military courtesy is the respect shown to each other by members of the same profession. It is not only a form of respect for the Nation, it is an exchange of respect and goodwill by members of the team whose job it is to defend the Nation. Enlisted men show military courtesy to their officers because they respect the responsibility the officer has in leading his men. Officers on the other hand, respect their men because they know the responsibility the men have in carrying out orders. Military courtesy also includes salutes, the correct use of titles, respect to the flag and National Anthem, and military funerals.

OTHER COURTESIES TO INDIVIDUALS

All military personnel are customarily addressed, in official correspondence by their full titles. In conversation and unofficial cor-

respondence, Army, Air Force, and Marine personnel, male or female, are addressed as follows:

All general officers—"General."
Colonels and lieutenant colonels—"Colonel."
Majors—"Major."
Captains—"Captain."
All Lieutenants—"Lieutenant."
All chaplains—"Chaplain."
Cadets—"Mister."
Officer Candidates—"Candidate."
Warrant Officers—"Mister, Mrs., Miss."
Sergeant Major—"Sergeant Major."
First Sergeants—"First Sergeant."
All other sergeants—"Sergeant."
Corporals—"Corporal."
All specialists—"Specialist."
Privates and private first class—"Private."

When the name is not known, a private may be addressed as "Soldier."

In conversation and in unofficial correspondence, Navy and Coast Guard officers, male and female, are addressed as follows:

All admirals—"Admiral."
Commodores—"Commodore."
Captains—"Captain."
Commanders—"Commander."
Lieutenant commanders—"Mister, Miss, Mrs."
Lieutenants, ensigns, and midshipmen—"Mister, Miss, Mrs."
All chaplains—"Chaplain."
All medical officers—by their rank.

In referring to or introducing captains in the Navy or Coast Guard, it is customary to add, after the name "of the Navy," or "of the Coast Guard," since the grade of captain in the Navy and in the Coast Guard corresponds to the grade of colonel in the Army, Air Force, and Marines.

Any officer in command of a ship, regardless of the size or class of the ship, is addressed as "Captain" while actually exercising such command.

Enlisted men of the Navy or Coast Guard are addressed either by their speciality or by their last name. A chief petty officer is usually addressed as "Chief." When his name or specialty is not know, a seaman may be addressed as "Sailor."

The term of respect "Sir" is used when speaking to officers and civilian officials. Each sentence or statement should be either preceded or terminated with the word "Sir," but should not be

used both before and after the statement. When speaking with a female officer, the term "Ma'am" is used.

Conversation carried on in the presence of troops should be formal and proper, and proper titles should be used. When not in the presence of troops, seniors may address juniors by their first or last name, but this does not give the junior the privilege of addressing the senior in any way other than by his proper title. Individuals of the same grade generally address one another by name.

UNCOVERING

Officers and enlisted men under arms uncover only when—

Seated as a member of or in attendance on a court or board. (Prisoner guards do not uncover.)

Entering places of divine worship.

Indoors when not at a place of duty.

In attendance at an official reception.

The cap of male personnel is removed indoors (the post exchange, commissary, and similar places are not indoors in this sense) and in elevators when ladies are present. When out of doors, the cap is never removed or raised as a form of salutation in presence of ladies. When appropriate, ladies and civilians may be saluted in lieu of removing the cap.

Female military personnel will remain covered at all times when it would be appropriate for civilian women at a similar function to wear a hat. They must wear headgear when in uniform outdoors.

When an officer enters a room, enlisted men uncover (if unarmed) and stand at attention until the officer directs otherwise or until he leaves. When more than one person is present, the first to see the officer commands *ATTENTION*.

When an officer enters a place used as an office, workshop, or place of recreation, personnel engaged in an activity there do not come to attention unless the officer speaks to them. A junior comes to attention when addressed by a senior, except in the transaction of routine business between individuals at work.

When an officer enters a mess, unless custom or that officer directs otherwise, the mess will be called to *at ease* by the first person who sees the officer. The person in charge reports to the officer. The men remain seated at ease and continue eating unless the officer directs otherwise. An individual directly addressed should rise to attention unless seated on a bench instead of a chair, in which case he stops eating and sits at attention until the conversation is ended.

When accompanying a senior, the junior walks or rides on his left, except during an inspection of troops in formation.

On entering a vehicle, the junior enters first, and others follow in inverse order of rank. In leaving a vehicle, the senior leaves first and others follow in order of rank.

When a commanding officer enters an office for the first time each day attention will be called by the first person noticing the officer. If a higher commander enters, attention is called again.

PERSONAL HONORS

When personal honors are rendered, officers and enlisted personnel not in formation salute at the first note of the music and hold the salute until the completion of the Ruffles and Flourishes, and the General's March. When the cannon salute is rendered, military personnel being saluted and other persons in the ceremonial party render the hand salute during the firing of the salute. Civilians stand at attention while being honored. Other persons in the vicinity of the ceremonial party also stand at attention. A cannon salute to the Nation requires no individual action.

MILITARY FUNERALS

Military personnel salute during the passing of a caisson or hearse bearing the remains in a funeral procession. Those attending a military funeral in their individual capacity uncover or salute as prescribed in FM 22–5.

THE ARMY SONG

The US Army is the only one of the services which has adopted its own official marching song. It was adapted from the music of "The Caisson Song," written about 1908. The Official Army Song was formally dedicated by the Secretary of the Army on Veterans Day, 11 November 1956, and officially announced on 12 December 1957.

In addition to standing while the National Anthem is played, audiences render honors while state songs, school songs, and other symbolic songs are being played. Accordingly, Army personnel are encouraged to *stand at attention* whenever the official Army Song is played. There is no Department of the Army directive in this regard; however, commanders, officers, and other personnel can encourage this tribute to the Army be setting the example for others and standing at attention when the band plays "The Army Goes Rolling Along."

CHAPTER 32

SALUTES

HAND SALUTE

The hand salute is a one-count movement. The command is *Present, ARMS.* On the command of execution, *ARMS,* raise the right hand to the headdress and with the tip of the forefinger, touch the rim of the visor slightly to the right of the right eye. The fingers and thumb are extended and joined, palm down. The outer edge of the hand is barely canted downward so that neither the palm nor the back of the hand is visible from the front. The upper arm is horizontal with the elbow inclined slightly forward and the hand and wrist straight (fig 129).

Order arms from this salute is a one-count movement. The command is *Order, ARMS.* On the command of execution, *ARMS,* return your hand smartly to your side, resuming the position of *attention.*

When uncovered or when wearing a headdress *without* visor, the hand salute is executed in the same manner as previously described, except the tip of the forefinger touches the forehead (near the eyebrow) slightly to the right of the right eye.

When *reporting* or rendering *courtesy* to an individual, turn your head and eyes toward the person addressed and simultaneously salute. In this situation, the actions are executed without command. The salute is initiated by the subordinate at the appropriate time and terminated upon acknowledgment (fig 129).

The hand salute may be executed while marching. When double-timing, individuals must come to quick time before saluting.

Note: When marching a formation at double time, only the individual in charge assumes quick time and salutes.

It is improper to salute with any object in your right hand or with a cigarette, cigar, or pipe in your mouth.

MEANING

The salute is a greeting between military men. It's a military way of saying "Hello, How are you?" In fact, it's customary to say "Good morning, Sir," or "Good afternoon, Sir," or "Good eve-

ning, Sir" when you salute an officer. Usually, it's proper for officers of the same rank to salute each other when they meet, because it's the military way of saying "Hello." Sometimes, of course, you will use the hand salute to honor the colors. Then the salute is used as a mark of respect for your country.

The way you salute is important because it tells a lot about you as a soldier. If you salute proudly and smartly, it shows that you have pride in yourself and pride in your outfit. It shows that you have confidence in your abilities as a soldier. A sloppy salute, on the other hand, shows that you lack confidence, or that you don't understand the meaning of the salute, or that you are ashamed of your outfit and yourself.

WHOM TO SALUTE

You are required to salute all commissioned officers and warrant officers, both male and female, of the Armed Forces. It is customary to salute the officers of Allied nations when you recognize them as such. Do not salute noncommissioned officers or petty officers. However, you will learn that there are exceptions to this rule, such as when you act as a squad leader and salute your platoon sergeant when making reports.

WHEN TO SALUTE

All Army personnel in uniform are required to salute at all times when they meet and recognize persons entitled to the salute except in public conveyances such as trains and buses or in public places such as theaters, or when a salute would be manifestly inappropriate or impractical (e.g., when officers are acting as drivers or passengers of civilian vehicles). Additionally, Army personnel exchange salutes upon recognition even when one or both parties are in civilian clothes. Salutes in vehicles are explained below. The rendering of the salute is also required—

When the national anthem, "To the Color," or "Hail to the Chief" is played.

When the national color passes by.

On ceremonial occasions.

In all official greetings.

At reveille, when within sight of the flag or sound of the music.

During the rendering of honors.

When passing by uncased colors outdoors.

When pledging allegiance to the flag.

The salute is rendered only once if the officer remains in the immediate vicinity and no conversion takes place. If a conversa-

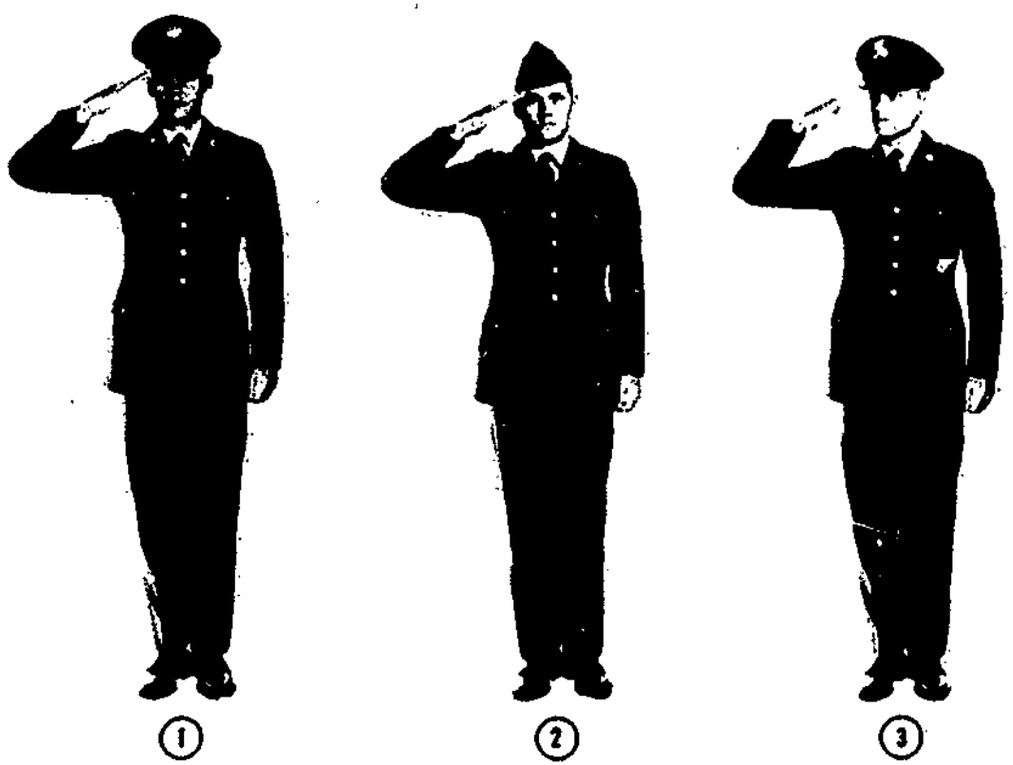


Figure 129. Hand salute.

tion takes place, the soldier again salutes the officer on departing or when the officer leaves.

Exceptions to the general rule prescribing the salute are indicated in specific rules given in subsequent paragraphs. In general, one does not salute when—

At work.

Indoors, except when reporting to an officer or when on duty as a guard.

A prisoner.

The rendition of the salute is obviously inappropriate.

Example: A person carrying articles with both hands or being otherwise so occupied as to make saluting impracticable is not required to salute a senior person or to return the salute of a junior. In any case not covered by specific instructions, or in case of reasonable doubt, the salute will be rendered.

The term "outdoors" includes such buildings as drill halls, gymnasiums, and other roofed inclosures used for drill or exercise of troops. Theater marquees, covered walks, and other shelters open on the sides to the weather and where a hat may be worn are also considered outdoors.

The term "indoors" includes offices, hallways, kitchens, orderly rooms, recreation rooms, washrooms, and squad rooms.

SALUTE AT SLING ARMS

To salute, while at *sling arms*, the command is *Present, ARMS*. On the command of execution, *ARMS*, reach across your body with your left hand, grasping the sling just above the right hand. Release your right hand and execute the hand salute (fig 130).

To resume order arms, the command is *Order, ARMS*. On the command of execution, *ARMS*, lower your right hand smartly to your side and regrasp the sling at the original position. After grasping the sling with the right hand, release the sling with your left hand and return it smartly to your left side, as at the position of attention.

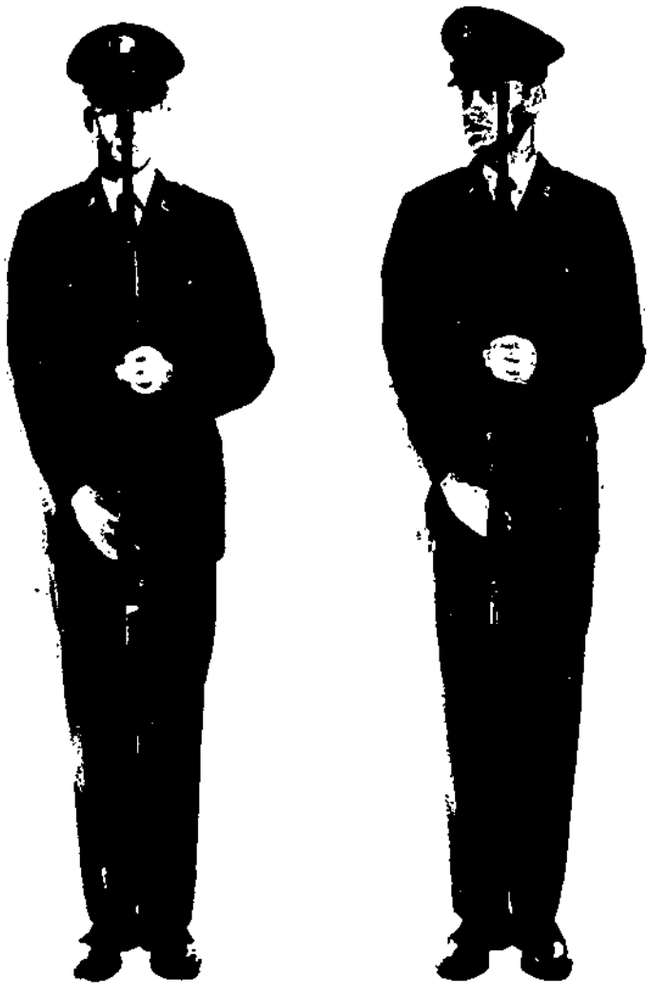
When rendering reports or courtesy to an individual, the same rules apply for the hand *salute*, as explained in individual drill.

PRESENT ARMS

Present arms from order arms is a three-count movement. The command is *Present, ARMS*. On the command of execution, *ARMS*, execute port arms in two counts. On the third count, twist the weapon with the right hand and move the weapon to a vertical position approximately 4 inches in front of and center of the

SLING ARMS PARADE REST HAND SALUTE

Figure 130. Sling arms.



IN FORMATION COURTESY - REPORTING

Figure 131. Present arms.

body. Lower the weapon until the left forearm is horizontal to the ground, keeping the elbows at your sides (fig 131).

Order arms from present arms is a four-count movement. The command is *Order, ARMS.* On the command of execution, *ARMS,* return the weapon to port arms. Counts two, three, and four are the same as from port arms.

Port arms is assumed en route to or from present arms from left shoulder arms. Present arms from or to port arms is a one-count movement.

When rendering reports or courtesy to an individual from order arms, execute present arms as mentioned above, except turn your head and eyes toward the individual addressed. Order arms is executed automatically upon acknowledgment of the salute.

When rendering courtesy to an individual while marching with the weapon at right shoulder, left shoulder, or port arms, and not in formation, you must halt and then execute *present arms*. Upon acknowledgment of the salute, automatically return to the original position and resume marching.

REPORTING TO AN OFFICER

When a soldier has requested and obtained permission to speak to an officer officially, or when the soldier has been notified that an officer wishes to speak with him, the soldier reports to the officer. The form of the report may vary according to the local policy, but the recommended form is "Sir, Private Smith reports."

When reporting to an officer in his office, the soldier removes his headgear, knocks, and enters when told to do so. He approaches within two steps of the officer's desk, halts, and salutes. The salute is held until the report is completed and the salute has been returned by the officer. When the business is completed, the soldier salutes, holds the salute until it has been returned, executes the appropriate facing movement and departs. When reporting indoors under arms, the procedure is the same except that the headgear is not removed and the soldier renders the salute prescribed for the weapon with which he is armed. (If the soldier is armed with the M1 or M14 rifle, he carries it at trail arms.)

The expression "under arms" means carrying the arms, or having them attached to the person by sling, holster, or other means. In the absence of the actual arms, it refers to the equipment pertaining directly to the arms, such as pistol belt or pistol holster.

When reporting outdoors, the soldier will move rapidly to the vicinity of the officer, halt at a distance of approximately three steps from the officer, salute, and report as described above. If under arms, the weapon may be carried in any manner for which a salute is prescribed.

When reporting for pay, the soldier answers "Here, Sir," or "Here, Sergeant" when his name is called, salutes the officer making payment (in this instance, the officer does not return the salute), reports "Sir, Private Jones reports," counts his money as it is handed to him, signs the pay voucher, and leaves the room without again saluting.

SALUTES IN VEHICLES

The general rule that all Army personnel in uniform are required to salute at all times when they meet and recognize persons entitled to the salute applies generally to salutes in vehicles. Some exceptions follow: In case a detail is riding in a vehicle, the individual in charge (normally seated next to the driver) renders the hand salute for the entire detail. Drivers of military or civilian vehicles are not required to salute at any time they feel it would create a safety hazard. Thus, in most cases, a driver will not be able to render a salute. All personnel will be especially alert to recognize and salute vehicles bearing general officer automobile plates. Salutes are not rendered by, or to, persons riding in public conveyances.

SALUTING IN GROUPS

In Formation. Individuals in formation do not salute or return salutes except at the command *PRESENT, ARMS* or *HAND, SALUTE.* The individual in charge salutes and acknowledges salutes for the entire formation. Commanders of organizations or detachments which are not a part of a larger formation salute officers of higher grades by bringing the organization or detachment to attention before saluting. When in the field under campaign or simulated campaign conditions, the organization or detachment is not brought to attention. An individual in formation at ease or at rest comes to attention when addressed by an officer.

Not in Formation. On the approach of an officer superior in rank, a group of individuals not in formation is called to attention by the first person noticing the officer, and all come smartly to attention and salute. Individuals participating in games and members of details at work do not salute. The individual in charge of a work detail, if not actively engaged, salutes or acknowledges salutes for the entire detail. A unit resting alongside a road does not come to attention upon the approach of an officer; however, if the officer addresses an individual or group, all come to attention and remain at attention (unless otherwise ordered) until the termination of the conversation, at which time they salute the officer.

SALUTING AND CHALLENGING ON GUARD DUTY

A sentry, on a post which does not require challenging, carrying a weapon at sling arms, will render the hand salute upon recognition of an officer (fig 130).

A sentry, on a post which does not require challenging, carry-

ing a weapon at right (left) shoulder arms, will, upon recognition of an officer, halt and present arms (fig 131). When the officer returns the salute the guard will return to right (left) shoulder arms and resume his duties.

A sentry armed with a pistol, on a post which does not require challenging, will, upon recognition of an officer, render the hand salute (fig 129).

No salute is given by a guard who is engaged in a specific duty, the performance of which, prevents saluting.

A guard talking with an officer does not interrupt the conversation to salute another officer; however, if the officer salutes a senior, the guard also salutes.

The special orders will specify the time for challenging.

When challenging, a guard, armed with a rifle, carbine or shotgun will challenge from the position of port arms. If armed with a pistol the guard will challenge from the position of raise pistol.

After challenging, a guard will remain in the challenge position until the individual challenged is allowed to pass, depart, or is turned over to the commander of the relief.

Sentinels on post requiring challenging will not render salutes. The sentinel's primary mission is to guard his post. Requiring salutes places the individual in a vulnerable position. The sentinel will, however, display all other military courtesy and respect while in conversation with an officer.

HONORS TO THE NATIONAL ANTHEM, "TO THE COLOR," OR "HAIL TO THE CHIEF"

Outdoors. Whenever and wherever the national anthem, "To the Color," or "Hail to the Chief" is played, at the first note, all dismounted personnel in uniform and not in formation face the flag or the music (if the flag is not in view), stand at attention, and render the prescribed salute. The position of the salute is held until the last note of the music is sounded. Military personnel not in uniform will stand at attention (remove headdress, if any, with the right hand), and place the right hand over his heart.

Vehicles in motion will be brought to a halt. Persons riding in a passenger car or on a motorcycle will dismount and salute. Occupants of other types of military vehicles and buses remain seated at attention in the vehicle, the individual in charge of each vehicle dismounting and rendering the hand salute. Tank and armored car commanders salute from the vehicle.

The above marks of respect are shown the national anthem of any friendly country when it is played at official occasions.

Indoors. When the national anthem is played indoors, officers and

enlisted personnel stand at attention and face the music, or the flag if one is present. They do not salute unless under arms.

At reveille the procedures outlined above will be followed.

SALUTES TO COLORS

National and organizational flags (as described below), which are mounted on short flagstaffs (pikes) equipped with spearheads, are called colors. These are made of silk and measure 3 feet on the pike by 4 feet on the fly. They are trimmed on three edges with a knotted fringe of yellow silk 2 1/2 inches wide. Attached below the spearhead of a national color only is a red, white, and blue silk cord, 8 feet 6 inches in length, with a tassel at each end.

Military personnel passing an uncased national color salute at six steps distance and hold the salute until they have passed six steps beyond it. Similarly, when an uncased color passes by, they salute when it is six steps away and hold the salute until it has passed six steps beyond them. Small flags carried by individuals, such as those carried by civilian spectators at a parade are not saluted.

PART SIX

WEAPONS: ARMY RIFLES AND GRENADE LAUNCHERS

CHAPTER 33

ARMY RIFLES: M16A1, M14, M1

5.56-MM RIFLE, M16A1

GENERAL

The US Army's newest rifle, in its arsenal of small arms, is the M16A1. This rifle was developed by the Armalite Division of Fairchild Stratos Corporation in 1957, at the request of the United States Continental Army Command. In 1962 the Department of the Army directed that the M16A1 (then known as the AR–15) be evaluated in light of certain new rifle characteristics being sought, specifically a rifle that was easy to handle in jungle or heavily vegetated terrain and a lightweight rifle which could be used by new units such as Air Assault Divisions in which weight is a critical factor. Based on the findings of this evaluation approximately 85,000 of these rifles were purchased initially. With modifications, the AR–15 was standardized for the Army as the M16A1 (fig 132 and 133).

Figure 132. The M16A1 rifle.

TABULATED DATA

The M16A1 has the following characteristics:

Gas operated.
Air cooled.
Magazine fed (20 to 30 round magazine).
Straight line stock.
Semiautomatic and automatic capability:

Cyclic rate of fire	700 to 800 rounds per minute.
Maximum effective rate of fire (auto)	150 to 200 rounds per minute.
Maximum effective rate of fire (semi)	45 to 65 rounds per minute.
Sustained rate of fire	12 to 15 rounds per minute.
Maximum range	2,653 meters.
Maximum effective range	460 meters.
Muzzle velocity	3,250 feet per second.
Muzzle energy (at the muzzle)	1,300 foot pounds.
Mechanical features:	
Rifling	Six grooves, one turn per 12 inches.
Sight radius	19¾ inches.
Trigger pull	8½ pounds maximum. 5 pounds minimum.

Sights: Rear sight adjustable for windage (isolate windage drum) and range (two apertures, 0–300 meters for the small aperture, 300–500 meters for the large aperture marked with an "L").
Two apertures: short range, 0 to 300 meters; long range, 300 to 500 meters.
Front sight adjustable for elevation. One click of windage or elevation moves the strike of the bullet 2.8 centimeters at 100 meters.

Combat weight (with sling and 20-round magazine) ..... 7½ pounds.
Special features:
Lightweight aluminum bipod; quickly attached or detached.
Trigger guard rotates down to facilitate firing with mittens.
Dust cover over ejection opening (opens with rearward movement of bolt).
Ammunition:
5.56-mm. Projectile: 55-grain, full jacketed, steel core, boat-tailed.
Tracer ammunition (standard).
Blank ammunition (standard).
No armor piercing ammunition planned.

US RIFLE, 7.62-MM, M14 AND M14A1

THE M14

The M14 is another standard Army rifle (at this time) and remains in use in many units, both active and reserve components.

TABULATED DATA

For M14 and M14A1

(1) Shoulder fired.
(2) Gas operated.
(3) Air cooled.

Figure 133. The M16A1 with bipod.

(4)	Magazine fed (20 rounds).	
(5)	Semiautomatic and automatic capability.	
	Cyclic rate of fire (rounds per minute) ..	700 to 750.
(6)	Maximum range	3,725 meters.
(7)	Maximum effective range, M14	460 meters.
*(8)	Maximum effective range, M14A1	700 meters.
(9)	Muzzle velocity	2,800 feet per second.
(10)	Mechanical features:	
	(a) Rifling	4 lands, 4 grooves; right-hand twist.
	(b) Sights:	
	1. Front	Fixed.
	2. Rear	Adjustable. One click of elevation or windage moves the strike of the bullet .7 centimeter at 25 meters, or 2.8 centimeters for each 100 meters.

*When employed semiautomatically with bipod.

(11) Weights in pounds (approximate):
M14 Rifle with full magazine and cleaning equipment (fig 134) ..... 11¼ pounds.
M14 Rifle with full magazine, cleaning equipment, selector and bipod (fig 135) .. 13 pounds.
Bipod M2 ..... 1¾ pounds.
M14A1 with full magazine (fig 136) ... . 14½ pounds.

(12) Length in inches (approximate):
M14 overall with flash suppressor . ..... 44⅛.
M14A1 with stabilizer assembly . .. . 44⅓.

(13) Number in a rifle company:
M14 ..... 104.
†M14 with bipod M2 ..... 18.
M14A1 ..... 18.

†Being replaced by M14A1 as the automatic rifle in the Army.

THE M14A1

The M14A1 is a modification of the standard M14 rifle. When the M14 was adopted for use within the rifle squad, it was also adopted as the automatic rifle by adding the bipod and selector. The M14A1 is a rifle further modified to improve its capabilities in the role of an automatic rifle (fig 134–136).

Description of components.

Stock group. The stock group of the M14A1 is of the "straight line" type with a fixed rear handgrip and a folding front hand-

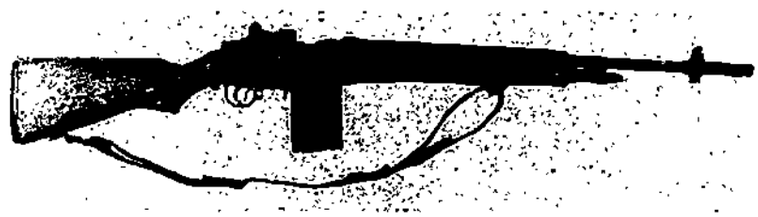


Figure 134. The M14 rifle.

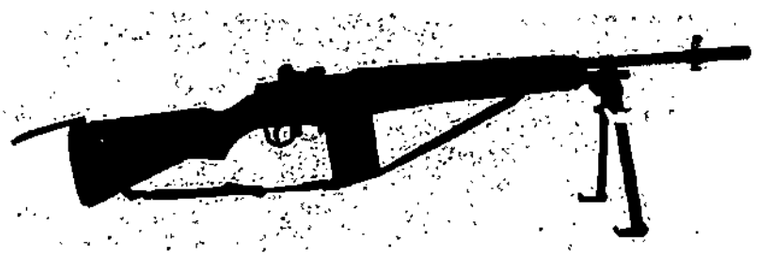


Figure 135. M14 (modified) with bipod.

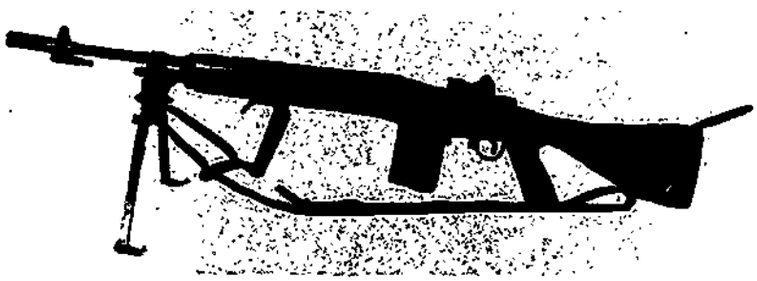


Figure 136. The M14A1 rifle.

grip which lies flat along the bottom of the stock when not in use. The location of the front handgrip can be adjusted to one of five positions in 1-inch increments to accommodate all gunners. The rubber recoil pad reduces the effects of recoil. The hinged shoulder rest provides vertical control of the butt end of the rifle. The butt sling swivel pivots 90° to the left for ease of carrying.

Stabilizer assembly. The stabilizer assembly consists of a perforated steel sleeve which slides over the flash suppressor and is fastened to the muzzle over the bayonet lug by a screw and a locknut. The stabilizer provides muzzle stability and reduces recoil.

Bipod, M2 (modified). The bipod M2 is modified by the addition of a sling swivel and a longer pivot pin to accommodate the swivel.

Sling. The M14A1 utilizes a sling with an extra hook assembly. The portion of the sling between the handgrip and the bipod provides additional muzzle control during firing. The portion of the sling between the front handgrip and the bipod allows the average firer to increase the ground pressure and reduce the shot group dispersion.

US RIFLE, CALIBER .30 ML

GENERAL

The first major change in the basic weapon of the rifleman, since the adoption of the Springfield Rifle, came about in the late 1930's. At this time the Garand Rifle, later to gain world renown as the M1, became the standard rifle of the Army. The M1 was bloodied in battle during WWII and Korea and was the standard rifle of the American fighting man until 1957 when the M14 was adopted. The M1 is still in limited use in the reserve components (fig 137).

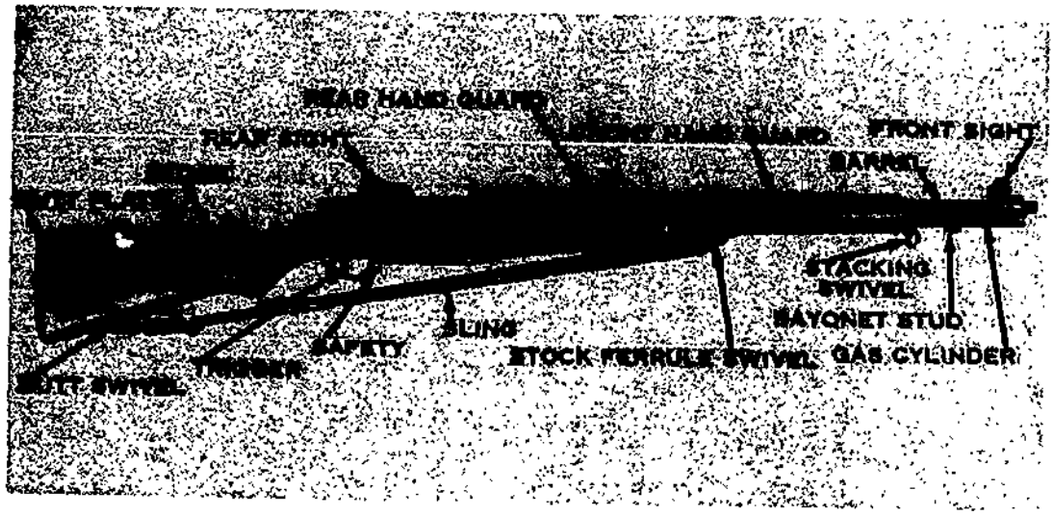


Figure 137. US Rifle, .30 caliber, M1.

TABULATED DATA

The M1 has the following characteristics:

Air cooled.
Gas operated.
Clip fed.
Semiautomatic.
Shoulder weapon.
Weight, fully loaded with sling and cleaning equipment .. 11¼ pounds.
Length overall, 43.6 inches.
Sights: front....fixed; rear....adjustable for elevation and windage.
Muzzle velocity, 2,800 feet per second.
Chamber pressure, 50,000 pounds per square inch.
Maximum range, 3,200 meters.
Maximum effective range, 460 meters.
Maximum rate of fire, 16 to 24 rounds per minute.
Ammunition:

M2 ball	plain brass tip.
M2 armor piercing	black tip.
M14 armor piercing incendiary	aluminum tip.
M1 incendiary	blue tip.
M1 tracer	orange tip.
Blank M1909	no projectile.
M3, grenade cartridge	no projectile, crimped neck.
M40 dummy	corrugated case, no primer.

CHAPTER 34

GRENADE LAUNCHERS: M79 AND M203

THE 40-MM GRENADE LAUNCHER, M79

GENERAL

Description. The 40-mm grenade launcher M79 is a single-shot break-open, breech loaded, shoulder-fired weapon capable of launching a 40-mm projectile out to ranges of approximately 400 meters. There are two of these weapons in each rifle squad. The launcher is the grenadier's primary weapon. He carries a basic load of 40-mm ammunition as prescribed by unit SOP, and is further armed with the caliber .45 pistol for close-in self-protection.

Capabilities. The M79 is capable of delivering a concentration of lethal fire on both point and area targets. It can deliver point fire on targets such as windows, caves, and bunker apertures to a maximum effective range of 150 meters. It can deliver area fire on targets, such as troops in the open or open weapons emplacements, to a maximum effective range of 350 meters.

MECHANICAL TRAINING

The entire launcher, unloaded, weighs approximately 6 pounds. This light weight is due to its aluminum barrel. The M79 is composed of five major subassemblies and groups (fig 138):

The *sight assembly* consists of a fixed front sight blade and and adjustable leaf rear sight.

The *barrel group* is rifled to impart spin to the projectile which both stabilizes the projectile in flight and completes the arming of the fuze.

The *fore-end assembly* secures the barrel to the receiver group.

The *receiver group* is made of steel. Within it are found all of the locking, cocking, firing, and safety mechanisms. It has a trigger guard that can be rotated right or left (away from the trigger) should the firer be wearing winter mittens.

The *stock assembly* has a rubber recoil pad on the butt to help absorb some of the recoil.

The launcher is loaded by rotating the barrel locking latch lever (located on top of the receiver) its full travel to the right. This unlocks the barrel from the receiver and automatically places the launcher on SAFE. As the barrel rotates up to the loading position, the launcher is automatically cocked by the cocking arm (beneath the barrel) and the cocking lever (in the receiver).

To unload the launcher, break it open again and manually extract the spent cartridge case. The ejector will force the cartridge case about one-half of an inch out of the breech.

TABULATED DATA

Weapon:

Length of launcher (overall)	28¾ inches.
Weight of launcher:	
Loaded	6½ pounds.
Unloaded	6 pounds.

Operational Characteristics:

Action	Single shot, break open.
Sights:	
Front	Blade.
Rear	Folding leaf, adjustable.
Chamber pressure	3,000 pounds per square inch.
Muzzle velocity	250 feet per second.
Spin	3,700 revolutions per minute.
Maximum range	400 meters.
Maximum effective range (area fire)	350 meters.
Maximum effective range (point fire)	150 meters.
Minimum safe firing distance:	
Training	80 meters.
Combat	31 meters.

SIGHTING EQUIPMENT

The launcher is equipped with a fixed front sight blade and a folding, leaf-type adjustable rear sight (fig 139). The rear sight consists of the following:

A fixed, notch-type sight used with the rear sight in the down position to engage targets out to a range of 100 meters.

The windage scale and the windage knob. One click of windage at 200 meters will move the impact of the grenade about 10 inches (approximately 25 centimeters for each 100 meters of range).

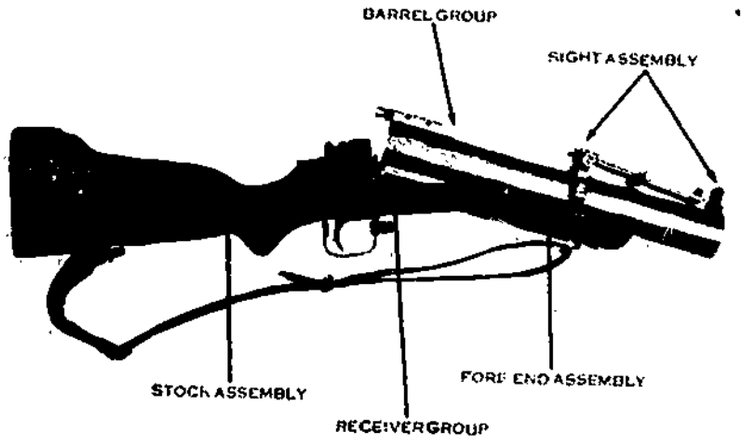


Figure 138. Five major subassemblies and groups.

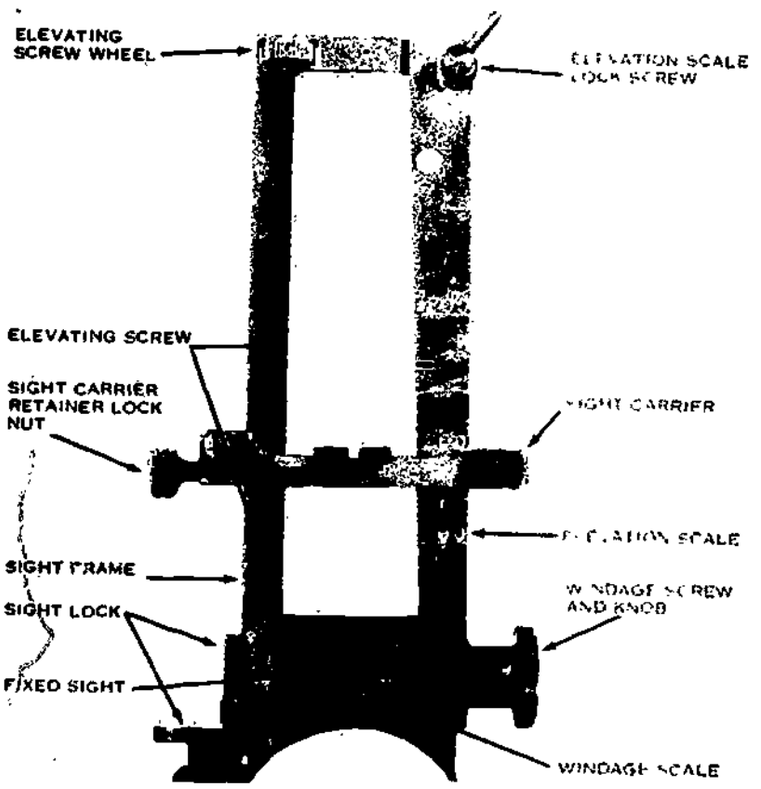


Figure 139. Rear sight assembly.

The adjustable elevation scale is graduated in 25-meter increments from 75 to 375 meters and numerically marked at 100, 200, 300, and 375 meters. The scale can be adjusted approximately 1/4-inch for zeroing purposes. The scale is inclined to the left as the range increases to compensate for the natural right-hand drift of the projectile (due to the right-hand spin). The rear sight aperture is canted to the left by the scale as the range increases.

The grenadier always carries the weapon with the sight down.

THE 40-MM GRENADE LAUNCHER, M203

GENERAL

Background. The M79 did provide the infantry squad with a long range grenade capability; however, due to TOE authorization, it also deprived the squad of two rifles or 20 percent of its direct fire capability. A dual purpose system would provide the solution; thus in 1969 the M203/M16A1 weapons system was adopted.

Description and Capabilities. The 40-mm grenade launcher M203 is a single shot, pump action, breech loaded, shoulder fired weapon with the same indirect fire capability as the M79 (fig 140). However, when mounted on the M16A1, the grenadier also possesses the rifle point fire capability.

MECHANICAL TRAINING

The launcher, unloaded, weighs 3 pounds (the M203/M16A1, both combat loaded, weigh less than 11 pounds). The M203 consists of four major subassemblies (fig 140).

Sight assembly and handguard: the sight assembly, which is attached to the special handguard unit, that fits the rifle, consists of a fixed sight leaf graduated to 250 meters.

Receiver assembly consists of firing and safety mechanisms, barrel and rack, support and latch.

Quadrant sight assembly consists of a complete quadrant sight system graduated to 400 meters.

Barrel assembly consists of a rifled aluminum barrel, to impart ballistic and arming spin to the projectile, and handgrips.

The launcher is loaded by depressing the barrel latch. This unlocks the barrel from the receiver, allowing it to be slid forward along the barrel track. As the barrel is slid forward, the weapon is automatically cocked and ready to fire. The firer must place the safety switch on safe.

To unload the launcher, again slide the barrel forward which will automatically eject the spent cartridge case.

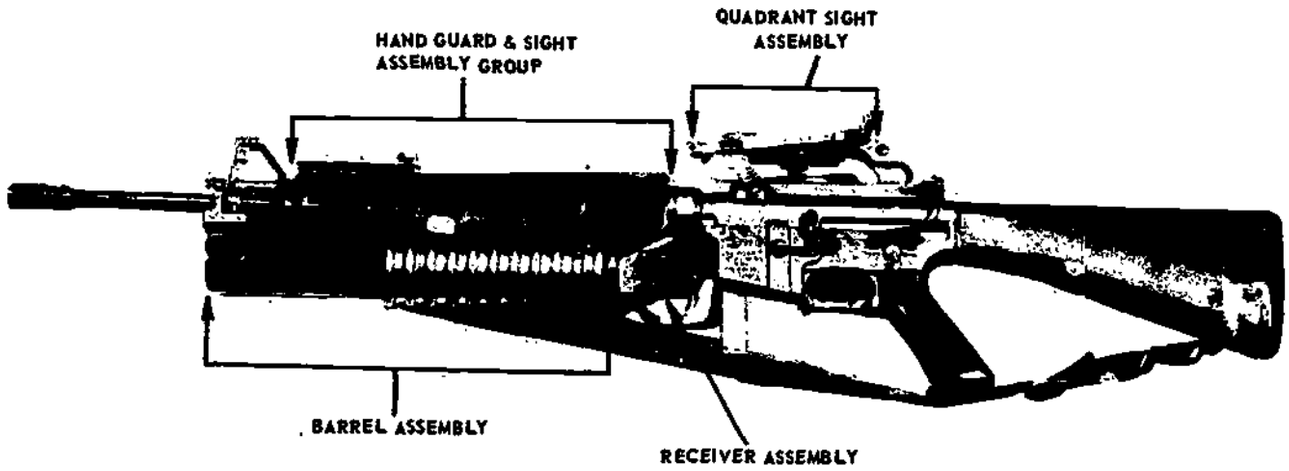


Figure 140. The M203 40-mm grenade launcher attached to the M16A1 rifle.

TABULATED DATA

Length of launcher (overall)	15 inches.
Weight of launcher:	
Loaded	3½ pounds.
Unloaded	3 pounds.
Ammunition:	
Caliber	40-mm.
Weight	8 ounces (approximately).
Operational characteristics:	
Action	Single-shot, pump-action.
Sights	Sight leaf/M16A1 front sight post and quadrant sight.
Chamber pressure	3,000 pounds per square inch.
Muzzle velocity	250 feet per second (+−).
Spin	3,700 revolutions per minute.
Maximum range	400 meters.
Maximum effective range:	
Area type	350 meters.
Point type	150 meters.
Minimum safe firing distance:	
Training	80 meters.
Combat	31 meters.

SIGHTING EQUIPMENT

The sight leaf assembly is located at the leading edge of the handguard and is used in conjunction with the front sight post of the M16A1. It is adjustable for both windage and elevation and consists of the following:

A sight leaf base which serves to protect the sight when not in use.

Sight leaf mount and sight leaf. The mount is attached to the sight base and is used to raise and lower the sight leaf. The sight leaf is graduated in 50-meter increments from 50 meters to 250 meters and marked numerically at 100 and 200 meters.

Elevation adjustment screw and elevation scale. The screw attaches the sight leaf to the sight mount, and by loosening it the sight leaf may be moved up or down to make minor adjustments in elevation. The elevation scale consists of five equally spaced lines on the sight leaf mount and an index line on the sight leaf. One increment will move the impact of the round 10 meters at a range of 200 meters.

Sight windage screw and windage scale. The left end of the

sight windage screw is a knob which may be turned for adjustments in deflection. The scale consists of a zero line with two equally spaced lines on each side. One increment of windage will move the impact of the round 1 and 1/2 meters at a range of 200 meters (fig 141).

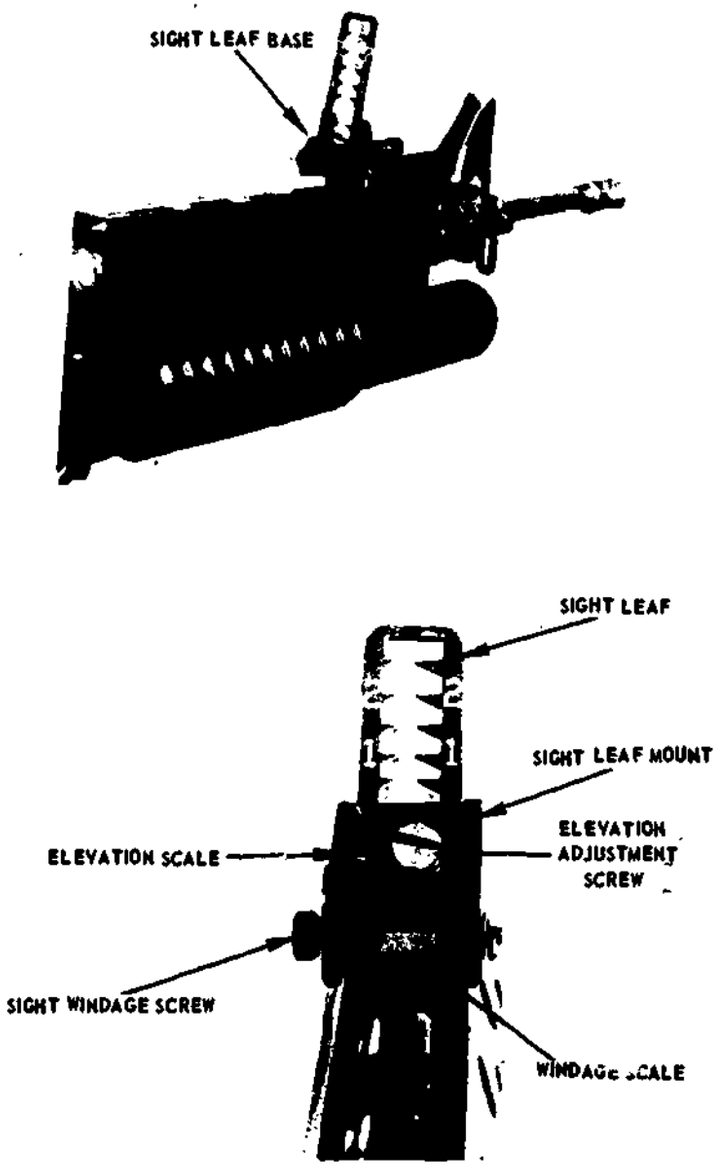


Figure 141. Sight leaf assembly for the M203 grenade launcher.

AMMUNITION AND TRAINING, M79/M203

GENERAL

There are currently five rounds of Standard A ammunition as well as a variety of developmental ones (fig 142–43).

All rounds authorized to be fired in the M79 are authorized for fire in the M203, with the exception of the riot control rounds which are too long for the action of the M203.

DESCRIPTION

The five standard A rounds consist of the following:

The high explosive antipersonnel round has a 5-meter casualty radius.

The training practice round is ballistically matched to the HE, but instead of fragmentation, emits a puff of yellow smoke.

The smokeless/flashless round has the same casualty radius as the HE, but eliminates all smoke, flash, and most of the noise when the round is fired. This helps the grenadier by not giving away his position too quickly.

The bounding fragmentation round has a greater casualty radius than the HE. This is due to the fact that through a dual fuze system, the grenade achieves an air burst.

The dual purpose round offers antipersonnel fragmentation, but due to the shaped-charge principle, can penetrate 2 inches of armor plate at 200 meters.

The developmental rounds include signaling and illuminating, such as smokes, parachute flares and clusters, riot control and tactical CS, and antipersonnel canister rounds.

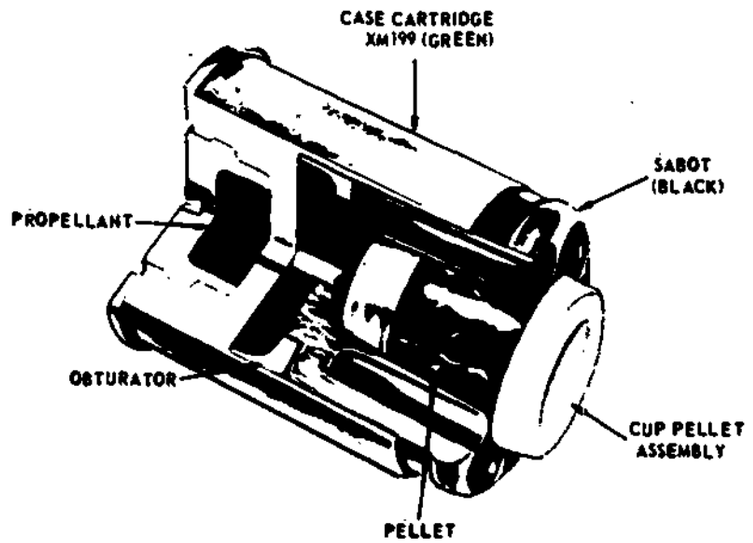
There are five steps of preparatory marksmanship used to instruct and train the grenadier:

Sighting, aiming, and sight manipulation.
Positions and rapid fire.
Sensing and adjustment of fire.
Zeroing procedures.
Range determination.

M406
TYPE OF FILLING - - - - - - - - - - HE MAXIMUM RANGE - - - - - - - - - - - - 400 METERS EFFECTIVE CASUALTY RADIUS - 5 METERS ARMING DISTANCE - - - - - - - - - - 14 TO 28 METERS
M381
ARMING DISTANCE - - - - - - - - - - 2 TO 3 METERS

M407A1
TYPE OF FILLING - - - - - - - - - YELLOW SMOKE MAXIMUM RANGE - - - - - - - - - - 400 METERS ARMING DISTANCE - - - - - - - - - 14 TO 28 METERS
M382
ARMING DISTANCE - - - - - - - - - - 2 TO 3 METERS

Figure 142. 40-mm high explosive cartridge.



TYPE OF FILLING	20 PELLETS
MAXIMUM RANGE	50 METERS
MAXIMUM EFFECTIVE RANGE	35 METERS

Figure 143. Cutaway view of a 40-mm cartridge.

APPENDIX A

UNIFORM CARE AND PRESERVATION

NECESSITY FOR PROPER CARE

Good uniforms and the accessories which are worn with them deserve such treatment as will assure maximum durability and appearance. The care to be given uniforms and equipment is considerable, but it need not be burdensome. Rumpled and soiled uniforms, dirty or dull leather, frayed service ribbons, or tarnished brass, present an unsightly appearance regardless of the original quality. It is obvious that an old uniform of good quality that is well-fitting, clean, neat, and unfaded, will look far better than a new and costly one that is slightly soiled or out of press. Regulations, therefore, require that the uniform be neat, clean, and well pressed.

PRESERVATION

Coats should be kept on hangers that have width at the shoulders to hold the garment in shape; wire hangers do not satisfy this requirement. Trousers should be placed on hangers which permit them to hang at full length. A clothes brush with stiff bristles should be used each time a garment is worn; it removes loose dust and freshens the nap.

Wool uniforms should be drycleaned, not washed, to avoid serious shrinkage. Only a competent cleaner should be entrusted to remove spots and stains. The nature of any unusual stains should be reported to the cleaner so that he will know the correct solvent to use.

Underarm perspiration injures the color and wearing quality of fabrics. Protection should be provided by attaching an impervious lining at the armpit.

CARE OF BRASS

Articles of brass such as the lapel and cap insignia must be brightly polished. Perspiration tarnishes brass on contact, and this characteristic requires that care be taken in affixing insignia

and in buckling the belt. Some prefer to wipe polished articles and brass with a cleaning fluid to remove residual polish; this delays corrosion and avoids dulling the shine. However, polishing cloths give excellent results and are easy to use. Brass buttons should not be shined with brass polish; a good scrubbing with ammonia and water is sufficient. Do not overlook the brass buckle on the trouser belt.

CARE OF LEATHER

Leather articles which constitute a part of the uniform are costly, and both their durability and appearance require proper care. The best appearance requires that all leather equipment match in color. The routine care of leather consists of keeping it clean, pliable, and well polished. Castile or other mild soap is the best cleaning agent and neat's-foot oil meets the requirements for oiling. A high-grade saddle soap is suitable for both purposes.

Leather should be cleaned thoroughly before polish is applied. The application of coat upon coat of polish is undesirable because a deposit of dust and grime of increasing thickness is built up. The polish should be free of such ingredients as acid or turpentine, both of which are highly injurious to leather. Many prefer a neutral leather dressing because it softens and protects the leather, gives good lustre in polishing, and does not darken the color with repeated use. Leather that becomes excessively dry and lifeless may be restored with suitable leather dressings or by a light application of neat's-foot oil on the flesh (inner or "rough") side.

The application of heat to wet or damp leather is extremely destructive. Leather that is damp or wet must be allowed to air-dry slowly at room temperature and then be given an oil dressing. Shoes and boots should be placed on shoetrees as soon as removed and before body heat and moisture are dissipated; this practice, if followed regularly, restores the original shape and prevents the forming of deep, permanent wrinkles.

By Order of the Secretary of the Army:

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Official:

VERNE L. BOWERS,
Major General, United States Army,
The Adjutant General.

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NGUS: None.

USAR: None.

For explanation of abbreviations used, see AR 310-50.

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