American
Military
Heritage

General William W. Hartzog

Military History Office
United States Army Training and Doctrine Command
Fort Monroe, Virginia
and
Center of Military History
United States Army
Washington, D.C., 2006
Foreword
To the 2001 Edition

The Center of Military History is pleased to join the Training and Doctrine Command in reprinting General William W. Hartzog’s American Military Heritage. General Hartzog originally wrote this book almost thirty years ago, while he was an instructor at West Point. In 1998, TRADOC republished it to provide a reference that could help drill instructors and other Army leaders instill an appreciation for the lore and traditions that make up the Army’s rich heritage. American Military Heritage has been so well received that TRADOC has agreed to reprint it in cooperation with the Center to make it available to the Army as a whole. The reappearance of this volume is particularly appropriate this year, as the Army celebrates its 225th birthday.

American Military Heritage is not official history, per se. It differs from the lengthy, detailed, heavily documented official volumes that the Center publishes on generally more specific subjects. American Military Heritage does present, in a readable and attractive format, stories, individual experiences, and traditions from which the Army has drawn inspiration over its long and proud history. In these pages, you can readily learn about such formative Army experiences as Bunker Hill, Gettysburg, and D-Day; about such prominent Army heroes as George Washington, Elijah Churchill, Ulysses S. Grant, William H. Carney, Dwight D. Eisenhower, and Audie Murphy; and about numerous details concerning Army daily life, uniforms, and equipment.

We treasure our Army’s heritage as we prepare to meet the challenges of the twenty-first century. We trust that you will find this book helpful in your work and that it will be a source of pride and inspiration as we march into the future of our Army and our nation.

Washington, D.C. 11 September 2000

JOHN S. BROWN
Brigadier General, USA
Chief of Military History

First Printed 1998—CMH Pub 69–6–1
Foreword

The United States has a proud heritage. Our history and the events that have molded our democratic way of life are important touchstones for all of us as citizens. Similarly, our military history contains the proud heritage of all of the men and women who have ever, or will ever, wear a uniform.

I wrote much of this many years ago while I was an instructor at West Point. I wrote it because, while many books presented American military history, I found no one-volume source for information on those key bits of history that have become our military heritage. The same was true as we looked for ways to reemphasize the Army’s heritage now, at the close of the century. I remembered this collection of materials, and thought it might have some value. I asked that it be revised, expanded and published for distribution to drill sergeants and new second lieutenants, those who will be in the forefront of learning and responsible for passing on the Army’s proud past.

Our history and our heritage form a big part of who we are as individuals and as an organization. Not every story in this book is a positive one. But the Army learns from its mistakes as well as from its successes, and all of those events become part of our heritage.

Many people have participated in this revision, and they are named in a separate acknowledgment page. My thanks to BG Jack Mountcastle and the many talented people at the Center of Military History. It is a much better work for their efforts. Profound thanks to Mr. Steve Gammons, who painstakingly formatted the manuscript into the computer; Dr. Bob Wright, LTC (Ret) Adrian Traas, Mr. Ted Ballard, Dr. Graham Cosmas, Dr. Ed Raines, Dr. Clay Laurie, Mr. Steve Gammons, Mr. Charles Anderson, Dr. Bill Hammond, Dr. Dave Hogan, LTC Jim Carafano, and Mr. Ned Bedessem for their revisions and additions; Mr. Walt Bradford, Mr. Jim Speraw, Mr. John Elsberg, Mr. Bill Epley, Ms. Marylou Gjernes, Dr. Terry Gough, Mr. Steve Hardyman, SGT Brent Holmes, COL Clyde Jonas, Mr. Jim Knight, SGT Jeffrey Manuszak, and Mr. Joe Webb for their advice and suggestions throughout the course of the work. Thanks also to Ms Diane Cline of the Institute of Heraldry for her recommendations on awards.

I initially handed this work to Dr. Jim Stensvaag, the TRADOC Chief Historian, who took over the overall supervision of the project. He has succeeded in adeptly managing the many aspects of this work. Out of the TRADOC Military History Office, Dr. Charlie Cureton insured that representations of uniforms were the best and most accurate. Dr. Jack Atwater at the Ordnance Museum at Aberdeen Proving Ground did the same for ordnance. Dr. Sue Canedy, Commander’s Planning Group, edited and tuned the text with an ear for the primary author’s voice. Mr. Ray Reuter, Army Training Support Center, took all of the parts and put them together into an outstanding design. If this source book is useful, it is because of the teamwork demonstrated by each of these members of the Total Army, along with many others unnamed.

June 1998

WILLIAM W. HARTZOG
# Contents

**Foreword** .............................................................. ii

**Chapter 1. The Beginnings** ........................................ 1

- Section I European Heritage and Early Colonization .......... 1
- Section II Weapons and Tactics Notes .......................... 4
- Section III Uniform Notes ......................................... 7
- Section IV The Colonial Militia .................................. 8
- Section V Braddock’s Defeat, 9 July 1755 ....................... 10
- Section VI Notes on Rogers’ Rangers ............................ 13

**Chapter 2. The American Revolution** ............................ 15

- Section I Why the Revolution? .................................... 15
- Section II The Will to Fight: Bunker Hill ....................... 16
- Section III Building an Army ..................................... 18
- Section IV Army Life, 1783–1800 ............................... 19
- Section V Notes on Army Uniforms of the Revolutionary Era ................................................................. 22
- Section VI Notes On Weapons And Tactics (Revolutionary Era) .............................................................. 24
- Section VII Notes on Baron Friedrich Wilhelm Von Steuben ................................................................. 26
- Section VIII Notes on George Washington (1732–1799) .... 27
- Section IX Elijah Churchill and William Brown ............... 30
- Section X Notes on the Founding of West Point .............. 32

**Chapter 3. The War of 1812** ........................................ 33

- Section I The Complexion of the War ............................ 33
- Section II Notes on Zachary Taylor (1784–1850) .............. 34
- Section III Notes on Winfield Scott (1786–1866) ............. 35
- Section IV Notes on Uniforms 1810–1840 ...................... 37
- Section V Chippewa and Lundy’s Lane ......................... 41
- Section VI The Battle of New Orleans ........................... 42

**Chapter 4. Westward Expansion** ................................. 43

- Section I The “Thirty Year Peace” and National Expansion ................................................................. 43
- Section II Westward Exploration .................................. 44
- Section III The Seminole Wars .................................... 46
- Section IV Notes on Sylvanus Thayer and the United States Military Academy ............................................. 48
- Section V Notes on John C. Calhoun and the War Department ................................................................. 50
Section I International Tension and American National Military Strategy .................. 185
Section II The Delicate Balance .................................................. 188
Section III The Role of the Reserve ............................................. 191
Section IV Notes on Weapons and Equipment Developments 195
Section V Notes on Uniforms of the Cold War Era ............... 197
Section VI Notes on General Lyman L. Lemnitzer ............. 199
Section VII Notes on Sergeant Elvis Aron Presley .......... 201

Chapter 12. The Vietnam War .................................................. 202
Section I A New Kind of War .......................................................... 202
Section II Ambush Patrol .............................................................. 204
Section III Heroes of the Vietnam War ........................................... 206
Section IV Weapons and Equipment Development ..................... 209
Section V Notes on Awards of the Vietnam War ......................... 213
Section VI Notes on Uniforms of the Vietnam War Era .......... 213

Chapter 13. The Post Vietnam Era .............................................. 214
Section I Reforming the Army ....................................................... 214
Section II Reforms .................................................................. 215
Section III General Creighton W. Abrams .............................. 217
Section IV General William E. Depuy ........................................... 219
Section V Notes on Weapons Systems ........................................... 220
Section VI Notes on Uniforms ....................................................... 223

Chapter 14. The Transformed Army: Contingency and Combat After Vietnam .................................................. 225
Section I Intervention in Grenada: Operation Urgent Fury .............................. 225
Section II Operation Just Cause ..................................................... 227
Section III The Gulf War ............................................................... 229
Section IV Mission to Somalia–Living the Creed .............................. 241
Section V Uphold Democracy–The Joint Team in Action .................... 243
Section VI Operations in Bosnia–Trained and Ready ....................... 244
Section VII Notes on Uniforms ....................................................... 246
Section VIII Notes on Awards ....................................................... 247

Chapter 15. America’s Army after the Cold War 1991 and Into the Future .......................................................... 249
Section I A Decade of Change ....................................................... 249
Section II Reductions in the Post Cold War Army ....................... 249
Section III Doctrinal and Cultural Change in the Post Cold War Army .................. 250
Section IV Women in America’s Army ........................................... 251
Section V Disaster on the Green Ramp–Taking Care of America’s Army ........................................ 252
Section VI Army Values–A Matter of Dignity and Respect ......................................................... 252
Section VII One Team–One Fight–One Future
  The Total Army and Ice Storm 98 ........................................ 253
Section XI Notes on Equipment ........................................ 255
Section XII An Army on the Move – Shape,
  Respond, and Prepare ........................................ 256
Postscript: Looking Into the Future From 1998 ........................................ 257

Appendix A. The Medal Of Honor ........................................ 259

Appendix B. United States Army Commanding Generals, Chiefs of Staff, Secretaries of War and Secretaries of the Army ........................................ 263

Appendix C. Military Music ........................................ 267

Appendix D. The American Flag ........................................ 271

Appendix E. Principal Wars in which the United States Participated/U.S. Military Personnel Serving and Casualties ........................................ 273

Appendix F. Worldwide U.S. Active Duty Military Deaths
  Selected Military Operations Since 1980 ........................................ 275

Acknowledgments ........................................ 276
The United States Army, like Alex Haley, has roots. Only when soldiers realize that the Army and its institutions began as the British empire expanded into the New World during the seventeenth and eighteenth centuries, will they begin to understand their heritage as fighting men and find the guide to behavior as defenders of the Constitution. Our military force started to take form first when colonists fought for the mother country, and grew when the colonists’ desire for control over their own lives required them to fight for their independence from the mother country. The military system they created combined several European military traditions and modified them to fit a unique American environment, much the way our laws, morals, and other institutions are one-of-a-kind and still the children of older cultures. In the two centuries preceding the American Revolution, Great Britain, France and Spain each made some efforts toward colonization along the eastern sector of the North American continent. Britain had colonized the eastern seaboard from Maine to Georgia; France held Canada and Louisiana, and was attempting to expand into the Great Lakes area and along the Mississippi Valley; Spain held Florida and the Southwest.
During the period from 1689 to 1763, the powers of Europe engaged in four wars. Each of these wars had a counterpart conflict in the New World colonies, where both sides sought the allegiance of the Indian tribes. The last of these wars, known in the colonies as the French and Indian War, was, at its root, a struggle for the control of the North American continent. Although many small-scale, unrelated military efforts had been undertaken by the British colonists in defense of their holdings, they responded to the French invasion of the Ohio Valley in the early 1750s by generating major fighting forces. These forces are significant to any student of heritage, for their formation was a successful attempt to merge contemporary European military techniques with the inherent restrictions of the thickly forested “battlefields” of the New World. This merger was not a smooth one nor was it accomplished without setbacks on the part of the British. (See Section V, Chapter 1.) The colonial warriors of the French and Indian War are often overlooked as a fighting force, for they served years before the colonies sought their independence. One can find no stronger link, however, between the ancient European man-at-arms and the American soldier than the men who stood with Braddock or patrolled with Robert Rogers. Their efforts are outlined in the following chronology:

**1754**

Jan 10  
Detachment sent by the Ohio Company to build fort at junction of Monongahela and Allegheny Rivers.

April 17  
French drive out Ensign Edward Ward’s detachment from the forks of the Ohio and rename the post Fort Duquesne.

July 3  
MAJ George Washington surrenders, under great odds, to French at Fort Necessity.

**1755**

March  
Braddock plans four-fold attack on French.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>Braddock cuts road through forest.</td>
</tr>
<tr>
<td>July 9</td>
<td>Braddock’s disaster at Fort Duquesne.</td>
</tr>
<tr>
<td>1756</td>
<td>May 17 Great Britain declares war on France.</td>
</tr>
<tr>
<td></td>
<td>Aug 14 Ft. Oswego destroyed by French.</td>
</tr>
<tr>
<td>1757</td>
<td>Aug 10 Fort William Henry captured by French.</td>
</tr>
<tr>
<td>1758</td>
<td>July 8 Battle of Ticonderoga — British defeated by French under Lord Montcalm.</td>
</tr>
<tr>
<td></td>
<td>July 27 Louisburg falls to British.</td>
</tr>
<tr>
<td></td>
<td>Nov 25 Fort Duquesne retaken by British and renamed Fort Pitt.</td>
</tr>
<tr>
<td>1759</td>
<td>July 25 Fort Niagara captured by British.</td>
</tr>
<tr>
<td></td>
<td>Sep 13 Battle on Plains of Abraham overlooking Quebec.</td>
</tr>
<tr>
<td>1763</td>
<td>Feb 10 Treaty of Paris formally ends Seven Years War.</td>
</tr>
</tbody>
</table>

*The New Jersey Regiment (Jersey Blues), 1755–1764*
American Military Heritage

Section II
Weapons and Tactics Notes

1500 TO 1600
Technological developments of the three-century period extending roughly from 1500 to 1800 focused mainly on the refinement of basic gunpowder weapons. Tactics changed as armies learned better ways to employ the new weapons.

GROUP WEAPONS
Gun Carriages: Marked beginnings of field artillery, since cannon mounted on carriages could be moved easier.

Iron Shot: Displaced stone shot; construction of cannon strengthened; made mostly of cast iron and brass.

Ship of War: Became primary fighting vessel, displacing galley; remained supreme for about three hundred years; principal types were the ship of the line and frigate (later roughly equivalent to the modern battleship and cruiser).

INDIVIDUAL WEAPONS
Musket: A modification of the arquebus, but originally larger and heavier; fired from a rest. (The term musket is generally — and somewhat incorrectly — applied to all infantry shoulder firearms before the rifle, )

Wheellock: Improved firing device for arquebus and musket, eliminating need for lighted match; ignition results from sparks caused by friction.

Defensive body armor declined as small arms and cannon became more effective.
1600 TO 1700

GROUP WEAPONS

Mobile Field Artillery: Improvements introduced by Gustavus Adolphus; weapons lighter, simpler, standardized in size and type; used aggressively in coordination with infantry and cavalry.

Solid Shot: Used in all cannon; basis for establishing bore size. Example — a 4-lb cannon with a three-inch bore fired a 4-lb solid shot, 2.9 inches in diameter. Solid shot were used at long ranges against fortifications and troop formations; when fired at ships, they were occasionally heated to cause fires or ignite powder stores.

Hollow Shot: Precursor of shell; existed in sixteenth century, but comes into general use in seventeenth century. Other types of scatter-effect projectiles coming into common use: canister (also called case shot), in which metal balls were propelled from gun in can or case; in the case of grape shot, similar balls or pellets were propelled uncased, like modern shotgun pellets.

INDIVIDUAL WEAPONS

Light Musket: Improvement introduced by Gustavus Adolphus; no need for a musket rest; fired from shoulder like arquebus.

Grenades: Soldiers throwing these were called grenadiers. With musket improvements, grenades were little used for more than a century until high explosives made them really effective.

Flintlock: Introduced toward the end of the seventeenth century; increased reliability of the musket. Famous “Brown Bess” of the British Army from about 1700 to 1850 was a flintlock musket. Relatively accurate only up to 100 meters.
Carried by British soldiers for over 100 years (1715–1835). During that time, the barrel length and weight were greatly reduced. Efficient soldiers, firing without commands, could load and fire four rounds per minute for a brief period.

**LINEAR TACTICS AND SIEGE WARFARE**

The linear tactics developed on European battlefields in the seventeenth and eighteenth centuries made sense when you remember that they took advantage of the weapons and the soldiers’ mobility as it existed. Each battle was a highly structured event in which troops marched onto the battlefield in a column and then deployed into lines, three or more ranks deep. The troops stood shoulder to shoulder and fired massed volleys at their enemy. Soldiers received little or no training in marksmanship because the smoothbore flintlock musket was not an individual weapon like a modern rifle. It was a crew-served weapon system — the ‘weapon’ was actually an entire platoon firing in unison as a giant shotgun.

Battles took place only after extended maneuvering as each side tried to gain critical terrain and place the opposing force at a disadvantage. The commander put his artillery along the main battle line, his cavalry on the flanks or in the rear and a reserve force behind the cavalry. When the battle itself began, the formations would move to within 50 or 100 meters of each other and then fire volleys. The exchange would continue until one side or the other could carry the field with a bayonet charge. At this point, the victorious commander could pursue the beaten foe or regroup his attacking forces for other missions.
Not all eighteenth century warfare took place on open fields. A French engineer, Sabastian le Prestre, Marquis de Vauban, generated a set of formal concepts to govern both fortress construction and the attack and defense of such fortresses. Vauban developed a star-shaped fortress design, and his method of attacking such forts was known as “approach by parallel lines.”

Under Vauban’s system, sappers constructed the first parallel about 600 meters from the fortress walls. They then dug zig-zag approach trenches forward about 200 meters to points from which they constructed a second parallel. By the same process, they dug a third parallel. Infantry and siege artillery moved forward as each parallel was completed until, in the third, they were beneath the outer wall of the fortress. From this vantage point, the artillery could breach the main wall and the infantry could take the fortress by storm. At this juncture, the fortress commander usually surrendered.

**Section III
Uniform Notes**

The following order, now preserved in the Emmett Collection of the New York Public Library, describes in detail the arms and accouterments of the day. Note that the militiamen being called to service are expected to bear the total expense of their own armaments.

To Shrimpton Hutchinson Esq.

SIR

You are hereby ordered and directed, to compleat yourself with ARMS and Accouterments, by the 12th instant, upon failure thereof, you are liable to a FINE of THREE POUNDS; and for every Sixty Days after, a FINE OF SIX POUNDS, agreeable to law.

Articles of equipment,

A good Fire arm, with a Steel or Iron Ram-Rod, and a Spring to retain the same, a Worm, Priming wire and brush, and a Bayonet fitted to your gun, a Scabbard and belt therefor, and a cutting Sword, or a Tomahawk or hatchet, a Pouch containing a cartridge box, that will hold fifteen Rounds of Cartridges at least, a hundred buckshot, a jack knife and Tow for wadding, six Flints, one pound of powder, forty Leaden Balls fitted to your gun, a knapsack and Blanket, a canteen or Wooden Bottle sufficient to hold one Quart.
Until the early stages of the Revolution, the basic uniform of the militiamen was simply the civilian dress in which he conducted his everyday activities. The sketch on the previous page depicts an example of the type of hunting dress worn by the colonial militia during the mid-18th century.

Section IV
The Colonial Militia

Great Britain, the source of most of the original settlers of the thirteen colonies, naturally exerted the first influence on American institutions, including the military. One of the most fundamental notions incorporated by the colonists from English traditions was the belief that an individual who benefited from membership in a society had an obligation to use his talents and resources for the good of the society at large. In the military realm, this meant that every free, able-bodied male was required to own weapons and, when necessary, offer his services under local leaders to defend the community. Thus, everyone participated in the defense of a society in proportion to the benefits received from it.

Geography and political events in Britain during the seventeenth century shaped British military institutions along lines quite different from those in other European countries. Because Britain was an island, the navy, rather than the army, served as the first line of defense. Britain thus did not need as large an army to defend the homeland; it could rely more on loosely-controlled militia and raise temporary armies of paid soldiers when it became necessary to send expeditionary forces to foreign shores. This arrangement pleased most Britons, since it was inexpensive and avoided major disruptions of everyday life. By the 1570s, the emerging militia effectively consisted of two categories. Most individuals carried out their lives in the “common militia” knowing that they had to serve only in a true crisis, when they would join a general mobilization. A far smaller
group of volunteers formed “trained bands,” which held periodic musters or meetings to practice military skills.

The struggle for power between the monarchy and the elected representatives in Parliament during the seventeenth century also had a major effect on British military institutions. During the English Civil War of the 1640s, Oliver Cromwell’s armed dictatorship, and the Restoration, relatively large armies caused extensive economic disruption and occasionally terrorized civilians. When the “Glorious Revolution” of 1688 finally settled the issue in favor of a monarchy that had to share power with Parliament, the latter took steps to ensure that the king could not raise and maintain his own private army by requiring annual Parliamentary authorization for such a force. It also provided for a right to maintain arms by citizens outside the “standing army.”

When Englishmen settled in the New World, they brought the militia institution with them. None of the early colonies could afford the luxury of exempting most of the male population from training requirements. Instead, they expanded the trained band concept to include all settlers. Several regional patterns emerged fairly quickly. In the South, where the plantation economy caused dispersion of settlement, the settlers from a broad area formed a company, with each county establishing a regiment to control and administer the companies. In New England, religion and a different economy resulted in a town-based residential system. Each town formed one or more militia companies as soon as possible after organizing its local government; in areas of more dense population, the colonists formed more than one regiment in each county. Pennsylvania was the exception to the general pattern. Settled by pacifists, it did not establish a mandatory militia until 1777.

By the eighteenth century, the colonial militia showed several differences from the trained bands of Britain. The biggest difference lay in the fact that few free
adult Americans were exempted by law from actual training. When war erupted between settlers and local Indians in Virginia and New England, militiamen actually had to fight in defense of their homes. When the colonists launched offensive operations against the tribes in retaliation, they used temporary detachments to avoid shutting down the economy, which would have happened if a complete mobilization of the militia took place. As the colony matured, the immediate danger subsided, but the standing militia remained active, giving basic training to the colony’s young men, providing a source of volunteers and draftees for the temporary detachments and expeditionary forces, and serving as a law-enforcement agency. Except for slaves, just about every adult male in a colony served in the militia at some point in his life.

Section V
Braddock’s Defeat, 9 July 1755

The efforts of a combined British and Colonial force to defeat a French, French-Canadian and Indian detachment at Fort Duquesne draw a painfully clear picture of the problems and frustrations of early warfare in the wilderness. In 1754, the French occupied Fort Duquesne at the junction of the Allegheny and Monongahela Rivers and laid claim to the surrounding areas. Governor Robert Dinwiddie of Virginia decided that such an acquisition could not be tolerated, and he sent a young colonial, Major George Washington, with a unit of Virginia militia to force the withdrawal of the French from the fort. The French drove back Washington and forced him to surrender.

Early the next year, Major General Edward Braddock, a British General of some forty-five years of experience on European battlefields, arrived in the New World with two regiments of British regulars and the mission to finish Washington’s task. Braddock augmented his ranks with some Virginia and North Carolina provincials to increase his force to 2,200 men. In June 1755, set out on the long trek through the wilderness to Fort Duquesne. Braddock moved through the wilderness in what was then a typical formation. A four hundred-man advance guard led the column, and axemen constructed a rough corduroy road en route to support the heavy baggage train that followed the formation. Although the soldiers had repeatedly lightened their packs, they still kept their knapsacks and haversacks. When the column had completed half its march, General Braddock decided that their progress had been so slow that he would divide the column and forge ahead with about 1,300 selected men, a few cannon, and some pack horses.
By the first week in July, Braddock and his advance force had reached the Monongahela River at the point closest to Fort Duquesne. The advance guard under Lieutenant Colonel Thomas Gage, cautiously crossed the river and began the last seven-mile movement to the fort. Suddenly, about three fourths of a mile into the forest, a hail of musket fire cut into the British force. The size of the enemy force remains uncertain, but it probably consisted of less than 100 French colonial troops, French Canadian militia, and Indians. The French commander had intended to ambush the British column at the crossing of the Monongahela, but, by the time the Indians joined him, he apparently sought to attack the British whenever he encountered them. He and his men deployed onto a hill and into a ravine on either side of the road and opened fire just as the British vanguard passed between them. Gage, perhaps disastrously, fell back on Braddock’s advancing main body of troops and in doing so, caused considerable confusion. The French and Indian force fought well from the excellent cover and concealment of the forest and was able to pour deadly, effective fire into the flanks of Braddock’s confused and milling force. The British regulars repeatedly regrouped into lines to deliver the customary volleys against the enemy; however, as one regular wrote, “scarce an officer or soldier can say they ever saw at one time six of the enemy and the greatest part never saw a single man.” Two thirds of the British officers quickly fell dead or wounded. Braddock, himself critically wounded, finally ordered a retreat, but without the organization and regimented leadership of the linear battlefield, the retreat became a rout and the panic-stricken soldiers did not
stop even when they had reached the wagon trains many miles to the rear. The rout fell just short of total disaster only because the French and Indians did not pursue the fleeing British.

Braddock’s expedition had been a disaster, but the colonial forces learned several lessons. Contrary to popular belief, they did not determine that regular forces or linear warfare were useless in America or that colonial militiamen were superior soldiers to British regulars. They decided, rather, that they had to make the tactical organization and techniques of the European battlefield more flexible to cope with the rugged terrain of the Americas. The result was more open formations and a command structure that gave more authority to lower ranking officers, contributing to European innovations of the Napoleonic Wars such as the tactical mixing of the column and line as a flexible system letting commanders rapidly adjust to changing terrain and battle conditions.

The Braddock disaster presented Americans with important lessons about the need to adapt to a new battle environment. Similar situations have continued to face American armed forces in each half century of their existence. The puny artillery that first appeared on the World War I battlefield was quickly replaced by huge howitzers. The disjointed tactics of the 1941 European battlefield were quite different from the tank/infantry machine that ground into the enemy’s heartland only three years later. Indeed, even the heavily weighted soldier and the definable front and rear of the “conventional” battlefield have evolved into the lightning quick, highly flexible air assault units of the modern Army. As General Braddock was carried dying from the battlefield at Fort Duquesne, he is alleged to have murmured, “Another time we shall know better how to deal with them.” Perhaps Americans indeed learned the lesson for which he paid so dearly.
Section VI
Notes on Rogers’ Rangers

ROBERT ROGERS—THE MAN
“Born on Nov 7, 1731, in the village of Methuen, Massachusetts....” “... A tall man of great strength... his features bold and his glance piercing...an impression not only of a vigorous physique but of a vigorous mentality... his voice a rumble of bass... for all his size, he could slip through the wood like a phantom.... His outstanding characteristic however, was his immense courage, of the type that is a blend of fortitude and endurance... a man restless in mind and body with an immense fund of vital physical and mental energy that made him almost tireless when compared with others....”

ROGERS—THE RANGER LEADER
“In a day when officers of the Army kept themselves apart form other ranks, he was on terms of familiarity with his Rangers, but at the same time was able to maintain discipline with remarkable ease. Although he treated his men as equals, his superior knowledge, his ability, and especially his personality gave him the advantages of such treatment without the drawbacks; for all recognized his peculiar qualities of leadership.”

THE RANGER (LIGHT INFANTRY, CIRCA 1755)
“A heterogeneous crew...not mounted, even though their duties were often those usually performed by mounted troops...they were the eyes and ears of the Army... usually a hard-bitten crew...served in an active capacity all the year round...at home on snowshoes or on skates... forays by canoe and whale boat in summer by day and by night.”

RANGER WEAPONS AND UNIFORMS
“A woodland uniform varying in the different companies... smoothbores... tomahawks and scalping knife, a bullock’s horn for powder slung from the left shoulder, and a leather or sealskin bag about the waist for shot... officers carried a small compass fixed to the bottom of the powder horn.”

STANDING ORDERS ROGERS’ RANGERS
Although the language differs, the principles advocated by Rogers are applicable today.

1. Don’t forget nothing.

2. Have your musket clean as a whistle, hatchet scoured, sixty rounds powder and ball, and be ready to march at a minute’s warning.
3. When you’re on the march, act the way you would if you was sneaking up on a deer. See the enemy first.

4. Tell the truth about what you see and what you do. There is an army depending on us for correct information. You can lie all you please when you tell other folks about the Rangers, but don’t never lie to a Ranger or officer.

5. Don’t never take a chance you don’t have to.

6. When we’re on the march, we march single file, far enough apart so one shot can’t go through two men.

7. If we strike swamps, or soft ground, we spread out abreast, so it’s hard to track us.

8. When we march, we keep moving till dark, so as to give the enemy the least possible chance at us.

9. When we camp, half the party stays awake while the other half sleeps.

10. If we take prisoners, we keep ‘em separate till we have had time to examine them, so they can’t cook up a story between ‘em.

11. Don’t ever march home the same way. Take a different route so you won’t be ambushed.

12. No matter whether we travel in big parties or little ones, each party has to keep a scout 20 yards ahead, twenty yards on each flank and twenty yards in the rear, so the main body can’t be surprised and wiped out.

13. Every night you’ll be told where to meet if surrounded by a superior force.

14. Don’t sit down to eat without posting sentries.

15. Don’t sleep beyond dawn. Dawn’s when the French and Indians attack.

16. Don’t cross a river by a regular ford.

17. If somebody’s trailing you, make a circle, come back onto your own tracks, and ambush the folks that aim to ambush you.

18. Don’t stand up when the enemy’s coming against you. Kneel down, lie down, hide behind a tree.

19. Let the enemy come till he’s almost close enough to touch. Then let him have it and jump out and finish him up with your hatchet.

Major Robert Rogers 1759.

Source:
The American Revolution

Section I
Why the Revolution?

The causes of the American Revolution were complicated and rooted deeply in European life and governmental practices of the era. To simplify a complex story, the colonists had developed to the point that — economically, socially, and governmentally — British control was no longer bearable. This chronology shows the events that followed from this bitter discontent.

Dec 1773 Boston Tea Party
Sep 1774 First Continental Congress
19 Apr 1775 Skirmish at Lexington begins Revolutionary War
May 1775 Second Continental Congress
14 Jun 1775 Birthday of the United States Army
15 Jun 1775 George Washington appointed Commander-in-Chief
17 Mar 1776 Evacuation of Boston
4 July 1776 Declaration of Independence
26 Dec 1776 Battle of Trenton
17 Oct 1777 Burgoyne capitulates at Saratoga
1778 Von Steuben at Valley Forge
19 Oct 1781 Cornwallis surrenders at Yorktown
7 Aug 1782 Washington introduces the Badge for Military Merit
2 May 1783 Washington’s Sentiments on a Peace Establishment
25 Nov 1783 British evacuate New York
1790–91 Harmar and St. Clair expeditions against the Indians
8 May 1792 Militia Act
The Legion, commanded and trained by Major General Anthony Wayne
20 Aug 1794 Battle of Fallen Timbers
1802 U.S. Military Academy founded at West Point
7 Nov 1811 Battle of Tippecanoe
Section II
The Will to Fight: Bunker Hill

Even after the New England colonies replaced their militia with volunteers following the clashes at Lexington and Concord, the American forces surrounding Boston in the spring of 1775 were a disorganized, loosely knit bunch of units and individuals interested in protecting their personal rights and property. In short, the American soldiers had not yet become an army. The Battle of Bunker Hill on June 17, 1775 began the transformation of these individuals into an army. At Bunker Hill, the colonists realized that they could indeed stand up to the mighty volleys and gleaming bayonets of the British regulars. In that realization was born the will—indeed, the heritage—of an army.

As May turned to June, a council of general officers from the four separate New England armies were looking for ways to force Major General Sir Thomas Gage’s British troops from Boston. On the night of June 16, 1775, Israel Putnam, Thomas Gridley and William Prescott led about 1,000 troops onto the Charlestown peninsula across Bunker Hill, and onto Breed’s Hill, where they began construction of an earthen fortress overlooking Boston. A small party moved into the deserted village of Charlestown while the main force, in about four hours, built a shoulder-high redoubt capable of resisting musket and cannon fire. At dawn, the British warship “Lively” fired a broadside at the fort. To their amazement, sailors watched the cannon ball bounce from the earthworks. In Boston, General Gage handed loyalist Abijah Willard a spyglass and asked him if he could identify the lone figure standing atop the Breed’s Hill earthworks. Willard looked, turned to Gage and said that it was William Prescott, his own brother-in-law. “Will he fight?” Gage demanded. “I cannot answer for his men,” Willard replied, “but Prescott will fight you to the gates of hell.”
After observing as much activity as possible, Major General William Howe, commanding the 2,200-man British assault force, loaded his regulars into flat-bottom barges and, at about 1:30 p.m. began a movement to a landing site near Morton’s Point. These troops, who landed unopposed, were the pick of the British Army. They were dressed in full scarlet coats and even the Light Infantry of the line carried heavy packs as well as three days’ rations and ammunition. Howe was so confident of success that, after his landing, he had his men pile arms and eat their midday meal.

The noonday meal finished, Howe moved to the attack. He planned to hit the flanks of the breastworks. Naval gunfire from Admiral Samuel Graves’ warships used red-hot cannon balls to set fire to the houses in Charlestown so that they could not be used by snipers. Howe then began the assault with his right, or eastern, flank, moving

Grenadier Company, 38th Regiment of Foot, 1775–1776.
slowly and majestically in the three near-perfect lines of the European battlefield. The defenders had occupied positions behind a low stone wall and patiently waited for the British to come well within musket range. When the British were within forty yards of the wall, the Americans fired together and stopped the attack cold. A second time the British charged, this time further toward the American redoubt in the center, and for a second time, overwhelming fire threw them back with terrible losses. In a last-ditch effort, employing reinforcements, Howe swept up the hill toward the American right, or western, flank. The American defenders there were out of ammunition and powder and their line grudgingly gave way. As the terrible line of British bayonets approached, the defenders fell back, first to Bunker Hill and then off the peninsula entirely.

The British had won a victory but the Americans realized that they had stood up to some of the King’s finest troops and had inflicted more than twice as many casualties as they had suffered. This fight provided the morale boost needed to give the amateur soldiers of the colonies the will to fight on for their freedom.

Section III
Building an Army

After Lexington, Concord and Bunker Hill, the Crown, in effect, gave the colonial revolutionaries time to build an army. The scope of the problem facing the members of the Second Continental Congress was indeed staggering. John Adams saw it most clearly when he said, “When fifty or sixty men have a constitution to form for a great empire, at the same time that they have a country of 1,500 miles extent to fortify, millions to arm and train, a naval power to begin, an extensive commerce to regulate, numerous tribes of Indians to negotiate with, a standing army of twenty thousand men to raise, pay, victual, and officer, I really shall pity those fifty or sixty men.” The already complex challenge of building an army was rendered nearly impossible by geographical and political differences between members of the Continental Congress. The creation of the Continental Army was easily one of the most significant achievements of all the accomplishments of the statesmen of the era.

In spite of all of the problems, on June 14, 1775, Congress voted to adopt the four New England armies (and a fifth force which New York was in the process of organizing) as the Continental Army, the forerunner of today’s United States Army. Congress then quickly voted to raise ten companies of riflemen to make the Continentals representative of the entire nation, and it chose George Washington, a Virginian, to be Commander-in-Chief. To assist Washington, Congress appointed twelve additional general officers and adopted a staff structure closely resembling that of the British Army.
Washington did not have a perfect initial impression of his men. He found them to be “...a mixed multitude of people...under very little discipline, order or government.” Seeing clearly the need for discipline among his soldiers, he quickly set about formulating regulations and building a staff to enforce them.

After half a year, Washington began to see that the numbers of troops “on hand” would fall far short of enlistment goals. His only available solution was to use short-term militia to fill his needs and, while building up his army’s strength, deal with the organization and logistical problems of his forces-in-being. Unfortunately, the entire Continental Army had enlisted in 1775 for a duration of one year, a policy which would prove to be a serious error. Neither Washington nor any of his planners, however, anticipated anything other than a short campaign.

Certainly, the rabble that Washington found in the camps around Boston in the summer of 1775 did not resemble the Continental Army of 1778 or 1779 but it was a beginning, for both the Continental Army and the United States Army.

Section IV
Army Life, 1783–1800

After the close of the Revolution, Congress reduced the size of the Army. In fact, for a brief period the entire Army consisted of just one artillery battery. In 1784, Congress, realizing the Indian threat to the nation’s borders, authorized a peacetime regular army of 700 men—a regiment with eight companies of Infantry and two of Artillery. The small force soon split among the tiny forts along the frontier country of the Ohio Valley. Its mission was keeping
the peace by creating a no-man’s land between white adventurers and Indians. By 1789, Congress increased this force to 846 strong, although, as Secretary Henry Knox pointed out, the Army still needed 168 men “to complete the establishment” (reach full strength).

This small Army, called the First American Regiment and commanded by Lieutenant Colonel Josiah Harmar, endured a dreary and isolated existence. The general pattern of fortress construction of the time called for a pentagonal log structure with multi-storied corner towers. The towers’ lower floors provided barracks space, while the upper floors housed cannon and, when necessary, fighting forces. Each garrison grew part of its own food in the fort’s garden. Social life on the frontier was virtually non-existent, and the soldier’s daily routine was either boring or dangerous, depending on the whims of the Indians. Many soldiers deserted, but those who stayed were a tough professional core of hearty veterans who could hold their own in any situation.

The Army’s pay tables (circa 1785) are quite interesting. Colonel Harmar drew $50 a month; his majors, $45; captains, $35; lieutenants, $26; and ensigns, $20. The lowly private of Harmar’s force drew a monthly salary of only $4. To understand what a soldier could do with his pay, however, remember that a thirsty troop could still buy an entire barrel of whiskey for a single dollar.

During the late 1780s, the Indians, feeling the press of civilization, became increasingly restless. In an attempt to settle the Indian problem, Arthur St. Clair, governor of the Northwest Territory, directed that a military expedition be made against the Indian towns along the Maumee River near what is now Cincinnati. Harmer’s troops were largely raw recruits with a small core of
veterans. Their commander moved his ill-trained, motley array into the wilderness only to meet successive defeats at the hands of the enemy. After a month’s efforts, Harmar returned to Fort Washington having lost a third of his pack train, nearly all of the militia (largely through desertion), and a quarter of his regulars.

Although the Harmar expedition represents one of the most unsuccessful endeavors in the Army’s history, worse was to come. Encouraged by their successes, the Indians stepped up their activities all along the frontier. To meet the threats, Governor St. Clair, old and in failing health, raised a largely volunteer force of about 2,200 men and placed himself in command. In a dismal repeat of Harmar’s misfortunes, St. Clair’s force, amid snow, ice and rain, met the Indians about fifty miles from what is now Fort Wayne, Indiana. The militia ran, leaving the regulars to be overrun by the triumphant Indians. Over 900 soldiers were left on the battlefield.

President Washington took steps to remedy the “lack of discipline and experience of the troops” to which he attributed the miserable failures of Harmar and St. Clair. He initiated, and Congress passed, laws to strengthen the militia and instituted a legionary system for the regular army. The essence of this system built combat teams called sub-legions, a unit roughly analogous to a modern battalion task force, into self-sufficient, combined arms forces of infantry, light infantry, dragoons and artillery. To train and lead this force, Washington chose Major General “Mad” Anthony Wayne, one of his ablest commanders in the Revolution.

Wayne was able, smart, and organized. He took a year to build his legion into a strong, well disciplined striking force with one objective — to fight Indians in the wilderness and win. In 1794, the confrontation came. At Fallen Timbers,
a mass of tangled thickets of uprooted trees and underbrush near present-day Toledo, Ohio, the legion met the enemy in force. A rumbling volley into the brush, a fierce bayonet charge, and hard-riding Kentucky mounted riflemen slashing from the flanks were more than the enemy force could stand. Wayne’s discipline, organization and training had given the legion the will to soldier. The young country again had an Army.

Section V
Notes on Army Uniforms of the Revolutionary Era

General
Throughout the American Revolution, the average fighting soldier might have appeared in any of a dozen different uniforms or combinations of uniforms. General Washington realized the need for uniforms and, throughout the war years, continuously attempted to establish a workable uniform policy. He achieved some success, but as in all wars, active campaigning caused wear and tear. The notes below give a summation of Washington’s efforts and examples of both militia uniforms and the clothing of members of the Continental Line.

Washington’s Uniform Policies
Pre-1775: Although most pre-1775 common soldiers wore civilian dress, several independent militia companies had devised their own colorful uniforms. Washington saw a need for badges of rank and directed a series of colored ribbons across the chest of general officers, colored cockades on the hats of field and company officers, and colored worsted epaulettes on the shoulders of noncommissioned officers.

1775–76: Washington attempted to outfit his infantry in linen frocks of the style worn by frontier riflemen. He wanted a uniform that would be easily accessible to every soldier and that would make the enemy feel he was facing massed marksmen. His plan was only moderately successful.

1777–79: Washington ordered uniforms from France and initiated local manufacture that would provide some similarity for troops from neighboring states grouped in the same unit. This effort met with only temporary success.

1780: The Commander-in-Chief published a directive fixing the color and style of general officers’ uniforms and artillery, cavalry and infantry, establishing gold bullion epaulettes for generals with various numbers of silver stars as the insignia of grade.
THE MILITIA

“Many colonial militia companies did adopt uniforms, and in some cases they were quite elaborate.... In Connecticut, the Governor’s Foot Guard wore scarlet coats, bear skin hats, and brown gaiters. Members of the City Troop of Philadelphia dressed in brown coats with white facings, white breeches, high boots, and round leather caps decorated with a buck’s tail and a silver cord.... The grenadier Company and light infantry of New York wore blue with red facings. The fusiliers wore the same colors with bear skin caps.”

THE CONTINENTAL LINE

Although some variance of color and style existed within each of the three segments of the Regular Continental Army (foot, horse and gunners), the examples here are composites that reflect contemporary trends.

Thompson’s Pennsylvania Rifle Battalion, 1770 “...deerskin hunting shirt, rifle or musket ...canvas knapsack, hatchet ...powder horn and bayonet.”

Baylor’s 3d Continental Dragoons, 1778 “...white coats faced with blue ...sabre and flintlock pistols.”

The Continental Artillery, 1780 “...dark blue or black coat faced with red... spontoon carried by officer....”

Washington and his staff, “...blue coats with buff facings and linings, yellow buttons, white or buff underclothes, epaulettes with appropriate stars... all commissioned officers a cockade, and side arms, either a sword or a genteel bayonet.”

¹ Falls, pp 301.

5th Pennsylvania Regiment, Continental Line, 1777–1783
Section VI
Notes on Weapons and Tactics
(Revolutionary Era)

The weapons (both group and individual) of the American Revolution were, for the most part, identical or similar to those used by European armies in the second half of the 18th century. Although few startling weapons developments occurred during this period, the improvements mentioned below occurred through a process of evolution.

**GROUP**

**Howitzer:** These pieces were much lighter and shorter than guns. Often, they only had bores of three calibers in length, and they usually had a narrowed chamber at the base of the bore for the powder charge. They were designed to fire shell, grapeshot, and other antipersonnel ammunition. Their short barrels and special carriages enabled them to fire either horizontally for short-range work or at a higher elevation to lob shells over a fortification.

The American Revolution took place at a time of major innovations in the construction and employment of artillery. In Prussia, Frederick the Great reduced the weight and improved the mobility of his guns and introduced horse artillery, capable of keeping up with cavalry. Gribeauval of France adopted Frederick’s improvements and added many more, making French artillery by far the finest in Europe during the period just prior to the French Revolution and Napoleonic Wars.

**Mortar:** Sought to lob exploding shells over a high arc; they were particularly useful for sieges, where they could throw projectiles inside an enemy fortification.

**INDIVIDUAL**

**Bayonet:** Replaced the pike, since infantrymen now could use the musket with attached bayonet for both missile and shock functions.

**Rifle:** Had been used by sportsmen for a century or more, particularly in the Alps, but, despite its much greater accuracy and range, it had not proved suitable as a military weapon, because of the lack of a bayonet and the time nec-
essayary to load. As the *Kentucky Rifle*, it became common on the frontiers of the thirteen colonies, and it later played a significant role in the Revolution. It was accurate for over 300 yards and more.

**Iron Ramrod:** Introduced by Frederick the Great, it enabled the infantryman to double the rate of fire of the flintlock musket to about four rounds per minute.

**GROUP**

**Shrapnel:** Balls and pellets of grape shot and canister enclosed in a shell which burst by means of a time fuse near the target; named after its British inventor, General Sir Henry Shrapnel, who introduced it about 1784. (Not to be confused with shell fragments, a common error of terminology of the 20th century.)

**INDIVIDUAL**

**Mass Production of Small Arms:** Introduced by Eli Whitney about 1790.

**Revolutionary Tactics**

**General Tactics**

“The means by which soldiers seek to achieve their ends in battle... the main factors which influence tactics are ground, weapons, armor, means of movement and of passing information and orders....”

**Early 18th Century**

“Armies consisted of horse, foot, dragoons and cannon... [the] normal cavalryman was armed with a sword and a pair of pistols — he relied on shock action, charging at speed or on missile action, firing from the saddle and wheeling off to reload... infantry regiments consisted of musketeers and pikemen in the ratio of 2 to 1... dragoons were mounted infantry who usually fought on foot.... Artillery, though useful in battle, was seldom able to play a decisive part. The equipment was heavy and the means of traction, usually horses pulling tandem, but sometimes oxen, was inefficient. There was as yet no battery organization. In addition to this immobility, the rate of fire was slow.”

**Mid 18th Century**

The Continental Army’s organization closely followed that of the British. A British regiment consisted of eight platoons, each line up three men deep. One platoon fired at a time, thus achieving a concentrated fire at certain points of the
enemy front. “... the introduction of Grenadier companies, one per battalion, gave the infantry a corps d’élite, particularly useful for storming parties in siege warfare... during this period the three arms — horse, foot and guns — were all equally useful in their ways, though the infantry were gaining ground steadily. The artillery were about to see a period of marked improvement and the cavalry were virtually standing still.”

Section VII
Notes on
Baron Friedrich Wilhelm Von Steuben

His Youth
The son of an engineer officer, Von Steuben was born in Magdeburg, Prussia on September 17, 1730. He joined the Prussian Army in 1746 as a lance corporal and rose to the rank of first lieutenant and trainer of troops in the crack Lestwitz Regiment by the time of the Seven Years’ War. He was twice wounded in that war; as a reward for his gallantry, he received an appointment as principal staff officer of one of the Prussian “free corps” organized to counter Austrian light infantry. Although among Frederick the Great’s special corps of aides, he left the Prussian Army soon after the war, probably because of military politics and his commoner status.

Involvement with the Colonial Revolution
Looking for employment, Steuben, in 1777, offered his services to Benjamin Franklin, the American representative in Paris. Congress, acting on the false information that he was a retired lieutenant general, accepted him as a volunteer
without rank, and he arrived at Valley Forge on February 23, 1778. Washington, impressed with the new arrival, assigned him to prepare a system of “discipline, maneuvers, evolutions, [and] regulations for guards.”

**AT VALLEY FORGE**
Mixing French regulations, the British manual of arms, and his own observations since joining the Continental Army, Steuben drew up a simple but efficient and flexible system of maneuver that used both column and line formations and stressed the importance of kind and considerate treatment of the troops to discipline. An impressed Washington appointed Steuben his temporary inspector general, in which office he supervised the training of the Continental Army in the new system. The Prussian soon became a popular figure among the troops, who gathered to watch the Baron train his “model company” using colorful but good-humored curses, delivered in a variety of languages. The members of the model company and selected officers then instructed other units of the Army. When the Continental Army again faced the British in June 1778 at the Battle of Monmouth Court House, it impressed observers with its enhanced performance. When Congress officially created the office of Inspector General in February 1779, Steuben was the obvious choice.

**POST-WAR**
After the war, a grateful state of New York gave Steuben 16,000 acres of land, to which the Baron retired. He continued to write on military subjects, advocating a military academy and a Swiss militia system to supplement the small Regular Army. He died on his Mohawk Valley estate on November 28, 1794, leaving his adopted nation greatly in his debt.

**Section VIII**
**Notes on George Washington**
*(1732–1799)*

As Commander in Chief of the Continental Army, as the man who presided over the Constitutional Convention, and as the first president, George Washington was the leading figure in the formation of the American republic. Even to his contemporaries, the Virginian seemed larger than life. Possessed of an extraordinary strength of character, he displayed an integrity, self-discipline and devotion to duty that caused men to follow him.
American Military Heritage

His Youth
Born on February 22, 1732 to a family of landed gentry in Westmoreland County, Virginia, Washington, as a younger son, seemed destined to an obscure existence as a farmer and land surveyor. But, in 1752, the death of his older brother Lawrence left him with Mount Vernon, a large plantation on the Potomac. He also succeeded his brother as one of the four adjutants responsible for training the colony’s militia and, in 1753, he received the rank of major.

Early Military Career
When Washington entered military service, the French were making their bid for control of the disputed area beyond the Appalachian Mountains by constructing forts along the Ohio River Valley. Lieutenant Governor Robert Dinwiddie of Virginia sent Washington to warn the French to leave the area. When the French rejected Washington’s ultimatum, Dinwiddie sent a force of 300 colonials under the young major to defend English claims to the area near present-day Pittsburgh. Washington won a preliminary skirmish with a French party, but a larger force compelled him to surrender. Washington later served as a volunteer aide with the doomed Braddock expedition, where he earned notice for his courage and tactical skills. He rose to overall command of Virginia’s frontier defenses, and led a brigade against Fort Duquesne. His service in the French and Indian War taught the young colonel much about the importance of discipline, terrain and administrative detail, lessons he would put to use in future years.

Pre-War Period
After resigning his commission in 1758, Washington returned to Mount Vernon, where he married a wealthy widow, Martha Custis, and concentrated on his flourishing plantation. He also served in the Virginia House of Burgesses, emerging as a moderate among the opponents to Britain’s colonial policy. As war clouds gathered, Washington accepted the leadership of Virginia’s volunteer militia
and represented his colony in the Continental Congress, where he served on various committees handling military matters.

**The Revolutionary War**

On June 15, 1775, the Second Continental Congress unanimously elected Washington as “General and Commander in Chief” of the Continental Army. For eight long years, serving without a salary, the general led the main American army while also supervising the overall American military effort. In his efforts to organize and maintain an army, he had to deal with Congress, jealous state governments, difficult allies, impulsive subordinates, and supply and financial problems that frequently appeared too tough for a normal man to handle. Above all, he sought to preserve his army, believing that the Revolution could survive only if the Army remained intact. He avoided major defeats and where he saw an opportunity, as at Trenton, Princeton, and Yorktown, won critical victories. In the end, he kept an army in the field long enough for the British to tire of the struggle. Without Washington’s foresight, integrity, and self-discipline, it is doubtful that the Revolution would have succeeded.

**Constitution and Presidency**

After resigning his post, a step that shocked many Americans and Europeans who expected him to seize power, Washington returned to Mount Vernon to resume his agricultural and business interests. But the country could not allow him a comfortable retirement. In 1787, he served as president of the Constitutional Convention, lending prestige and dignity to the proceedings which provided the country with a true national government. When that government
went into operation, the choice for the first president was clear. For eight years, Washington provided the leadership necessary to set the new government on its proper course, jealously guarding its authority, refereeing between competing factions, and pursuing a policy of neutrality that kept the United States out of dangerous European wars.

**Final Years**

Having established many important precedents in his two terms, Washington established another by refusing to run for a third term. He retired to Mount Vernon in 1797. When he died there on December 14, 1799, almost all Americans agreed with one of his former officers who characterized him, “first in war, first in peace, and first in the hearts of his countrymen.”

**Section IX**

**Elijah Churchill and William Brown**

The noncommissioned officer corps forms the backbone of any army, and George Washington’s Continental Army was no exception. Steuben’s regulations stressed the role of the NCO in the care, discipline, and training of the Army, and the NCO corps of the Continental Army distinguished itself on the drill field and the battlefield. Two of the most notable NCOs were Elijah Churchill and William Brown.

In 1781, Elijah Churchill, a sergeant in the 2d Legionary Corps, conducted two daring raids against British outposts on Long Island. In a fierce November storm, the sergeant led his men on a dangerous, twenty-mile journey across Long Island Sound as part of an elite task force. Thrown off course by the wind, they reached shore and marched several miles to the British post at Fort St. George. They overwhelmed the surprised garrison, burned a supply boat, and destroyed enormous stocks of enemy
supplies, before returning to their base. In this action, as in the later raid against Fort Slongo, Churchill did not lose a single man.

William Brown, a sergeant in the 5th Connecticut Regiment, earned distinction in the most important campaign of the Revolutionary War, the victory at Yorktown. When the Americans and French stormed the outer works of Yorktown on the night of October 14, 1781, Sergeant Brown led the advance party against redoubt number 10. Unwilling to wait for combat engineers to clear the obstacles facing his party, he led his men over and through the obstacles to overrun the fort in a surprise assault. Within ten minutes, the Americans had the fort. Sergeant Brown had been wounded in the hand by a bayonet, but his heroism and that of his fellow soldiers, had hastened the fall of Yorktown, which surrendered on October 17.

For their heroism, Sergeants Churchill and Brown received the Badge of Military Merit during the same ceremony on May 3, 1783.
Section X
Notes on the Founding of West Point

George Washington, although not a professional soldier himself, was outspoken about the unreliability of militia troops and amateur officers. Just two days before his death, he wrote to Alexander Hamilton that the establishment of a military academy in America “upon a respectable and extensive basis, has ever been considered by one as an object of primary importance to this country; and while I was in the chair of government, I omitted no opportunity of recommending it, in any public speeches and other ways, to the attention of the legislature.”

The Academy officially came into being on 16 March 1802, when Congress authorized a Corps of Engineers, set its strength at 7 officers and 10 cadets, and directed that they form a military academy at West Point, New York. West Point had been a key fortress on the Hudson River during the Revolution, and the new United States Military Academy began operations there on 4 July 1802, using buildings already in existence. The experience of the Continental Army during the Revolutionary War had demonstrated the need for competent technicians in all branches of the service. In addition, Congress hoped that the Academy would provide a center for the practical study of the science and engineering to help build a growing nation.

Source:
The War of 1812

Section I
The Complexion of the War

Scholars have debated the origins of the War of 1812 for years. The most likely causes appear to have been the seizure of American ships and the kidnapping of American sailors by the Royal Navy. A second and only slightly less significant factor was a widespread belief that the British were venturing into the Ohio Valley from Canada and were supplying the Indians with muskets and other equipment for raids against frontier settlements.

The United States entered the war with several handicaps. At the outbreak of the war, the tiny U.S. Army was scattered among many small frontier forts. In addition to the weak military force in being, Americans did not wholeheartedly support the war effort. Faulty strategy also hampered the American war effort. The bulk of the enemy and the most important parts of Canada could best be reached by an invasion along Lake Champlain and the Richelieu River. Partly because of New England’s weak support for the war, however, the Americans conducted their initial attacks further to the west, around the western tip of Lake Erie and in the Niagara region.

The war progressed through three periods. During the first year of the war, Britain, hard pressed in Europe, could offer little resistance to American military initiatives. In the second stage, from 1813 until early 1814, the British established a blockade but still found themselves short of manpower. The Americans won their first small victories during this period. By 1814, Great Britain had defeated Napoleon and was able to transfer large forces to America. The American Army and its commanders, however, had matured and, in these final months of the war, the United States won its greatest victories.

The following chronology lists some of the highlights of the three stages of the war.

1812
Small actions center around forts on the Northern Frontier. British win most of these. In many areas, American militia refuses to cross the border into Canada.

1813
May 26 Battle of Sacket’s Harbor
American Military Heritage

British abandon Fort George and Queenston but Americans fail to pursue.

Sep 10 Americans gain control of Lake Erie
Oct 5 Thames River Battle
Dec British regain Fort George and take Fort Niagara

1814

Jul 5 Battle of Chippewa
Jul 25 Battle of Lundy’s Lane—Brown’s invasion of Canada halted.
Aug 24 Battle of Bladensburg and the burning of Washington.
Sep 11 Lake Champlain
Dec 24 Treaty of Ghent

1815

Jan 8 Jackson’s triumph at New Orleans

Section II
Notes on Zachary Taylor (1784–1850)

EARLY MILITARY LIFE
Taylor was born in Orange County, Virginia on November 24, 1784. After a boyhood on the Kentucky frontier, he received a commission as a first lieutenant of infantry in 1808. Two years later, he was promoted to captain.

THE WAR OF 1812
In September 1812, Taylor won distinction for his gallant defense of Fort Harrison on the Wabash River in the Indiana Territory. He received a promotion to brevet major for his service.

THE INDIAN WARS
After service in the Black Hawk War, Taylor, now a colonel, served in the Seminole Wars. In 1837, he inflicted a serious defeat on the Seminoles and their Mikasuki allies on the north shore of Lake Okeechobee, Florida. For his achievements, he was promoted to brevet brigadier general.

THE WAR WITH MEXICO
Initial Campaign: As relations between the United States and Mexico deteriorated in 1845, President James K. Polk ordered Taylor to Corpus Christi, Texas to take command of American troops there. In early 1846, Polk ordered
Taylor to advance into the disputed territory between the Nueces River and the Rio Grande. When Mexican and American patrols clashed, the United States declared war on Mexico. At Palo Alto and Resaca de la Palma in May 1846, Taylor defeated larger Mexican forces under General Mariano Arista. His victories made him a national hero.

**Latter Stages of the War:** After capturing the city of Monterey in September, Taylor’s force was greatly reduced by the transfer of his best units to Major General Winfield Scott’s campaign against Veracruz and Mexico City. Learning of these depletions, General Antonio Lopez de Santa Anna, the Mexican chief of state, launched an offensive against Taylor’s much smaller army. On rugged terrain at Buena Vista in February 1847, Taylor skillfully used his artillery to win an overwhelming victory, which catapulted him into the presidency two years later. He died in office on July 9, 1850.

**Taylor, the Man and Soldier**

Taylor represented the Army before West Point professionalism. Rough-hewn, unpretentious, almost unschooled, and unimaginative, his steady rise through the ranks reflected luck and perseverance more than brilliance or knowledge of the art of war. But “Old Rough and Ready” displayed a degree of physical and moral courage that earned the admiration of those serving under him, including Ulysses S. Grant. According to legend, he sat on his horse at the battle of Buena Vista, with one leg thrown over the pommel of his saddle, disregarding two Mexican bullets that ripped through his farmer’s coat. His determination and refusal to admit defeat, as much as any other factor, were responsible for the American victory in that battle.

**Section III**

**Notes on Winfield Scott**

**(1786–1866)**

**Early Life and Schooling**

The son of a Revolutionary War veteran, Scott was born near Petersburg, Virginia on June 13, 1786. After briefly studying law and serving in the Virginia militia he joined the Army in 1807, rising to the rank of captain of light artillery by 1809. Unimpressed by the quality of his colleagues, he considered returning to the legal profession and, at one point, denounced his commander as a traitor, an offense that earned him relief of his commission for a year.
The War of 1812

With Congress’ declaration of war against Great Britain in June 1812, Scott received the rank of lieutenant colonel. He earned distinction in the attack on Queenston Heights but was captured. After his exchange, he again distinguished himself in the battle at Fort George, where he was wounded. Promoted to brigadier general, he trained his troops to such a high level that even the British were impressed with their performance at the battle of Chippewa. He was badly wounded a few days later at Lundy’s Lane. But he emerged from the war as a brevet major general and recipient of medals from Congress and Virginia.

Peace Time Contributions

After the War of 1812, Scott prepared manuals of infantry tactics and studied military affairs for a time in Europe. He participated in the Black Hawk War of 1832 and the campaigns against the Seminoles and the Creeks. In 1841, he rose to the post of commanding general of the U.S. Army, a post he held for the next twenty years.

War with Mexico

Despite Taylor’s victories in northern Mexico at the start of the Mexican War, President Polk determined that a sea-based campaign against Veracruz and Mexico City would more effectively bring the conflict to a close. With some reluctance, he gave the command to Scott, whose ties to Polk’s political opponents were well-known. After capturing Veracruz in a skillful amphibious expedition and siege, Scott and his small army cut loose from their communications, a risky step that aroused the concern of many observers, including the Duke of Wellington. But Scott and his soldiers were equal to the challenge. Defeating superior enemy forces in battle after battle, they penetrated deep into the Valley of Mexico and captured the capital. The brilliant campaign cemented Scott’s place in American military history.

Civil War and the Final Years

For his services in the Mexican War, Scott earned a retroactive promotion to brevet lieutenant general in 1855. In 1852, he had run for President but was defeated by Franklin Pierce. When the Civil War erupted, Scott prepared a strategic plan for a coastal blockade and the seizure of the Mississippi River to divide and conquer the South. Although the press sarcastically called it the Anaconda Plan after the snake which kills prey by strangling it, Northern strategists pretty much carried out the war just that way. Scott at 75 was not prepared mentally or physically to fight the war, and he retired in 1861 to
West Point after the fiasco at Manassas. By his death on May 29, 1866, however, he had lived to see the Union preserved.

**Scott the Man and Soldier**

Scott was, in many ways, the opposite of Taylor — big, refined, and so vain and pompous that his nickname was “Old Fuss and Feathers.” But even his critics had to admit his military ability. A diligent student of military affairs, he displayed a profound grasp of the intricacies of strategy, tactics and logistics. At the same time, his intelligence and humanity in administering occupied Mexico earned such respect from the Mexicans that some of them offered to make him a dictator. He was the outstanding American military leader of the period between the Revolution and the Civil War.

**Section IV**

**Notes on Uniforms, 1810–1840**

**1810–1813:** By this time, the uniform of the Revolution had disappeared. The Army adopted a coat with short skirts cut at the waste and high collars. Enlisted men and company officers wore a uniform cap with visor, and general and staff officers retained the cocked hat in the form of the chapeau de bras, a hat with a stiff brim turned up on two sides. Beginning in 1813, the colored facings were eliminated from the coats. Shortages of cloth and funds during the war caused a lack of uniformity even within units.
1816: “A need was recognized for a less formal (undress) uniform... but coat collars were still ‘as high in front as the chin will permit in turning the head’... [By this time,] West Point cadets had begun to wear gray uniforms.”

1820’s: “Army regulations of ’21 stated ‘Dark blue as the national color, when a different one is not expressly prescribed. All uniform coats will be of that color’...chevrons denoted Captains and Lieutenants ....Higher laced shoes were adopted and were called bootees.” By 1817, the Army had also adopted the forage cap.

18th U.S. Infantry Regiment, 1814–1815

U.S. Artillery Regiments, Winter Uniform, 1825–1832
1830’s: “In 1832, the single breasted coat for officers was traded for a double breasted [coat]... high boots disappeared and were replaced with shoes...staff officers wore aiguilletes (a gold cord circling the right shoulder and hanging in loops across the chest.... Crossed cannon were adopted as the insignia for the Artillery;... the Eagle was adopted as the insignia of rank for colonels....” Shoulder straps as we know them today were introduced in 1834.
1840: “The turreted castle was adopted as the Engineer Corps insignia... the USMA cadet now wore a tall beaver stovepipe.”

U.S. Company of Sappers, Miners, and Pontoniers, Winter Full Dress, 1846–1851

U.S. Corps of Cadets, U.S.M.A., 1853–1861
Section V

Chippewa and Lundy’s Lane

A military giant of the nineteenth-century U.S. Army, Winfield Scott, played a key role in the War of 1812. As a 27-year-old brigadier general commanding a brigade in the army of Major General Jacob Brown, Scott found himself on July 5, 1814, at Chippewa, New York. In celebration of Independence Day, he had promised his brigade a parade, but as he moved his 1,300 men to a nearby plain, he found, instead of a reviewing party, an enemy force of nearly 4,000 British regulars under General Phineas Riall. Scott moved to the attack. Riall saw before him an advancing line clad in gray, due to the shortage of blue fabric normally worn by American regular troops. Undoubtedly, Riall thought Scott’s force to be militia and probably felt his men would make short work of such inexperienced troops. In spite of heavy British fire, Scott’s men continued a precise, well-schooled advance. “These by Gad!” the startled Riall is supposed to have stated, “these are regulars!” The British broke and eventually crumbled as they fell back across Chippewa Creek.

Three weeks later, Riall and Brown met again at Lundy’s Lane (near Niagara Falls), one of the costliest battles of the war when casualty percentages are considered. The battle began in the afternoon and raged far into the night. When it had ended, both sides found their forces riddled, and both claimed a victory. From the perspective of America’s military heritage, one of the most enduring traditions from Lundy’s Lane was a three-word quotation from a regimental commander in one of Brown’s brigades. Brown ordered Colonel James Miller’s regiment in his reserve to take the British main battery. As Colonel Miller led his men forward, General Brown pointed to the objective and asked Miller if his men could take it. His reply is proudly emblazoned on the emblem of his unit’s modern successor: “I’ll try, sir.”
Section VI
The Battle of New Orleans

In the twentieth century, man can send messages to the moon with virtually no delays in transmission time. In 1814, a trans-Atlantic message took two months to deliver. As a result, thousands of soldiers lost their lives in the Battle of New Orleans fought in 1815 after signing of the peace treaty.

Peace negotiations were in progress in late 1814 when Major General Sir Edward Pakenham departed Great Britain to take command of an expedition to attack the Gulf Coast. When he arrived in the vicinity of New Orleans, Pakenham found that his forces had already fought a three-hour skirmish with the defending forces, commanded by Major General Andrew Jackson. Casualties to both sides had been heavy but the results inconclusive. Although the Americans dug in using traditional field works, they took advantage of huge cotton bales and casks from the city’s docks to strengthen their defenses. Jackson’s troops included a mixture of regulars, Louisiana militia, Tennessee riflemen, free African-Americans, some sailors and, reputedly, several drunks who woke from a euphoric slumber to find a weapon in their hands.

By January 8, 1815, Pakenham felt prepared to attempt a frontal assault on the American positions. In the early morning mist, his troops, marching in line as if on parade, advanced on Jackson’s cotton-bale defenses. They were met by a murderous fire, first from the American artillery and then from the riflemen among the defenders. More than 2,000 British troops fell including two of their general officers. Eight Americans died. A small British force advanced on the far side of the river but did not continue the attack after seeing the main thrust falter. For a brief period, Jackson had the opportunity to counterattack, but he feared that the British were just regrouping to attack elsewhere. He left the battered remnants of Pakenham’s force in a swiftly assembled camp. After about ten days, the British re-embarked and sailed away. Only then did the British and American forces learn of the signing of the Treaty of Ghent ending the war on Christmas Eve, 1814.

One of the strongest lessons to emerge from this battle was Jackson’s awareness of the capabilities and limitations of his forces. Although he anchored his defenses with regulars, his forces included a mixture of inexperienced militia “reservists” whom Jackson accurately judged would break in an open battle with the British. To prevent this, he directed the construction of strong material defensive positions, not for the physical protection they provided but for the psychological boost they gave to his militia. His judgment proved sound. The defense of New Orleans lives today in the “Cotton baler” nickname of the 7th Infantry.
Westward Expansion

Section I
The “Thirty Year Peace” and National Expansion

In 1815, the armies of Napoleon and Wellington met at Waterloo and finally brought to an end the long series of Napoleonic wars that had plagued Europe. Brigadier General Winfield Scott, who had traveled to Europe as a military observer, believed British success on the continent could cause another war between the United States and Great Britain. He further feared that the tactical, administrative, and training lessons garnered in the Napoleonic wars would make the British a most overpowering, if not undefeatable, foe. Yet, although his suppositions at the time seemed well founded, the United States would experience thirty years of relative peace. As a result, the nation concentrated on internal development and expansion, with the U.S. Army serving as a key agent in these endeavors.

Throughout the Army’s existence, the senior service has responded to the needs of the government, both in policy and in action. During the first half of the nineteenth century, interrupted only by the War of 1812, this direction included much more than international warfare. In some cases, Army personnel undertook tasks that helped shape the direction and long-range policies of the nation. In this respect, the pre-Civil War Army played a unique role in the nation’s development. Examples of such events are highlighted below, and several are examined in this chapter.

1803 Louisiana Purchase
1804–06 Lewis and Clark expedition
1806–07 Captain Pike’s expedition
1815 Regular Army authorized at 10,000, plus the Corps of Engineers
1817 First Seminole War
1819 Florida ceded to the United States
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820</td>
<td>John C. Calhoun, Secretary of War, draws up “Expansible Army Concept”</td>
</tr>
<tr>
<td>1821</td>
<td>Army strength reduced; Major General Brown stationed in Washington; he later becomes Commanding General of the Army</td>
</tr>
<tr>
<td>1822</td>
<td>Recruiting Depots opened in major cities; establishment of General Recruiting Service for the Army. General Scott prepared new manual of infantry tactics and Army Regulations of 1821. First commissioned Surgeon General, Joseph Lovell</td>
</tr>
<tr>
<td>1824</td>
<td>Rivers and Harbors Act of 1824 placed the Corps of Engineers in control of nation’s seaports and inland waterways. Artillery School at Fort Monroe established</td>
</tr>
<tr>
<td>1832–35</td>
<td>Captain Benjamin Bonneville, 7th Infantry, explores to the Pacific Coast</td>
</tr>
<tr>
<td>1842–43</td>
<td>Lieutenant John C. Frémont’s exploration of Oregon Trail to California</td>
</tr>
<tr>
<td>1843</td>
<td>School for Infantry brigade drill established</td>
</tr>
</tbody>
</table>

**Section II**

**Westward Exploration**

In early 1804, President Thomas Jefferson made plans to explore the newly acquired Louisiana Territory. The previous year he had asked Congress for $2,500.00 to finance the exploration of the virgin territory west of the Mississippi River. On a rainy afternoon in May, Captain Meriwether Lewis and Lieutenant William Clark set out from St. Louis. They led a party consisting of fourteen soldiers of the Regular Army, nine hand-picked Kentucky frontiersmen, two French boatmen, Clark’s black servant, a civilian interpreter, Lewis’ Newfoundland dog, and, eventually, a Shoshone Indian squaw named Sacagawea and her infant child. Although Lewis and Clark had different personalities both displayed intelligence and resourcefulness. They complemented
each other in their leadership and made a success of one of the rare cases of effective disunity of command.

The two explorers displayed their ingenuity while making preparations. They had to pack three years of goods in three small boats, a seemingly insurmountable problem, but one they adroitly mastered. They packed gunpowder in thin sheets of lead which later they melted into bullets. Nearly every bale of supplies contained small packets of each of the expedition’s articles so that, if a bale was lost, the expedition would not be without the entire supply of any one article. Small lockers were placed along the sides of the boats so that in the event of attack the defenders could raise the lids to provide protection. The largest of the boats carried a new weapon for demonstration purposes, an air gun that did not need to be loaded, wadded or primed but was nearly as powerful as a Kentucky rifle.

The expedition followed the Missouri River, crossed the Rocky Mountains, and journeyed to the Pacific, hoping to find a continuous water route. Though
that ultimate aim was not achieved, the expedition explored and mapped the
water routes and observed and recorded information on the animals, plants,
minerals, and other noteworthy details. Lewis and Clark also endeavored to
make friendships with the Indian tribes they encountered and to establish trade
with them if possible. Throughout the long trek the two officers repeatedly
exhibited tact, ingenuity, and endurance. They completed their mission in
September 1806. As a direct result of their efforts, a maze of trails westward
opened, eventually resulting in the long wagon trains of the middle and late
1800s.

While Lewis and Clark were conducting their journey west, Captain Zebulon
Pike made two separate expeditions of a similar nature. The first, in 1805–06
was an excursion to the source of the Mississippi River. The second, a year
later, found Pike moving westward into what is now Colorado, near the peak
that bears his name, and then along a southern route into Mexico.

In each of the expeditions during this period, the U.S. Army played a unique
role. In many cases the military reacted to the needs of the people and the
government, and the Army led the way. As a result of these expeditions, the
nation developed and expanded westward.

Section III
The Seminole Wars

In 1817, the Lower Creek and Seminole Indians carried out a series of
raids and murders along the border between what is now Florida and
Georgia. Since Florida belonged to Spain at the time, the United States
did not cross the border in pursuit. In November, however, a large band
of Indians ambushed an army supply boat on the Apalachicola River and
killed or captured nearly all of the forty passengers, including the wives
of soldiers. Slow-moving news caused nearly a month’s delay before the
attack came to the attention of Washington. President James Monroe was
outraged and immediately sent Major General Andrew Jackson to the
border to take command.

Jackson interpreted the War Department’s instructions as permission to launch
an invasion. He recruited a 3,000-man force of Kentucky, Tennessee, and
Georgia militiamen as well as a friendly faction of the Creek Indians. For
about three months, Jackson rampaged through Florida, burning Indian vil-
lages, destroying pockets of resistance as he encountered them, and leaving
outposts in the Spanish territory. During this campaign, Jackson learned that
the Indians who had conducted the raids had been agitated and trained by
several adventurers from the Bahamas. When his troops located and captured
two British citizens involved in these activities, Jackson tried them in a military
court and had them executed.
General Jackson’s actions in invading Spanish territory and executing prisoners caused serious international problems. Fortunately, the British and Spanish governments did not press this matter. Negotiations with Spain for the purchase of Florida were already underway, with the United States taking formal possession in February 1819.

During this First Seminole War, the Army learned not to depend entirely on civilian suppliers for rations and other logistical support. Repeatedly, Army troops arrived at a prearranged delivery point to find no civilian supplier on hand. Congress remedied this problem in 1818, when it re-established the Subsistence Department to improve the services provided by civilian contractors.

The Second Seminole War (1836–1842) began when the Seminoles, after giving up their ancestral lands by treaty, refused to leave and ambushed several small army forces in the area. This time, Washington dispatched Brigadier General Winfield Scott to organize a force to subdue the Indians. Scott made elaborate plans for his campaign but was unable to engage the Indians in strength. The Seminoles employed a form of guerrilla warfare totally unfamiliar to the American soldier and his commanders. During the following six years, Scott was succeeded by a series of commanders: Brevet Major General Thomas S. Jessup, Brevet Brigadier General Zachary Taylor, and Brevet Brigadier General Walker K. Armistead. These officers tried with varying degrees of success to pin down the Indians. For instance, Taylor divided the whole area into small regions and attempted to run down the Indians with bloodhounds, a short-lived experiment that quickly roused the outrage of the American people. Finally, in 1841, Colonel William J. Worth campaigned through the summer, which kept the Indians from raising and harvesting that year’s food supply. His continuous campaigning brought the war to an official end the following year.
As the First Seminole War prompted developments in the field of logistics, the Second Seminole War revealed serious transportation deficiencies. The Army possessed no wagons or light boats in its inventory suitable for the swamps and rivers of south Georgia and Florida. At General Jessup’s request, the Army hired mechanics and laborers to keep wagons and boats in repair. The War Department turned away from dependence on contractor-provided steamboats and switched to Army-owned steamboats, which were more reliable and cheaper. The Army also developed a light pontoon wagon with an India rubber cloth lining for crossing rivers. These lessons proved valuable during the Mexican War.

Section IV
Notes on Sylvanus Thayer and the United States Military Academy

Early Life
Sylvanus Thayer was born in 1785 into a large family with military backgrounds in the Revolutionary War. At Dartmouth College, Thayer already knew Napoleon’s Italian Campaign “by heart.” He graduated from Dartmouth in 1807, completed the Military Academy’s requirements in one year, and received a commission. “In 1810 he served as assistant professor of mathematics at West Point, and he compiled a creditable record in the War of 1812.” He went to France in 1815 to study the European military schooling system. It was on this excursion that Thayer compiled the references, knowledge and classroom material that he would soon use as West Point’s fifth Superintendent.

The Superintendent
“The impression he made on cadets, the faculty, congressmen, and the public generally gave him the trust and support he needed in order to inaugurate his reforms. His personal appearance was majestic…. He carried himself with such dignity and dressed
with such care that he looked like the ideal professional soldier…. His punctu-
ality was unfailing and legendary…. He never married; the Academy was his
only love…. The superintendent made each one of the cadets feel ‘that his eye
was ever on them, both in their rooms and abroad, both in their studies and on
parade.’ Thayer not only knew every cadet by name but had a general idea of
where each stood in his class and how good, or poor, his behavior had been.”

**THE DISCIPLINARIAN**

“Thayer’s discipline was stricter even than that imposed upon students of civil
colleges, and it was administered impartially and without fail.” He began his
tenure by dismissing those cadets whom he considered “deficient in natural
abilities and destitute of qualities.” He limited cadet travel off post and initiated
a one-year service obligation. “Thayer abolished the practice of annual vaca-
tions and instituted a summer encampment.” He instituted order of merit and
continued the punishment tour system. Those cadets exceeding 200 demerits
in one year were dismissed.

**ACADEMY DEVELOPMENTS**

**Cadet Pay:** “He also forbade them to bring money with them to West Point
or to receive any from home, so that all cadets, rich or poor, lived on the same
income — the $18.00 a month the government paid them.”

**Relative Class Standing:** “It was the merit roll, a device which allowed
Thayer to rank each cadet within his class, so that at the end of four years he
could say that the cadet ranking second in his class should be an engineer,
while the cadet ranking thirty-first ought to be in the infantry.”

**Class Sectioning and Lesson Assignment:** “It was that students should be
taught in small sections, divided according to ability and that every student
should be required to recite in class every day…. From then on each cadet
received an assignment from the text each day, upon which he recited and
was graded the next.”

**General:** In addition to the practices and customs mentioned above, Thayer
instituted numerous systems and ideas such as regularly scheduled parades,
post class examinations, a board of visitors and an entrance selection system.
It is no wonder that he is referred to as the “Father of the Military Academy.”

Source:

pp. 63–86.
Section V

Notes on John C. Calhoun and the War Department

Calhoun’s Initial Problems
John C. Calhoun took office as Secretary of War in 1817. He faced two major problems: postwar reorganization of the military establishment and meeting an outbreak of border warfare in the South. Public sentiment would not allow the retention of a large standing army. The Military Academy was in the throes of disorder over the dismissal of its superintendent. There was a tendency to economize after the tremendous expense of a war.

The Expansible Army Concept
“Calhoun’s ‘expansible army’ was a national army, which would rely wholly on volunteers. It had, as he saw it, two tasks: to garrison the forts and posts and ‘keep in check our savage neighbors’…. This would be achieved by what he called in later years, ‘skeletonizing.’ Each infantry company would have a peacetime strength of thirty-seven men, to be reinforced to seventy-seven in time of need…. The result would be a powerful national force, unhampered by the state governors or the constitutional limitations on the use of the militia.” Calhoun’s plans, however, never went into effect.

Calhoun’s Later Contributions
“During Calhoun’s tenure as Secretary of War the line of military posts and trading houses was extended into Indian territories west of the Mississippi, the supply and purchasing services of the Army were overhauled, and an improved diet was provided for the soldiers…. Calhoun also proposed a ‘school of practice’ for men in service, out of which in 1824 grew the Artillery School of Practice at Fort Monroe, Virginia…. One of Calhoun’s most important measures was an order requiring Army surgeons to keep detailed day-to-day weather records at all posts.”

War Department Reorganization
“In 1821 the Regular Army was fixed at seven regiments of infantry and four of artillery. The cavalry was abolished…. The Corps of Engineers was retained; and the cadets, who had been distributed to various regiments, were reassembled at West Point, in an authorized strength of 250, where the Engineers would train them…. The total authorized strength, men and officers, was 6,183.”

Section VI
The Army’s Development

The history of the U.S. Army has recorded the shifts in organization, activities, and lifestyle of the American soldiers—aspects which, although of great importance to the warriors of the era, have not been given the attention they deserve since. One can find many interesting topics in this area during the thirty years following the War of 1812. Each added its small bit or its particular tone to the fabric of the army of that period.

Reorganization After the War of 1812
At the end of the war in 1815, the Regular Army totaled 33,000 men. Shortly thereafter, Congress set a ceiling of 10,000 men in addition to the unaltered Corps of Engineers. This army consisted of eight infantry regiments, eight artillery battalions, and one light artillery regiment. The Regiment of Light Dragoons (mounted infantry) was abolished. The Army also made provisions for a “General Staff,” although not of the same sort recognized today. The staff, under the Secretary of War, consisted of two major generals, four brigadier generals, an Adjutant, an Inspector General, a Quartermaster General, and several other special staff officers. The rest of the Army divided into territorial units, with the Division of the North (with four subordinate departments) under Major General Jacob Brown and the Division of the South (with five subordinate departments) under Major General Andrew Jackson.

Brevet Rank
The custom of conferring temporary ranks, or “brevets,” on individuals for their outstanding service or gallantry remained in the Army until 1870. This custom proved both useful and confusing. While serving in his own regiment or corps, a “brevetted” officer was considered to be in his normal rank and seniority; however, should two different units serve together or on “other occasions,” according to the regulations, the officer assumed his brevet rank. This arrangement could, and did, present problems. George Armstrong Custer, for example, was brevetted a major general in the Civil War, but fought at the Little Big Horn as a lieutenant colonel. Nevertheless, he will probably always be known as “General Custer.”

Army Recruiting
A reform of the recruiting system occurred in 1822. Prior to that time, each regiment had recruited individually, with many attractions and varying results. In 1822, the Eastern Department opened recruiting depots in New York, Philadelphia, and Baltimore to gain recruits for the Army at large. This system proved successful; however, each regiment continued to recruit separately, and, on occasion, entire volunteer units were raised.
COAST AND HARBOR DEFENSES
While the Seminole Wars absorbed the Army’s tactical attention, its leaders pondered the strategic importance of defending the nation against possible conflict with England or France. As a result, Congress appropriated from $400,000 to $600,000 annually for the construction of harbor defenses. Some of these fortresses involved detailed design and construction, such as Fort Monroe, Virginia, but most were earthworks built over stone or brick walls. Arms also developed to keep pace with these needs. During the 1830s and 1840s, the Army placed heavy guns (24- and 32-pounders) in batteries overlooking sea approaches to some thirty-five east coast harbors.

THE ARMY MESS
Regimental- and post-level officers’ messes came into existence as a permanent custom in the U.S. Army in the first half of the 19th Century. For instance, in 1821, officers at Fort Independence in Boston Harbor dined in full dress each evening with a soldier, also in full dress, attending. In 1840, the 1st Artillery Regiment organized a mess in Houlton, Maine, and the West Point Army Mess came into existence a year later.

PAY IN THE 1830S
Pay in the 1830s ranged from $63.91 for second lieutenants to $172.66 for a full colonel. Brigadier and major generals made $257.75 and $401.50 a month respectively. Company commanders and staff officers made $10.00 a month extra. As an indication of the buying power of dollars in the 1830s, a soldier could buy a very respectable gallon of whiskey for about thirty cents. Enlisted pay at about $13.00 a month was competitive with civilian wages when room, board, and medical costs are factored.

OFFICERS AND NCOs
Although Congress initially rejected Calhoun’s expansible army program, the Secretary of War still sought to instill professionalism into the small officer and noncommissioned officer corps. The small number of officers quickly became overextended, creating a shortage at company levels. Efforts were made to improve NCO training out of necessity, but as the NCOs demonstrated their abilities, that process tended to accelerate. Some sergeants even found themselves commanding companies during the absence of the company commander and his officers.

The Army Regulations of 1821 were the first to establish a systematic method of selecting noncommissioned officers. Each regimental commander appointed the NCOs based on the recommendation of the respective company commanders. Calhoun’s emphasis on standardizing NCO selection resulted directly from his desire to strengthen the corps’ professionalism. This attitude extended to uniforms. After years of experimentation, the Army adopted chevrons
in 1821. NCO duties were set forth in Scott’s Infantry Drill Regulations. These regulations placed the ultimate responsibility for the training, well-being, and readiness of a company’s enlisted men on the NCOs in charge. Specifically, these included checking the appearance and conditions of barracks and the status and serviceability of the troops’ uniforms and equipment.

During the 1830s and 1840s, the only sources of combat experience for the junior officers and NCOs were the Seminole Wars, the bitter struggle against skillful Indian chief Black Hawk across the Mississippi River, and occasional campaigns as the frontier expanded westward. Because much of this service was performed by company- and battalion-sized elements drawn from scattered posts, junior officers and NCOs became involved in a much wider variety of activities other than a conventional conflict. Fortunately, this training prepared them for leadership responsibilities when war broke out with Mexico in 1846.

In 1842, at the conclusion of the Second Seminole War, Congress again cut the strength of the Army from 12,500 to 8,600. This reduction differed from the earlier one, because the legislators finally decided to follow Calhoun’s expansible army plan. Only the number of privates in each company was reduced. No regiments or companies were disbanded. This policy contributed to nurturing an experienced officer and NCO corps.

Source:
Section VII
The Alamo

Nearly every American has a mental picture of the Alamo — the dusty, brown, adobe brick mission; a handful of valiant Texans defending to the last man; and Davy Crockett dying courageously with weapon in hand. Only a small percentage of people today are aware of the circumstances of the Texas War for Independence, of which the Alamo was but a part.

In 1822, the United States recognized the newly independent Mexico, which at the time claimed Texas. Mexico adopted an attractive immigration policy, and 15,000 homesteaders and several thousand black slaves settled in the region. In 1830, due to intensifying boundary problems and unstable Mexican politics, Mexico reversed her position on immigrants and placed severe restrictions on homesteading in the northern territory. The problems that arose as a result grew into an open revolt in 1835, and, in 1836, Texas proclaimed independence. General Antonio López de Santa Anna, at the head of the Mexican Army, captured the fortress of the Alamo in a now historic siege that lasted thirteen days. The public outcry “Remember the Alamo” became a familiar exhortation, and volunteers rushed to Texas. On April 21, 1836, at San Jacinto, General Sam Houston, at the head of 743 raw troops, met and defeated a force of 1,600 veteran soldiers under Santa Anna. In March 1837, Texas became an independent Republic.

Most Texans felt that their independence was simply a declaration of separation from Mexico, and that the republic would be annexed by the United States as a state. The question of annexation, however, was heatedly debated because of the slavery controversy. As a result, Texas would not become a state for nearly ten years. During this period, the Texas–Mexico border endured ruthless border raids and continual unrest sparked by both Mexicans and Texans.
On March 1, 1845, Congress voted to accept the Lone Star Republic as a part of the Union. Mexico promptly severed diplomatic relations. President James K. Polk hoped to settle the brewing storm through negotiations. In mid-June, anticipating a quick Texan acceptance of annexation, he ordered Brevet Brigadier General Zachary Taylor to move his forces from Fort Jesup on the Louisiana border to a position “on or near” the Rio Grande. From that position, he would repel any invasion from Mexico. Taylor transported most of his 1,500-man force by steamboat from New Orleans and sent his dragoons of mounted infantrymen overland via San Antonio to the banks of the Nueces River near the hamlet of Corpus Christi. Over the next six months he built up his army to nearly 4,000 men and subjected it to a strict training regimen. In February 1846 he received orders from Washington
to advance to the Rio Grande. Meanwhile, negotiations had broken down, and Taylor began to construct Fort Texas (later to become Fort Brown) across the river from Matamoros. He also established a supply base at Point Isabel. The American general made peaceful overtures to the Mexican commander, who countered these by threats and warnings. On April 25, a Mexican force crossed the Rio Grande and attacked a dragoon reconnoitering patrol, killing and wounding several Americans and capturing the commander and the rest.

The war lasted a little over two years and took place in two major theaters of operation. First, President Polk wanted to seize all of the land in question north of the Rio Grande and Gila River and westward to the Pacific. His chief military planner and Commanding General of the Army, Major General Winfield Scott, planned to do this through a three pronged offensive. These actions took place after Taylor’s initial battlefield victories at Palo Alto and Resaca de la Palma on May 8–9, 1846 and the declaration of war by the United States on May 13. Under this plan, Taylor’s force drove west to capture the key city of Monterrey in September 1846. A second expedition under Brigadier General John E. Wool advanced from San Antonio into northern Mexico to join Taylor. The third prong under Colonel Stephen W. Kearny thrust westward to San Diego from Fort Leavenworth. Part of Kearny’s force under Col. Alexander W. Doniphan later moved south through Chihuahua to Parras. Fighting in northern Mexico essentially came to a close following Taylor’s narrow victory over Santa Anna at Buena Vista, a major achievement since Scott had taken most of his best troops to join his invasion of Mexico at Vera Cruz. The Americans settled into occupation duty and occasional clashes with Mexican guerrilla forces and bandits.
The second theater of operations in Washington’s master strategy opened in 1847 and involved an amphibious landing at Vera Cruz and a march to Mexico City. General Scott engineered, planned, organized, and commanded this campaign. After surrounding and capturing Vera Cruz, he advanced westward, winning along the way a series of victories at Cerro Gordo, Contreras, Churubusco and Chapultepec, until he reached his ultimate goal, Mexico City. Scott triumphantly entered the city on September 14. Here too, the U.S. Army assumed occupation duties, mapped the region, and fought guerrillas and bandits preying on its line of communications to the coast.

On February 2, 1848, the Treaty of Guadalupe Hidalgo was signed. The occupation troops marched out of Mexico City in June, and on August 1, the last Americans boarded their transport ships at Vera Cruz and left Mexican soil. By the terms of this treaty, Mexico recognized the Rio Grande as the boundary of Texas and ceded New Mexico (including the present states of Arizona, New Mexico, Utah, and Nevada, a small corner of present-day Wyoming, and the western and southern portions of Colorado) and Upper California (the present state of California) to the United States.

The Mexican War produced many “firsts” in American military history. For the first time, an American army fought house-to-house in city streets at Monterey. Also for the first time, American forces deployed overseas to
fight in a land whose climate, terrain, and people differed entirely from that with which they were accustomed. The amphibious landing at Vera Cruz and the use of transport vessels by both Taylor and Scott far surpassed earlier logistical efforts, and for the first time, steamboats saw extensive service. Finally, the American army faced, for the first time, the duties of establishing and administering a system of military government over an occupied nation.

The tactical improvements made possible by the advances in weapons, organization and training greatly contributed to the battlefield victories of the Mexican War. Then, as now, NCOs played a key role as trainers. Because they supervised daily drill, they worked with officers to master the “the school of the soldier,” as basic training was then known. For training purposes, a typical company in peacetime garrison organized enlisted men into four squads. In these squads soldiers learned various drills, practiced maneuvers at the company level, and gained skill and confidence in handling artillery. At Palo Alto, Major Samuel Ringgold’s “flying artillery” battery epitomized these efforts when it galloped into action, unlimbered, loaded, and fired point-blank into enemy guns, annihilating their crews. When the Mexicans broke through the Americans’ left flank at Buena Vista, American batteries quickly moved from point to point, mounting and dismounting, limbering and unlimbering, firing shot and canister at enemy ranks. These batteries and the handful of others available to Taylor and Scott enabled American troops, although usually outnumbered, to stage successful invasions and eventually force the Mexicans to sue for peace.

By 1848, the army had decreased to roughly the size of the army of 1815. The decade of the 1850s became one of the establishment of western frontier forts, particularly in the Mexican Cession territories, experimentation in arms and equipment, and slight increases in strength. One interesting (and short-lived) experiment entailed the use of camels as pack animals to supply frontier posts in the arid Southwest.

The small Corps of Topographical Engineers played a leading role. Some knowledge of the frontier had been gained by the earlier expeditions of Captain Benjamin L.E. Bonneville, an infantryman, who made valuable observations concerning the Pacific Coast in the 1830s; Colonel Stephen W. Kearny, who led a force of dragoons over the Oregon Trail in 1845; and Lieutenant John C. Frémont, a topographical engineer, who led several expeditions through the Rocky Mountains to California in the 1840s. More knowledge was gained during the war by topographical engineers attached to the commands in the field. They recorded data and mapped the regions traversed. In the decade that followed the war, topographical engineers surveyed the new border with Mexico and surveyed routes for transcontinental railroads.
The highlights below summarize the key dates in the development of the heritage of the U.S. Army during the Mexican War period:

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
</table>
| 1845 | Texas accepts annexation statute  
General Taylor moves forces to Corpus Christi |
| 1846 | Feb  
Move to Rio Grande and establish Fort Texas  
25 Apr  
Opening skirmish north of the Rio Grande  
8 May  
Battle of Palo Alto  
9 May  
Battle of Resaca de la Palma  
13 May  
War declared  
19–24 Sep  
Battle of Monterey |
| 1846–47 | Kearney, Wool, and Doniphan expeditions |
| 1847 | 22–23 Feb  
Battle of Buena Vista  
27 Mar  
Battle of Vera Cruz  
12 Apr  
Battles of Cerro Gordo, Contreras, to 8 Sep  
Churubusco, and Chapultepec  
14 Sep  
Surrender of Mexico City and first taste of occupation duty |
| 1848 | 2 Feb  
Treaty of Guadalupe Hidalgo |
| 1849 | California Gold Rush |
| 1848 to 1860 | Exploration, pacification of Indians, and survey for transcontinental railroads |

**Section II**

**Notes on the Battles of Palo Alto and Resaca De La Palma**

One of the most turbulent battles of the Mexican War began on May 7, 1846, west of Fort Texas, in the thick scrub brush country near a small place called Palo Alto. General Taylor commanded the American forces, which included Major Ringgold’s flying artillery and two-18 pounder siege pieces. Taylor employed all of his artillery in the main line of battle with the heavier 18-pounders in the center. The Mexicans attempted to flank the southern end of the American force, but Lieutenant Randolph Ridgely and two of Ringgold’s artillery pieces unlimbered and smashed the Mexican charge. The artillery duel that followed the unsuccessful charge started several grass fires, which obscured
both battle lines for several hours. A later charge by the Mexican infantry into Taylor’s left flank met Captain James Duncan’s battery of conventional pieces, which quickly broke the enemy formations into small, disorganized bands. An infantry observer said, “Duncan’s fire was terrible and awesome in its effect.” The indirect fire of the Mexican 12-pounders, although
relatively heavy, did not match the versatility or the accuracy of Taylor’s artillery. The American victory, however, came at a price. Taylor lost his brilliant artillery commander, Maj. Ringgold, who was mortally wounded. This and subsequent battles plus the high rate of illnesses in armies of this period would cost the lives of more young officers and men.
That evening, the Mexican Army withdrew to a dry riverbed, edged on both sides by thick, tangled vegetation. Taylor pursued but left the 18-pounders well to the rear. The opposing forces (deployed as shown on the map) found themselves limited, in artillery, to their flying batteries and smallest field pieces. General Taylor wisely chose to employ infantry troops in the close terrain and, employing Capt. Charles A. May’s detachment of dragoons, routed the enemy from the battlefield. Careful battle analysis and eyewitness accounts of the battle of Resaca de la Palma indicate that Taylor’s bullheaded pursuit and his courageous infantry were simply superior in combat effectiveness to the Mexican General Mariano Arista and his previously highly touted cavalry armed with lances.
When General Scott arrived in Mexico in late December 1846, he took with him almost all of Taylor’s Regulars and left the northern army with only volunteers and artillery. The troops that Scott would use in the amphibious assault loaded into transports at the mouth of the Rio Grande and met the remainder of the invasion force at Lobos Island, almost fifty miles south of Tampico. In a small boat, Scott, his commanders, and a party of engineer officers that included Robert E. Lee, George G. Meade, Joseph E. Johnston, and Pierre G.T. Beauregard came close to shore to reconnoiter and were almost hit by a shell fired from an island fortress opposite Vera Cruz. If the shell had struck the vessel, the course of the Mexican War, as well as the Civil War, might have changed. Once Scott had selected the landing site (see map) and reconnoitered the harbor, he transferred the landing force from the transport ships to specially designed landing craft, consisting of sixty-five surf boats that had been towed to the area by steamers. The entire force, backed by Commodore Matthew C. Perry’s 32-pounders and 8-inch naval guns, formed a semicircle and, as the signal gun fired, rapidly swept toward the beach. With the seamen straining at their oars, the infantry soldiers with bayonets ready and the crash of naval gunfire, the first major amphibious landing of the U.S. Army had begun. The landing was largely unopposed, and in four hours, more than 10,000 men had gone safely ashore. Shortly after the landing, the New Orleans Bulletin printed the following remarks:

The removal of a large body of troops from numerous transports into boats in an open sea — their subsequent disembarkation on the sea beach, on an enemy’s coast, through a surf, with all their arms and accouterments, without a single error or accident, requires great exertion, skill, and sound judgment.

A more recent Army concept of amphibious operations, probably without consulting the New Orleans Bulletin of 1847, envisions:
Technical problems of logistics represented by loading thousands of troops and large quantities of material into ships at widely separated embarkation points, moving them to the objective, then landing them in exactly the proper sequence, usually on open beaches or landing zones and under fire initially, all require extraordinary attention in the form of detailed planning.

The similarity between Scott’s flotilla of double ended surf boats and the mighty armadas of Normandy and Inchon are evident. The Vera Cruz operation showed the rudiments of amphibious warfare doctrine and technique.

Section IV
Notes on Uniforms of the Mexican War

By today’s standards, both Taylor’s and Scott’s American armies in the Mexican War wore uniforms that exhibited a variety of types; only five of the more colorful and unusual categories are considered here.

The Texas Ranger:
“Their clothing was of the roughest sort. For an upper garment a coarse red or blue shirt or a greasy fringed hunting jacket sufficed; their trousers tucked into ‘mule’s ear’ boots or ‘breed leggins.’ Most wore the low crowned slouch hat so familiar in the Southwest of that day.”

The Mississippi Rifles:
“They too were riflemen, but they carried the new percussion weapon just being issued to the Regulars. Their clothing was equally simple — red flannel shirts, Panama hats, and white duck trousers, but the men were not frontiersmen. At their head rode Colonel Jefferson Davis.”

2d Artillery: “It was the only fully mounted ‘horse artillery’ in the entire army…. The men of this company were authorized a distinctive uniform — alone of all the Artillery, they wore dark blue jackets like the Dragoons, but trimmed with
red instead of yellow lace…. After the war began, an additional ‘light’ company was authorized for each regiment…. These foot artillerymen of the Third were uniformed and equipped as infantry when so serving, but they never gave up their yellow lace and brass buttons.”

**Topographical Engineers:** “The officers of the Corps of Engineers and the affiliated topographical service were the elite of the Army…. It was their duty on campaign to construct temporary fortifications, bridges, and roads and to destroy enemy obstacles. They also planned marches and positions…. In short, the Engineer officer of the nineteenth century performed almost all the functions which today are assigned to a general staff; in particular, he was the intelligence officer.” Their uniforms were of somber blue hue trimmed in black velvet, and they wore forage caps in matching fabric.

**Dragoon, 1853–1854:** In 1851 the Army adopted a French style uniform featuring frock coat and cap, and black leather accouterments which became the basis for the style of uniform worn throughout the Civil War.

**Chevrons:** The Army instituted chevrons to denote noncommissioned rank for wear on the fatigue dress. The chevrons were large, extending from seam to seam, and were worn by soldiers with the point upward. Chevrons took the color of the worsted lace of the branch: artillery, yellow; infantry, white; and dragoons, orange.
Section V
Scott and Taylor: A Contrast in Generalship

Although General Scott’s and General Taylor’s lives, experiences, characters and military efforts were different, history drew them into national prominence at the same time during the Mexican War. By the mid-1840s, the two generals had served their country faithfully for over thirty years in peace and war. Both had commanded large bodies of troops and had played major roles in the nation’s defense. Taylor and Scott had been the object of much political maneuvering and had, at varying times, been associated with the political party in power. In short, considering the constraints of the times, both were successful military men at the height of their careers. But there the similarities ended.

A product of the pre-West Point concept of the Army, Zachary Taylor, popularly known as “Old Rough and Ready,” was a cautious commander who, by his own admission, was old and tired. He had lost much of the sense of urgency and the burning ambition of his youth, and it seemed to take the violence of combat to arouse him. In his private letters and particularly after his early victories, Taylor expressed a desire to step down and allow Scott to assume the field command. Rough-hewn, plain, almost unschooled, and unimaginative, his steady rise reflected luck and determination more than brilliance or knowledge of the art of war. History has not judged Taylor a brilliant tactician or strategist, nor does he appear to have been a leader who became deeply involved in the details of his army’s operation. The key to Taylor’s success as a field leader lay in an excellent physical and moral courage that earned the admiration of those serving under him, including Ulysses S. Grant. One finds many accounts of his having sat astride his horse, wearing his farmer’s coat, in the very heart of a raging battle with no apparent regard for his safety and a seeming disdain for the enemy’s fire.

As noted above, “Old Fuss and Feathers” Scott was in many ways the opposite of Taylor. Even in the heat of Mexico and under the constant strain of battle, the courtly Scott demanded exactness and precision in the dress and actions of his subordinates. Yet, for all his vanity, he was a remarkably successful general. Although involved in political and governmental maneuvers in Washington, he asked for the chance to assume command in the field and gain the acclaim and public applause accorded a victorious commander. A diligent student of military affairs, Scott displayed a profound grasp of the details of strategy, tactics, and logistics. At the same time, his intelligence and humanity in administering occupied Mexico earned such respect from the Mexicans that some offered to make
him a dictator. Scott’s personal courage could be equated with Taylor’s, but he supposedly displayed his fearlessness in a more planned and practical manner. The stately Virginian was the outstanding American military leader of the period between the Revolution and the Civil War.

What then really distinguished the generalship of Taylor from that of Scott and why are these differences so important? The differences lie primarily in the realms of personality, appearance and technique. Yet, although these styles of generalship differed widely, they both resulted in gifted and successful military leaders.

Section VI
Notes on Weapons of the Mexican War Era

The Mexican War was a war of muskets and cannon. As seen in the battles at Palo Alto and Resaca de la Palma, the basic developments in artillery lay not in the construction of new equipment or shot, but in the techniques of their employment. The same 6-, 8- and 12-pounders that, for years, had proved massive and immobile on the battlefields of Europe became highly mobile and versatile weapons when the Army formed them into mounted batteries. The best known American example of entirely mounted artillery was, of course, Ringgold’s flying artillery at Palo Alto. Rifled barrels in field pieces were the subject of many experiments during this period; however, they were neither sufficiently perfected nor widely produced to be of great use before the American Civil War.

Individual weaponry, rifles, muskets and pistols played a vital role in the close confines of battles such as Resaca de la Palma. The individual tools of war found in those dry river beds represented, for the most part, neither highly inventive nor contemporary masterpieces of the times. In most cases, they were twenty- and thirty-year-old weapons that had passed their periods of maximum usefulness and were nearing old age. A representative selection of the individual weapons of the Mexican War and pre-Civil War periods are shown below:

U.S. Flintlock Musket, Model 1822: This musket was a popular .69-caliber model, which Springfield and Harper’s Ferry Armories manufactured with but few alterations until 1840, It weighed 10 pounds and used a 16-inch bayonet. Some of these weapons still were in service in 1861, much to the alarm of the militia to whom they were issued.

U.S. Percussion Musket, Model 1841: The Army issued this .69-caliber firearm at the front during the Mexican War, but it was ill-received by the soldiers. This musket had a rifled barrel patterned after a design by the French officer Minie.
American Military Heritage

U.S. Rifle, Percussion, Model 1841: This .54-caliber weapon was also produced by the Harper’s Ferry and Springfield armories and was known as the Mississippi or “Yager” rifle. The Army first issued the weapon to troops from Mississippi (thus the name) and employed it well into the Civil War. The patch box and cover in the stock were of brass.

U.S. Rifled Musket, Maynard Primer, Model 1855: This .58-caliber weapon used an unusual priming device, which was the invention of Dr. Edward Maynard. A supposedly waterproof tape with patches of fulminate at intervals was fed past the nipple by the gun’s hammer. As each patch was expended, it was cut off by the hammer and the next patch exposed. The operator of this firearm experienced a great deal of difficulty in keeping the caps dry; thus the weapon enjoyed only a medium degree of popularity.

Hall Flintlock Rifle (1811): This was the Army’s first breech loader and also one of the first weapons to incorporate the concept of interchangeable parts. Soldiers found them more desirable than any of the existing muzzle loaders, but they were still not universally popular with the troops.

U.S. Percussion Pistol, Model 1842: This pistol was made by the Middletown, Springfield and Palmetto armories. The naval models of this .54-caliber pistol had an anchor stamped on the rear of the barrel.

U.S. Flintlock Pistol, Model 1836: This .54-caliber pistol was manufactured in both Milbury, Massachusetts, and Middletown, Connecticut, by small arms companies. It used an 8-inch barrel and was in production until 1844. Many of these pistols were converted to percussion mechanisms in the 1850s.

Colt Walker Revolver, Model 1847: This was one of Colt’s earlier models and one that was both popular with its contemporary users.
and one that has remained popular with collectors. Colt manufactured 1,000 of them.

**Colt Army Dragoon Revolver:** This was Colt’s popular “Dragoon” model, a name it drew from its users. This six-shot, .44 caliber, 14-inch pistol weighed 4 pounds. The soldier carried one on his person and one in a saddle holster.

**Wesson and Leavitt Percussion Revolver, 1837:** One of the unique pistols of the period was this six-shot, .40 caliber weapon whose cylinder could be turned in either direction by hand. One of the earliest American revolvers, it came in a .31 caliber version, and one could purchase several different barrel lengths.

**Colt Navy Revolver, Model 1851:** Many unusual, and occasionally bizarre, weapons appeared during the pre-Civil War period. This .36 caliber, six-shot revolver was one of the most successful and universally popular of the “unusual” efforts. It boasted a detachable stock with an inset canteen for holding drinking water. The canteen cap was held in place by a small metal chain.
The Civil War was the most encompassing experience in the history of our nation. Over three million Americans served in either the Union or the Confederate armies, of whom over 600,000 died from combat or disease. Thousands more were wounded. Veteran amputees were a common sight in towns and cities in late nineteenth and early twentieth century America. The Civil War also gripped the economy and the very heart of the nation in a way that no event or series of events has done since. Scholars have estimated that four years of war cost the Federal government over three billion dollars; the economic cost to the nation as a whole is incalculable. Payments of benefits to the wives of some Union Army veterans continued into the late-1990s.

War in the 1860s encompassed many of the activities and feelings that war has embodied since its beginnings. Men marched, weapons fired, cannon roared, the hooves of cavalry mounts drummed on dusty roads, men laughed and cried and died — all these things American soldiers have done in all wars. But the Civil War was unique in certain special ways. In this war, men occasionally fired at each other in anger and then later in the day swapped tobacco, a bit of coffee, the hometown paper and such humor as was possible. This war saw a mixture of older customs and practices with modern technology and application. It saw the introduction of modern equipment and techniques that would eventually signal the end of massive infantry frontal attacks, advances by artillery in line with infantry, and the unsupported cavalry charge. And, it would see the beginning of the idea of “total war,” when the economical and social base of an enemy nation was subject to the same destruction as its armies.

Prior to the election of Abraham Lincoln as President on November 6, 1860, tensions over the issue of extending slavery into the western territories mounted alarmingly, and the nation moved closer toward disunion. Along with slavery, the shifting social, economic, political and constitutional problems of a fast-growing nation created tensions between southern and northern states. With
Lincoln’s election to the presidency, South Carolina declared that the union then existing between that state and other states, under the name of the “United States of America,” was dissolved. One by one, other southern states began to secede from the Union, joining South Carolina as part of the “Confederate States of America.” Abraham Lincoln proclaimed that an “insurrection” existed, and immediately called on the states of the Union to provide 75,000 militia for three month’s service. By May 1861, eleven southern states were in open armed rebellion against the Federal government.

Both sides had to build almost entirely new armies. The United States Army early in 1861 consisted of fewer than 20,000 officers and men scattered in 198 companies, the majority of which were in the Western territories. The North’s militia which numbered in the neighborhood of 3,000,000 on paper was, in reality, nonexistent as a fighting force. A few militia units in both the North and the South had uniforms and had undergone some military training; however, the majority of such organizations had disintegrated to nothing more than social organizations. Of course, the militias of each of the states of the Confederacy were lost to the Union as their respective states seceded. When the break came, most enlisted men of the Regular Army continued to serve with the unit in which they were enlisted. However, of the 1,036 Regular Army officers on active duty, 286 resigned and offered their allegiance to the Confederacy. With the exception of Major General David E. Twiggs’ surrender of his entire command to Texas Confederates, the majority of the U.S. Army officers who decided to join the rebellion officially submitted resignations before their actual departures.

Several Southern-born officers in the United States forces decided to continue in Federal service. The most notable was the seventy-four-year-old 3rd Regiment (Hussars), New York State Militia, 1850–1860
Commanding General of the Army, Winfield Scott. Many historians feel that he alone was capable of making a strategic analysis of the problems facing the two governments at the outset of the war. He did this and quickly recommended to President Lincoln a three-part plan. The first part called for a blockade of Southern ports to cut off the possibility of outside economic aid. The second involved raising a large army to conduct an offensive down the Mississippi River to divide the Confederacy into halves. The final stage would involve increased military pressure to overwhelm the rebel states both militarily and economically. The public discounted Scott’s plan because they expected the rebellion to be over by year’s end. But Scott’s “Anaconda Plan,” as it was called, would appear again, in the successful operations carried out by Grant and Sherman four long and costly years later.

Although many bloody, brilliant battles took place throughout the four long years of war, those fought in 1862 offer an overview of the tactics and techniques of many of the war’s great leaders.

The chart on the following pages summarizes each of the battles mentioned and lists the opposing commanders and results.

### West 1862

<table>
<thead>
<tr>
<th>Area/Date</th>
<th>Actions</th>
<th>Commander</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>6–15 Feb</td>
<td>Twin Rivers</td>
<td>Union: Grant</td>
<td>Confederates surrender forts and abandon Kentucky and middle and west Tennessee. Lost local industry &amp; transportation center at Nashville.</td>
</tr>
<tr>
<td>(6 Feb)</td>
<td>Campaign</td>
<td>Confed: Johnston</td>
<td></td>
</tr>
<tr>
<td>(15 Feb)</td>
<td>(Fort Henry)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Fort Donelson)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Apr</td>
<td>Shiloh</td>
<td>Union: Grant</td>
<td>Confederates have Confed: Johnston initial success but delay in attacking; lose advantage and have to withdraw after Union counterattack.</td>
</tr>
<tr>
<td>10 Apr</td>
<td>New Orleans</td>
<td>Union: Butler</td>
<td>Only Vicksburg and Port Hudson left blocking Federal control of Mississippi.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confed: Lovell</td>
<td></td>
</tr>
</tbody>
</table>
7 Oct    Perryville    Union: Buell Confed: Bragg    Tactical stalemate but Confederate casualties force them to withdraw.

31 Dec–2 Jan  Stones River (Nashville)    Union: Rosecrans Confed: Bragg    Tactically a draw but immobilized Union Army of the Cumberland for six months.

**East 1862**

<table>
<thead>
<tr>
<th>Area/Date</th>
<th>Actions</th>
<th>Commander</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Confed: Jackson</td>
<td></td>
</tr>
<tr>
<td>26 Jun–2 Jul</td>
<td>Seven Days’ Battles</td>
<td>Union: McClellan</td>
<td>Confederates protect Richmond with small force, main body on offensive. Lee out-maneuvers McClellan but attacks badly coordinated &amp; frontal attack costly. Both armies withdraw.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confed: Lee</td>
<td></td>
</tr>
</tbody>
</table>
American Military Heritage

<table>
<thead>
<tr>
<th>Area/Date</th>
<th>Actions</th>
<th>Commander</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Sep–18 Sep</td>
<td>Invasion of Maryland (Antietam)</td>
<td>Union: McClellan Confed: Lee</td>
<td>Lee’s plan fell into enemy hands, but McClellan fails to capitalize. Although Lee pinned between Antietam Creek &amp; Potomac by superior force, the Union failed to commit reserve and a bloody draw resulted.</td>
</tr>
<tr>
<td>13 Dec</td>
<td>Fredericksburg</td>
<td>Union: Burnside Confed: Lee</td>
<td>Lee on defensive and repulses Federal frontal attacks. Casualties: Union—12,000; Confederate—5,300</td>
</tr>
</tbody>
</table>

Section II
Notes on the Presidents Davis and Lincoln

JEFFERSON DAVIS, 1808–1889

Early Life: Born 1808 in a Kentucky log cabin, he attended back country schools and then Transylvania College. He entered West Point in 1824 and graduated 23d in class of 33.

Army Career: Davis served during his early army career as the commander of logging camps along the frontier, where he gained a reputation as a strong and fair officer. In 1834, he was forced to defend himself in a military court for having missed a formation while suffering from pneumonia. He did so skillfully and with such dignity that he was not only acquitted but gained a reputation for being self-confident and convincing in his arguments. Davis served with distinction as a senator and in the War with Mexico as the commander of the Mississippi Rifles. He led his unit well and took deep personal pride in having won a victory at Buena Vista through the use of an innovative “V” formation.
President of the Confederacy: Davis undertook the Presidency of the Confederacy with a self-professed deep sense of regret. He was uniquely qualified, having served as a United States Senator, military commander, and Secretary of War. “Davis’ mind was rigid and sometimes overly theoretical, it was nevertheless brilliant, retentive, and disciplined. Furthermore, he was an articulate and sometimes moving spokesman for the aspirations of the South. He might often be too self-conscious in adherence to the Southern gentleman’s code, but he was in truth a high-minded gentleman of courage.”

Later Life: After the war’s conclusion, Davis was accused of complicity in Lincoln’s assassination and imprisoned by the Federal government for 13 months at Fort Monroe. He was freed for lack of any credible evidence. After an unsuccessful attempt to head a failing insurance company, he retired to Mississippi plantation life. He died in 1889 and was buried in a Richmond cemetery near his former capital.

Abraham Lincoln, 1809–1865

Boyhood and Youth: Born February 12, 1809 in the relative poverty of the Kentucky backwoods, he grew up in a one-room cabin in frontier Indiana. Young Lincoln attended only the equivalent of one year of formal schooling, but he had an insatiable thirst for books. He was noted equally for hard common sense and lanky, brawny arms.

Romance and Marriage: “Though a man’s man of the world of men, he [Lincoln] was on strange ground with women — cautious, indecisive, torn by a complexity of unfamiliar emotions.” Lincoln’s first love, Anne Rutledge, died of a fever before their romance had progressed to marriage, throwing Lincoln into a period of deep despondency. After a brief brush with a relatively obscure Mary Owens, he met Mary Todd, the woman who was to become his wife. Though quite unlike in personality and temperament it was said of them, “...they were not always happy, but each would have been unhappy without the other and neither would have been happy alone.”

Congress and Debates: Lincoln opposed Stephen A. Douglas in a much publicized series of debates in conjunction with the Senate race of 1858. He lost the race but gained the national recognition that would send him to the White House.

The President: “A tall, gaunt man of intense spirit and strong will. . .” During his Presidency, he met frequently with his war cabinet, binding the brilliance and energy of each of its members
into a loyalty to the Presidency and the national good. During the first two years of the war, Lincoln appointed a series of generals (McDowell, McClellan, Burnside, Hooker and Meade) to command the eastern army, the Army of the Potomac. He suffered terribly as each of these men produced their costly defeats. However, in the spring of 1864, Lincoln “found his man” when he appointed General U.S. Grant commander of all Federal forces. The war ended within a year.

**The Man:** What would Lincoln say and do if he could reach across the years and speak to the current generation? Surely he would say as he said again and again, “I would do whatever will help men to be free — whatever will help free men to govern themselves....” Lincoln rose above the confusion of his time, rising above the minds of little men, and never lost the firm conviction that this free government was the “last best hope of earth” something to be treasured, protected, and fostered for future generations, even with the sacrifice of life itself.

Sources:

**Section III**  
**Notes on the Commanders Lee and Grant**

**ROBERT E. LEE, 1807–1870**

**Early Life:** “Born in January 1807. . . studied Latin, Greek and Mathematics as a youth in Alexandria. . . appointed to the Military Academy in 1825....” Lee excelled both in academics and in discipline as a cadet. He graduated second in his class and served as the Adjutant of the Corps of Cadets.

**U.S. Army Service:** Commissioned a brevet lieutenant of engineers, Lee quickly established a reputation as a planner and constructor of fortifications at Fort Monroe, Fort Wool and Fort Pulaski. He served with distinction as a member of Winfield Scott’s staff during the War with Mexico and, in 1852, became the Superintendent of the Military Academy at West Point. In the period between that assignment and the beginning of the Civil War, Lee became a cavalry commander and served on the Texas frontier with the 2d Cavalry Regiment. After much personal soul searching as the war clouds gathered, Lee chose to tender his resignation from the U.S. Army on April 20, 1861, and to remain loyal to his home state of Virginia.
War Commander: Lee accepted command of Virginia military forces just a few days after he had resigned his commission in the U.S. Army. In June 1862, he was appointed commander of the Army of Northern Virginia, the Confederacy’s main fighting force in the East. The story of that army’s rise and fall is one of triumph and heartache, and its leader proved to be one of history’s truly great commanders. Always outnumbered and short of supplies, Lee led the Army of Northern Virginia to victories at Second Manassas, Fredericksburg, Chancellorsville and the Wilderness. On April 9, 1865 Robert E. Lee’s military career ended at Appomattox Court House, Virginia, when he surrendered his army to U.S. Grant.

Post-War Era: Lee served as the President of Washington University (later Washington and Lee University), in Lexington, Virginia. He died there on October 12, 1870.

Lee the Man: Many images of Lee linger even today — the young handsome engineer, the dutiful husband and father, the world-renowned commander and the fatherly college president. They are all Lee: A gentleman, a man who others — even his enemies — knew as a great leader and a man of honor.

Ulysses S. Grant, 1822–1885

Early Life: “Born in April 1822 in Ohio...” He was a student in several local schools but left his only boyhood mark as a horseman. It is said that he far outclassed his contemporaries in his ability to break and train spirited colts. In frontier Ohio, this ability in a boy roughly equated to modern expertise in a major sport. Grant was “one of the throngs” in the Class of 1843 at the Military Academy and graduated precisely in the middle of his class. He was a brevet second lieutenant with an annual salary of $779.00 and little possibility for promotion.

Pre-Civil War: Throughout the Mexican War, Grant served steadily and well as a quartermaster officer. Although he received a brevet promotion to captain, his military record was only average. In the slow, lonely and arduous life of the peacetime army, Grant began to regret his military occupation. He often took to drinking for consolation but this practice led to disciplinary problems. In 1854, to avoid courts-martial, he resigned his commission in the U.S. Army.

The General and President: In a dazzling ten-year period. Grant rose from a poor dirt farmer to command all American armies, and then lead the nation as its President during the critical post-war period. Although Grant never personally cared much for the life of a soldier, he totally applied himself throughout the war to
the goal of defeating the enemy. Through this single-mindedness of purpose, the man referred to as “short, stubby, seedy, stoop shouldered and undistinguished,” emerged as one of history’s great commanders. Although he was a strong and capable war leader, Grant was naive when it came to politics or the requirements of the Presidency. Historians graciously describe his two terms as lusterless.

**The Man:** Grant’s greatest asset was an infallible ability to thrust incisively to the root of a problem and then to pursue to completion his chosen course of action.

Sources:
Mapp, pp 122–135.
Sumner, pg 61.

---

**Section IV**  
NCO Heroes of the Civil War

**Adna R. Chaffee:** Chaffee was born in Ohio and enlisted in the Regular Army’s 6th Cavalry in July 1861. He became first sergeant of Troop K in September 1862, the month he distinguished himself at the battle of Antietam. Commissioned a second lieutenant, Chaffee served in the Indian Wars and rose to command a brigade in the Spanish-American War. In 1904, he became Chief of Staff of the Army.

**William H. Carney:** Born in Virginia, Carney lived for many years in New Bedford, Massachusetts, where he became a sailor. In February 1863, he enlisted in the Union Army. At Fort Wagner, South Carolina on July 18, 1863, his regiment, the 54th Massachusetts Volunteer Infantry stormed a strong Confederate position guarding the sea approaches to Charleston. When he saw his color sergeant fall to enemy fire, Carney seized the flag before it struck the ground and carried it to the parapet, where he was hit in both legs, the chest, and the right arm. Yet, he insisted on carrying the colors as the regiment fell back. When he reached the field hospital, he collapsed, stating, “The old flag never touched the ground, boys.” For his heroism, he received the Medal of Honor.

**Christian A. Fleetwood:** A Baltimore native, Fleetwood joined the Union Army in July 1863 and quickly advanced to the rank of sergeant major in the 4th United States Colored Troops. In 1864, he distinguished himself in the fierce fighting around Richmond, Virginia. When two color sergeants fell at Chapin’s Farm, Fleetwood proudly seized the national colors and
carried them through the rest of the engagement. For his heroism, he received the Medal of Honor. At one point, he wrote in his diary, “This year has brought about many changes that at the beginning were or would have been thought impossible. The close of the year finds me a soldier for the cause of my race. May God bless the cause and enable me in the coming year to forward it on.” After he left the Army in May 1866, he joined the District of Columbia Militia, rising to the rank of major.

**William McKinley:** McKinley enlisted in the 23d Ohio Infantry in June 1861. At the battle of Antietam, young McKinley was a commissary sergeant, in charge of his unit’s supplies. Realizing that the troops needed food as the bloody day wore on, he gathered some stragglers and led two mule teams with rations and hot coffee into the thick of the fighting. He received repeated warnings to retreat and lost one team of mules to enemy fire, but did not return to the rear until his fellow soldiers had received their food. For his heroism, he received a direct commission as a second lieutenant, rose to the rank of major by the end of the war, and eventually became President of the United States.

**Charles E. Morse:** As a sergeant in Company I, 62d New York Volunteer Infantry, Morse was in the thick of the battle of the Wilderness on May 5, 1864, when he saw his unit’s color sergeant fall, mortally wounded. Rushing to his fallen comrade, Morse raised the colors and rallied the men. Despite wounds, he carried the flag to the end of the engagement, receiving the Medal of Honor for his heroism.
When the call to arms came in 1861, many state volunteer units reported for duty wearing a myriad of uniform styles. Although gray had been for years the generally accepted militia color, individual state regiments might adopt gray, blue, red, or green uniforms, or combinations thereof. A regiment could even have a separate uniform style or color for each of its companies. As the war progressed, most units found it more practical to adopt government issue uniforms. The Federal government had earlier adopted blue as the national color, and its standard uniform in 1860 was the dark blue coat and trousers. A shortage of dark blue trousers early in the war resulted in large numbers of Federal troops being issued light blue trousers.

The Southern government adopted gray as its national color and prescribed that color for its uniform. Though the Confederate soldier was less uniform than his northern counterpart, the rebel army was better clothed than initially believed. There are always going to be soldiers that manage to lose everything...
within a day of issue and hard campaigning took its toll, but at some point every year, the Confederate soldier was well dressed.

7th Regiment, New York State Militia — 1861: “Gray uniform with a blue overcoat, the low kepi so familiar at this period, the heavy knapsack and blanket, and the wide white belts all bespeak the crack militia regiment of the time.”

Federal Infantry 1862: “Allowed freedom in the matter of clothes,...black hats, battered into a hundred shapes were seen.” Dark blue sack coat or blouse and sky blue trousers; “...brigades began wearing identifying bits of cloth (origin of unit insignia).”

1st South Carolina Infantry, U.S., 1862: One of the first regiments of United States Colored Troops was assigned to Union forces operating along the south Carolina coast. There soldiers were issued a long dark blue frock coat, kepi, brass shoulder scales, and red trousers.

Confederate Infantry 1863: Although some Confederate infantrymen began the war well equipped, long marches and tough fighting soon reduced their essential equipment to the haversack, a blanket, a rubber blanket, a rifle or musket and a handful of ammunition, a cup, and the absolute essentials of clothing.
Section VI
Notes on Weapons and Ordnance of the Civil War

Shoulder Weapons

The Civil War’s basic infantry weapon was the rifled musket. This weapon had already been developed and introduced into several of the other armies of the world during the preceding decade.

Minie Ball: In 1855, the caliber .58 “minie ball” was adopted for all rifles. This conical bullet with a hollow base was invented by a French Army captain, Claude Minie, and made it possible to load a rifle as easily and quickly as a smoothbore musket (three rounds per minute). It thus provided the common infantryman with a weapon accurate at ranges up to 600 yards. Because of a shortage of arms during the early years of the war, some American model muskets were contracted for and produced in Europe.

Sharp’s Percussion Carbines: This weapon had a .52 caliber linen-wrapped paper cartridge, weight of 8 pounds, and an accurate range of about 300 yards. Five distinct types appeared between 1848 and 1863. Sharp carbines were loaded by depressing the trigger guard, inserting the cartridge, and pulling up the trigger guard. A knife edge on the front of the breech block cut off the rear of the cartridge, exposing the powder. The soldier cocked the hammer and placed a percussion cap on the nipple, and the carbine was then ready to fire. During the Civil War, the Union Army purchased 80,512 Sharp’s carbines.
Spencer Repeating Arms: Caliber .52 to .56 rimfire metallic cartridge; carbine weight 8 pounds, 4 ounces; rifle weight 10 pounds. Christopher Spencer invented this magazine carbine in 1860, but it was repeatedly rejected for government use by the Ordnance Department until President Lincoln ordered their purchase in 1863. By December 1865, 12,471 Spencer rifles and many thousands of carbines had been procured by the Ordnance Department. At first loading was slow, as a soldier had to individually load each cartridge into the butt stock magazine, which held seven rounds. But later, a soldier could carry his cartridges in tin tubes — 7 cartridges to a tube, 10 tubes to a cartridge box. He would hold the tube to the opening of the magazine and invert the weapon, and the cartridges then slid by gravity into the magazine. He could then load and fire the weapon seven times as fast as the rifle musket. He fired the weapon by manually cocking the hammer, working the lever which

formed the trigger guard back and forth, and pulling the trigger. Later models had a magazine cutoff next to the trigger which made it possible to fire single rounds while holding the magazine in reserve. The weapon achieved an accurate range of about 400 yards.

Colt Revolving Rifles: Colt revolving rifles and carbines came in caliber .44 and .56 models, using Root’s patented side hammer mechanism. They were loaded like a percussion revolver, by placing the nitrate-treated, self-consuming charges in the chambers, ramming with the loading lever, and capping the nipples. Accuracy and range were good, but not comparable with the rifle-musket due to the smaller powder charge and gas leakage between the cylinder and barrel. This gas leakage, so near the face, and the ever-present possibility of multiple chamber discharges, made them very unpopular with the troops. The Union Army purchased 7,000 during the war.
SIDEARMS

Colt Revolver, Model 1851: These six-shot, .36 caliber revolvers were loaded and fired in the same way as the Colt rifles previously described. The 1851 model was designed as a Navy revolver but it was used in large quantities by both the Northern and Southern armies.

MACHINE GUNS

Ingenious as some of them were, machine guns played little part in the war. Aside from military conservatism, all such weapons of the period experienced major technical difficulties. The weight of the weapons and their ammunition, their relative inaccuracy, their low cyclic rates of fire, and complicated construction left the machine guns as merely interesting, unique, relatively untested machines. The Agar used a single barrel fed from a hopper; the Gatling gun was a multi-barrel, crank-operated weapon; and the Requa Battery was, in reality, a siege gun, firing twenty-five rounds simultaneously.

ARTILLERY

Siege and Garrison: The Civil War signaled a transition from the smoothbore to the rifled artillery. Both types of guns saw service in sieges against brick and stone forts and in support of ground forces, in such battles as Malvern Hill and Shiloh. The early tubes of cast iron were weak and subject to bursting. Later wrought-iron tubes were more reliable.

Seacoast: The heavier sea-coast artillery pieces were dubbed “Columbiads” and were mounted on heavy casemates. Brick seacoast fortresses often permanently mounted them as shown.

Mortars: Heavy siege mortars such as that shown were capable of lofting a 220-lb. projectile over 4,000 yards.
Section VII
Notes on Insignia, Traditions and Decorations of the Civil War Era

INSEIGNA

Unit Designation: In the spring of 1863, the Union army adopted the use of distinctive badges to designate different army corps. Worn on the coat or hat, the shape of the badge indicated the corps to which the soldier was assigned, and was colored either red, white or blue to indicate either the first, second or third division.

“First use of the ‘patch’, according to official sources, is believed to have been when General Philip Kearney had his men wear a red diamond on their hats to designate the Third Division, III Corps, Army of the Potomac.”

Rank Designation: The influence of the rank designations used by both the U.S. Army and the Confederate Army can be seen today. The shoulder straps of the U.S. Army, adopted in 1851, have emerged virtually unchanged on the Army Blue uniforms worn by officers. The sleeve insignia used by the officers of the Confederacy came directly from the French, and was not seen again after 1865.

Branch Insignia: The Engineers, Cavalry and Signal Corps of the era wore unique insignia which are still used today.

Regimental Traditions: The modern Army continues many proud traditions through regimental designations. For example, each modern unit bearing the designation of the Nineteenth Infantry Regiment is commanded by its junior second lieutenant on Organization Day, September 20. This commemorates the day in 1863 during the Battle of Chickamauga when the highest ranking officer left in action was a second lieutenant. The victory of that day also provided the unit’s nickname, “Rock of Chickamauga.”

DECORATIONS

At the beginning of the Civil War, the only “award” system in existence was the “brevet” promotion system. Brevet rank was honorary but could be assumed if assigned to a position calling for that grade. Brevet applied to officers only. Congress approved the establishment of the “Medal of Honor” for presentation to soldiers who “shall most distinguish themselves by their gallantry in action and other soldier-like qualities.” The Army presented the award throughout the era for acts of lesser magnitude than those for which it is now given.

The first Medal of Honor was awarded by the Army to a surgeon, Colonel Bernard J. D. Irwin, for his actions in voluntarily leading an infantry party in a raid against an Apache band on the Western frontier in 1861. The Army awarded approximately 1,200 of the medals for heroic actions during the Civil War.

Source:
By 1863 the war had entered what Union Major General William T. Sherman called its professional phase. The troops were well-trained and had acquired ample combat experience. Officers had generally mastered their jobs and were deploying their forces fairly skillfully in accordance with the day’s tactical principles. Furthermore, the increased range and accuracy of weapons, together with the nature of the terrain, had induced some changes in tactics, changes which were embodied in a revised infantry manual published in 1863. Thus, by the third year of the war, battles had begun to take on certain definite characteristics. The battle of Gettysburg is a case in point.

After the great victory at Chancellorsville, the Confederate cause in the eastern theater looked exceptionally bright. If 60,000 men could defeat 134,000, then the Confederacy’s inferiority in manpower was surely offset by superior generalship and skill at arms. In early June, Lee’s army left its camps at Fredericksburg, Virginia and headed north for Pennsylvania. Major General Joseph Hooker, commander of the Union Army of the Potomac, noticed the weakening of the Fredericksburg defenses, sent his cavalry to investigate. On June 9, the Union cavalry surprised Major General J. E. B. Stuart’s Confederate horsemen at Brandy Station, Virginia. Here, on an open plain, was fought one of the few mounted, sabre-swinging, cut-and-thrust cavalry combats of the Civil War. Although the Confederate cavalry had been superior to that point of the war, the Union horsemen at Brandy Station “came of age,” and Stuart was lucky to hold his position.

When General Hooker learned that Confederate infantry were west of the Blue Ridge and heading north, he moved to protect Washington and Baltimore. Lincoln, who had lost confidence in Hooker after Chancellorsville, replaced him with Major General George G. Meade. As the Army of Northern Virginia marched through the valleys and deployed into Pennsylvania behind cavalry screens, Meade sent the Army of the Potomac north.

While protecting the mountain passes with some of his cavalry, Stuart took the remainder of his men and attempted to ride around the Union army. The ride was daring, but proved of little use to Lee. Although Stuart captured a number of enemy supply wagons, it was not until the afternoon of July 2 that he would rejoin the army, too late to have an important influence on the battle. Stuart’s absence had deprived Lee of prompt, accurate information about the Army of the Potomac. When Lee learned from a Confederate spy on June 28 that the Union army was north of the Potomac, he quickly ordered his widespread units to concentrate at once between Gettysburg and Cashtown.
Outposts of both armies skirmished during the afternoon of June 30 near Gettysburg, the junction of twelve roads that led to Harrisburg, Philadelphia, Baltimore, Washington, and the mountain passes to the west. The rest was inevitable; the local commanders sent reports and recommendations to their
superiors, who relayed them upward, so that both armies, still widely dispersed, started moving toward Gettysburg.

**THE FIRST DAY, JULY 1, 1863**

On July 1, Union cavalrmen fought a dismounted action against advance infantry of Lieutenant General A. P. Hill’s corps northwest of town. The conflict expanded when a division of the Union I Corps arrived on the field to relieve the cavalry, and two divisions of the Union XI Corps took a position just north of the town. This initial action was followed by the arrival north of the town of Lieutenant General Richard S. Ewell’s corps, which struck the Union XI Corps on its front and right flank. As the fighting grew in intensity, Lee rode toward the battlefield, unhappy that his forces were being drawn into a battle at a time and place not of his own choosing. He arrived just in time to see Confederate infantry drive the Federals through the town and back to the heights to the south, on Cemetery Hill, and he ordered Ewell to take Cemetery Hill, if possible. But Ewell failed to press his advantage, and the Confederates settled into positions extending in a great curve from northeast of Culp’s Hill, westward through Gettysburg, thence south along Seminary Ridge. During the night, the Federals, enjoying interior lines, moved troops onto the key points of Culp’s Hill, Cemetery Hill, and Cemetery Ridge.
Lee had not wanted to fight at Gettysburg, but the victories of the day made it difficult to withdraw from hard-won ground. Hill’s and Ewell’s corps’ were on the field, and two divisions of Lieutenant General James Longstreet’s corps arrived during the night. Longstreet’s third division, commanded by Major General George E. Pickett, would not arrive for another twenty-four hours. The new commander of the Army of the Potomac, Major General Meade arrived during the night of July 1, and, as the rest of his army reached the area, he began to strengthen his lines. He briefly considered offensive operations for the next day but finally decided to let the Confederates attack.

**THE SECOND DAY, JULY 2, 1863**

Meade had completed his dispositions by the morning of July 2, and his line was strong except in two places. In the confusion, Little Round Top was occupied only by a signal station when the supporting cavalry was dispatched to guard the army trains and not replaced. Meanwhile, the commander of the Union III Corps, Major General Daniel E. Sickles, on his own responsibility, moved his line forward from the south end of Cemetery Ridge to higher ground
near the Peach Orchard, so that his corps lay in an exposed salient. By early afternoon, Meade had positioned seven corps along the Union battle line.

On the Confederate side, Lee had not been able to attack as early as he desired. Reconnaissance took time, and Longstreet’s two divisions did not reach their positions until afternoon. Generals in the Civil War tried to combine frontal assaults with envelopments and flanking maneuvers, but the difficulty of timing and coordinating the movements of such large bodies of men in broken terrain made maneuvers difficult. The action on the second day at Gettysburg graphically illustrates the problem. Lee wanted Longstreet to outflank the Federal left, part of Hill’s corps to strike the center, while Ewell’s corps enveloped the right flank of Meade’s army. The attack did not start until 3:00 p.m., when Longstreet’s men, having deployed on unfamiliar ground, under a corps commander who preferred to take a defensive stance, advanced toward Little Round Top. Longstreet’s divisions and brigades advanced piecemeal, but with savage enthusiasm. At this point, Meade’s chief engineer Brigadier General Gouverneur K. Warren, discovering that no infantry held Little Round Top,
persuaded the commander of the V Corps, Major General George Sykes, to send two brigades and some artillery to the hill. They arrived just in time to hold the summit against a furious Confederate assault. When this attack bogged down, Longstreet threw troops against Sickles’ position in the Peach Orchard and the Wheatfield; this assault cracked the Federal line and drove as far as Cemetery Ridge before Meade’s reserves halted it. Lee then ordered his troops to attack progressively from right to left. One of Hill’s divisions assaulted Cemetery Ridge in piecemeal fashion, but was repulsed by Union troops there. On the north, Ewell attacked about 6:00 p.m. and captured some abandoned trenches, but the Federals posted behind stone walls proved too strong. As the day ended, the Federals held all their main positions. During the night, Meade, after requesting the opinions of his corps commanders, decided to defend, rather than attack, on July 3.

**THE THIRD DAY, JULY 3, 1863**

Lee had hoped that with Pickett’s fresh division arriving on the field, he could launch a full-scale, coordinated attack all along the line on the morning of July 3. However, Longstreet was reluctant to allow his two divisions, which
had fought the previous day, to continue the attack. They had suffered heavy casualties, and one division commander had been wounded and carried off the field. With Federal forces now occupying Little Round Top in strength, Longstreet was concerned his divisions would be attacked in flank if they moved forward. Lee decided, therefore, that while Longstreet’s two divisions remained in place and protected the right flank, Pickett’s division would attack the Federal center along with two divisions of Hill’s corps. Lee had wanted Ewell to attack the Federal right flank during the attack on the center, but Meade’s troops attacked early on the morning of July 3 and drove Ewell’s men off their position on Culp’s Hill and out of supporting distance. Stuart’s cavalry, which had arrived the evening before, exhausted from its ride around the Federal army, was to strike Meade’s line in the rear, cutting off retreat when the center collapsed under Pickett’s assault. But Stuart was spotted moving around the Federal flank, attacked and driven off. Even without the support of Ewell and Stuart, Lee believed that he could not delay an attack. His army was living off the country and would soon strip it bare; his own communications were highly vulnerable; and the enemy before him was growing stronger with each passing day. Lee correctly surmised that the Federal center was weak, with no more than 2,000 defenders. Pickett’s and Hill’s combined attacking force would consist of more than 12,000 troops. Lee ordered Longstreet to send Pickett’s and Hill’s divisions forward, preceded by an artillery barrage. At 1:00 p.m., approximately 140 Confederate guns opened fire along Seminary Ridge in the greatest artillery bombardment witnessed on the American continent up to that time. For two hours, the barrage continued but did little more than tear up ground, destroy a few caissons, and expend ammunition. The Union artillery along Cemetery Ridge, numbering only eighty guns, had not been knocked out by the bombardment. It did, however, stop firing in order to conserve ammunition, and the silence seemed to be a signal that the Confederates should begin their attack.

Longstreet’s task force — forty-seven regiments — emerged from the woods on Seminary Ridge, dressed their lines as if on parade, and began a mile-long, twenty-minute march toward Cemetery Ridge. Union artillery opened fire from along Cemetery Ridge and from the summit of Little Round Top, enfilading the Confederate ranks. Suffering heavy casualties, the Confederates struggled to keep their formations. When the attackers reached the Emmitsburg Road, their lines and units became intermingled as they came within rifle and canister range of the Union defenders. At point blank range, Union artillery fired double charges of canister, while the infantry poured massed volleys into the gray mass. Fewer than 200 Confederates actually reached and crossed over the stone wall defended by Brigadier General John Gibbon’s 2d Division of the II Corps, and those few were soon killed, wounded, or captured. Pickett’s survivors withdrew to Seminary Ridge, and the fighting was over.
During the night of July 3, Lee pulled back his lines in anticipation of a Union counterattack the following day. But Meade and the Army of the Potomac were badly shaken by the bold assault and remained in place. On the night of July 4, the Army of Northern Virginia began its retreat back to Virginia.

**CONCLUSION**

At Gettysburg, both sides had fought hard and with great valor, suffering 51,000 casualties in killed, wounded and missing. On November 19, 1863, President Lincoln spoke at the dedication of the Gettysburg National Cemetery to honor those who had fallen. His Gettysburg Address has since been called by many one of the great speeches in the English language.

Gettysburg was a stunning setback for the Confederacy. At Gettysburg, and at Vicksburg a day later, the South lost the ability to win victory with its own resources and could only hope that the North would eventually tire of the conflict. Although the war continued for almost two more years, Gettysburg proved to be a crucial turning point.
The Army Develops in the Post Civil War and Spanish-American War Periods

Section I
The Army’s Post-War Missions

Appomattox had scarcely faded into memory when the public clamor began for the immediate demobilization of the Union Army, a process that has repeated itself after each major American war. The senior military commanders, who had fought the war urged the continuance of a strong Army-in-being, but the general public, speaking through their civilian representatives, forced massive reductions in the wartime military structure. The end result was a relatively small military force, spread over a wide geographical area and bound to the accomplishment of three missions. By 1866, the army had decreased in size to five artillery, ten cavalry, and forty-five infantry regiments. In addition, Congress had provided for 1,000 Indian scouts. The Army of the time was dispersed among nineteen territorial departments and five geographical divisions. This geographical organization fluctuated nearly annually until the completion of the Indian wars. By 1878, the entire Army had dwindled to 2,153 officers and 23,254 enlisted men, divided into company-sized units along the western frontier. These units were often viewed as “police forces” rather than an “army” in the generally accepted sense of the word.

In spite of all of the difficulties, reductions and dispersion, the post-Civil War Army performed three very difficult and different missions. It initially eliminated a threat posed by the French-supported Emperor Maximilian in Mexico. It also occupied and aided in the reconstruction of the Southern states, and it suppressed the hostile Indians and restored peace on the western frontier. Although all three of these missions were important, the last proved by far the most taxing in terms of efforts and hardships endured. From 1865 to 1891, the Army conducted 13 different campaigns and fought at least 1,067 separate engagements with various Indian nations on the western plains, including the Comanche, Modoc, Apache, Northern Cheyenne, Sioux, Nez Perce, Bannock, Piute, and Ute. Names of able leaders and warriors such as Sitting Bull, Geronimo, Santana, Joseph, and Low Dog became familiar to troopers in the West.
In assessing the years between the end of the Civil War and the first decades of the twentieth century, one finds that two different chains of events occur. The following section reflects that feature, presenting, first, a general chronology and, second, a short look at the Army’s role in the Indian campaigns.

**GENERAL CHRONOLOGY**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun 1866–Jan 1867</td>
<td>Sheridan deploys his army along the Mexican Border to discourage France in Mexico</td>
</tr>
<tr>
<td>Dec 1866</td>
<td>Massacre at Fort Phil Kearney</td>
</tr>
<tr>
<td>Jul 1867</td>
<td>Wagon Box fight</td>
</tr>
<tr>
<td>Dec 1867</td>
<td>Army garrisons Alaska with 250 men</td>
</tr>
<tr>
<td>May 1869</td>
<td>Transcontinental railroad completed</td>
</tr>
<tr>
<td>Aug 1871</td>
<td>New Orleans riots</td>
</tr>
<tr>
<td>Mar 1876</td>
<td>Crook’s Powder River Campaign</td>
</tr>
<tr>
<td>25 Jun 1876</td>
<td>Battle of the Little Big Horn</td>
</tr>
<tr>
<td>24 Nov 1876</td>
<td>Battle of Crazy Woman’s Fork</td>
</tr>
<tr>
<td>Jul 1877</td>
<td>Railroad strike disorders</td>
</tr>
<tr>
<td>Jul–21 Nov 1877</td>
<td>No Pay!</td>
</tr>
<tr>
<td>May 1881</td>
<td>School of Application for Infantry and Cavalry established at Fort Leavenworth.</td>
</tr>
<tr>
<td>Aug 1881–Jun 1884</td>
<td>Greely Expedition to Greenland</td>
</tr>
<tr>
<td>Dec 1890</td>
<td>Battle of Wounded Knee</td>
</tr>
<tr>
<td>15 Feb 1898</td>
<td>USS <em>Maine</em> blows up in Havana harbor</td>
</tr>
<tr>
<td>25 Apr 1898</td>
<td>U.S. declares war on Spain</td>
</tr>
<tr>
<td>13 Jun–15 Jul 1898</td>
<td>Santiago campaign</td>
</tr>
<tr>
<td>February 1899</td>
<td>End of Spanish-American War</td>
</tr>
<tr>
<td>1899–1902</td>
<td>Philippine Insurrection</td>
</tr>
<tr>
<td>Jun–Aug 1900</td>
<td>The Boxer Rebellion                               Walter Reed conquers yellow fever</td>
</tr>
</tbody>
</table>

**INDIAN CAMPAIGNS**

1865–1868 Southern Oregon, Idaho, Northern California and Nevada
1867–1875 Service Against the Comanches and Confederate Tribes in Kansas, Colorado, Texas, New Mexico, and the Indian Territory
1872–1873 The Modoc War in northeastern California
1873 The Apaches in Arizona
1876–1877 The Northern Cheyennes and the Sioux in the Dakotas
1877 The Nez Perce War in northeastern Oregon, Idaho and Montana
1878 The Bannock War in Oregon, Washington, Idaho, Montana and Wyoming
1878–1879 The Northern Cheyennes in Kansas, Oklahoma, Wyoming, and Colorado
1879 The Sheep-Eaters, Piutes and Bannocks in Idaho
1879–1880 The Utes in Colorado and Utah
1885–1886 The Apaches in Arizona and New Mexico
1890–1891 The Sioux in South Dakota (Ghost Dance uprising)

Section II
Notes on the Buffalo Soldiers in the Indian Wars

GENERAL
Throughout recorded American history, the black soldier has served with valor and distinction. One of the nineteenth century’s hardest working, most widely deployed, and most collectively valorous units was the block of African-American regiments, the 9th and 10th Cavalry and the 24th and 25th Infantry, known collectively as the Buffalo Soldiers. These units, formed by Act of Congress in 1866, campaigned against the western Indian tribes for the following thirty years.

THE ENEMY
Numbered among the foes of the “Buffalo Soldiers” were such formidable nations as the Apaches, Kiowas, Comanches, Ute, and Sioux. Great war chiefs such as Santana, Quanah Parker, Geronimo, Sitting Bull, and Big Foot led their respective bands against the black cavalymen and were repeatedly defeated by the seemingly limitless determination of the pony soldiers; “typical of their warfare was a deed of the grim chief Santana. He lay hidden behind a hill while a bugler was sounding calls in a camp. Before the bugler could take the instrument from his lips, the chief had galloped down on him, swept off his cap, seized him by the hair, and dragged him up across his pony’s withers, scalped him, and thundered away with wild shots of guards whistling past him.” Exposure to the elements tempered the Indian to a steel-like hardness. Many wore only a loin cloth and leggings, with a red flannel strip wound about his straight dark hair. “Those who campaigned against him remembered him for his remarkable endurance... his sheer deadliness.”
THE CAVALRYMAN

“A lot of drilling on foot and on horseback and enough parading to last you all your life... you had to keep your rifle and saber clean,... the sergeants and corporals were tough as pig iron... sugar, biscuits, coffee, salt pork and bacon... when boots and saddles sounded, comfort was left behind....” The capabilities of an African-American as a cavalryman were questioned by some of the white officers of the 1880s. But an observer who rode and fought with the Buffalo Soldiers characterized them as tough, rock-hard warriors, the match of any cavalry in the world.

AN OLD TROOPER

In 1965, Private Simpson Mann, age 103, formerly of Troop F, 9th U.S. Cavalry, received a medal for his service in the Indian Wars. Although the medal came three quarters of a century after his tour of duty, Mann’s memory of Pine Ridge, charging troopers, and the mighty Sioux warriors was crystal clear. He talked at length with his interviewer of the days of barracks music, the camaraderie of a good poker game, and the sheer terror of the hissing tomahawk. As the campaign medal was pinned to his robe, “... tears welled up in the eyes of the fine old cavalryman. He spoke almost in a whisper. ‘I’m very proud to receive this medal.’... His country was proud to give it, proud of the gallant memory of all the Buffalo Soldiers.”

Source:
Family life on the frontier was alternately dangerous, placid, monotonous, backbreaking and even occasionally “civilized,” but it was, above all, unique. In addition to the lack of the kitchen, plumbing, and automobiles of today, the military family of the late 1800s endured extreme heat and cold, long wagon marches, and fierce Indian attacks. One such family was that of Andrew and Elizabeth Burt. Andrew Burt rose from the rank of private in 1862 to brigadier general in 1902. Through his eyes and those of his faithful wife, we can catch glimpses of Army life on the frontier. Mrs. Burt’s observations of her daily life show that, although the experience of her clan was quite different from that of present-day military families, they still found time for small pleasures and joys amidst the many adversities.

**MRS. BURT’S OBSERVATIONS**

“The band played every day at guard mounting, giving untiring pleasure. Through the many years spent in different posts, watching this daily formation never lost its interest.”

“I soon learned that in an army mess, one officer ordered the meals and controls the cook and assistant, if there is one, and at the end of the month divides the expenses among the members of the mess. Its hospitality is generally extended to those coming to the post and leaving it.”

“The winter was cold and snowy. We had many dances and social gatherings, all at our houses . . . Colonel Reeve often called the figures for the young people in the square dances, in the merriest manner. The two-step was then unknown but we waltzed with delight and danced the ‘gallop’.”

“At lunch ... served us a cup of tea and a simple meal consisting of a glass of milk and hardtack ... at Fort Leavenworth, a fine wind blew peppering our food with a fine sand that would sift into everything.”

“The beautiful pink and yellow blossoms of the prickly pear were profusely scattered over the sandy country among other lovely flowers new to us... the Platte River with quicksand and fickle currents.... It is impossible to conceive of a more dreary waste than this whole road is — without tree or bush, grass thin and the Platte running over its wide, shallow bottom with its rapid current; no game or birds; nothing but the long dusty road with its occasional ox team, and the everlasting telegraph poles.”
“Officers and their ladies combined to brighten the evenings with amateur theatricals.”

“During the winter at Fort Phil Kearny,... the snow was very deep and the weather remained bitter cold; the rations gave out entirely, and they were compelled to take the grain which was brought for the animals and boil it to make food with which to sustain the lives of the garrison.”

“Allow me to correct an impression too generally prevalent among civilians that an army officer’s uniform even is provided by the government and that the food we eat is all given us. No indeed; an officer pays for all he and his family eats and wears.”

“There was musical talent, too, among the ladies, who kindly contributed their share to the social entertainment. . . These diversions, in addition to the weekly hops, combined to make the long winter evenings pass in a happy social way, which without these aids would have been drearily monotonous.”

“The sutler’s store was the social and economic center of Fort Laramie’s transient population. The store was well stocked with every imaginable article, including flour, bacon, tobacco, whiskey, wolf poison, beauty aids, beaver traps, shotguns, and carpet bags, and it was generally crowded with customers and loafers.”

“If there is no school, the children recite their lessons to their parents. In mild weather, people almost live on their porches, and generally, the houses in those days were built around a square — the parade ground — each house being in full view of the others.”

“By 1880, company barracks and officer’s quarters were one story frame, lined with brick, plain batten finish and painted a dull yellow. Coal oil and wood burning stoves were standard equipment. Except for the two story residence occupied by the commanding officer, all the ‘plumbing’ was outdoors, ‘ten feet to the rear of each kitchen. A cistern was built for each set of quarters which drained discharge into a small stream that flows in front of the post and empties in the river. Slops and excrete are hauled away and deposited on the commons Northeast of the post.”

These passages provide a small window into the Army home and social life of the Andrew Burts, who lived the life of an army officer and his wife for more than forty years on the frontier. In the words of Elizabeth Burt, their lives were in near equal parts, “Indians, Infants, and Infantry.”

Section IV
Notes on Uniforms

The uniforms of the Army during the period from the Civil War to World War I changed several times. The Army fought in several different climates under diverse conditions. Uniforms, therefore, were designed especially for the conditions of the battlefield.

**The 8th Infantry (ca. 1895):** The field uniform was very simple,... cap, plain blue coat and long trousers... armed with a Springfield rifle single shot and bayonet.

**Cuban Expedition (1898):** This soldier is from an artillery regiment, and the officer is in the Medical Department. The soldier’s uniform consisted of dark blue and sky blue wool, trousers, and his rifle was the bolt action Krag.
Infantry (1904): Khaki breeches, coat, felt hat and laced gaiters.... The officer’s uniform was similar but with brown leather leggings with sword.

**Infantry Officer and Sergeant, Philippines, Infantry in Field Dress, 1903**

Second Lieutenant c. 1890 wearing the prescribed officer’s overcoat with the cape.
Section V
Notes on Weapons and Tactics

Between the end of the Civil War and the early twentieth century, firearms and their employment went through several changes. These changes and improvements were accompanied by concurrent alterations in tactics. Although the Army fought no large-scale wars in which it could test the new weapons and tactics under battle conditions, the weapons and tactics developed prior to the turn of the century proved effective in the multiple small-scale skirmishes of the Indian Wars and in the early twentieth century conflicts.

Weapons

Springfield Model 1873: These Springfield models were nicknamed “Trapdoor Springfields.” After the Civil War, the Army possessed thousands of muzzle-loading, rifled muskets that the Ordnance Department wanted to convert into breech loaders. After a series of trials in 1865, the Army approved a system designed by the Master Armorer at Springfield Armory, Eskine S. Allin, for .58 caliber rimfire. In 1866, the caliber was reduced to .50 by brazing a liner in the barrel; the Army designated this version the Model 1866. In 1870, the manufacturers strengthened the breech and shortened the rifle, but they still constructed the rifle mostly from converted Civil War muzzle loaders. In 1873, the caliber was reduced to .45, and the rifle consisted of all new parts. The manufacturers reduced the weight from 9 1/4 to 8 1/4 pounds. The rate of fire at the time was twelve to thirteen rounds per minute. At 500 yards, this rifle placed its shots in a 15” diameter circle and penetrated 10.6 inches of white pine. The maximum range was 3,500 yards, with a time of flight of 21.2 seconds. This time of flight was so great that one finds instances of Indians seeing the puff of smoke from the rifle, running behind cover, and watching the bullet pass. Corresponding models of carbines also appeared. The rifle ammunition was designated the 45-70-405 and the carbine 45-55-405. As in all black powder cartridges, the first number is caliber, the middle is powder weight, and the last is bullet weight.

U.S. Rifle, Magazine, Bolt Action, Krag-Jorgensen, Model 1892: The adoption of this rifle was a giant step forward. Not only was it a repeater, but
it also fired a smokeless .30 caliber cartridge. Using this weapon, a man could load and fire 35 to 40 unaimed rounds of ammunition per minute and 20 aimed rounds in 54 seconds. Accuracy was comparable with the .45-70. The muzzle velocity was 2,000 feet per second with the 220 grain service bullet. The rifle weighed 9 pounds, 5 ounces. It was invented by two Norwegians, Krag and Jorgensen, and adopted by the Danish government in the late 1880s. A Board of Officers recommended it for the Army’s use in 1890, but it was not adopted by the Army until 1892. Through a delay occasioned by complaints from American inventors, manufacture did not begin until 1896. It was used by the Army until replaced by the Model 1903.

**Hiram Maxim’s Machine Gun:** In 1881, Hiram Maxim, an American electrical engineer, developed an efficient machine gun. His gun was completely different from the others of the time. The weapon used its own recoil to load, fire and eject continuously while the operator held back the trigger. The cartridges were stored in a flexible belt and the gun was cooled by a water jacket around the barrel. The British government agreed to buy the weapon if its weight could be reduced and cyclic rate of fire increased. Maxim’s first acceptable model weighed in the neighborhood of 40 pounds and boasted a cyclic rate of fire of 650 rounds per minute.

**Gatlings in the Offense:** Although the Gatling machine gun had existed since 1861, it had primarily served as either an artillery weapon or in defense of artillery and other fixed emplacements. In the Battle of San Juan Hill during the Spanish-American War of 1898, a battery of Gatling guns found themselves in close support of advancing infantrymen. Observers judged their firepower to be devastating, and, at that moment, the principle of the use of machine weapons in the offense was born.

**U.S. Rifle, Magazine, Bolt Action, M1903:** This model, using a modified Mauser design, became the primary shoulder arm of the Army for nearly forty years. The 1903 Springfield was a bolt-action, clip-fed rifle with a much improved sighting system and a much better balanced stock. This weapon saw service throughout the World War I era and the post-war years and was considered to be the best available shoulder weapon in the world.
American Military Heritage

Improved versions of the ‘03 were produced in volume as late as 1917. The rifle weighed 8.7 pounds and its maximum effective range was 600 yards.

Smokeless Powder: The introduction of smokeless powder proved a boon to its users from two standpoints. It eliminated the tell-tale puff of smoke that revealed positions, and it permitted a more rapid rate of fire, since it eliminated the need to wait for the smoke clouds to clear after each round was fired.

TACTICS

The Role of the Cavalry: In spite of occasional dashing exploits in the Civil War, the battlefield role of massed mounted cavalry was over by the late 1800s due to the devastating firepower of the new rifles and artillery. Against the Plains Indians, the cavalry used their horses for mobility but usually dismounted for combat. At Santiago de Cuba in the Spanish-American War, a cavalry division under General Joseph (Fighting Joe) Wheeler, a former Confederate general, conducted their entire campaign dismounted. Although the cavalryman continued to be a part of the army well into the twentieth century, his functions were largely confined to scouting and raiding by 1900.

Infantry/Artillery: As the combat role of the Cavalry diminished due to the development of devastating weaponry, the role of the Infantry and the Artillery became increasingly more important. Against modern rifles and machine guns, the artillery no longer could move forward with attacking infantry to render close support. Instead, American artillerymen began to develop equipment and doctrine for indirect fire at long range, laying the groundwork for the mighty and responsive firepower available to troops today. At the same time, the infantry began to use its flexibility, ability to fight in small groups, and adaptability to extremely varied conditions to accomplish the total mission of defeat of the enemy.

Section VI

Notes on Spanish-American War Mobilization

GENERAL

To evaluate the difficulties that the Army encountered in mobilizing for the Spanish American War, one must examine the developmental steps that occurred during the army’s “dark ages” (1865–1898). The basic American concept of maintaining only a sufficient fighting force to protect the country still prevailed. During this particular period, however, the forecasted force was insufficient in size, strength, training and logistical support.

Reorganization of the War Department: Prior to the Civil War, the high-level command links and channels of information were muddled and ineffective due to the existence of a Commander-in-Chief, a Secretary of War, and a Com-
manding General of the Army, whose areas of interest and responsibilities were overlapping. The lack of clear channels of control often caused intense bickering among the individuals in the three positions, and, in fact, the Commanding General, on occasion, would establish his headquarters in a city other than Washington. During the latter third of the century, observers realized the problem, but continual resistance from the holders of the offices obstructed change. Thus, at the turn of the century, the Army possessed essentially the same organization.

Military Training in Civil Institutions: The origins of the idea of granting funds and teachers to civil institutions to teach military science can be traced to the Morrill Act of 1862, which granted land to fund the establishment of state agricultural colleges and provided for military training. This act became effective after the conclusion of the Civil War, and it is generally considered one of forerunners of today’s ROTC program. Although the War with Spain in 1898 brought a temporary halt to the program, enough men had received the instruction to establish at least a partially trained potential supply of prospective officers.

Army Schools: Although the Artillery School at Fort Monroe, Virginia, had been founded in 1824, the period just after the Civil War saw the expansion of the Army schooling system. It sought to give regular units concentrated training, to train officers appointed to the Army from civil life, and to give advanced training to graduates of the military academy. The period saw the opening of the School of Instruction for Light Artillery at Fort Riley, Kansas, the School of Application for Infantry and Cavalry at Fort Leavenworth, Kansas, and the United States Engineer School at Willets Point, New York.

The Military Picture in 1898: High-level army management — that is, the General Staff and bureaus — presented a collection of loosely knit elements, and the leaders charged with their coordination, the Commanding General and the Secretary of War, were again locked in a power struggle. The Regular Army was scattered over some eighty posts across the country, with most of the troops at small posts in the West. On paper, the Militia, or National Guard, totaled nearly 116,000 officers and men, but their training in combat and field operations was sadly deficient.

Mobilization Efforts

Manpower: President McKinley called for 125,000 volunteers in 1898 after the sinking of the U.S.S. Maine resulted in a declaration of war with Spain. As the war expanded to include a second theater of operations in the Philippines, the President issued an additional call, this time for 75,000 men. The strength of the Regular Army increased solely through recruitment and, although it expanded rapidly, never quite reached the proposed total of 64,700.
Supply: During mobilization for the war with Spain, the problems involved with the selection of campsites, procurement of equipment and uniforms, and the development of stockpiles of rations posed a major challenge. Existing stockpiles of weapons, clothing and uniforms were scanty and mixed, and the Army had contemplated no planning or systems to alter the deficiencies. After much early confusion, staff bureaus and field commanders overcame these difficulties. Within two months of the start of mobilization, Army expeditions were on their way to Cuba, Puerto Rico and the Philippines; and the large volunteer force in the home camps was approaching a state of readiness. The Army met with comparative ease the post-war challenges of suppressing the Philippine insurrection and providing troops for an international expedition to China to put down anti-foreign rioting.

Training: The Regular Army had a good program of individual training but had conducted few or no large-scale exercises to allow the staffs and commanders to practice their functions. At the beginning of the Spanish-American War, a lack of high level staff training was particularly evident in the logistics field and often caused such exasperating problems as a traffic jam of loaded freight trains at Army camps in Florida.

Source:

Section VII
Notes on the Contributions of Elihu Root to the U.S. Army

State Of The Nation
The problems of governing Cuba, Puerto Rico and the Philippines after the Spanish-American War and post-war Army demobilization and reorganization confronted the new Secretary of War, Elihu Root, in July 1899.

Root’s Background: A wholly unmilitary New York corporation lawyer, Root knew little of the military or the art of war. President McKinley, however, chose him not on the basis of his military qualifications, but because of the need to administer the new American possessions being occupied by the military. Besides dealing with colonial problems, Root, influenced by Army officer reformers such as Leonard Wood, took on the task of reorganizing the Army so that it could wage modern warfare.

His General Ideas: Root strongly felt that the army was a mechanical instrument through which the country’s civilian leaders could implement or uphold
their strategy and decisions. He also observed that the Army in the state in which he found it was incapable of performing its role.

**Preparation for War:** Root felt that the preparation of the Army for war involved at least four things: A staff capable of long-range war planning; an agency capable of evaluating new war materials and recommending their adoption; a merit selection and advancement program for army officers; and large scale training exercises to maintain a high training level.

**Recommendations for Improvement:** Root’s plans to achieve an Army capable of the above tasks included the following ideas: To establish an Army War College to train the ablest and most competent officers of high grades; to select all War Department staff officers from the line and return them to the line at the end of their respective tours; to include provisions in the promotion system for the selection of outstanding officers for advanced promotion; and to make all officer promotions though a board of officers.

**Reorganization of the General Staff:** Root pushed a general staff bill in 1902, but, due to strong opposition by senior officers whose jobs would be affected by the legislation, he was unable to secure its approval until 1903. It then became known as the Reorganization Act of 1903 and included the following features: The organization of a general staff to perform long-range military planning; the abolishment of the Office of Commanding General of the Army; and the establishment of the Office of the Chief of Staff as a Presidential advisor and focal control point for high level army activities.

**The Dick Militia Act, 1903:** This act repealed the Militia Act of 1792. The new bill established state controlled, federally equipped and advised National Guard units that could be federalized for service within the United States. For use in foreign wars, national authority was still required to ask Guard units to volunteer. Foreign service was made compulsory by later legislation.

**Conclusions:** Root’s work was strongly influenced by the concepts and writings of Emory Upton, which in turn were influenced by the writings of John C. Calhoun. It is realistic to assume that, had Root’s ideas not been heeded, the U.S. Army’s participation in the First World War would have been much less effective than it was. Although not a brilliant field commander or a valorous warrior, Root’s link in our Army’s heritage is secure as a result of his planning, organizational concepts, and far-sighted goals. Root truly laid the institutional foundations of the U.S. Army of the twentieth century.
Section VIII
The Philippines, 1898–1902

The Spanish-American War left the United States, for the first time in its history, with colonial possessions. When the Spanish surrendered Manila in August 1898, the Army provided law enforcement, established a military court system, instituted a system of inspections and vaccines to improve sanitation, and reopened the port to revive commerce. To win over the Philippine revolutionaries who had fought the Spanish and who resisted becoming a colony of the United States, the Army adopted large-scale civic action programs to improve inefficient public administration, and tackle unhealthy living conditions and lack of educational, economic, and political opportunity on the islands. American soldiers played a key role in a new public school system that would provide education to more than a small male elite. Given the sheer number of schools throughout the country, noncommissioned officers, as well as enlisted men, had to participate as teachers.

When an American unit moved into a town, NCOs supervised the construction of necessary facilities, while commanders detailed personnel as principals and teachers. By 1900, a Department of Public Instruction supervised the program. A centralized system thus employed the basic American methods of compulsory attendance, free primary and secondary schools, and specialized schools. Beyond the primary grades, the teachers conducted their classes in English. The system soon proved overwhelmingly popular among the Filipinos. Within five months of the establishment of the Department of Public Instruction, over 100,000 students had enrolled in about 1,000 schools, and the Army had distributed over $100,000 worth of school materials. American soldiers passed on more than a formal elementary education. Filipinos discovered that they liked American-style Christmas celebrations, complete with a soldier decked out as Santa Claus, and sports such as baseball and basketball.
During the first forty years of the twentieth century, the United States underwent a transformation from one of several “great powers” to, arguably, the most powerful nation in the world. The U.S. Army carried out its imperial responsibilities, experimented with new technologies of warfare, reorganized its mobilization structure, and fought its first major war overseas. These new missions, and particularly the crucible of war, changed the Army. Still, the Army of 1941 shared much in common with the old frontier constabulary of the nineteenth century.

1909 Army purchases its first airplane
1914 Completion of the Panama Canal
Start of World War in Europe
1916 Punitive Expedition into Mexico
National Defense Act
April 1917 United States’ entry into World War I
May 1917 Selective Service Act
November 1918 Armistice ending World War I
1920 Amendments to the National Defense Act of
1929 Stock market crash leads to the Great Depression
1933 Adolph Hitler becomes Chancellor of Germany

In the period between the turn of the century and 1917, the United States became a world power. Yet, even while the Navy was receiving large budgets to achieve its goal of becoming the most powerful in the world, the Army was struggling to modernize with limited funds. The General Staff, established in August 1903, became the central planning and coordinating agency in the War Department, preparing contingency plans, collecting information about foreign armies, supervising the Army educational system, and controlling operations. The General Staff planned, and the Army conducted, a number of contingency operations, including the second occupation of Cuba (1906–09)
and interventions in China after the fall of the Manchu dynasty (1912), at Vera Cruz (1914), and in Mexico (1916–17). The Army also maintained order and provided relief during several major natural disasters, most notably in San Francisco following the earthquake of 1906.

The Army school system continued to grow, adding the Army War College, the Infantry School, the Field Artillery School, the Signal School, and the Quartermaster School, among others. The old Infantry and Cavalry School at Fort Leavenworth expanded to become the Command and General Staff School, and began to attract as students some of the most proficient junior officers in the service. Lack of funds, however, permitted only a small percentage of the Army’s officers to attend these schools.

The regiment remained the largest permanent unit, but the second Cuban occupation prompted the War Department to organize a division headquarters to control the Army and Marine Corps units involved. The outbreak of the Mexican Revolution in 1911 twice caused President William Howard Taft to mobilize provisional divisions on the Mexican border (1911 and 1913–15). These episodes, as well as the extensive program of maneuvers involving both Regular and National Guard units, gave American soldiers more experience with large formations than they had ever had in peacetime and added realism to the General Staff’s planning for wartime divisions and corps.

Intellectual change characterized the era for the Army. To guide training, the General Staff issued the first edition of Field Service Regulations in 1905, followed by revised editions in 1910, 1913, and 1914. The 1914 edition first explained the concept of “combined arms.” The five-paragraph field order, developed at the Leavenworth Schools, became the standard form for Army operational orders. The field artillery, which separated from the coast artillery in 1907, adopted indirect fire as its primary mode of delivering shells on target. Both the infantry in 1904 and the field artillery in 1911 established professional journals.

Equipment also changed during this period, but given the Army’s level of funding, equipment modernization had much less impact than in the Navy. The Army adopted the 1903 bolt action Springfield Rifle and a modern rapid-fire, three-inch gun for the field artillery. During the 1906–07 war scare with Japan, the Chief of Ordnance stockpiled hand grenades and developed a trench mortar, because both he and the Chief of Staff believed that the next major war would involve extensive trench warfare. The Army issued two machine guns to each regiment of infantry and cavalry beginning in 1906. In 1909, the Army purchased the first military airplane, and by early 1910, it planned to mobilize one aero company per army corps in the event of war. Automobiles and trucks began to replace the horse for transporting staff officers and hauling supplies. Army reformers failed to foresee, however, how these new weapons would interact on the battlefield.
Many of the technical branches of the Army made significant contributions in their own areas of expertise. With the acquisition of an overseas empire following the war with Spain, the Army Medical Department became a world leader in research on tropical medicine. In particular, the Yellow Fever Commission, led by Major Walter Reed, proved that the mosquito was the carrier of yellow fever. During the first occupation of Cuba, 1899–1903, the Army succeeded in all but eliminating this deadly disease from the island. The Army Corps of Engineers continued to play a large role in public works; the Panama Canal was completed under the direction of an Army engineer, Colonel George W. Goethals. The Army Signal Corps, at the same time, experimented with wireless telegraphy, an early form of radio, and, in 1904, used it to transmit messages as far as 107 miles, then a world record.

Section III
Early Army Aviation

The Army of the Potomac fielded a Balloon Corps during the first years of the Civil War. While somewhat useful as an observation platform to monitor Confederate movements, the balloons lacked the tactical mobility to accompany the troops on wide ranging maneuvers. Considerable friction also existed between the civilian balloonists and the officers charged with supporting the corps. After the battle of Chancellorsville in May 1863, the War Department allowed the organization to disband.

In the 1890s, the Signal Corps, responding to developments in European armies, acquired several observation balloons. A Signal Corps officer used a balloon for aerial observation in Cuba in 1898, with mixed results. Although the Signal Corps concentrated most of its efforts after the war with Spain on the expanding field of electrical communications, it retained an interest in lighter-than-air experiments. At the same time, another Army agency, the Board of
Ordnance and Fortification, funded experiments with heavier-than-air flight. In 1903, the Board funded experiments by Dr. Samuel P. Langley. They ended in failures that were both spectacular and public. The Army received considerable criticism from both Congress and the public for wasting public money on “impractical” schemes.

On December 17, 1903, nine days after Langley’s second failure, two bicycle mechanics from Dayton, Ohio, successfully flew the first airplane in a controlled flight at Kitty Hawk, North Carolina. When they sought to sell the Army an airplane in 1906, the Board of Ordnance and Fortification turned them down. The following year, after President Theodore Roosevelt personally intervened with the Board of Ordnance and Fortification, the Signal Corps drafted the specifications for the first Army airplane. Following trials at Ft. Myer, Virginia, the Army purchased a Wright Flyer in August 1909.

Although the Army purchased the world’s first military aircraft in 1909, European nations soon surpassed the Signal Corps’ air arm in both the quantity and quality of their machines. The German and the French armies were engaged in an arms race; both countries devoted far more money to aviation than the United States. Congress waited until fiscal year 1912 to provide funds for additional aircraft. Until then the Army used contingency funds to finance aviation. Money, however, was only one of the reasons why aviation development lagged in the United States. Light engine technology was much more developed in Europe than the United States. American-built aircraft were consequently underpowered and prone to stalling, often with fatal results. Not until World War I, with the introduction of the Liberty engine, did American engines begin to compare favorably to European designs.
Despite these difficulties, military aviation made progress in the United States. After receiving flying instruction from the Wrights, Lieutenant Frank P. Lahm became the first Army pilot. In 1910 College Park, Maryland, became the site of the first military airfield. The Signal Corps provided two aircraft to support the Maneuver Division the War Department assembled on the Mexican border in 1911. Two years later, with yet another division mobilizing in Texas, the Signal Corps formed the Army’s first aviation unit, the 1st Aero Squadron (Provisional), to support it. The outbreak of World War I gave the War Department a large quantity of information about Allied aerial operations on the Western Front. Using high-level connections, the American military attache in London, Lieutenant Colonel George O. Squier, became the only officer from a neutral nation given free access to the British armies fighting in France. What the Army lacked was technical data on the design and construction of British, French, and Italian military aircraft. It did not receive this data until after the American entry into the war.

Section IV
The Panama Canal

One of the logical extensions of the United States’ new status as a world power was the need for a water route linking the Atlantic with the Pacific. In 1880, a French company attempted to build a canal across the isthmus of Panama, then a province of Colombia. Unprecedented engineering problems, tropical disease, and lack of finances contributed to the eventual collapse of the attempt. American interest in a Central American canal dated from the 1850s. The 1890 publication of Captain (later Rear Admiral) Alfred Thayer Mahan’s *The Influence of Seapower Upon History* convinced many Americans, and particularly the young Theodore Roosevelt, that building a canal under American control was a pressing national need. In 1901, Roosevelt became president and set the legislative and political machinery in motion to gain the sole right to continue the work begun by the French. In the process, he supported a successful revolution by the Panamanians against a somewhat uncooperative Colombian government.
By 1904, Roosevelt had overcome all the obstacles, and the United States was ready to undertake the project. All previous attempts had contemplated building a sea-level canal, but a civilian engineer, John W. Stevens, successfully argued for a lock canal. Worn out by political infighting and a brutal climate, Stevens resigned in 1906. Roosevelt appointed Colonel George W. Goethals of the U.S. Army Corps of Engineers to finish the project. Goethals’ success owed much to the efforts of an Army medical team led by Colonel William Gorgas, a veteran of public health work in Cuba. Between 1904 and 1906, the team wiped out yellow fever in the Canal Zone and worked hard to reduce the incidence of malaria, which Gorgas considered the more dangerous. Sanitary work under Medical Department supervision included the construction of modern water and sewer systems for all the towns in the Canal Zone. As a result of the Army’s efforts on this project, the Panama Canal opened for shipping in 1914.

Section V
Pancho Villa

In 1911, revolution erupted in Mexico. Although the revolutionaries quickly overthrew the government, a violent internal power struggle followed. After he became president in 1913, Woodrow Wilson intervened in Mexican affairs on several occasions to try to influence the outcome in a democratic direction. When fighting broke out between President Venustiano Carranza and one of his chief lieutenants, General Francisco “Pancho” Villa, President Wilson assisted Carranza. In retaliation, Villa raided across the border into New Mexico with some 485 followers.

The War Department had deployed units of the Regular Army at intervals along the border to prevent the violence in Mexico from spilling over into the United States. On the night of March 9, 1916, Villa struck Columbus, New Mexico, which was garrisoned by elements of the 13th Cavalry. After a confused fight at close quarters in the dark, the cavalrymen drove off the raiders. President Wilson, believing that he would have the permission of the Carranza government, directed Brigadier General John J. Pershing to pursue them into Mexico. However, the movement of the Punitive Expedition into Mexico angered the Mexican people, who were still sensitive to any incursion by forces of the United States which had been responsible for the loss of a substantial part of the nation a half-century before. In response, President Carranza denied Pershing the right to use the Mexican National Railway to supply his far-flung cavalry columns. Pershing improvised a supply line using automobiles and motor trucks obtained from the organic equipment of the 1st Aero Squadron and purchased on the open market. The campaign into Mexico marked the Army’s first large scale use of trucks in a line of supply.

The aircraft of the 1st Aero Squadron, commanded by Captain Benjamin D. Foulois, proved useful in the initial phases of the operation for reconnaissance
and coordination of the columns. Unfortunately, they lacked the power to fly over the Mexican mountains. After numerous crashes, the squadron had to withdraw to the United States for refitting. Both the potential of aviation and the problems that the squadron encountered led Congress to provide much more generously for aviation in the National Defense Act of 1916.

Although Pershing pushed deep into Mexico, he was never able to catch Villa. American cavalry had several running fights with the Villistas and broke up his main band, killing many of his chief lieutenants in the process. Increasing friction between Pershing’s command and the Mexican Army led to armed clashes at Parral and Carrizal. President Wilson ordered Pershing to fall back closer to the border, where he established a zone free of bandits and revolutionaries. At the same time, Wilson mobilized the National Guard on the border. Pershing withdrew his forces from Mexico in early 1917. But the Army had to maintain troops along the border throughout World War I. In fact, the Army fought its last major battle with the Villistas in 1919.

Pershing was bitterly disappointed about his failure to capture Villa and was opposed to the policy of withdrawing from Mexico. But he faithfully executed all the administration’s orders without public complaint. When President Wilson had to select a soldier to command American forces in France, he turned to the man who knew how to follow orders, the recently promoted Major General John J. Pershing.
Between 1892 and 1914 the continent of Europe became an armed camp as two rival alliance systems of great powers vied for supremacy. The Triple Entente consisted of France, Russia, and (informally after 1906) Great Britain, while Germany, Austria-Hungary, and Italy composed the Triple Alliance. The outbreak of war in the Balkans between Austria-Hungary and Serbia in July 1914 quickly drew all the major powers into the conflict as the alliance obligations took effect. Russia, France’s ally, supported Serbia, and Germany supported its ally, Austria-Hungary. Thus, Germany faced a two-front conflict. Italy first declared its neutrality and then, in 1915, joined the Allies, as the members of the Triple Entente became known. By 1917, most minor European states had aligned themselves either for or against Germany.

In France and Belgium, as early as October 1914, the troops on both sides began constructing what became an increasingly elaborate trench system known as the Western Front, stretching from the Swiss frontier to the English Channel. Offensives gained ground in yards, not miles, and cost tens of thousands of lives. On the first day of the battle of the Somme, July 1, 1916, the British Army alone lost 100,000 casualties.

Throughout the first three years of the war, the United States consistently sought to maintain its neutrality. A series of incidents resulting from the German submarine blockade of France and Great Britain made this increas-
ingly unlikely. As early as May 1915, the German submarine *U-20* sank the great British liner *Lusitania* off the coast of Ireland, killing 128 Americans. Although this incident caused a war scare and touched off a large preparedness movement to provide trained reserves for the Army, the Wilson administration continued to seek a diplomatic solution. Under threat of war, the German government pledged in April 1916 to refrain from unrestricted submarine attacks on shipping. By January 1917, however, the German high command was convinced that it had accumulated enough submarines to starve the British Isles into submission. Germany renounced its earlier agreement. It also tried to convince Mexico to declare war on the United States by promising to return Mexico’s “lost provinces,” Texas, New Mexico, Arizona, and California. British intelligence intercepted and deciphered the message, known as the Zimmerman Telegram, and turned it over to the Americans. The United States declared war on Germany and on its allies on April 6, 1917.

The German leaders had anticipated an American declaration of war but had calculated that the U.S. Army was too weak to intervene in sufficient strength before Germany won the war. Although Congress in the National Defense Act of 1916 had provided for an expanded Regular Army of 175,000 men in peacetime, backed by the 400,000-man National Guard and an Army Reserve, expansion had only barely begun when war was declared. The passage of a Selective Service Act in May 1917 allowed a relatively orderly mobilization of manpower until the Army reached a peak of approximately 3,000,000 men in November 1918. Industrial mobilization, on the other hand, proved much more chaotic, and the equipment shortages that resulted made unit training difficult for divisions in the United States. The supply situation remained a problem until the end of the war, and the Americans had to depend on their allies for most of the heavy equipment they used in combat.

Shortly after entering the war, President Wilson sent the advance elements of the American Expeditionary Forces (AEF) to France under the command of Major General John J. Pershing. Pershing organized a modern staff, set up a school system to train specialists, and prepared a training schedule for divisions as they deployed to France. But the American troops were slow to arrive. There were only four combat divisions in France by December 1917. American planning looked toward launching a war-winning offensive in 1919. Pershing, meanwhile, came under heavy pressure from the British and the French to integrate Americans into their depleted armies — first as individual replacements and later as units. He strongly opposed the first proposal and only consented to the latter to facilitate unit training and for short periods during combat emergencies. President Wilson believed that only a strong, independent American Army would give him the leverage he needed at the end of the war to achieve a just and lasting peace in Europe. Not without difficulty, Pershing ensured that the AEF was independent when the war ended.
While the AEF slowly organized in France during 1917, the Germans knocked Russia out of the war. At the same time the German Army held off major French and British attacks on the Western Front, although at considerable cost. During the winter of 1917–18, the Germans transferred divisions from Russia to France and, in the spring of 1918, opened a series of offensives designed to win the war. American units helped stop the last two drives, and then the U.S. I Corps participated in the Allied counterattack at Soissons in July that marked the beginning of the German Army’s long retreat. In early September 1918, the U.S. First Army, under Pershing’s immediate command and reinforced with French divisions, successfully cleared the St. Mihiel salient and thereby removed any German threat to the rail lines leading to Verdun. Using Verdun as a base, the First Army then attacked north through the Argonne Forest toward the key rail center of Sedan as part of a general Allied offensive. Initially very successful, the Americans bogged down because of difficult terrain, skilled German defenders, and their own inexperience.

After suffering high casualties, Pershing halted and reorganized, inserting a second field army headquarters to provide better control over some thirty American combat divisions now in France. When the Americans resumed the attack in early November, First Army broke the German lines and pursued the enemy toward the Meuse River. An armistice ended the fighting on November 11, 1918.

At the Paris Peace Conference, President Wilson succeeded in winning agreement on the formation of the League of Nations, an international organization designed to allow nations to settle disputes without war. By forcing Germany to pay substantial penalties, known as reparations, the Allies sowed some of the seeds of the next world war. The withdrawal of the United States into isolationism, signified by the Senate’s refusal to ratify the Versailles Treaty and the concurrent failure to join the League of Nations, also severely weakened the postwar balance of power.
Section VII
Notes on Legislation

Between 1916 and 1920 Congress passed three significant laws, the National Defense Act of 1916, the Selective Service Act of 1917, and the 1920 Amendments to the National Defense Act of 1916. Some of the most far-reaching pieces of military legislation ever enacted in the United States, they served as the basis of U.S. military manpower policy between 1916 and 1972. Some provisions of these acts continue to affect the Army to this day.

The National Defense Act—1916: The 1916 act, passed as a result of the Preparedness Movement and the dangers posed by World War I in Europe, was a comprehensive piece of legislation that affected all aspects of the military establishment. It provided that “the Army of the United States” would consist of “the Regular Army, the Volunteer Army, the Officers’ Reserve Corps and the Enlisted Reserve Corps, the National Guard while in the Service of the United States, and other such forces as are now or may hereafter be authorized by law.” The law increased the maximum peacetime strength of the Regular Army from 100,000 to 175,000, phased in over a period of five years, and set the wartime strength at 286,000. The act called for the War Department to organize all mobile troops of the Regular Army and National Guard into brigades and divisions in peacetime and authorized the President to establish corps and field armies in time of war or emergency. The legislation prescribed the composition of these units but only in general terms. It created a Regular Army enlisted reserve with an elaborate system of bounties to encourage men to stay in the reserve and re-enlist in time of war. It created the Reserve Officers Training Corps at all four-year, land-grant colleges and authorized the War Department to establish similar training detachments at other four-year colleges and universities and established a Regular Army officer reserve. Finally, it provided that individual members of the Organized Militia could be drafted into active service for an indefinite period in time of war.

The Selective Service Act—1917: Congress and the Army sought to avoid the mistakes of the Civil War draft. During the Civil War, the War Department took six months to appoint enrollment boards and to conduct the registration. The enrollment officers went from house to house to conduct a military census and determine who was eligible. Some enrollment officers were killed, and many were injured. The resulting registration was incomplete and inaccurate. During World War I, while Congress debated the act, the War Department secretly worked out the administrative procedures. By the time the act became law, the War Department had completed all administrative plans. One of the key distinctions between the Civil War and World War I drafts lay not in the laws themselves, but in the registration regulations. Rather than requiring members or employees of the draft boards to go to individuals to register them
as a census taker would, the regulations made it the patriotic duty for all men of military age to come forward and register at a designated place. Once the War Department formulated this policy, it became logical and convenient to have the men report to their customary voting precincts to register. Registration, however, was only the preliminary step in the selective service process. The real work centered around who would serve. The local boards handled the major part of the selection work. Because the local boards were composed of the neighbors of the future selectees, the system achieved widespread grass roots support. About sixty-seven percent of the men serving in the Army during World War I entered under the Selective Service Act. In less than eighteen months, the system selected and brought into the armed forces 2,810,296 men.

The law made all males between the ages of 21 and 30 subject to registration except for those in certain occupations, such as holders of civil office, members of pacifist religious sects, hardship cases, and individuals giving evidence of “moral turpitude.” The law established local boards comprised of minor officials and prominent citizens appointed by the President, who had the power to exempt individuals. Finally, it specifically prohibited the twin evils of the Civil War period, the hiring of substitutes and the payment of bounties to induce enlistments.

The 1920 Amendments to the National Defense Act of 1916: This legislation is sometimes referred to as the National Defense Act of 1920. Although technically this legislation only made amendments to the earlier act, the amendments actually represented a genuine shift in policy. Congress passed the amendments after one of the most comprehensive debates on national military policy in American history. Two differing views emerged in testimony before the Senate Military Affairs Committee. The great wartime chief of staff, General Peyton C. March, wanted a large, skeletonized Regular Army of 500,000 men to be filled to war strength by the Army Reserve, kept up to strength by a continuation of wartime conscription. In contrast, Colonel John McAuley Palmer, General Pershing’s personal representative, championed the concept of the citizen soldier. He advocated a small, ready Regular Army, capable of handling all situations short of a general war. To provide trained reserves for a major conflict, whether Army Reserve or Guard, Palmer advocated a system of universal military training for all males of military age. Endorsed by Pershing, Palmer’s ideas, shorn of the universal military training provisions, became the basis of the 1920 amendments. They provided that “the Army of the United States” would consist of “the Regular Army, the National Guard while in the service of the United States, the organized Reserves, including the Officers’ Reserve Corps and the Enlisted Reserve Corps.” The Regular Army would not exceed 280,000 enlisted men in peacetime. The amendments added three new branches—Air Service, Chemical Warfare Service, and Finance Department. Tanks became the
responsibility of the Infantry branch. The number of officers in each grade and the pay of the entire Army was fixed by statute. To facilitate mobilization, the peacetime Army would normally organize into brigades, divisions, and corps. The legislation left their composition to the discretion of the President. The President could also form field armies when he thought the situation justified it. The War Department General Staff received specific responsibility for preparing plans for national defense and the use of military forces for that purpose. The country was divided into corps areas for peacetime administration.

During the prosperous 1920s, with public attention focused upon the fortunes to be made on Wall Street and the impulse toward isolationism still strong, Congress never fully funded the act. Initially Congress provided for 150,000 Regulars, still substantially larger than the pre-1916 Regular Army, but after 1927 cut it back to 117,000 men. The War Department divided the country into nine corps areas. Each was to contain one Regular Army, two National Guard, and two Reserve divisions. Given the authorized manning levels, the Regular divisions remained skeletons. Guard divisions, dependent on Federal drill pay, were usually at less than fifty percent strength, with minimal training days. Reserve divisions were little more than paper organizations, with small cadres for mobilization.

The onset of the Great Depression placed the whole program under even greater stress. During the period between the world wars, the United States possessed a national military policy adequate on paper to its needs. But lack of political commitment and the shortage of funds that resulted meant that the Army, although larger and better prepared for mobilization, was probably less ready to conduct operations than the pre-1916 Army.

Section VIII
Notes on Awards and Decorations

Societies have always valued individual courage, skill, and ability. Military medals, however, are a relatively recent invention. In the eighteenth century the king of England ordered medals to be presented to senior British military and naval leaders. During the American Revolution, the Continental Army adopted the practice with a democratic variation. On August 7, 1782, Lieutenant General George Washington established the Badge of Military Merit. Known commonly as the Purple Heart, it is generally held to be the first award for valor without regard to rank. Although the Medal of Honor dates from the Civil War, the United States government waited until World War I to authorize and present a significant number of awards and decorations for individual valor and distinguished service. A brief summary of these World War I-era medals and their stated use follows:
The Distinguished Service Cross (DSC): President Wilson authorized this award in 1918 at the same time that the criteria for the award of the Medal of Honor were updated to their present strict requirements. The DSC was intended to rank just below the Medal of Honor. It was supposed to be awarded to any person who, while serving in any capacity with the Army of the United States, distinguished himself or herself by individual acts of extraordinary heroism in connection with military operations against an armed enemy under circumstances that did not justify the award of the Medal of Honor. The DSC was also awarded to members of civilian relief organizations who distinguished themselves while working with the Army in an area of actual operations. During World War I, the War Department presented more than 5,000 DSCs and 100 bronze oak leaf clusters instead of a second award. Officers and men who had rendered conspicuous service prior to World War I became eligible for the medal as well. The DSC is a bronze cross and bears an American eagle, superimposed upon a laurel leaf. A scroll below the eagle has the inscription FOR VALOR. It is suspended from a blue ribbon with a border of narrow red and white stripes.

The Distinguished Service Medal: Congress created this medal to reward those persons, either military or civilian, who in positions of great responsibility rendered outstanding service to the United States Government. The medal was awarded to numerous officers, both American and foreign, as well as to many women during the World War I era. The first group of these medals was presented in 1918 to each of the military commanders of the allied armies. The medal is a bronze seal of the United States, surrounded by a lettered, blue enamel circlet suspended on a red and white ribbon.

The Silver Star: This award was originally a small silver star intended to be worn on a campaign medal to denote gallantry during that particular action. Approved for issue in 1918, it ranked just below the DSC. In 1932, a medal, consisting of a silver star suspended from a red, white, and blue pendant was authorized with a bronze oak leaf cluster to be added for each additional award. An interesting feature of this decoration is that it is, in the strictest sense, the only medal, other than the Medal of Honor, that is awarded for “gallantry in action.” One of the famous early holders of this decoration was General Pershing.
**The Distinguished Flying Cross:** On July 2, 1926, Congress authorized the award of the Distinguished Flying Cross to any person who, while serving in any capacity with the Air Corps of the Army, Navy, or Marine Corps including the National Guard and Organized Reserves following April 6, 1917, distinguished himself by heroism or extraordinary achievement while participating in aerial flight. Although the decoration was made retroactive to World War I, it was more widely presented during the postwar period, with one of the first awards going to Captain Charles A. Lindbergh for his trans-Atlantic flight in 1927. The medal consists of a bronze, four-bladed propeller suspended from a bar which is attached to a blue ribbon with red, white, and blue stripes.

**The Soldier’s Medal:** Congress established this medal at the same time that it authorized the Distinguished Flying Cross. The Soldier’s Medal is intended as an award to a member of the armed forces for heroism not involving actual conflict with an enemy. Most of these medals have been awarded for heroic deeds in life-saving. Nearly three hundred were presented during the decade immediately following its authorization. The medal is a bronze octagon with a superimposed eagle suspended from a ribbon with two broad blue stripes at the edges and thirteen narrow white and red alternating stripes in the center.

**The Purple Heart:** On February 22, 1932, the two hundredth anniversary of George Washington’s birth, the War Department announced the revival of the Purple Heart. It was to be awarded to Army personnel who as a result of enemy action had received wounds necessitating treatment by a medical officer. The original award, designed by Pierre Charles L’Enfant, who later designed Washington, D.C., was a purple, heart-shaped cloth encased in a silver border. One of the two surviving originals also has the word “Merit” embroidered in the center and encircled by a wreath. The modern medal, designed by Elizabeth Will, consists of a purple heart in a light bronze border with a profile of General Washington in the center. Above the heart is a miniature of the Washington family coat of arms between tiny sprays of green leaves. It hangs from a purple ribbon enclosed by thin silver stripes at the left and right borders.
Section IX
Notes on Weapons and Tactics

GENERAL
When the United States entered World War I, the factories that produced armaments and munitions were busy with orders for the British and French Armies. Even though the United States had pioneered interchangeable parts, assembly lines and mass production, it required approximately eighteen months to set up new factories and begin large scale production of equipment and munitions. Consequently, the AEF had to rely on French and British weapons on the Western Front. The following list, by no means complete, gives some of the weapons and equipment used by the soldiers of the AEF.

LIGHT WEAPONS AND MACHINE GUNS
American troops went to war with a mixture of allied weapons, including French machine guns, an odd weapon called the Chauchat 8-mm. machine rifle, and ancestors of the modern light mortar and hand grenades. U.S. Army stocks of light automatic weapons were both small and obsolescent at the time of American entry into the war. The American inventor John M. Browning developed a family of machine guns that promised to be the best in the world, but production took time. The Browning automatic rifle, best known by its famous acronym BAR, went into combat with the 79th Division at St. Mihiel in September 1918. Divisions arriving from the United States after that time came equipped with them, but it took longer to reequip divisions already in France. The Browning model 1917 .30 caliber machine gun only entered service at the front in one division in late September 1918. The only other truly “all American” weapon of the war was the automatic pistol .45 caliber model 1911, also of Browning’s design. Several of the more commonly used weapons of the war are discussed below:

United States Rifle, .30 Caliber, Model 1917: The Springfield 1903 was very popular with American troops during the war, but they also used the .30 caliber model 1917, a bolt-action magazine rifle derived from the British Lee Enfield, pattern of 1914. The U.S. Army reworked its version to take standard Army .30 caliber cartridges, mounted in a clip of six. The sight was adjustable from 200 to 1,600 yards. The rifle was a pound heavier and three inches longer than the 1903 Springfield.

The locking system on the 1917 model was weaker than the one on the Springfield. Unlike the models produced for the British Army, however, the American version
featured interchangeable breech mechanisms. Through November 9, 1918 the Army received 2,202,429 model 1917 rifles. It used them to equip all draftee divisions and at least four National Guard divisions. The National Guard divisions that fought in France with the British Expeditionary Forces, the 27th and 33d Divisions, received British Lee Enfields.

**Russian Three-Line Rifle, 7.62-mm:** This bolt-action magazine rifle loaded from the top along the lines of the Mossin and Nagant, the standard rifle of the Imperial Russian Army. The magazine had a capacity for five cartridges. The Remington Arms Company and the New England Westinghouse Company had large contracts from the Russian government at the time of the March 1918 Revolution. The War Department wanted these companies to manufacture the Browning .50 caliber machine gun. To enable them to keep their skilled workforces together, the department purchased all the Russian rifles manufactured by the companies until they could put their machine gun lines into production. The Army thus acquired 280,049 Russian-pattern rifles, all of which the War Department shipped to the states for distribution to Guard units.

**French Chauchat Automatic Rifle:** This air-cooled automatic rifle was widely used by the French, the Belgians and the Americans during World War I. The French and Belgian models employed a crescent-shaped magazine, while the American version, a modification of the model 1915 Chauchat, used a straight magazine. Both magazines had a 20-shot capacity. The rate of fire was 300 rounds per minute, operated by the long recoil system. It weighed 19 1/2 pounds, including a folding bipod. The first American divisions arriving in France were equipped with this weapon out of French Army stocks. This version used 8-mm. ammunition, but was subsequently redesigned to take U.S. .30 caliber cartridges. Beginning on 31 December 1917, American divisions received their Chauchats prior to sailing for France. Bad design and poor manufacture meant that the gun was plagued with “parts breakage, feed jams, and cartridges sticking in the chamber as soon as the barrel became slightly hot.” The long recoil meant that it was almost impossible to keep the weapon on target. As soon as these limitations became widely known, American troops discarded great numbers of Chauchats on the battlefields of France. Lack of an adequate machine gun program in the U.S. Army prior to the war meant that most of the AEF had to use the Chauchat until the Armistice.
Hotchkiss Machine Gun, Model 1914:  The standard machine gun in the French Army, it enjoyed a great reputation for reliability and accuracy. Belt-fed, gas-operated, and air-cooled, it was first developed for use by the French Army in North Africa. Chambered for the standard French Army rifle ammunition, the 8-mm. model 1886 Lebel cartridge, the gun could fire 400 rounds per minute. The first twelve U.S. combat divisions to arrive in France received 8-mm. models from the French Army. In order to simplify ammunition supply, the War Department converted these to standard .30/06 rifle cartridges. The model 1914 received much credit for the French Fourth Army’s successful defense of the Marne River in July 1918.

Automatic Pistol, .45 Caliber, Model 1911:  This standard Army-issue weapon was the Army’s response to juramenado, a custom of the Moros, the Moslems living in the southern Philippines. The Moros would attack Christians with long knives while in a religious frenzy until they themselves were killed. The standard Army pistol of .38 caliber proved too lightweight when faced with such fanaticism. Officers were sometime hacked to death by Moros after emptying their revolvers into assailants, who eventually died themselves. The .45 caliber model 1911 was designed with sufficient hitting power to knock a large male in full charge to the ground with one hit. A revolver that could penetrate white pine to a depth of 1 inch at a range of 25 yards was considered to have inflicted a serious wound on a man. The model 1911 penetrated white pine at that range to a depth of 6 inches. The magazine carried seven cartridges. Under test conditions, an operator beginning with an empty magazine fired 21 shots in 28 seconds, all of which struck a man-sized target stationed 25 yards away. The trajectory was flat up to 75 yards, the distance the Ordnance Department considered the limits of its accuracy. It was a handy weapon in a trench fight.


Artillery

World War I on the Western Front was very much an artilleryman’s war. Modern artillery dates from the French Army’s adoption of the model 1897 75-mm. gun. It was the first piece capable of quick fire; a hydraulic recoil returned the gun to battery after every shot. The carriage remained stationary throughout the recoil, permitting a great increase in the speed of fire. When soldiers prepared the trail (that part of the gun carriage that rested on the ground) so that the tube reached a 45-degree elevation, it achieved a maximum range of 9,482 yards. The French Army planned to use the guns close
to the infantry firing line, in plain view of the enemy, in what was known as direct fire mode. The rapid fire would sweep the enemy infantry quickly from the front. The British Army, however, opted for a system of indirect fire as its standard artillery tactic. Direct fire allowed close coordination of action by infantry and the accompanying artillery and simplified the problem of massing fire. Gunners simply established gun lines in which their pieces lay in close physical proximity to one another. Virtually all Western armies before the war, including the U.S. Army, still regarded infantry fire as decisive for establishing fire superiority over an opponent. Artillery only assisted the infantry.

The opening battles of 1914 settled many questions of tactics. Direct fire was guaranteed to cause the artillery excessive losses, not only of men but materiel. It could only be adopted in a tactical emergency. The French 75, excellent weapon that it was, still was not sufficient by itself in all situations. When attacking fortifications, artillery needed to throw heavier shells at higher angles than the gun could provide. Large caliber howitzers were necessary.

The Allied armies developed techniques to deal with the unprecedented situation facing them. The British Army perfected the tactic of the rolling barrage, which consisted of moving a line of shell fire, usually shrapnel, at a slow pace about 100 yards in front of the advancing infantry. It became standard practice, following the disastrous first day of the Somme offensive,
to provide “a creeper” to support all infantry attacks. Carefully plotted map fire enabled artillery to support the initial stages of attacks, concentrating fire on strong points, likely artillery positions, and counterattack routes. But once the attacking infantry outran its supporting artillery, it quickly became vulnerable to counterattack. After a period of forward defense, the German Army adopted just this sort of flexible, opportunistic theory of defense, allowing Allied infantry to penetrate deeply into a defensive zone and then cutting off its escape routes and destroying it. Such was the state of artillery tactics and materiel when units of the AEF entered the front line in 1918.

As early as 1902 the U.S. Army adopted its first rapid-fire artillery, the 3-inch gun. Indirect fire as the primary mode of delivery of support to the infantry became doctrine in 1905. The Army also embraced a complete system of modern artillery later that same decade. But shortages of trained personnel and equipment hampered progress. By 1917 the field artillery had only 600 model 1902 3-inch guns and only a few samples of the other weapons. Even the 3-inch gun had one design feature that limited its utility. It had a single trail, which gave it greater stability when drawn by a team of horses but limited its traverse to only 4 degrees to either side of center. With the trail in the center, the tube could only elevate to fire at an angle of 16 degrees. This characteristic limited the gun’s range to 6,500 yards, considered too short given the conditions prevailing on the Western Front.

To remedy the defect, the Ordnance Department designed and built a split-trail carriage that would allow elevation of the tube to 40 degrees with an appreciable increase in range. Unfortunately, it was rushed prematurely into production and the design proved a bad one. Known in the service as “the crime of 1916” after its model year, it was never employed in combat. Instead General Pershing outfitted the AEF with primarily French equipment—the model 1897 75-mm. gun, the 155-mm. howitzer, and the 240-mm. howitzer. It also adopted the 8-inch howitzer standard in the British Army. The Ordnance Department contracted with American firms to build the French equipment. The Army received its first model 1897 75-mm. guns from American plants just as the Armistice ended the war.
TANK WARFARE

The British first employed tanks during the battle of the Somme in 1916, but in such limited numbers that they did not achieve any far-reaching tactical results. They did demonstrate considerable potential, however. At the first battle of Cambrai on November 20, 1917, the British Third Army used tanks in mass for the first time and briefly broke the German line. The Germans eventually restored their position through a massive counterattack, the second battle of Cambrai.

Prior to American entry into the war, U.S. Army observers reported that tanks had accomplished little. Based on their analysis, the War Department early in 1917 officially adopted the position that tanks were a failure. Upon his arrival in France, however, General Pershing established a tank committee to examine the issue. These officers became quite enthusiastic about the tank’s potential, and Pershing consequently organized an AEF tank program. The Americans standardized their tank program on two models — a French Renault tank and a heavy British Mark V tank. The Renault weighed five tons and carried a two-man crew. It used a hand-cranked turret in which it mounted either a 37-mm. gun or an 8-mm. machine gun. It could cross a trench seven feet wide and had a maximum speed of six miles per hour. The Ordnance Department designed an American version, the six-ton tank, model 1917, which substituted an American automobile engine for the Renault engine. It was 2 miles per hour slower than its French model. The Mark V came in two configurations: the “male,” with its two 57-mm. guns and five machine guns, and the “female,” with seven machine guns. It weighed over thirty tons and required a crew of eight.
The primary responsibility of tanks in the AEF was to assist the infantry, although Captain George S. Patton, Jr., who would achieve greater fame in a later war, wanted to use light tanks for exploitation after a breakthrough. The 1st Tank Brigade (Provisional), later redesignated the 304th Tank Brigade, equipped with Renault tanks and commanded by Patton, supported V Corps at St. Mihiel. It proved of only limited use because of the difficult terrain and impassable trenches. During the early stages of the Meuse–Argonne offensive, the brigade provided valuable support for the I Corps but suffered 125 percent losses while doing so. On November 1, when the U.S. First Army launched its final major attack of the war, the remnants of the brigade assisted the 2d Division in breaking the German lines. The AEF had too few tanks, and they suffered from too many mechanical breakdowns, to implement Patton’s concept.

**GAS**

In 1914, Germany boasted the world’s leading chemical industry. The German Army could draw upon a wealth of technical expertise and productive capacity that gave it a technological advantage until the last year of the war. The stalemate that developed on the Western Front in late 1914 created the circumstances in which the German high command first approved the use of gas. German soldiers opened over 5,000 cylinders of poison gas at Ypres at 1700 on April 22, 1915. Soon, 168 tons of chlorine in the form of a greenish-yellow cloud were gently rolling across no man’s land toward the French 45th Algerian Division. This division, new to the front line and composed of colonial troops, broke for the rear. Approximately 20,000 men were gassed; some 5,000 died.

Very soon after the attack, all the armies on the Western Front adopted protective masks. Anti-gas discipline became a major consideration in all combat forces. Advances in technique and tactics improved the delivery of gas, barrages of which delivered by shell fire became the method favored by both sides. Gas, increasingly more lethal, became just another cost of doing business on the Western Front.

The first masks were developed by the Germans and had a greased leather face piece with a charcoal-filled canister below. French, Belgian, and British masks had an cloth face piece impregnated with a resin mixture with a chemically treated cotton pad as a filter. It could be regenerated with
urine in an emergency. The British redesigned their mask in 1916 to use a canister similar to the German, but carried in a bag on the chest and connected to the mask by a hose. The United States adopted and used this mask, known colloquially as the “British box mask,” up to the early days of World War II. In areas subjected to heavy gas shelling, the Army handed out French Tissot masks and gloves. The finest gas mask developed by any army during World War I, the Tissot was very bulky. Normally, it was used by artillery rather than infantry, although commanders made exceptions based on the tactical situation.

By 1918 the British and the French armies liberally used toxic gases in both the offensive and the defensive. On the attack, they drenched suspected machine gun and artillery positions with mustard gas and then maneuvered around the gassed areas. These locales thus played much the same tactical role in the offensive as minefields did in World War II. Although by August 1918, the U.S. First Army staff was convinced of the soundness of these ideas, Pershing failed to appreciate their importance. First Army made little use of mustard gas during the St. Mihiel offensive. Only the III Corps, of the three American corps involved, used gas in the opening phases of the Meuse–Argonne offensive. Once the artillery moved forward to support the subsequent phases of the attack, it no longer received gas shells. The shells were caught in a massive traffic jam that developed in the army’s rear area. Not until November 1, with Lieutenant General Hunter Liggett in command of the First Army, did the Americans adopt Allied techniques. The liberal use of gas helped break the German line. Thus, only at the very end of the conflict did the Americans demonstrate a level of mastery of gas warfare that approached British and French standards.
HELMETS
Intendant-General Adrian of the French Army developed the first modern military helmet. In 1915, he talked with a soldier who told him that he owed his life to the fact that “he was wearing his metal food bowl” under his cloth kepi. A rifle bullet had glanced off the bowl. Adrian immediately commissioned the manufacture of a number of metal skull caps, one of which he wore for several days under his own kepi until he was satisfied that soldiers in the trenches could wear them without discomfort. The French Army then began issuing them to the combat troops. By 1917, all the belligerents issued steel helmets to their troops.

At this time the German steel industry was more technically advanced than its competitors in Great Britain, France, or even the United States. Consequently, the “coal scuttle helmet” worn by German and allied Austrian troops gave good ballistic protection to both the top and sides of the head. French and British steel makers lacked the capacity to “draw” the steel, that is shape it around the wearer’s head, without weakening it. The famous “Poilu” helmet that resulted from the idea of General Adrian, subsequently adopted by the Belgian and Italian as well as the French armies, provided some protection to the side of the head at the expense of overall strength. The British Army, on the other hand, adopted a “pancake” style helmet, a simple dome with a brim, that gave maximum protection to the top of the head and none at all to the sides. The War Department selected the British helmet but directed the Ordnance Department to design something better. These efforts ultimately led to the M1 helmet adopted during World War II.

SHRAPNEL
Also called “case shot” or “spherical case shot” in the nineteenth century. In 1784, Lieutenant Henry Shrapnel, an Englishman, invented a spherical explosive shell filled with round lead projectiles positioned around a bursting charge. A time fuse, later a percussion fuse, would set off the bursting charge and scatter
the enclosed bullets. This artillery projectile increased the range of scatter shot from 300 or 400 yards to 1600 yards. The British first used shrapnel shells against American troops in the War of 1812. The U.S. Army soon adopted this type of explosive shell and used it from the Mexican War through World War I. Soon after elongated shells developed, shrapnel was adapted to them and consequently became a much more deadly weapon. Case shot, when fired from a smooth-bore cannon, might be in any of several attitudes in flight when the charge exploded. A rifled gun and the elongated shell made it possible to predict the shell’s position at the point of explosion and cover a wide area with fire. It was shrapnel in the new shells that made the 75-mm. gun, model 1897, such a potential war winner in the opinion of the French General Staff prior to the outbreak of World War I.

The quick-fire gun in combination with shrapnel shells were a deadly combination to infantry advancing in the open. Once the infantry entrenched, the artilleries of the rival armies switched largely to high explosive shells with thin casings. These shells scattered fragments not unlike shrapnel near the point of explosion. All artilleries, however, continued to use shrapnel, particularly when troops were in the open in the attack. Eventually, artillery accounted for 75 percent of the battlefield casualties during the war.

**AIRPOWER**

In the early stages of the war, the airplane functioned as a reconnaissance and artillery spotting device. The presence of aircraft over the battle zone meant that offensive preparations could be observed, and surprise in the operational sense became impossible to achieve. The aerial artillery observer, whether in a captive balloon or biplane, contributed to the stalemate on the ground by making armies even more inclined to stay within their fortifications and avoid the fire of enemy artillery. Fighter aircraft evolved to protect friendly observation planes and to deny the air space over the front lines to enemy observation. Control of the air in 1914–18 terms meant blinding the opposing army and hampering his artillery. Loss of control of the air did not prevent an army from attacking. The British Expeditionary Forces launched and sustained the Flanders campaign during the summer and fall of 1917 when the Germans controlled the air. Not until the spring of 1918 did air affect the ground battle. In March 1918 the Germans broke the British
Fifth Army’s lines. The Royal Air Force threw masses of aircraft against the attackers, appreciably slowing the advance until sufficient reserves arrived to restore the line. Then in September, during the St. Mihiel offensive, Brigadier General William Mitchell, the commander of the U.S. First Army Air Service, defeated a battalion-size counterattack force, using aircraft alone. Attacks against ground targets were just coming into use as the war ended. Bombardment was much better developed, but at Pershing’s insistence, the Americans directed all such efforts against depots and rail lines along routes used by the Germans. The British and Germans attempted to conduct strategic bombardment campaigns with limited results. But the concept fired General Mitchell’s imagination, and after the war, he sought both this capacity and independence from the Army. During the war observation was primary. Of the forty-five squadrons the Air Service, AEF, committed to combat, the great majority were observation units.

**Organization**

General Pershing and his key staff advisors deliberately adopted a much larger standard division than that common in other armies on the Western Front. On paper pre-war American divisions were triangular, each consisting of three brigades of three infantry regiments each. Pershing’s staff, anticipating conditions on the Western Front, selected a square configuration. Each American division contained two infantry brigades of two infantry regiments and one machine gun battalion each, and another machine gun battalion that reported directed to division headquarters. They were backed by an artillery brigade of three regiments plus the usual support troops. Two regiments were armed with French 75-mm. guns, model 1897, and operated in direct support of the infantry brigades. The third regiment, with a general support mission, was equipped with 155-mm. howitzers. This unit was simply huge by Western Front standards of 1918. In that year, British divisions contained an average of 11,800 officers and men; French divisions 11,400; and German divisions 12,300. An American division, on the other hand, contained 28,000 officers and men when fully manned. American infantry companies, 250 strong, were designed to take losses and keep on going. Clearly, Pershing wanted to maximize combat power and minimize maneuver.

**Tactics and Techniques**

While building a division intended to burst through the German defenses on the Western Front, Pershing emphasized the need for Americans to defeat the German Army in “open warfare.” The concept was based on the prewar infantryman’s bible, *Infantry Drill Regulations, 1911*. It envisioned the use of aimed rifle fire to establish fire superiority. But this approach was often at odds with the detailed training directives prepared by his staff and simply not feasible on the Western Front. Trench warfare called for new tactics based on artillery-infantry liaison and the use of
specialized weapons, such as trench mortars and hand grenades. Pershing used the open-warfare argument to justify the need for an independent Army and prevent moves to use Americans as replacements in the British and French armies. But open warfare defied the realities of the Western Front, as the Allied generals knew from three years of experience. Pershing simultaneously undermined his own prestige with the Allies and undercut the effectiveness of his own troops. He consequently made his military objective — the defeat of the German Army — that much more difficult to achieve.

Section X
Notes on Uniforms

The War Department adopted olive drab woolen uniforms in 1902 to provide a service dress for wear in the field and in garrison. The service hat of olive drab felt had the “Montana” peak and by 1910 was known as the campaign hat. Enlisted men wore cords of varying colors around the crown of the hat to denote their branch of service. The leggings were of olive drab canvas. The uniform on the left was worn by members of the AEF after arrival overseas. Puttees — that is wrapped, wool leggings — replaced the standard leggings. The field uniform in France also added a steel helmet and an overcoat roll attached to the haversack and pack carrier. A small, soft cloth “overseas” cap, the origin of the modern garrison cap, replaced the service hat.
Secion XI
Notes on General of the Armies
John J. Pershing and Staff Organization

General Pershing is best known for his service as commander-in-chief of the AEF during World War I. He thus became the first American officer to command American soldiers on European soil. Pershing was born at Laclede, Missouri, in 1860 and attended public schools in that state until he entered the U.S. Military Academy in 1882. Upon graduation four years later, he joined the 10th Cavalry, one of two Regular Army cavalry regiments with black enlisted men and mostly white officers. He participated in the last of the Indian campaigns against the Apaches and the Sioux. He was serving as an instructor of tactics at West Point at the outbreak of hostilities in 1898 against Spain. He took part in the Santiago campaign and in the charge up San Juan (actually Kettle) Hill.

At the end of the war, the War Department transferred him to the newly acquired colony in the Far East, the Philippines. Pershing served in the Moro Provinces in the southern islands. The inhabitants of the interior were fiercely independent Moslems who lived in separate clans and engaged almost continuously in petty warfare with one another and with the Christian Filipinos who had settled around the Spanish garrisons along the coast. During over three hundred years of colonial rule, Spain had not succeeded in pacifying the interior of Mindanao and the other islands. Pershing quickly became familiar with local customs. He first became advisor to column commanders and ultimately commanded a brigade-size force while still a captain. The department commander arranged this by simply ordering all Pershing’s seniors to remain in garrison when the troops took the field. Pershing accomplished his ends mainly by diplomacy with a minimum of fighting.

A skilled field soldier, Pershing was equally adept in Washington. Ordered to the capital as a member of the War Department General Staff, he met and married Frances Warren, the daughter of Senator Francis E. Warren, the chair-
man of the Senate Military Affairs Committee and a power in the Republican Party. Pershing was posted to Tokyo as military attache and observer with the Japanese armies in Manchuria during the Russo-Japanese War (1904–06). In 1906, President Theodore Roosevelt jumped Pershing ahead of 862 of his fellow officers and promoted him to the rank of brigadier general. Two more tours in the Philippines followed. From 1906 to 1908, Pershing commanded one of the few brigades in the peacetime Army, at Fort William McKinley outside Manila. Following a tour as military observer in the Balkans, he returned to the southern Islands to become the last military governor of the Moro Provinces.

Upon his return to the United States, Pershing received command of a brigade posted on the Mexican border. While there he suffered an immense personal tragedy. His wife and three young daughters burned to death in a fire in their quarters at the Presidio of San Francisco. Only a young son survived. Pershing coped with his grief by burying himself in work. In 1916, the Pancho Villa raid across the border led President Wilson to dispatch the Punitive Expedition under Pershing. Given the difficulties with Germany, Wilson did not want a war with Mexico. When Mexican public opinion came out strongly against the American intervention, Pershing’s cool head and diplomatic skills contributed to a peaceful resolution. He remained on the Mexican border until ordered to France in command of the American forces. Shortly after his arrival in France, he was promoted to the rank of full general.

The AEF drew heavily on French models in its organization and staff doctrine. When Pershing arrived in France, the British and Belgian armies held the left wing of the Western Front, protecting the tiny strip of Belgium still in Allied possession and the all-important channel ports through which ran the British Army’s lines of communication to England. The center of the line covered Paris, the administrative and transportation center of France and consequently the most important zone of operations for the French Army. That left the right flank as the potential area for an independent American field army. Geography thus dictated that the Americans be more closely associated with the French than the British Army. The Americans adopted French doctrine and equipment wholesale. To ease coordination between the two armies, Pershing decided to adopt French staff organization as well. The prewar U.S. Army had modeled its staffs along German lines, but Congress had kept the number of staff officers so small that it had not been able to organize staffs for field units except on an episodic basis. Consequently, knowledge of staff organization and procedures was not widespread or deeply embedded among the Americans. Pershing’s decision introduced the famous G-system of staff organization into the American Army. As he described the new organization:
A well organized General Staff through which the commander exercises his functions is essential to a successful modern army. . . . The General Staff is naturally divided into five groups each with its own chief who is an assistant to the Chief of the General Staff. G-1 is in charge of organization and equipment of troops, replacements tonnage, priority of overseas shipment, the auxiliary welfare association, and cognate subjects. G-2 has censorship, enemy intelligence, gathering and disseminating information, preparation of maps, and all similar subjects; G-3 is charged with all strategic studies and plans, movement of troops, and the supervision of combat operations; G-4 coordinates important questions of supply, construction, transportation arrangements for combat, and of the operations of the service of supply and of hospitalization of the sick and wounded. G-5 supervises the various schools and has general direction and coordination of education and training.

Pershing had much less scope for innovation in the operational aspects of his command than in the organizational. At the operational level of war, he personally urged the attack on the St. Mihiel salient and carried it out with vigor in September 1918. This operation was the first large scale offensive by a predominantly American force. During the Meuse–Argonne offensive (September 26–November 11, 1918), Pershing demonstrated that as a tactician he was far too conventional. He threw masses of infantry into frontal assaults against German machine gun posts at great cost in lives. He was also very skeptical of the value of the new appliances of war — the airplane and, particularly, the tank. In large part, his views reflected the fact that creating a modern American field army, literally from the ground up, and negotiating with Allies left him too little time to master the complexities of warfare on the Western Front. Despite his shortcomings, Pershing built the AEF into a force that helped deliver victory.

As a reward for his achievements, Congress in July 1919 advanced him to the rank of general of the armies. He also became chief of staff of the Army, serving from July 1921 until September 1924, when he retired. His prestige was such that until World War II, he exercised great influence on senior appointments in the Army. In 1939 he backed his protégé Brigadier General George C. Marshall to be chief of staff. Pershing died in July 1948.

Section XII
Douglas MacArthur

1880–1964

General Douglas MacArthur’s accomplishments during and after World War II have overshadowed his career prior to December 7, 1941, but those earlier years were filled with more achievements than most soldiers are able to accomplish during an entire lifetime.
MacArthur was born at Little Rock, Arkansas, on January 26, 1880, but his earliest memories were of Fort Wingate, New Mexico, where his father, Captain Arthur MacArthur, 13th Infantry, took station in the summer of 1880. Douglas grew up with stories of the Civil War and the Indian Wars. As a nineteen-year-old regimental commander, his father had won a Medal of Honor leading the attack on Missionary Ridge in November 1863. Often during Douglas’ childhood, the post’s guardhouse held Apache prisoners of war. In these surroundings, Douglas developed an attachment to the service in his early youth that he never lost. He was deeply influenced by his mother, Mary Pickney Hardy MacArthur. The tie between the two was so strong that, rather than accompany her husband to the Philippines, she lived at West Point for the four years Douglas was there. He entered the U.S. Military Academy in 1899. He graduated in 1903 with an outstanding scholastic average of 98.14 percent.

Commissioned in the Corps of Engineers, MacArthur accompanied the 3d Battalion of Engineers to the Philippines. In November 1903 while cutting timber for construction, he was ambushed by two Filipino guerrillas. Although one slug passed through the crown of his campaign hat, he calmly drew his service revolver and killed both his assailants. His ability to think clearly and act quickly under fire, of which this was the first example, became legendary in the service.

In 1905 the War Department assigned him to Tokyo where he became aide to his father, now a major general, who had been the senior American military observer with the Japanese Army during the Russo-Japanese War. The elder MacArthur intended to finish his tour by making a comprehensive inspection of the major armies of Asia. The tour thus had the promise of furthering Douglas’s professional development, but his father’s favoritism had a negative consequence. During this assignment, Douglas slowly began to develop the attitude that, because of his relation to his father, he deserved special treatment. The pomp and ceremony to which he was subjected on this tour as General MacArthur’s aide was sufficient to turn any young officer’s head. Assigned as a student in the Engineer School of Application at Washington Barracks (now Fort McNair) in Washington, D.C., MacArthur performed exceptionally well until, as another mark of esteem for his father, he was assigned as an additional duty to be a social aide to President Theodore Roosevelt. Caught in the heady social whirl of the White House, MacArthur neglected his studies. Assigned to the Milwaukee Engineer District in August 1907, he received a severe reprimand, backed by the Chief of Engineers, for neglecting his responsibilities in the reconstruction of the harbor at Manitowoc,
Wisconsin. The small pre-World War I officer corps, where promotion was by seniority and everyone knew everyone else, was much more tolerant of mistakes than was the rule later in the century. But MacArthur was on the verge of acquiring a reputation that would relegate him to a series of time serving assignments until he retired for age.

MacArthur saved his career by hard work and strict application of duty, but he never quite lost the habit of requesting special exemptions for himself. In 1908, he assumed command of Company K, 3d Battalion of Engineers, at Fort Leavenworth, Kansas. Rated the lowest of the twenty-one companies on the post, he trained the company until it rated highest at the post’s next general inspection. Assigned as a temporary duty to develop a short course on explosives and pioneering in the Cavalry School at Fort Riley, Kansas, he did so in such a manner that the commandant of the school asked for him to teach the course at the appropriate time in the curriculum for the next three years he was at Fort Leavenworth. The success of the course at Riley led to his introducing a course on “practical and theoretical demolitions” at the Leavenworth Schools. MacArthur wrote the Army’s manual on explosives. Before he left Leavenworth, he became the head of the department of military engineering of the Field Engineer School.

Assigned to the Office of the Chief of Staff in 1912, MacArthur favorably impressed the chief of staff, Major General Leonard Wood, who became one of his patrons. In 1914, the Army occupied the Mexican port of Vera Cruz, following its seizure by a Navy and Marine Corps landing force. With war threatening, it became essential for the General Staff to obtain up-to-date information on the route between Vera Cruz and Mexico City. Wood sent MacArthur on a secret mission behind Mexican lines to obtain the needed information. He succeeded in a daring reconnaissance for which he was recommended but did not receive the Medal of Honor.

As a staff officer, MacArthur was involved in drafting legislation that became the National Security Act of 1916. Appointed as liaison to the press — his official title was press censor — he was instrumental in obtaining popular support for the Selective Service Act of 1917. In the process he gained a very favorable reputation among the reporters covering the War Department. MacArthur was one of the few officers on the General Staff in favor of mobilizing the National Guard in 1917, and it was his advice that President Woodrow Wilson and Secretary of War Newton D. Baker followed. Baker, concerned about maintaining and strengthening what he perceived as fragile popular support for the war effort, wondered aloud to MacArthur which Guard division should go overseas first and inevitably receive the first casualties. MacArthur suggested forming a composite division from Guard units all over the country. “It will,” he commented, “stretch across the country like a rainbow.” His suggestion became the 42d Division (the “Rainbow” Division), and, promoted to colonel, MacArthur became its chief of staff.
The 42d Division played a key role in defeating the last German offensive, part of the Champagne–Marne Defensive, and then joined in the Allied counterattack, the Aisne–Marne Offensive. Rewarded with promotion to brigadier general and command of the 84th Infantry Brigade, MacArthur led this unit at St. Mihiel and the opening phases of the Meuse–Argonne offensive. Late in the conflict, MacArthur succeeded to command of the division and thereby became the youngest division commander in the AEF. He was decorated thirteen times and cited many other times for conspicuous bravery.

Assigned at the end of the war as superintendent of the U.S. Military Academy, MacArthur started the first comprehensive reforms at West Point in over 100 years. After commands in both the Philippines and the United States, he became chief of staff of the Army from November 21, 1930 until October 1, 1935. The Great Depression and the financial strains it placed on the Army budget dominated his tour. He succeeded in maintaining the officer corps intact against budget cutters. Only by retaining extra officers, he argued, could the Army mobilize when the next emergency occurred. Unfortunately, his success came at the price of gutting the Army’s modernization budget. Within budgetary constraints, he tried to make Army war planning — both industrial and manpower mobilization plans — more realistic. During his tour, the Army assumed responsibility for administration of Civilian Conservation Corps camps. Upon retirement from active service, he was hired as a military advisor by the Philippine government, scheduled to receive full independence from the United States in 1946. In July 1941, with the possibility of war between the United States and Japan increasing, President Roosevelt recalled him to active duty with the rank of lieutenant general and named him commander of U.S. Forces in the Far East. He was in Manila when the Japanese attacked.

Section XIII
The Trench Soldier, A Profile

Combat on the Western Front was unlike any that preceded or followed it. Sieges have been a part of warfare since the beginning of recorded history, but the scale, duration, and intensity of this siege made it unique. Millions of men along a line that stretched some 300 miles fought for four years. Gains during most of that period were measured in yards. Tens of thousands of men died to take a few square miles of territory, and in the areas where the armies launched major offensives, hundreds of thousands died. The infantry lived in a lunar landscape where artillery killed at a distance and the enemy was rarely seen. It was into this environment that the men of the AEF were thrust in 1918.

Lieutenant (later Captain) Jeremiah M. Evarts commanded the 4th Platoon, Company E, 18th Infantry, in the 1st Division, AEF. In the spring of 1918 the division took up position near the village of Cantigny, then in German hands.
The sector, he later recalled, “was wholly disorganized.” Front line trenches were little more than two feet in depth. His position lacked dugouts and communication trenches. His platoon covered a 200-yard front from three small trenches.

The largest was possibly 75 yards and contained seven or eight bays. The ground of that trench was very chalky and each man experimented in finding cover by digging a hole of some variety in the side of the trench under the parapet. It was better than being rained on. Sometimes a direct hit on the parapet from a 77 [standard German Army field gun] would bury the occupant undamaged under a couple of feet of earth. Anything larger than a 77 meant no further worry. Men lived in that sector the most extraordinary game of life and death ever invented — lived on their wits, their nerves, and that sixth sense which combined all other senses, and were assisted to live once each twenty-four hours — if the chow party was lucky — by a slice of meat, a spoonful of sour mashed potatoes, a canteen of water, a canteen cup of coffee, a half-loaf of bread, a beautiful country, and sometimes a sunny sky.

Twenty years later Evarts recalled his men with a mixture of awe and affection.

**Jackson:** Evarts’ platoon sergeant came into the trench with a Private Jackson (a fictitious name) in tow. Jackson had experienced a near escape from a shell and was on the verge of breakdown. He cried and prayed aloud as each enemy artillery shell came in. The men in his squad were ready to shoot him. The shelling was bad enough, but Jackson and the shelling were too much to bear. Evarts felt tempted to say that he felt like weeping and praying every time a shell landed close to him,
and he suspected that the sergeant felt the same way. Evarts, however, remained silent. No one spoke of their emotions in the front lines. It required all their energy just to endure conditions there. Instead, Evarts assigned Jackson to the platoon command post in hopes that he could settle him.

The gloominess and wetness were almost unbelievable. I sat and watched Jackson without talking to him and waited for the evening bombardment to commence. Was he completely down and out, I wondered, and if he was, what could one do? I feared the coming bombardment which was as certain as the rain, but I was interested in seeing what Jackson would do. I knew enough to realize that here was a person who suffered terribly with nothing to think about (he being a private) to take his mind off his suffering. What would he do and what could I do?

The German artillery commenced according to schedule. It generally lasted from three-quarters of an hour to two hours at that time of day. Jackson commenced to shake badly and he showed his terror in his face more than anybody I had ever seen. Finally he lay flat on his stomach in the mud and water on the bottom of the trench and wept and wept. He shook all over. It was perfectly terrible and I was at a complete loss as to what I should do. I waited and watched him, I don’t know how long, but finally I couldn’t stand it any longer and I reached down, grabbed him by the shoulder, and dragged him up beside me. He was covered with mud and the tears rolled down his face. I held his shoulder and said, ‘Now, Jackson, what the hell is the use of doing that? It only makes things much worse for you and it makes me feel like lying down in the mud and crying myself, and that would be a hell of a thing, wouldn’t it?’ He went on weeping, and I hung on to his shoulder. I told him I was just as scared as he was, if not more so. (I think I probably was.) Finally I suppose it penetrated his mind that I had hold of his shoulder and was talking to him. I doubt if he had realized it before in his agony. He went on shaking but stopped crying.

Evarts made daily rounds of the platoon position after dark with one of his noncommissioned officers. He included Jackson in those rounds. Jackson was frightened, but he went. Evarts continued this routine every day. Jackson was never more than a few paces away. He stopped crying but he still shook under shell fire. Evarts talked to him whenever he had an opportunity to steady him. Evarts had discovered when making his rounds that Jackson did not have a friend left alive in the platoon. Evarts believed that part of his problem was that he was lonely and isolated. When the company moved back into reserve, Evarts was relieved to be able to send Jackson back to his squad. Providing therapy under shell fire was draining. Before the company
moved back into line, Evarts took Jackson aside and had a long talk. Evarts told him that he would be all right. And he needed to remember that he was not alone in his fears. Every man in the company was just as frightened as he was.

On the evening of July 17, 1918, Evarts once more took Jackson aside to tell him that the company would go into the attack the next morning. “I told him to stay by his corporal and that he would get along all right. We shook hands. Separately I told the corporal that Jackson must be within eight paces of him at all times. I did not think the latter and its implications were really necessary as I was sure that Jackson would be all right. It seemed to me that his heart had been tried enough by that time.”

The attack lasted most of five days. “On the morning of the 24th of July I called the roll of the company. Jackson was not present. His corporal told me with tears in his eyes that he had acted well.”

**Six Quarts of Cognac:** Evarts had one eternal private in his platoon, the type of soldier who seems to crop up in every platoon of our army in each of its wars. His name was Olsen. He was twice Evarts’ age, twice his size, had red hair, and yellowed gapping teeth. He was both a tremendous line soldier and a drunken bum when not in combat.

The only time he [Olsen] was ever nervous was one morning at Cantigny. He and Shea [one of the noncommissioned officers] were sitting out in front of the mud trench at dawn to see if they could get a shot at a late patrol. Olsen had his legs apart and a dud 77 landed between them. He only missed being castrated by about ten inches. He and Shea came over to tell me about it. Shea said Olsen’s expression as he looked at the hole was simply wonderful.

Shortly after the dud incident when the company was in reserve, Olsen went AWOL for two days. Two of his platoon mates finally came to Evarts and said that Olsen had been located in a cave in the edge of “no man’s land”. He was drunk and he had a loaded rifle. He was threatening to shoot anyone who tried to get him. Evarts crawled to the cave and ordered Olsen to come out.

There was a considerable scuffling around in the cave and soon he crawled out the entrance, fully armed and bayonet fixed. With his red beard, dirty face, and filthy uniform he was about the most disreputable looking person I ever saw. He saluted, grinning broadly, and held out a full bottle of cognac he was carrying in his pocket. I felt like laughing. Instead I was very severe.

A bit of questioning determined that Olsen had found and downed five quarts of cognac in the cave prior to his giving himself up. The company com-
mander wanted to send Olsen back to the front line as a punishment. Evarts convinced him that Olsen was too valuable a man to take a chance on breaking his spirit. Instead, “Olsen sweated out the five quarts at hard labor digging trenches in the village for protection from air raids. I think he probably would have enjoyed the line more. The bottle of cognac was consumed at the officer’ mess. Olsen was never absent again.”

Canned Moroccan: About 1000 on a fine morning in front of Cantigny everyone in Evart’s platoon was getting hungry.

The food had been blown up two nights in succession, once on the way up, once in the trench. There would be fourteen more hours of hunger at least. There was nothing to be done about it, and I was about to escape by sleeping when [Sergeant] Shea appeared. He asked me if he could borrow my field glasses. I gave them to him, and he went back to the mud trench. He often borrowed them to look for machine guns.

I woke as usual about two in the afternoon, hungrier than ever. I sat in the sun in the corner of the bay by the P.C. (post of command) and went through the usual afternoon ritual of picking out cooties and their eggs from my undershirt and listening to the bombardment.

To Evarts’ astonishment, Shea suddenly appeared in the bay with his hand tucked into his shirt. He walked over to Evarts and in a whisper asked him if he wanted something to eat. Evarts replied that he definitely did, and Shea produced two cans of corned beef, which quickly disappeared. Later, Evarts asked Shea how he had found the scarce treat.

Well, Lieutenant, you remember I borrowed your glasses this morning. You know that line of dead Moroccans down in the valley where they ran into a machine gun? (There was a line of about twenty.) I looked them over with the glasses and decided it was worth trying. I got a can off two out of six. They had been dead a long while….

He had spent four hours crawling on his belly for 200 yards and back again under the eyes of the German balloons and the German sentries in Cantigny. He had searched six Moroccans who had been dead for more than twenty days. He had won and divided the winnings.

Later, in the Meuse–Argonne offensive, when all the officers in the company were killed or severely wounded, Shea assumed command and successfully led the company for two days in the advance of the American Army.

Alvin C. York: The greatest enlisted hero of World War I was born in Pall Mall, deep in the Cumberland Mountains of Tennessee, on December 13, 1887. As a young man, he earned a reputation for drinking, gambling, and unruly behavior, but a religious conversion in 1915 transformed him into a pious, fundamentalist Christian. York applied for conscientious objector status when the United States entered World War I, but his local board drafted him anyway. Torn between his beliefs and his patriotism, York finally became convinced that the United States was fighting the battle of the Lord and that his Christian duty demanded his participation. He sailed for France in May 1918 with the 82d Division.

On October 8, during the Meuse–Argonne offensive, York, now a corporal, and his unit were pinned down by hostile fire. Attempting to outflank a German machine gun nest, he and sixteen other doughboys surprised and captured a German battalion headquarters at breakfast. Almost immediately, the Americans came under fire from machine guns on a hill twenty-five yards to the front, and nine were killed or wounded. When six Germans charged his position, York calmly used his marksmanship with the pistol to shoot all six, starting with the man furthest from the front — a trick he later stated he learned while hunting wild turkeys near home. The battalion commander then surrendered the machine gun positions. As the Americans returned to their lines, they rounded up other enemy machine gunners that they passed. In all, York received credit for killing 25 Germans, capturing 132, and silencing 35 machine guns. The Allied commander-in-chief, French Marshal Ferdinand Foch, called his feat, “the greatest thing accomplished by any private soldier of all the armies of Europe.” York was promoted to sergeant and received the Medal of Honor and the Croix de Guerre for his exploits.

Samuel Woodfill: Sergeant York may have emerged as a national hero, but Sergeant (later Major) Sam Woodfill received from General Pershing the ultimate tribute as “the outstanding soldier of the AEF.” Born in Belleview, Indiana on January 6, 1883, Woodfill enlisted in the Regular Army at Louisville, Kentucky on March 8, 1901. When he deployed
to France in April 1918 with the 5th Division, he received a promotion to first lieutenant and company commander in the “National Army,” the overall force the United States had mobilized to fight World War I, but he remained a sergeant in the Regular Army. On October 12, 1918, Woodfill was leading his company near Cunel, France, when his troops came under heavy machine gun fire. Ordering two of his soldiers to pin down the enemy, he personally moved around the position’s flank, shooting three members of the crew as they appeared. When the fourth member of the crew, an officer, rushed Woodfill, the latter, unable to club the German with his rifle, finished him with a shot from his pistol after a hand-to-hand fight. Continuing to advance, the company encountered another machine gun nest. In the face of heavy fire, Woodfill led his company in the attack, shooting several enemy troops, capturing three others, and silencing the gun. When yet another machine gun nest challenged the American advance, Woodfill charged the position, killed five with his rifle and started to jump into the position with his pistol, only to have two other gunners, only a few yards away, turn their gun on him. Unable to kill them with his pistol, Woodfill grabbed a pick and dispatched them. The company could now continue its advance to the objective. For his heroism, he received the Medal of Honor, as well as numerous other citations for his bravery in the course of the war.

After the war, Woodfill returned to his permanent grade of sergeant and served at a series of Army posts until his retirement in 1923, at the Regular grade of master sergeant. He died on August 10, 1951.
At about one o’clock in the afternoon of December 7, 1941, the first word of the Japanese attack on the U.S. Navy’s Pacific Fleet in Pearl Harbor began to trickle into Washington, D.C. The news shocked both the general public and high military officials. Although tensions between the United States and Japan had been building for some time, the attack still came as a surprise. Even those who knew war was imminent had expected the first blow to come in the Philippines or Southeast Asia.

The attack on Pearl Harbor had been brilliantly executed by the Japanese fleet. The six Japanese carriers, which carried 360 fighters, fighter-bombers, and torpedo bombers, had come more than 3,500 miles through the open sea. They had remained virtually undetected until the first attacking planes had approached within 135 miles of their target, far too late for the Americans to mount a defense. The attacking force severely damaged the fleet at anchor and destroyed a significant portion of the land-based aircraft in the area belonging to the U.S. Army, Navy and Marine Corps. Strangely, the Japanese failed to destroy drydocks, ship repair facilities, and fuel storage depots, which allowed the Americans to begin a rapid recovery. Nonetheless, the combined attacks bases in the Philippines back for at least American island isolated and sion, and the Americas

Suddenly, the United States was involved in a full-fledged, two front war that would grow until almost the entire world became engaged. One can truly say that World War II was the exciting story of the American fighting man. This chapter seeks to offer a bit of the “flavor” of Normandy, Remagen,
Banzai attacks, the Tiger tank, and the soldiers who knew them first hand. The following chronology lists just a few of the events during this period:

1 Sep 1939           Nazi Invasion of Poland — War begins in Europe
16 Sep 1940          First peacetime military draft in U.S. history following passage of the Conscription Act of 1940
7 Dec 1941           Pearl Harbor attacked
9 Apr 1942           Fall of Bataan
6 May 1942           Fall of Corregidor
3–6 Jun 1942         Battle of Midway; turning point in Pacific
7 Aug 1942           U.S. Marines launch Pacific offensive at Guadalcanal
Sep 1942             U.S. Army begins offensive operations in New Guinea
8 Nov 1942           Allied landings in North Africa
10 Jul 1943          Allied landings in Sicily
Sep 1943             Allied landings in Italy; Italy surrenders
6 Jun 1944           Allied landings in Normandy
20 Oct 1944          American troops return to the Philippines
16 Dec–3 Jan 1944    Battle of the Bulge
7 May 1945           Surrender of Axis in Europe (V–E Day)
14 Aug 1945          War against Japan ends (V–J Day)
2 Sep 1945           Official Japanese surrender

Section II
Normandy

Pre-Invasion Activities
The “Germany First” strategy, determined by the British and Americans at the ARCADIA Conference in Washington from December 1941 to January 1942, finally became a reality in 1944. The striking characteristic of the invasion of Fortress Europe to a student of the heritage of the U.S. Army is the vast scale of the operation, the challenge it posed to the Army of the time, and the small stories of the individual fighting men that really show the fabric of the Army’s spirit. One can find no better summary of the importance of this effort than the words of the Supreme Allied Commander to his men:
Supreme Headquarters
Allied Expeditionary Forces

Soldiers, Sailors and Airmen of the Allied Expeditionary Force!

“You are about to embark upon the Great Crusade, toward which we have striven these many months. The eyes of the world are upon you. The hopes and prayers of liberty-loving people everywhere march with you. In company with our brave Allies and brothers-in-arms on other Fronts you will bring about the destruction of the German war machine, the elimination of Nazi tyranny over oppressed peoples of Europe, and security for ourselves in a free world.

“Your task will not be an easy one. Your enemy is well trained, well equipped and battle-hardened. He will fight savagely.

“But this is the year 1944! Much has happened since the Nazi triumphs of 1940–41. The United Nations have inflicted upon the Germans great defeats in open battle, man-to-man. Our air offensive has seriously reduced their strength in the air and their capacity to wage war on the ground. Our Home Fronts have given us an overwhelming superiority in weapons and munitions of war, and placed at our disposal great reserves of trained fighting men. The tide has turned! The free men of the world are marching together to Victory!

“I have full confidence in your courage, devotion to duty and skill in battle. We will accept nothing less than full victory!

“Good Luck! And let us all beseech the blessing of Almighty God upon this great and noble undertaking.

Dwight D. Eisenhower

One cannot say that the Normandy invasion was typical of the war in Europe to that point. Yet, the men, the activities, the equipment, and the weapons did represent warfare of the time. The invasion, above all, required enormous amounts of planning and organization before any soldier set foot on the Normandy beaches.

Planning and Organization

In 1943, the Anglo-American Combined Chiefs of Staff chose a British officer, Lieutenant General Sir Frederick Morgan, as the Chief of Staff to the Supreme Allied Commander, who at that time was yet unnamed. Under Morgan’s direction, plans for several different invasion possibilities were prepared, based on various estimated degrees of enemy strength. One, a plan called OVERLORD, was based on the assumption that the German armed forces would still be a
powerful threat at the time of the invasion. This proposal was the basis for the final OVERLORD plan that was developed by General Dwight D. Eisenhower and his command, the Supreme Headquarters, Allied Expeditionary Forces, in 1944. General Eisenhower’s leading commanders appear above. They are (from left to right) Lieutenant General Omar N. Bradley, Admiral Sir Bertram Ramsay, Air Chief Marshal Sir Arthur Tedder, General Eisenhower, General Sir Bernard L. Montgomery, Air Chief Marshal Sir Trafford Leigh-Mallory, and Lieutenant General Walter Bedell Smith.

General Montgomery, commanding the 21st Army Group, would serve as the overall ground commander for the invasion. The two invasion armies under his command would be the British Second Army under Lieutenant General Miles Dempsey and the First U.S. Army under General Bradley.

**THE INVASION PLAN**

The organization and training of the invasion forces is a story unto itself. The Allied command took great lengths to insure that the men who went ashore were as well trained and equipped as any soldiers in history. Extraordinary deception plans included both the efforts of undercover agents and the “construction” of decoy “armies.” All of these deceptions tried to make German leaders believe that the invasion would occur at the narrowest point in the English Channel at the Pas-de-Calais, rather than its actual location in Normandy. Finally, planners chose the beaches and gave each assault force a code name corresponding with its specific beach target, Utah, Omaha, Gold, Juno, and Sword. The final plan was then issued by the high level planners to the forces. All would land on their respective beaches, build up forces, and then break out from the beachhead.

The feats of the two U.S. Army Airborne Divisions that made the drop into Normandy are almost beyond belief, especially to those experienced in both combat and airborne operations. The 101st and 82d Airborne Divisions, along with their British airborne counterparts, received the mission of securing bridges, crossroads, canals, and communications sites at both ends of the invasion zone. They would thus prevent
the Germans from reinforcing and communicating with their forces at the beachheads. Airborne operations involve highly detailed planning, and the Normandy invasion came at a time when American soldiers had been conducting operational jumps for only a short time. Although little doctrine or experience existed, the imaginations and planning abilities of many first-rate officers had been heavily involved in preparing for the combat jump. Officers, NCOs, and their troopers were trained and ready when the transport aircraft and gliders left their airfields for Normandy. Looking back, it seems that the paratroopers were truly released on “...the winds of heaven,” for only a small percentage of either division ever came close to their objectives, and those troopers who did reach the ground safely were scattered over fifteen or twenty miles. The night quickly turned into a series of isolated two- and three-man battles, creating a great deal of panic and confusion among enemy forces behind the invasion beaches. As interesting as this story is, the real tale lies in the feelings, ideas, fears, and courage of the men who stood in the door of those planes on that night when the greatest invasion in the history of warfare was beginning. From the regimental history of the 501st Parachute Infantry Regiment, 101st Airborne Division come these impressions:

The night of June 6 was sullen and rainy. Fitful gusts of wind rocked the planes. Within the cabins, we sat with darkened faces and stared out at the darkened countryside far below. . . the men said short prayers, bowing their blackened heads where they sat... the man who is going into combat does not feel much different from the man who is going to make his first parachute jump. What lies ahead of him is too unfamiliar to be frightening... the tracer bullets were speckling up into the sky in streams, thousands of them... the popping noise sounded, oddly, as though it were close underneath the plane... at the shouted order, we shuffled to our feet. . . there was a new sound in the sky, an odd enveloping WOP... a red light glowed over the door... there were more explosions, all semblance of formation had been lost, men had gotten sick and vomited on the floor, shrapnel tore up through the greasy pools... machine gun bullets tore through the wings like the chattering of gravel... Over the door like a signal of relief, the green light went on. . . the anxious men dove out... dazed, he floated down... the only sounds were the sharp cracking of the bullets that struck the edge of his nylon canopy.
The most commonly held and repeated impression of those involved in the early airborne phases of the Normandy invasion was that, from the time that each man left the door of his plane until the linkup with ground forces many days later, every paratrooper was a fighting soldier, whether he was a general or private. When one realizes that fact, the personal valor and courage of the men of the 101st and the 82d Airborne Divisions in the invasion becomes a monument in itself.

**THE INFANTRYMAN**

As is basically the case in any land battle, the infantryman in Normandy bore the brunt of the combat. Here are a few random impressions of one of those men:

A rising, surging sea carried the invasion fleet into the night... the voyage seemed lonely and interminable, cold... an air of unreality... the coastal batteries were silent... when the tide began to run out, most of the small craft came to rest short of the belt of obstacles... the beach was almost invisible... blasted by gunfire and bombs... the ramps are down... waist deep in water, floundering, finding your feet wading in, rifles held high... the din was insane... the cries of men in the water... the sudden searing sheets of flame, the thunderous explosions as craft were hit by enemy shell and mortar fire... order began to grow out of chaos, men tried to the limits of endurance regained their feet, lifted up their heads and began to fight for more than their lives. Finally, the tremendous tide of men and vehicles pressed on, steadily wave upon wave building up on the beaches... the men were in, the damn deed done.

**THE ENEMY**

An understanding of the enemy is essential to a grasp of the difficulty and complexity of the task facing Allied forces in the invasion of Northwest Europe. A grand offensive strategy on the part of Hitler during 1943 simply did not exist, although the German armed forces had formulated a grand defensive strategy that would keep the Allies at bay for more than two years. This overall strategic weakness, however, did not blunt the efforts of Hitler’s commanders in the west at the time, Field Marshals Gerd von Rundstedt and Erwin Rommel, who were responsible for the defense of the vast French coast line where the invasion was to occur. The senior of the two, von Rundstedt, believed that the Allies would attack at the narrowest point of the English Channel at the Pas-de-Calais and thus
place themselves closest to the heartland of Germany. Rommel, who felt that an attack at Normandy was probable, was forced to prepare defensive plans and fortifications for the entire French coast, while trying to obtain units and equipment from an increasingly hard-pressed German nation. Later history has showed us that in this case, Rommel faced an impossible task, but he managed to build a defensive position of enormous proportions. Since his objective was to stop the Allied invasion on the beaches, the weight of Rommel’s defense lay in a series of water obstacles and heavy gun emplacements.

Section III
The Pacific

World War II in the Pacific made unique demands on the talents and capabilities of the U.S. Army. The foot soldier with the rifle and grenade had the nasty, poorly-understood and, at the time, thankless job of rooting the enemy from his caves on the tiny tropical islands in the Pacific Ocean. This soldier participated in the amphibious assaults and the agonizingly slow-moving combat across the coral reefs of each island. This same soldier eventually so weakened the armed forces and morale of the enemy that the atomic bomb could bring an abrupt end to the conflict. Whether he wore the uniform of a U.S. Marine or the insignia of one of several different U.S. Army divisions, he was an American fighting man with a job to do, and he did that job well. The following are the comments of a group of unnamed writers who accompanied several small units of these soldiers as they accomplished their tasks.
It was like going through a miniature Grand Canyon... the rocks had to be painfully and methodically cleared time and time again but the enemy seemed to always reappear from inner caves... white clouds from American smoke grenades made the scene unearthly... the air was filled with the noise of exploding grenades... the exposed stones and caves looked like an ogre’s mouth... from one of the “teeth” a Nambu machinegun chattered, a soldier caught upright stopped suddenly... the enemy was in a coordinated defense, pillboxes, guns, mortars and machineguns... two automatic riflemen peeked over the lip of the shellhole in which they had been resting, They tried to see where the bullets were coming from. They spotted an opening in the rocks and fired at it.... Other soldiers, sensing a fight, waved to each other and began to close in... they covered each other with carbines and rifles and edged slowly toward the rocky hole... a blaze of enemy small arms fire came from at least five different parts of the ridge... they stopped, huddled behind rocks and waited... they studied the wounded men lying in the open, finally, a little corporal from New York City licked his lips and handed his rifle to the man next to him... here goes, he said, and was off in a fast crawl... he had almost reached him when there was another burst of fire and he stiffened, the injured man had also been hit... a supply Captain coming up from the rear saw what was happening and radioed for tanks... when they arrived, the step by step cleaning out began again, smoke bombs and phosphorous grenades... bazookas and automatic weapons... dynamite charges and flamethrowers... long jets of liquid flame into the holes and along the curving walls of the tunnels... the roaring flame did the trick... the scene became wild and terrible.... Almost forty scared and beaten men emerged from different holes, they were sent to the rear... the battle of the ridge was over and demolition crews began to seal the caves.

Section IV
Notes on Awards and Decorations

Following is a series of descriptions of the physical appearance and requirements for the most notable decorations authorized during, or as a direct result of, World War II. During this era, the Army presented large numbers of awards to U.S. personnel as well as other members of the Allied forces. Each of the decorations discussed is currently authorized for presentation on essentially the same basis as that stipulated on its authorization date.
The Legion of Merit: The Legion of Merit was established by an Act of Congress of July 20, 1942, amended by an executive order of March 15, 1955. It is awarded to U.S. soldiers and to nationals of other countries “who shall have distinguished themselves by exceptionally meritorious conduct in the performance of outstanding services” since September 8, 1939, the date of the President’s proclamation of the state of emergency that led to World War II.

The Legion of Merit is also the first award to have different degrees. If a holder of the Legion of Merit in one degree subsequently receives another such award, it is never in a degree lower than the original one. The degrees of Chief Commander and Commander are conferred on members of foreign governments only and are awarded for services comparable to those for which the Distinguished Service Medal is given to members of the United States armed forces.

The medal is a five-pointed American white star and is bordered in purple-red enamel. In the center of the star is a circle of clouds surrounding a field of blue with thirteen white stars. Backing the star in its angles is a laurel wreath and in each angle there are two crossed arrows pointing outward. The opposite side of the medal bears the inscription, “United States of America,” and within a central disk, “Annuit Coeptis MDCCCLXXII.” The ribbon is essentially the same as that of the Purple Heart, with the exception that it is less purple and more red.

The Bronze Star: This decoration, authorized by Executive Order No. 9419, February 4, 1944, is awarded to any service personnel in any branch of the military service who, while serving in any capacity with the armed forces of the United States on or after December 6, 1941, shall have distinguished themselves by heroic or meritorious achievement or service, not involving participation in aerial flight, in connection with military operations against an armed enemy.

The award recognizes acts of heroism performed in ground combat if they are of lesser degree than that required for the Silver Star. It also recognizes single acts of merit and meritorious service if the service or achievement is of a lesser degree than that deemed worthy of the Legion of Merit, but the recipient must have accomplished such service with distinction.

The medal is in the shape of a five-pointed star 1 1/2 inches from point to point. In its center is a smaller raised star. The small star is set on a raised ten-pointed figure, from which rays extend to the points of the outer star. The
reverse of the medal also has a raised center, with rays extending to the five points of the star. Inscribed on this are the words “Heroic or Meritorious Achievement,” encircling a blank space of the recipient’s name. The ribbon is predominantly red, with a narrow blue center stripe flanked on either side by a narrow white stripe, and a narrow white stripe at the outer edge. A bronze “V” on the ribbon denotes the medal having been awarded for valor.

**Air Medal:** The Air Medal is the second United States Decoration established for the aviation service of the military and naval forces. It was created by Executive Order 9158, 11 May 1942, but made retroactive to September 8, 1939. It may be awarded to “Any person who, while serving in any capacity in or with Army (Navy and Marine Corps) of the United States subsequent to September 8, 1939, has distinguished or shall distinguish himself by meritorious achievement while participating in aerial flight.”

The medal ranks below the Distinguished Flying Cross and may be awarded for either meritorious service or for valor. When awarded for valor, a “V” device is affixed to the pendant. The medal itself depicts an eagle poised in front of a sunburst struck in bronze. The medal is suspended from a yellow and purple ribbon.

**Army Commendation Medal:** This decoration — originally only a ribbon — was authorized in 1945 by War Department Circular 377. The medal itself was not authorized until 1949. The award goes to any member of the armed forces of the United States who, while serving in any capacity with the Army on or after December 7, 1941, shall have distinguished himself or herself, either in combat or noncombat action, by meritorious service. The award may be made, upon application, to individuals who were commended on or after December 7, 1941, and prior to January 1, 1946, in a letter, certificate, or order of commendation (not a letter of appreciation) signed by an officer of the rank of major general or higher, for meritorious achievement or service performed subsequent to December 7, 1941. Individuals awarded a Commendation Ribbon prior to October 1, 1949, are, upon application, issued the Commendation Medal.

The medal is a bronze hexagon, with one point up. In the center of the reverse side is an American bald eagle, facing left, its wings displayed and grasping three crossed arrows, points to the left, in its talons. The wing tips extend to the outer edge of the medal. Upon the eagle’s breast is a shield paly of thirteen sections and a chief.
The reverse of the medal bears the words “For Military,” set in two lines, with a wide panel for the recipient’s name centered below them, and under this the word “Merit.” At the bottom is a sprig of laurel, pointing left. The ribbon has alternating narrow stripes, five of white and four of green, flanked on either side by a wide green stripe, with a narrow white stripe at the edge. A bronze “V” is worn on the ribbon to denote that the award is for valor in combat.

Only one Commendation Medal may be awarded to any individual. A second or succeeding award is indicated by an oak leaf cluster worn on the ribbon.

**Good Conduct Medal:** The Army Good Conduct Medal was authorized by Executive Order 8809, 28 June 1941, for award to soldiers who shall have honorably completed three continuous years of active military service subsequent to August 26, 1940, and who are recommended by their commanding officers for exemplary behavior, efficiency, and fidelity. Persons awarded this medal must have had character and efficiency ratings of excellent or higher throughout the qualifying period, including time spent in attendance at service schools, and there must have been no convictions by court martial.

During wartime the Good Conduct Medal may be awarded on completion of one year of continuous service rather than three; an executive order of 1943 lowered the qualifying period for World War II, and in 1953 another such order made the one-year ruling apply to service during the Korean conflict (1950–1954), and during any future period in which the United States is at war.

The medal, on one side, has an eagle with wings displayed and inverted, standing on a closed book and a Roman sword. Encircling it is the inscription “Efficiency, Honor, Fidelity.” On the other side of the medal is a five-pointed star, slightly above center, with a scroll beneath for the recipient’s name. Above the star are the words “For Good” and below the scroll the word “Conduct.” A wreath, formed of a laurel branch on the left and an oak branch on the right, surrounds the whole design. The ribbon is scarlet with three narrow white stripes at either edge.

Only one Good Conduct Medal may be awarded to any individual. For a second or subsequent award, a clasp is worn, consisting of a bar 1 3/8 inches long and 1/8 inch wide, which has suspension loops.

Special skills and qualifications badges were authorized for wear during this period and have been used since although, in some cases, the specific requirements for such awards have been altered. Among such awards are the Combat and Expert Infantryman’s Badges, the combat and expert medical badges, and the parachutist, glider and driver qualification badges.
REVIEW OF DECORATIONS

While the awarding of medals, particularly for heroism, should be based solely on the merits of the act itself, we know that such is not always the case. During World War II, for example, many soldiers of African-American or Asian origin received the Distinguished Service Medal with little or no consideration for the Medal of Honor, because of who they were. Recognizing that segregation and the racial mistrust of the era may have played a role in the awarding of the medals, the Army undertook another review of DSM awards during the 1990s and, where the evidence warranted a change, conferred the nation’s highest military honor.

Section V
Notes on Weapons
and Technical Developments

GENERAL

World War II introduced a new age in the mass production of military materiel and the close cooperation of all sectors of industry to aid in the production of this country’s military needs. As a result of the need to counter sophisticated weaponry on the battlefield employed by Japan and Germany, the degree of sophistication in weaponry and war machinery of the U.S. Army developed to a greater extent than ever before, even when compared to the revolution experienced before and during World War I. A selection of the weapons of each side provides a sampling of these developments.

THE UNITED STATES: GROUND WEAPONRY

U.S. Rifle, .30 Cal., M-1: During World War I, the U.S. Army realized the value of greater infantry firepower and, as a result, conducted a search after the war for a semi-automatic rifle.

In 1919, John C. Garand was hired by the U.S. Government and went to the Springfield Armory to design a rifle for the .276 Pederson cartridge. In 1929, field trials with one of Garand’s designs proved so successful that the weapon was further refined, converted to .30 caliber, and adopted by the armed forces as the U.S. Rifle, .30 Cal., M-1. This rifle used an eight-round, clip-loaded, box magazine which ejected the clip after the eighth round was fired. The rifle weighed 9 1/2 pounds; 10 1/2 pounds with bayonet.

Browning Automatic Rifle, .30 Cal., M1918: This automatic rifle was developed during the last year of World War I and provided excellent service for American and Allied forces throughout World War II and the Korean conflict.
It employed a 20-round, box magazine and fired the standard .30 caliber rifle cartridge. It was gas-operated, air-cooled, and fired from an open bolt at a cyclic rate of 500 rounds per minute. It would also fire semi-automatically. The BAR weighed 15 1/2 pounds unloaded and was accurate to a range of about 800 yards.

**U. S Rocket Launcher 2.36-Inch:** The rocket launcher was developed by the U.S. Ordnance Department at Aberdeen, Maryland, in 1942, and was immediately nicknamed “Bazooka” after comedian Robert Burns’ musical instrument, which consisted of odd pieces of pipe and fittings. The Bazooka was a hollow pipe, open at both ends. The secret of its target effect is the “MONROE” effect, discovered in 1888 by Dr. Charles Monroe, an American chemist. He discovered that cavities in high explosives provide a jet stream of fire and metal with terrific power, which concentrates to the middle of the inverted cone. The projectile weighed 3 1/2 pounds. German anti-tank weapons were greatly superior to this weapon, however.

**The M-4 Sherman Tank:** The U.S. Army found itself outgunned in tank warfare by Germany until late in the war. By the time of the Normandy invasion, however, American technicians had developed in the M-4 “Sherman” tank an easy to manufacture and durable tank chassis with very good suspension and a low-maintenance, rugged transmission. The radial gasoline engine allowed both high speed and mobility on the road and off. The addition of a long-barreled 75-mm. gun provided the much needed velocity and firepower that earlier models lacked. Over 55,000 M-4 “Sherman” tanks were manufactured during World War II.

**The Airplane:** The P-51 “Mustang” and P-38 “Lightning” series of fighters saw steady and continued service from 1941 until 1945. For strategic bombing, the United States followed a policy of daylight precision strikes, building heavy, well-armed bombers such as the B-17, B-24, and B-29.

**The “Jeep”:** The American truck, quarter ton, 4x4/standard, popularly known as the “Jeep,” was used by all of the Allied powers on every fighting front. It was a cheap to produce, yet rugged, general purpose vehicle (the nickname Jeep came from the initials “GP” which stood for “general purpose,” bolstered by an odd little character of the same name in the Al Capp cartoon, “Lil Abner.”).
Manufactured by Ford and the Willys Overland Motor Company, the Jeep could be equipped with a canvas top, brackets to carry casualty stretchers, or a variety of armaments from .30 to .50 caliber machine guns to the 75 mm recoilless rifle. The four-wheel-drive Jeep was also capable of towing trailers, fuel and water tanks, and howitzers. Its 4-cylinder, 134 cubic-inch gasoline engine provided for a top speed of nearly 65 miles per hour.

**The 105-mm. Howitzer:** The 105-mm. howitzer was the main field piece of the U.S. Army artillery on all fighting fronts during the war, and it provided the American soldier with an awesome amount of fire support. The M2A1 model weighed 1,080 pounds and could fire four rounds per minute at a velocity of 1,550 feet per second to a distance of just over seven miles. One of the main advantages of the 105-mm. howitzer was its ability to be towed at speeds of up to 35 miles per hour, allowing for great mobility on the battlefield.

**GERMAN GROUND WEAPONRY**

**Machine Gun MG 42:** Developed from its lighter predecessor the MG 34, the MG 42 was adopted in 1942 and fired the 7.92-mm. service cartridge. The most remarkable feature of this weapon was its barrel change design. By retracting the bolt and moving the latch on the right side of the barrel housing forward and outward, the operator could drop out the barrel without touching it. This weapon was fed by fifty-round, non-disintegrating metal belts which could be linked together. The cyclic rate of fire was 1200 rounds per minute and the weapon weighed 25 pounds. The high rate of fire wasted ammunition and caused the gun to climb entirely too much to fully utilize the accuracy of the German service cartridge.
The Anti-Tank Mine: The Germans used about forty types of anti-tank mines, among which were:

Pressure Mine: A circular mine with a flat top and bottom, enclosed in two saucer-shaped covers. In the center, the mine had a small plate covering a safety screw. A pressure of 250 pounds on the lid sets off one or more of the five pressure igniters which, in turn, set off the main charge of 5 pounds of T. N. T.

German Tellermine (35-T-M-35 Stahl): This model had a fluted pressure plate which extended over the entire mine. This plate prevented sand from blowing off a buried mine. Tellermines saw service mainly in North Africa. In the center was a pressure plate and on the bottom and one side were two additional igniter holes. The mine weighed twenty-one pounds and used a detonating charge of twelve pounds. It took a pressure of 175 to 400 pounds to set off this mine.

The Tank: German tank development began in 1934. By 1939, four types of tanks had evolved — the Pz Kpfw (Panzerkampfwagen or armored fighting vehicle) I, II, III, and IV. The German Blitzkrieg campaigns launched between 1939 and 1942 used these models. By 1941, the Pz Kpfw I and II had become outdated, while the larger III and IV were modified with thicker armor and a larger gun. These modifications appeared in many models and used a 50-mm. gun and some the short 75-mm. cannon. Later German tanks included the Mark V “Panther,” which was perhaps the best tank of the war and appeared in 1943. Intended as a match for the Russian T-34, the medium “Panther” had excellent fire control, thick armor, and a powerful high-velocity 75-mm. gun. Its gasoline engine provided both high speed and good mobility. Over 5,000 “Panthers” were produced prior to Germany’s defeat. The later “Tiger” tank, the Mark VI, shared many of the fine qualities of the “Panther,” including thick armor and superior armament in its 75-mm. high-velocity gun which could penetrate 112-mm. of armor at 500 yards. The “Tiger” was not as maneuverable as the lighter “Panther,” however, and was mechanically unreliable. Fewer than 1,000 were produced.

Japanese Ground Weaponry

The two principal infantry rifles that the Japanese used during World War II were the Type 38, 6.5-mm. (Model 1905) and the Type 99, 7.7-mm. (Model 1939). Type 99 paratrooper rifles, could be disassembled by turning the screw on the right side of the receiver counterclockwise. The barrel and receiver group could then be separated.

When the soldier cocked his weapon, he set the safety by pushing the knob at the rear of the bolt with the palm of the hand and twisted forty-five degrees to the right. The two arms on the rear sight could unfold and were supposed to provide
a lead on flying aircraft. The operator loaded the box magazine with a 5-round stripper clip and unloaded the weapon by pulling the latch on the inside of the trigger guard, which released the floor plate. The weapon weighed 8.8 pounds; its range was slightly less that of U.S. .30 caliber weapons.

Section VI
Notes on Uniforms

General

As World War II approached, the Army provided the field soldier with a sensible combat outfit. It appeared in different versions, depending upon the soldier’s branch and role. The basic uniform was a light-weight, wind-resistant jacket, shirt, trousers and laced canvas leggings. A practical steel helmet and liner also came into service.

Uniforms worn in the European Theater by general officers were often adapted for his particular locality and needs. The short jacket, copied from the British battle dress, became known as the “IKE” jacket and was widely used by the Army until the early 1950s.

The airborne soldier’s uniform featured a jacket and “baggy” trousers. During the early part of the war, the paratrooper was the only soldier issued the jump boot, and he became fiercely, possessively proud of them. Jump boots were eventually issued by the Army to the other types of field soldiers. On his dress uniform, (not shown)
the airborne soldier wore a special cap insignia, a silver parachutist skill badge, and a shoulder tab identifying his status. These devices continue to contribute to the fierce pride and proud heritage of the paratrooper.

The types of uniforms worn by members of the Women’s Auxiliary Army Corps in non-combat situations were modeled after civilian styles but made of the same material as men’s utility uniform. When in combat, WAACs and nurses wore fatigue uniforms similar in design and style to those of their male counterparts.

**Section VII**

**Notes on General of the Army**

**George C. Marshall, 1880–1959**

In 1901, George C. Marshall graduated from the Virginia Military Institute, where, during his senior year, he served as the First Captain of the Corps of Cadets. In February 1902, he received a commission as a second lieutenant in the U.S. Army and was assigned to the Thirteenth Infantry in the Philippines. After several years in the American West and Pacific areas, he returned to Fort Leavenworth to attend the Infantry-Cavalry School, where he became a senior honor graduate in 1907. He was then assigned to attend the Army Staff College, also at Fort Leavenworth. Here, too, he finished at the head of his class.

Between 1913 and 1916, Marshall returned to the Philippines, where he impressed his superiors. Brigadier General James Franklin Bell, the Department Commander, called Marshall, “the greatest military genius since Stonewall Jackson.” Lieutenant Colonel Johnson Hagood, in response to the question in an efficiency report on whether he would like to have Marshall in his command, responded, “Yes, but I would prefer to serve under his command.” Hagood called Marshall, “a military genius,” and recommended that he be made “a brigadier general in the regular Army, and every day this is postponed is a loss to the Army and the nation.”

When the United States entered World War I, Marshall went from the Philippines to France as a captain on the staff of the 1st Infantry Division. He served as a staff officer in the battles of Cantigny, Aisne–Marne, and St. Mihiel. Within a year of his landing in France, he had reached the rank of full colonel and was the chief of the operations section (G–3), First U.S. Army.
After the war, he reverted to his prewar rank of captain and became an aide to General Pershing. By 1924, he had risen to the rank of lieutenant colonel. Between the wars, he served as executive officer of the 15th Infantry in China, assistant commandant of the Infantry School, commander of the 8th Infantry, with the Illinois National Guard, and commander of the 5th Infantry Brigade. In 1938, Marshall became Chief of the War Plans Division of the War Department, and he became Chief of Staff in September 1939, passing over thirty-four other officers. As Chief of Staff during World War II, he played a central role in Allied grand strategy, while supervising the building of the U.S. Army into one of the most powerful fighting machines in history. In December 1944, Marshall became General of the Army. British Prime Minister Sir Winston Churchill called him, “the organizer of victory,” and President Franklin D. Roosevelt, when faced with the decision of whether to permit Marshall to command the Normandy invasion, finally concluded, “I didn’t feel I could sleep at ease if you were out of Washington.” Perhaps the greatest compliment came from Secretary of War Henry L. Stimson, who had been involved with the U.S. Army since the turn of the century. At Marshall’s retirement ceremony at the end of the war, Stimson told him, “I have seen a great many soldiers in my lifetime, and you, sir, are the finest soldier I have ever known.”

But the postwar United States could not allow Marshall to retire. President Truman appointed him “Special Representative of the President to China,” with the personal rank of ambassador. Following this important assignment he became Secretary of State and developed the European Recovery Program, which became known as the Marshall Plan. After the start of the Korean War in 1950, President Truman called on Marshall to serve as Secretary of Defense, a position he held until September 1951.

As the capstone to his already illustrious career, Marshall received the Nobel Peace Prize for his European recovery plan. It might seem rather unexpected that a professional soldier dedicated to the art of waging war could receive such an award. But Marshall, even though he won fame during history’s greatest war, was a man of peace, a true soldier-statesman for the “American century.”

Section VIII
Notes on General George S. Patton, Jr., 1885–1945

One would be hard-pressed to find another American soldier as aggressive, colorful, and swashbuckling as George S. Patton, Jr. In his own army, in friendly
American Military Heritage

and enemy armies, men marveled at his aggressiveness and daring. They talked of his unrelenting demand for discipline, soldierly dress, and bearing. They laughed at, or despaired of, the unprintable speeches Patton delivered to inspire his troops to battle. They joked at, or shrank from, his unique, blistering vocabulary, which was richer than most old cavalry sergeants could muster. They argued about his colorful personality, his numerous scandals, and even his tactics. Patton’s reputation was widely known; and, as usually happens in such cases, one finds many varied opinions of the man and the soldier.

George S. Patton, Jr., was born near San Gabriel, California, in 1885. During his early years, he benefited from an active outdoor life on the family ranch, laying the foundation for a tremendous physique that would carry him through life with limitless energy and enthusiasm.

He began his military education at an early age and while his formal schooling was sparse, George managed to attend the Virginia Military Institute for a year before entering the U.S. Military Academy at West Point with the Class of 1908.

Patton’s life at the U.S. Military Academy was filled with little but hard work. He was dyslexic, and reading any but the shortest of passages was a struggle. Nonetheless, he felt compelled to read all of the ancient and modern military classics of history and theory. He failed plebe math but came back to graduate with the Class of 1909. He excelled in all military subjects, and in his First Class year, he served as the battalion adjutant. Patton participated actively in athletics, and, although unsuccessful in winning letters in football because of multiple injuries, he won his letter in track and broke the Academy record for the low hurdles. His athletics continued after graduation, too, for he entered the 1912 Olympics as the only United States representative in the “Modern Pentathlon,” finishing fourth in a field of forty-three.

Patton’s choice of branches upon graduation was the cavalry. His early service included a position on General Pershing’s staff with the Mexican Punitive Expedition in 1916. He so gained the confidence of his superiors that Pershing later named him to command Headquarters Troop of the American Expeditionary Forces. He was promoted to captain and went overseas with the first American troops. However, he soon tired of his inactive headquarters life and requested reassignment to a fighting unit. General Pershing offered him the choice of an infantry battalion or duty with the new U.S. Army Tank Corps. He joined the tank unit, was soon promoted to Lieutenant Colonel, and received
command of the first U.S. Army tank brigade. His service with the tanks brought him a promotion to colonel and recognition as one of the outstanding officers of his age and grade. During this period, he received the Distinguished Service Cross, the Distinguished Service Medal, and the Purple Heart.

After the war, Patton continued to work for the development of the tank as a weapon. But when the tanks came under the control of the infantry, he returned to his first love, the cavalry. He served with the cavalry until the start of World War II. His duties included several tours with the General Staff Corps, and at every opportunity he urged the joint use of cavalry and tanks. In 1940, he went to Fort Benning to train the nucleus of an armored force, and he later received command of the 2d Armored Division. He retained this command until early 1942 when he took command of the unit that would become the Western Task Force in the invasion of North Africa. Throughout this time, his initiative and drive were always in evidence, and his name became synonymous with efficiency and determination.

General Patton’s exploits during the remainder of World War II became legendary. In Tunisia, he whipped a demoralized U.S. II Corps into shape after the defeat at Kasserine Pass. In Sicily, he raced from one end of the island to the other, foiling all enemy attempts to slow his forces. In France, he displayed a mobility and determination that astonished friend and foe alike. During the Battle of the Bulge, he turned his Third U.S. Army at a moment’s notice in response to the German offensive and broke the siege of Bastogne. He then played a key role in the final campaign across Germany. He then commanded occupation forces until his death on December 21, 1945, as result of an automobile accident.

Section IX
Notes on Dwight D. Eisenhower and His Generalship During World War II

General of the Army Dwight D. Eisenhower’s stature as a great military officer, college president, and President of the United States has, if anything, grown over the years. If one examines several key points of his life and experiences, it is possible to see some of the forces that made him a living part of America’s heritage and the modern giant of the heritage of the U.S. Army.

Although Eisenhower commanded the largest invasion force in American history and became Chief of Staff of the U.S. Army after the war, in 1939, he was a lieutenant colonel serving as an aide to General MacArthur in the Pacific. After his graduation from the U.S. Military Academy in 1915, he had served in staff and command positions and attended the military schools considered normal for an officer of his rank and branch. Dwight Eisenhower, however, came of age in a peacetime Army that saw few promotions and advancements. It was an army
without a war and one that endured long periods of little training, little funding, and nearly no new equipment. Eisenhower learned early to use each available minute for study and self improvement, which he practiced throughout his life. Thus, when he became a high level commander in Europe after twenty-six years in an army of little action, he proved more than ready.

Although seldom considered a fighting general, Eisenhower possessed an acute sense of tactics and, on several occasions, demonstrated his ability to generate sound tactical maneuvers while practicing the diplomacy needed to command a force composed of the forces of many nations. For instance, during the breakout from the Normandy beaches, he held the bulk of the German forces in contact in one general area with relatively light forces while allowing Bradley and Patton to skirt the enemy in the West and trap them in the Falaise Pocket.

In the Battle of the Bulge, he recognized the strength of the German attack before any of his commanders and rapidly moved reserves to stem the tide. At a time when discouragement ran rampant in Allied councils, he retained his characteristic optimism, emphasizing that the battle represented an opportunity not a setback. During his final bouts with the enemy west of the Rhine River, he ordered a series of double envelopments that handed Hitler a major defeat.

In addition to his responsibilities as a military commander, General Eisenhower, as the Supreme Allied Commander, was required to deal with Prime Minister Churchill of Great Britain and General Charles De Gaulle of France, as well as other representatives of countries and military services, on a day-by-day basis. He accomplished this with understanding and patience. His tact and powers of persuasion have been praised by nearly every author that has examined his career; however, at no time did these attributes stand him in greater stead than in the trying days of a world conflict. In addition to his own abilities, Eisenhower understood the value of talent and surrounded himself with the most capable, energetic, and effective commanders and staff officers that he could find. Probably more important than his ability in finding these people was the fact that he listened to their advice and always had a broad base of knowledge upon which to base any decision.

**SUMMARY**

Eisenhower’s reputation as a great commander is assured not only by the vast numbers of men that he led and their lasting accomplishments, but because of his personal accomplishments as a man. In a nation that did not prepare for war, he
prepared himself for that unwanted eventuality. When that same nation needed him as president, he was ready. He served freedom’s cause with every personal resource at his command, and it was, indeed, more than enough. He is most worthy of the label “great fighting general, great man.”

Section X
Audie Murphy

The son of a sharecropper, Audie Murphy was born in Hunt County in northeast Texas, on June 20, 1924. During his boyhood, he often listened to the stories of World War I veterans and decided that he wanted to become a soldier. At age sixteen, he attempted to join the U.S. Marines but was rejected because of his size. After failing in an attempt to join the paratroopers, he joined the infantry.

Assigned to the 3d Infantry Division, he soon had the opportunity to show what he was made of. Although not fearless, and occasionally critical of those who were, he did possess a grasp of small-unit tactics. He served with distinction in Sicily and the Italian campaign, gaining promotions and the first of several decorations.

After the 3d Infantry Division participated in the invasion of southern France, Murphy received a battlefield commission. On January 26, 1945, near the village of Holtzwihr just outside Strasbourg, the Germans launched an attack against his company’s forward positions with six tanks and 250 infantrymen. Ordering his men to withdraw, Murphy remained behind on an abandoned tank destroyer, calling in artillery fire against the enemy advance. Although the tank destroyer was on the point of exploding, he climbed on top of it and used the vehicle’s machine gun against the enemy attack, continuing to fire until he had exhausted his ammunition. He eventually killed enough Germans—later estimated to be about fifty—to break up the assault. Although wounded, he then recalled his company and led them in a counterattack. For his bravery, Murphy received the Medal of Honor.

At the end of the war, Murphy was the most decorated American soldier, having won twenty-eight medals, including three French and one Belgian decorations. Leaving the Army, he began a career in motion pictures and wrote his memoirs. He later attempted a business career but was forced into bankruptcy in 1968. It was on a business trip, near Roanoke, Virginia on May 28, 1971, that Audie Murphy was killed in the crash of a private plane. Although his postwar career was marked by much adversity, his record as a combat soldier remains undimmed.
Like Audie Murphy, First Lieutenant Vernon J. Baker, an African-American, distinguished himself in combat in Italy, near the village of Viareggio. Here, according to the Medal of Honor citation, on 5 and 6 April 1945, then Second Lieutenant Baker demonstrated outstanding courage and leadership in destroying German installations, personnel, and equipment during his company’s attack against a strongly entrenched enemy in mountainous terrain. When his company was stopped by the concentration of fire from several machine gun emplacements, he crawled to one position and destroyed it, killing three Germans. Continuing forward, he attacked an enemy observation post and killed its two occupants. With the aid of one of his men, Lieutenant Baker then attacked two more machine gun nests, killing or wounding the four enemy soldiers in these positions. He then covered the evacuation of the wounded personnel of his company by occupying an exposed position and drawing the enemy’s fire. On the following night, Lieutenant Baker voluntarily led a battalion advance through enemy minefields and heavy fire toward the division objective. Second Lieutenant Baker’s fighting spirit and daring leadership were an inspiration to his men and exemplify the highest traditions of the Armed Forces.
At the conclusion of the War in the Pacific, the United States and the Soviet Union had arbitrarily divided Korea at the 38th Parallel, the Americans stationing troops below the Parallel and the Soviet Union above it. At Yalta, the Americans and Soviets considered a four power trusteeship, administered by the United States, the Soviet Union, China, and the United Kingdom, until Korea had sufficiently developed to choose its own government. But the Soviets presented demands unacceptable to the Americans, while aiding the relatively secret growth of a Communist government in North Korea. In 1947 and 1948, the United Nations attempted to act as a go-between in North and South Korea’s arguments over unification and independence, and particularly on the subject of elections. The Soviet Union protested that the United Nations had no jurisdiction over Korea and that foreign troops must be withdrawn before the creation of a unified Korean government. When South Korea held elections in May 1948, the North Koreans did not participate. They barred United Nations observers from entering the country and did not recognize the results of the elections. After the elections, both the United States and the Soviet Union withdrew their troops from Korea and left the country divided. From that point, South Korea became a target of varied forms of warfare by the North. These attempts ranged from border raids and guerrilla warfare to more subtle attempts to strangle the economy of the country and subvert the government through propaganda.

Striking without warning in the pre-dawn hours of June 25, 1950, seven divisions and an armored brigade of the 135,000-man North Korean People’s Army drove across the 38th Parallel and invaded the Republic of Korea. The invasion clearly represented a clash between two factions of the same country’s population, but it was, in a broader sense, a confrontation between the two major power blocs that had emerged from World War II. During the ensuing months, badly mauled South Korean forces retreated in the face of the invasion, United Nations forces regrouped in the southern tip of Korea, and General MacArthur, the Supreme Commander of UN forces, conducted a brilliant amphibious landing at Inchon and a breakout from the “Pusan Perimeter.” The UN forces drove north to the Korean–Chinese border on the Yalu River, only to meet the massive intervention of Communist Chinese forces. After the Chinese drove UN troops back to the area of the 38th Parallel, a long
costly stalemate and negotiations between the two sides resulted. Finally, the two sides signed an armistice, leaving a restless peace and a divided country.

Although, in some respects, the Korean conflict could be called a minor war when compared with World War I and World War II, it proved both devastating and unique. For the first time, the United Nations had enforced a policy against armed aggression. A unified commander and his staff built an effective

---

**The Korean Conflict**

1950 – 1951

United Nations Line,
Date Indicated

0 50 100

Miles
fighting force from troops of many nations, armed with their own weapons but sustained by standardized supporting agencies. The Korean conflict saw the United States Army overcome personnel shortages, equipment renovation and supply difficulties, inadequate training programs, and the ever-present problems of the flow of officer and enlisted replacements.

The North Korean Army demonstrated what to the occidental soldier seemed foolhardy concepts of tactics, particularly during the latter stages of the conflict. The North Korean Army did not possess the weapons or the ammunition to conduct a toe-to-toe slugging match with the better equipped and supplied United Nations forces, but it did have one commodity that the UN troops did not have—manpower. In many cases, the Communists seemed simply to substitute bodies for weapons and to casually expend a soldier as one might fire ammunition.

The Army learned many lessons on the battlefields of Korea, but perhaps the most significant was the important relationship of terrain to armored warfare. For nearly the entire first year of the war, tanks performed in the same offensive roles that they had assumed in World War II. But commanders soon learned that the mountainous terrain of Korea severely restricted the heavy vehicles and finally limited them to a fire support role. Thus, of the combat arms, infantry and artillery dominated the battlefield. The dates and events listed below represent pivotal points in the Korean War:

- **25 June 1950** North Korean People’s Army invades South Korea.
- **15 Sep 1950** The U.S. Army X Corps, spearheaded by the U.S. 1st Marine Division, lands at Inchon.
- **16 Sep 1950** Eighth U.S. Army begins offensive to break out of the Pusan beachhead.
- **20 Nov 1950** Communist Chinese cross the Yalu River to enter the war and attack UN forces.
- **21 Feb 1951** Eighth U.S. Army launches Operation KILLER, a counterattack by IX and X Corps to drive Chinese Communist forces north of the Han River.
- **20 Apr 1953** Operation LITTLE SWITCH, the exchange of sick and wounded prisoners of war by United Nations and Chinese and North Korean forces, begins. The exchange is completed on April 26, 1953.
- **27 Jul 1953** Armistice is signed in Korea.
- **5 Aug 1953** Operation BIG SWITCH, the exchange of prisoners of war, begins.
In great part, the uniforms of 1950 were those of the final era of World War II, with slight modifications for different parts of the world. Three distinct types of dress existed; however, as is shown, one finds a degree of similarity in the basic garments, especially in the field uniforms.

351st U.S. Infantry Regiment These are the uniforms of one of the proudest American units in the Korean War. These soldiers wear the winter gear used throughout the war. The helmet tops an olive green and a cotton field jacket worn over heavy woolen shirt and trousers.
Section III
Notes on the U.S. Army Regimental System

“Remember your regiment and follow your officers.” So spoke Captain Charles A. May to the 2d Dragoons just prior to their attack at Resaca De la Palma on May 9, 1846.

This quotation is indicative of the fierce pride, loyalty, even reverence, that soldiers in battle historically have reserved for their unit. Even during peacetime when good commanders and high esprit prevail, it is not uncommon to find soldiers springing to action to defend the reputation of their unit by means of an impromptu physical contest with the members of some rival unit.

For some time it has been recognized that in order to capitalize on this natural pride of a soldier in his unit, that unit’s history, lineage, battle streamers, and distinctive insignia should be carefully preserved. Unfortunately, our army has been required to expand so rapidly during periods of crisis that many units were created suddenly and could not benefit by being awarded the colors and lineage of an older tradition-laden unit. Demobilization following wars resulted in mass inactivation of units and further complicated the problem of retaining unit designations and histories. Periodic reorganizations of the army have also shown the need for a system of retaining previous unit designations.

In order to meet this requirement the Combat Arms Regimental System, commonly known as CARS, was established on 24 January 1957. CARS was designed to permit the retention of our most famous regiments while meeting the requirement for tactical flexibility on the modern battlefield. In the 1980s, CARS was succeeded by the United States Army Regimental System, or USARS, which includes non-combat arms branches.

Although tactical regiments no longer exist (armored cavalry, ranger, and special operations aviation regiments excepted) as units in the active army, their distinguished histories are preserved by the U.S. Army Regimental System. Regiments have always been the foundation of the Army’s combat power and the primary source of army history and tradition. The history of the U.S. Army is a history of its fighting regiments.

Although the number of regiments in our Army has varied from 1 to well over 300, in almost all of them the members have tried in some fashion to commemorate certain acts of valor which were a source of unit pride.
The 19th Infantry, for example, held the line for two days during the battle of Chickamauga in September 1863, but withstood such determined attacks that at the end of the second day half the regiment had become casualties. By the time the battle was ended, a second lieutenant was commanding the regiment — all of his seniors having fallen in battle. This inspired the regimental tradition that a second lieutenant be given command during 19th Infantry Regimental Day ceremonies, and the gold bar of a second lieutenant is now part of the unit’s crest. Soldiers of the 3d Infantry, the Old Guard, wear around their left shoulder a small black leather strap with a buff colored piece of leather woven along its length. This dates back to the 18th century when the regiment’s members wove distinctive strands of buckskin in their knapsack straps. Men took great pride in the regimental colors and carried them into battle. The colors were a symbol to be preserved and revered.

An example of how the USARS designations function is provided by the 1st Battalion, 3d Air Defense Artillery. Although it is a battalion-sized organization, it retains the colors and lineage of an element of the old 3d Regiment of Artillery. Thus, it is called the 1st Battalion, 3d Air Defense Artillery, or 1-3 ADA. Several different numbered battalions can be assigned the same regimental designation. As the lowest numbered active battalion of the 3d Air Defense Artillery, 1-3 ADA is the custodian of the 3d ADA regimental history and property.

The U.S. Army Regimental System is designed to maintain the history and traditions of our fighting units regardless of future tactical reorganizations.

“. . . to the best of military knowledge a Regiment never loses its Rank....”
—General George Washington, 1775.
Section IV
Notes on Personal Services and Army Life, Circa 1950

GENERAL
Soldiers can cite many intangibles, such as memories, friendships, and the satisfaction of achievements as major reasons why they serve in the army. Nevertheless, a serviceman must eat, be paid, and have a place to sleep. These material aspects of the soldier’s life during the period of the Korean War serve as interesting comparisons with similar services of his Revolutionary and Civil War ancestors and modern counterparts.

THE ENLISTED MAN
In the Regular units of 1950, a large number of World War II veterans still formed training cadres for those men recruited after the war. The average enlisted man received a base pay of about seventy-five dollars a month, ate in a company mess, and could live in “adequate” government quarters. The perpetual private had long since left the ranks, and milkshakes had become more popular than whiskey. The noncommissioned officer of the 1950s was a bright, studious, serious-minded soldier who was probably married and raising a family. He wore stripes as had his predecessors for nearly a century. The Army also began to use used small green shoulder tabs to designate a combat leader position.

THE ARMY MESS
At one time in the army, a great deal of individuality existed in the Army mess system. Each unit received funds to purchase additional food from the local economy of whatever area the unit was serving in. Therefore, most messes engaged in a great deal of competition to insure that their food and its preparation were the best in the Regiment. In 1950, the army modernized the mess system by standardizing the Army master menu, thereby providing for greater uniformity of mess service throughout the Army. This practice abolished much of the individuality of the mess, but it also protected the members of the companies that had poor mess sergeants and would have suffered under the more loosely run system.

ARMY EDUCATION
The Army enjoyed a long tradition of military education outside of training. In addition to strictly military instruction, the Army in the early nineteenth century had instituted educational programs for soldiers who wanted more than just their limited civilian education and military training. During World War II, the United States Armed Forces Institute had offered courses both in the continental United States and abroad. After the war, the Army Field Forces became responsible for the Army’s Military Schooling System, and that system continued to grow throughout the decade of
the 1950s. Later, correspondence courses and on-campus exchange programs were established at many of the colleges and universities located near military bases. Both of these programs proved popular and beneficial and remain in existence today.

**Army Organization**
The Reorganization Act of 1950 confirmed the power of the Secretary of the Army to administer departmental affairs and firmly established his position as the immediate superior of the Chief of Staff of the Army. It also divided the subordinate units of the Army Field Forces into six army areas and made the command responsible for training within the United States. Under this act, the Infantry Branch was retained; field, coast, and antiaircraft artillery merged into the Artillery Branch; tank and cavalry units consolidated into the new Armor Branch. The act also authorized fourteen services to give technical or administrative support to the combat arms, or otherwise to serve the Army as a whole. Artillery split again into Field Artillery and Air Defense Artillery in 1968. Army Aviation, equipped with small fixed-wing craft and helicopters, became a separate branch of the Army in 1983 and was fully integrated into the combined arms team.
Section V
Notes on Maxwell D. Taylor (1901–1987)

Born on August 26, 1901 in Keytesville, Missouri, Maxwell D. Taylor graduated fourth in his class from the United States Military Academy in 1922 and received a commission in the Engineer Corps. His first overseas assignment was at Schofield Barracks, Hawaii, where he soon became the aide to the Commanding General. Lieutenant Taylor returned to the Military Academy as an instructor in French and Spanish in 1927. In 1933, he attended the Command and General Staff School at Fort Leavenworth. After this assignment, he was promoted to captain and assigned to Tokyo to study the Japanese language. From Tokyo, he went to China, where he served as an assistant military attaché.

In June 1939, Captain Taylor returned to the United States where he attended the Army War College. Next, Taylor went on a special assignment to Latin America. In March 1940, he was promoted to major and subsequently assigned to the War Department General Staff.

In July 1942, Taylor joined the 82d Infantry Division as the chief of staff. He assisted in organizing the first airborne division of the Army. Receiving his appointment to brigadier general in December 1942, he went overseas with the division the following March as the Division Artillery Commander. In March 1944, Taylor became the Commanding General of the 101st Airborne Division. Accompanied by a contingent of his command, he became the first general to land on Normandy. His command led a successful assault on a river causeway, clearing the way for advancing airborne units. For his performance, he was awarded the Distinguished Service Cross and the British Service Cross.

After about a month’s combat, the division returned to England to prepare for subsequent operations. In September 1944, the 101st Airborne Division liberated Eindhoven, the first Dutch city to be freed by the Allies. After hard fighting in Holland, the division withdrew into theater reserve. In mid-December 1944, Taylor returned temporarily to Washington on a special mission. During his absence, General MacAuliffe assumed temporary command and led the division in the well-known Battle of the Bulge.
In September 1945 General Taylor, at forty-four, became the thirty-seventh Superintendent of the United States Military Academy. His superintendency paralleled that of General MacArthur’s in reform. He revised and balanced the curriculum, enlarged the physical facilities, and expanded the faculty. He continued to stress character building, military training and leadership, and a full athletic program.

Subsequently, General Taylor commanded the Eighth Army in Korea, and was named the U.S. Army Chief of Staff in 1955. Keenly aware of the danger of total reliance on nuclear deterrence, he retired in 1959 and authored a book entitled *The Uncertain Trumpet*. Recalled to active duty to become President Kennedy’s special military advisor, he next became the Chairman of the Joint Chiefs of Staff and subsequently the United States Ambassador to South Vietnam. During his retirement, he wrote his memoirs and numerous other works on national security issues, and lectured widely on defense. He died in Washington on April 19, 1987.

**Section VI**

**Notes on General Matthew B. Ridgway:**

**A Study in Applied Leadership**

Born at Fort Monroe, Virginia on March 3, 1895, Matthew B. Ridgway graduated from West Point in 1917 and was commissioned a second lieutenant of infantry. He served in a number of infantry posts during the interwar years, rising to the rank of lieutenant colonel. During World War II, he earned fame as the commander of the 82d Airborne Division and later the XVIII Airborne Corps. After the war, he served as the American representative on the United Nations Military Staff Committee, commanded Caribbean Command, and became the Deputy Chief of Staff for Administration, rising to the rank of lieutenant general.

On Christmas Eve 1950, Ridgway, his wife, and their son were quietly celebrating the evening in their home at Fort Myer, Virginia. A phone call from the Chief of Staff of the Army, General J. Lawton Collins, broke the quiet evening for the Ridgways. General Walton H. Walker, the Eighth Army commander in the war in Korea, had just been killed in a jeep wreck, and General Ridgway had been designated to replace him.

Ridgway’s thoughts at this juncture can only be imagined. He certainly realized the difficulties and responsibilities of his position. The American and South Korean forces in Korea were in nearly full retreat along the peninsula. General MacArthur’s brilliantly conceived end run to Inchon had liberated vast areas of the Korean peninsula from the enemy and had decimated the North Korean Army, but the rugged, well equipped Red Chinese troops that had poured
across the border had inflicted a nasty defeat on the Eighth Army. Thus Ridgway knew that he would be taking command of an army moving to the rear under great pressure, an army whose fighting spirit had reached a low ebb. He knew that his task would be immense.

Matthew B. Ridgway was no stranger to immense challenges, as his World War II record showed. A fighting general, he had repeatedly inspired his men through his own demonstrated leadership ability. With his trademark hand grenade always visible on his suspenders, he had become a familiar sight for paratroopers on the front lines.

General Ridgway’s operations as commander of the Eighth Army in Korea have been well recorded, but he has earned perhaps his greatest fame for the way in which he rallied Eighth Army. He devoted major portions of each of his days in visits to each of his units that he could reach. He liked to talk to the enlisted men of his commands, so that he could determine the needs of the lowest private. Whenever he could, he saw that these needs were met. He was severe with subordinate commanders and staff alike.

He chafed under the restrictions of his defense plan, for he wanted to assume the offensive. He knew that only through the offense could he achieve the victories that would shorten and ultimately end the war. When he finally launched his offensives, General Ridgway repeatedly displayed a complete knowledge and firm faith in the proven tactics of the offense. He demanded that all weapons and resources at hand be employed in an orchestrated attack. The Eighth Army quickly developed a proficiency in the basic doctrine of offensive warfare and that, along with the presence of the erect and confident man with the hand grenades taped to his harness, proved more than enough.

Ridgway’s own evaluation of the entire Korean situation provides a crystal clear picture of his devotion as a soldier and the basis upon which his capabilities as a leader were founded. It was this leadership that inspired the men of a demoralized and retreating unit, and it was this leadership that ultimately made the Eighth Army one of the finest field forces that has ever fought for America.

Ridgway became perhaps the most respected American military figure of the 1950s. When President Truman relieved General MacArthur in April 1951, he chose Ridgway to succeed MacArthur as Commander-in-Chief, Far East. Ridgway later served as Supreme Allied Commander in Europe.
from 1952 to 1953. From 1953 to 1955, he served as Chief of Staff of the Army, resigning out of concern over the impact of the Eisenhower Administration’s budget cuts on the Army. In retirement, Ridgway pursued a successful career in business until his death in Fox Chapel, Pennsylvania on July 26, 1993.

Section VII
A Night with Easy Company

On November 25, 1950, Easy Company of the 27th Infantry Regiment (Wolfhounds), commanded by Captain Reginald B. Desiderio, was spearheading the advance of the 25th Infantry Division. The story of the two following nights in the life of Easy Company provide a brief insight into the type of combat encountered and the type of man who fought in the Korean war. Easy Company’s saga is retold by Brigadier General S. L. A. Marshall in his volume, The River and the Gauntlet.

The piece of terrain on which the action took place resembled an acutely cornered horseshoe lying on its side. As Easy would eventually discover, the Chinese were holding the northern arm of the hill, which was parallel to and about 200 yards from the southern arm. Intermittent small arms fire from the northern hill swept across the relatively open ground on the southern surface of the hill. Easy’s mission was to secure the southern leg of the hill mass and hold it as a part of a blocking position. The company had just been roused by its officers from a well-deserved sleep in a rear area position, but the men fell quickly to their tasks and started toward their assigned defensive area. As the lead elements of the company cleared the crest of the hill from the south, strong enemy fire erupted, and Easy’s commander had to “leap-frog” his platoons into position, using the covering fire of one to support the next as it crested the hill. The first impression of the lead men was that the tracers seemed to float at them, and that they could see enemy soldiers in their flashes as they fired their weapons. Easy settled into position and began to entrench facing the enemy fire. Desiderio made his way to his higher headquarters command post in an attempt to gain the services of several tanks that he had seen.
parked there. Within fifteen minutes, he led five tanks back to his perimeter. His timing was perfect, for the tanks had just topped the southern rise when the first Chinese charge “...broke against the position.”

Sergeant Bryers was on a machine gun on the extreme left flank of the company ... white phosphorous had started a grassfire... Bryers saw about 100 of the enemy rush forward... they suddenly broke in half... charging across the saddle on the left... the others as if to turn Easy’s right flank .... Some fell from the fire, others scattered and advanced to the slope of Easy’s hill.... Bugles were now blowing from both ends of the Chinese line.... The armor drew bullets like magnet.... These were the terms of the fight for the next two hours. The Chinese kept walking into it and with the armor and all infantry weapons firing, Easy continued killing.

Although fourteen Easy Company men fell during the clash, three unexpected replacements had arrived on the scene and fought courageously through the night. As the fight was progressing, the Task Force commander had seen three men seemingly malingering in the vicinity of his command post and, without further questioning, had sent them to Easy Company’s position. It was later learned that these three stalwarts were an Air Force fighter pilot and two enlisted men who had been in the vicinity on official business.

The company fought on. During the engagement, the mortar section found itself without night sighting devices. Each gunner had to smoke about two packs of cigarettes, so that, by the glow of the stub, he could see the sights on his mortar. Their coughing reputedly grew steadily worse as the night progressed. Throughout the entire encounter, Captain Desiderio found himself either directing the tank fire into enemy masses or making the “rounds” of his own subordinate leaders in a calm and professional manner. His steady presence made itself felt to all who remembered the night.

Having tested the American position, the enemy withdrew. The American infantrymen understood that it had been the presence of the tanks that had caused his departure. Even though the fight had lasted only a short time, the five tanks had used forty-five boxes of .50 caliber ammunition.

The night was not yet over, however, for just before first light, the enemy readied another attack. Chinese troops crawled within fifteen yards of the perimeter, each clutching several fragmentation grenades. They also positioned several machine guns on top of their hill, commanding an excellent view of Easy’s positions. At a pre-arranged signal, a “...shower of potato mashers dropped inside the perimeter.” Just after the initial barrage of grenades, the enemy force tried a fierce frontal attack, firing rifles and burp guns as they ran wildly toward Easy’s positions.
The wild momentum of the attack carried the enemy waves through the right flank of Easy’s line and pushed back that platoon nearly to the tank positions. Desiderio, staggering from his own wound, repeatedly called to his men to “Hold till daylight and you’ve got it made!” At the height of the battle, two of the tanks, their commanders feeling that the position was hopeless and that they would surely be overrun in a few minutes, began to withdraw their vehicles. Captain Desiderio stood in front of the retreating tanks and beat on their hulls with a rifle butt, “Goddamn it, you’ve got to stay and fight! Goddamn it, we’re not quitting!” As a result of the shock effect of his sheer audacity and anger, the tanks stood their ground and continued the fight. As the enemy continued to swarm through the right flank, Desiderio yelled to one of his lieutenants, “They’re coming on us now. You take one side and I’ll take the other, and we’ll stop them.” Those were his last words. Personally charging the enemy penetration with his carbine and grenades, he fell mortally wounded.

Although the loss of its commander devastated Easy Company, one can find no greater testimonial to his efficiency as a company commander than to observe that he had trained the unit so well that it functioned even after his death. Another of the company’s leaders rallied the remnants of the platoon, armed them with grenades, and conducted a “grenade” march back over the same ground over which they had just retreated. Later that day, Easy Company withdrew toward the remainder of the division. The long night had ended.

What can the contemporary reader of the saga of this small unit on the obscure hill so many years ago learn from the tale? Easy Company won a Distinguished Unit Citation that night, and its commander was posthumously awarded the Medal of Honor. Beyond these examples of the personal and group valor stands the lesson that applies to other battlefields in other times. The crushing firepower of armor, even when stationary, again proved a major factor. The grenade emerged as an awesome weapon when used profusely at close range. The BAR and machine gun again established themselves as among the primary weapons of the battlefield. Finally, the eternal lesson of battle again asserted itself—that the ultimate weapons are the soldier himself and his will to win.

Source:
Dwight D. Eisenhower took office as the thirty-fourth president of the United States on January 20, 1953. Joseph Stalin, ruler of the Soviet Union, died on March 5, 1953. These two events define the beginning of the middle period of the Cold War.

Eisenhower came into office convinced that the Cold War would be a long-term conflict and that the United States needed to position itself for the long haul. A fiscal conservative, Eisenhower believed that the government should not overstrain the economy by maintaining a large military establishment in peacetime. He first sought to end the war in Korea — both for long-range strategic and short-term domestic political reasons. Then he was ready to implement a new long-term national military strategy, which he called the “New Look.”

The “New Look” received formal expression in a document known as National Security Council (NSC) paper 162/2, formally approved in October 1953. In Eisenhower’s view, the new atomic weapons were both more efficient and effective than conventional arms. NSC 162/2 stated that, in the future, American military policy would rest on “the capacity for inflicting massive retaliation through offensive striking power.” Massive retaliation meant, quite simply, an all-out atomic attack. The authors recognized that challenges might arise on the borders of the Soviet empire that would not warrant atomic attack. They preferred to use secret means to manage the problem, rather than conventional forces. The New Look was prepared as a blueprint for preventing future wars rather than as a guide on how to fight them. This concept was called deterrence. In the budgetary battles of the 1950s, the Air Force, which possessed the nation’s atomic strike force in the Strategic Air Command, became the big winner, and the Army became the big loser.

During the 1950s the Soviet Union, unlike the United States, put little emphasis on long-range manned bombers. Instead the Soviets concentrated on the development of intercontinental ballistic missiles (ICBMs). The success of the Soviets in orbiting the first satellite, Sputnik I, in 1957 was the first public indication of their substantial progress. Power struggles in the Soviet Union after the
death of Stalin led to considerable unrest in Eastern Europe, with riots in East Berlin in 1953, workers’ protests in Poland in 1956, and a nationalist revolt in Hungary later the same year. Stalin’s successors showed themselves quite willing to use the Soviet Army to crush opposition. Even more dangerous from the Soviet point of view was the challenge by the Chinese dictator, Mao Zhe Dong, for leadership of the worldwide Communist movement. Most Westerners remained unaware of this struggle in the 1950s and continued to regard Communism as a single movement obeying orders from Moscow. At the same time, America’s two leading European allies, Great Britain and France, retained colonial empires. Because World War II had sparked intense national feelings among colonial peoples, both the Soviet Union and China attempted to take advantage of this situation to weaken the Western alliance and to place local Communists in power. One of the most difficult tasks facing American leaders was distinguishing between truly nationalist uprisings and Communist takeovers. Given all the cultural differences involved, they did not always succeed.

Army officers and academics criticized the national military strategy of the Eisenhower Administration as too rigid and inflexible to cope with these defense challenges. Massive retaliation, argued Generals Matthew B. Ridgway and Maxwell D. Taylor, successive Chiefs of Staff of the Army, would deter only a general war. But wars on the edges of the Soviet sphere of influence — whether new Koreas or the “wars of national liberation” — appeared much more likely. Massive retaliation appeared to be such an overreaction to these kinds of provocations that no one would take the threat seriously. Such attitudes would prevent the United States from stopping lesser conflicts. Defense intellectuals like Henry A. Kissinger argued for a wider range of nuclear options—tactical nuclear weapons — to deter aggressors. The thrust of this argument, developed over almost a decade of discussion, was that the United States needed a variety of military capacities to respond to the new Communist challenges.

In 1960, the Democratic candidate for president, John F. Kennedy, took up this theme in his campaign. After his election, the New Look gave way to the “Strategy of Flexible Response.” The Kennedy administration built up conventional forces to handle outright aggression, while emphasizing unconventional forces, such as the Army Special Forces, to counter Communist insurgencies. These policies contributed to American involvement in the ground war in Vietnam.
following Kennedy’s assassination. President Lyndon B. Johnson’s inability to rally public support for the war and his administration’s failure to impose economic controls led to runaway inflation that undercut the basis for American military power.

President Richard M. Nixon entered office in 1969. Like Eisenhower in 1953, Nixon was pledged to find an early end to an unpopular war. Unlike Eisenhower, Nixon took more than four years to achieve his goal. The war continued another two years and only ended with the fall of the South Vietnamese government. Nixon and his chief foreign policy advisor, Kissinger, believed that American power was declining and Soviet power increasing. They hoped to use a temporary military superiority to negotiate a balance of power between the two countries. This whole process of engagement through negotiation became known as détente.

By the late 1960s the deterioration of the relations between the Soviet Union and China was obvious. The Nixon-Kissinger opening to China in 1972 was an attempt to position the United States to play off one Communist giant against the other and to achieve, by diplomatic maneuver, goals that could no longer be achieved by economic and military power. The Nixon Doctrine stated the national military policy of the administration as it applied to the world outside western Europe, Japan, and South Korea. To prevent future Communist aggression, the United States would assist those countries under threat with air and naval power. But each country would have to supply the ground troops. As long as the American involvement continued in Vietnam, the administration could not fully implement this policy. Once the war ended, the Army underwent a significant reduction in strength and influence.

1953
Jan Eisenhowers inaugurated
Mar Death of Stalin
Oct NSC 162/2 initiates the “New Look”

1957
Oct Soviet Union launches ‘Sputnik’
Nov Soviet Union launches Sputnik II

1958
Jan U.S. launches Satellite, Explorer I
Aug China attacks islands of Quemoy and Matsu
Dec Fidel Castro seizes power in Cuba

1961
Aug Communists erect Berlin Wall

1962
Oct Cuban missile crisis

1964
Aug U.S. warships attacked in Gulf of Tonkin, U.S. enters Vietnam War

1965
Apr U.S. Troops intervene in Dominican Republic

1972
Feb President Nixon travels to China and meets with Mao Zhe Dong
American Military Heritage

Section II
The Delicate Balance

Although the death of the isolated and nearly paranoid Joseph Stalin may have contributed to a safer world, the world seemed anything but safe to people who lived through the decade of the 1950s. The introduction of nuclear weapons appeared to make the world even more dangerous. A delicate balance of power existed throughout the world. Senior Army officers did not believe that nuclear weapons made war obsolete. They continued to prepare the Army to fight a conventional war that might turn into a nuclear war. At the same time, the Army played an important role in counterbalancing Soviet power. The North Atlantic Treaty Organization (NATO), hydrogen bombs, tactical nuclear weapons, and guided missiles shaped the Army in important ways during these years.

NATO

American rearmament in the 1950s closely paralleled the efforts of other nations that had joined with the United States in the North Atlantic Treaty Organization (NATO) to protect the critical area in Western Europe. The initial American contribution to NATO consisted of six Army divisions and impressive air and naval forces. Moreover, American equipment and American economic assistance to NATO nations became vital factors in enabling the alliance to maintain forces in the field. By mid-1953, NATO could deploy approximately 50 divisions, together with about 4,000 tactical aircraft and 1,600 naval vessels. The addition of Greece and Turkey to the alliance in 1952 provided important flank protection and added about twenty-five additional divisions to NATO’s strength. American planners hoped that, in case of a Soviet move, the national Communist forces of Yugoslavia would also oppose the Soviet Union. While a great disparity still existed between the massive forces of the Soviet Union and its satellites (known collectively as the Warsaw Pact) and those of the western alliance, there was good reason to believe that NATO forces, backed by American air-atomic power, would act as a sufficient deterrent to Soviet aggression in Europe.
The Hydrogen Bomb

The Soviet Union’s explosion of an atomic bomb in 1949 set off a debate in the U.S. government and the scientific community as to whether the United States should immediately launch a crash project to build a thermonuclear bomb. There was special concern that the Soviets might have already begun work on a hydrogen bomb, and President Harry S. Truman authorized work to begin. On November 1, 1952 the United States exploded its first fusion weapon, code-named Mike, at Eniwetok Atoll, one of two American atomic testing grounds in the Pacific. One scientist thirty miles away noted that the explosion “looked as if it blotted out the whole horizon.” The Soviet Union followed with its own thermonuclear detonation less than a year later, in August 1953. Whereas the Mike device was not portable and was exploded on a tower, the Soviets dropped their bomb from an aircraft.

The development of thermonuclear bombs, whose destructive power was thousands of times more powerful than that of atomic weapons, meant that they would be the relative measure of power between the Soviet Union and the United States for the remainder of the decade and beyond. Weapons so large and destructive could have only one military function — to wipe out cities. As such, they became the weapon of delivery for the Air Force. Only in the 1960s, with the development of submarine-launched ballistic missiles, would the Navy claim part of the Air Force monopoly. The Army never did. In an institutional sense, the introduction of hydrogen bombs solidified the Air Force’s claim to be the nation’s premier service. Only in wartime could the Army dispute that claim.

Source:

Tactical Atomic Weapons

When General J. Lawton Collins became Army Chief of Staff in 1949, he was convinced that atomic weapons were absolutely essential for the defense of NATO. The Army began working out a doctrine for employing them in a tactical setting. At the same time, the Army had to develop an effective delivery system. The first efforts focused on artillery. The Army produced a “safe and effective” nuclear shell that was slim enough to fit a 280-mm. gun barrel and rugged enough to withstand premature explosion when it was suddenly propelled out of the tube of a gun by a chemical explosion.

From these beginnings, the Army developed, successfully tested, and then fielded an atomic cannon as a tactical nuclear delivery system. An unwieldy 280-mm. howitzer with a limited range of seventeen miles, the atomic cannon was hard to maneuver. Cross-country movement was simply impossible. The system’s limited range meant that it had to be positioned far forward to shield friendly forces from the blast effects — which made it vulnerable to capture. It was a first, but not
a particularly usable first. Although the Army developed smaller warheads for lighter and more maneuverable artillery pieces, the potential ranges of missiles quickly attracted the attention of senior Army leaders.

Source:  

**GUIDED MISSILES**

Guided missiles and rockets were one of the most exciting areas of military innovation during the 1950s. They provided radical improvements in weapon range, accuracy, reliability, and, when combined with nuclear warheads, destructiveness. During the 1950s, all the services became involved in developing guided missiles. The Army concentrated its efforts in three areas — space exploration, Continental air defense, and surface-to-surface tactical missiles. The service ran its missile program out of its Redstone Arsenal in Alabama. The arsenal built its key research element around a team of German rocket scientists, headed by Wernher von Braun, whom the Army had brought to the United States at the end of World War II. By the mid-1950s, the Army’s program was more technically successful and further advanced than comparable efforts in the other services.

Continental air defense pitted the Army against the Air Force over their respective roles in air defense. The Newport Agreements, reached shortly after the creation of the National Military Establishment (forerunner of the Department of Defense) in 1947, gave the continental air defense mission to the Air Force at a time when the emphasis was on manned interceptors. Yet, the agreement also stated that one of the Army’s primary functions was to organize, equip, and train air defense units. The Army used this authority to take over the ground-to-air defense role. The Eisenhower administration came to office vitally concerned about the lack of adequate continental air defenses. If Soviet bombers could attack American cities at will, then the credibility of massive retaliation came into question. In effect, the Soviets could hold the American cities hostage to prevent an atomic assault by the U.S. Air Force in response to Soviet aggression in Europe or Asia. The Army developed a series of surface-to-air missiles designed to bring down high-flying Soviet bombers. Nike Ajax had a limited range of twenty-five miles and a conventional warhead. Its successor, Nike Hercules, boasted a longer range and a nuclear warhead. A follow-on, Nike Zeus, under development at the end of the Eisenhower administration, promised a defense against intercontinental ballistic missiles. It was never fully deployed — a victim of technical problems, limited funding during the 1960s because of the war in Vietnam, and the Nixon administration’s attempt to limit military spending and improve relations with the Soviet Union.

Continental air defense took a substantial portion of the Army’s research and development budget and had only a secondary relationship to the Army’s primary mission — fighting and winning the land battle. The third area of mis-
sile development, surface-to-surface missiles, however, directly related to this mission. The Army, again only after considerable disagreement with the Air Force over roles and missions, developed a series of rockets and missiles capable of carrying nuclear warheads. The Air Force, however, did succeed in preventing the Army from deploying intermediate range ballistic missiles, so the Redstone Missile was restricted to space exploration. It carried the first American satellite into earth orbit in January 1958.

Army surface-to-surface missiles offered a wide range of types. On one end of the spectrum was the Davy Crockett, a 150-pound rocket that lifted a miniature atomic warhead 1 1/4 miles; this range was insufficient to remove the crew from the blast effects. On the other end of the spectrum was the Pershing I, a guided missile with a 500-mile range. One of the consequences of integrating atomic weapons at all levels of the force structure was that, by the late 1950s, the Army was incapable of waging sustained combat without resorting to the use of tactical atomic weapons.

Section III
The Role of the Reserve

Throughout the Cold War era, the reserve components of the Army played a vital role in the balance of power that helped keep the “Cold War” cold. Without the Army Reserve and the Army National Guard, the United States would not have been able to fight World Wars I or II and would have struggled to wage the Korean and Vietnam Wars. The business of the Reserve and National Guard was readiness. They took this duty seriously, but, like the Regular Army, the reserve components faced major changes during the Cold War.

After World War II, the United States possessed a reserve force structured and equipped to fight another war like the one they had just waged. Policy makers and soldiers in the following years struggled with the question of the role of reserve forces in an age when total mobilization might never happen. As always, politics played a large role in the evolution of reserve policy. Some of the key developments between 1945 and 1973 are listed below.

The Gray Board Study

Following the passage of the National Security Act of 1947, Secretary of Defense James V. Forrestal appointed a Committee on Civilian Components, headed by Assistant Secretary of the Army Gordon Gray, to make a “comprehensive, objective, and impartial study” of the Organized Reserves and the National Guard. On June 30, 1948 the Gray Board submitted its report. As far as the Army was concerned, its major and most controversial proposal was to merge the Organized Reserves and the National Guard into a federalized “National Guard of the United States.” The National Guard would remain in
existence but directly under federal control. The dual obligation to federal and state governments was, in the opinion of the board members, outmoded. This recommendation was controversial politically and went down to defeat. The idea of merging the two components under federal control did not resurface again until the 1960s.

**KOREAN WAR**

Immediately prior to the outbreak of war in June 1950, Congress extended the Selective Service Act, but five years of neglect had left the Army unprepared for any military operations short of a full scale mobilization. As soon as the United States became involved, Congress also extended existing enlistments. Not one of the four divisions of the Eighth U.S. Army on occupation duty in Japan was at full strength. As the closest Army units to the scene of the conflict, they were the first to go. The Army cannibalized existing units in the first days of the war to bring up to strength the units committed to the fighting from both Japan and the United States. Operating under the authority conferred by a congressional declaration of emergency, the Department of the Army federalized four National Guard divisions in September 1950. The Army sent two to the Far East. The other two divisions deployed to Europe to support NATO. After the Chinese entered the fighting in November 1950, the Department of the Army activated four more National Guard divisions, which it used for training draftees in the continental United States.

The Army also called 404 Organized Reserve units and 10,584 individual Organized Reserve officers to active duty during July and August 1950. Because the administration feared that the invasion of South Korea might be the first move toward a general war with the Soviet Union, the Department of the Army did not want to strip officers out of units that would need them in a wider war. Consequently, the Department of the Army called to active duty of officers of the Organized Reserve Corps not assigned to Reserve units. In September 1951 the Army reversed its policy and began to call up officers from Reserve units first. By then it was clear that there would be no general war.

**UMTS ACT OF 1951**

Secretary of Defense George C. Marshall regarded military service as one of the obligations of citizenship. His return to government service as Secretary of Defense in September 1950 revitalized attempts to secure universal military training legislation. In June 1951, Congress passed the Universal Military Training and Service Act. Although the act contained a statement of the principle that all citizens were obligated to give military service, the act was important because it extended the draft and established a total military obligation of eight years. It thereby guaranteed a continuing flow of manpower into the Organized Reserve Corps.
ARMED FORCES RESERVE ACT OF 1952
The act reaffirmed the separate existence of seven reserve components: the National Guard of the United States; the Army Reserve, which replaced the old Organized Reserve Corps; Naval Reserve; Marine Corps Reserve; the Air National Guard of the United States; the Air Force Reserve; and the Coast Guard Reserve. For each of these components, the law created categories of ready, standby, and retired reservists, the basic tiered structure for the reserve components that remains to this day.

AMENDMENTS TO THE ARMED FORCES RESERVE ACT (RFA) OF 1952
This legislation is sometimes referred to as the Armed Forces Reserve Act of 1955 because of the major policy changes it introduced. It provided various methods by which young men could serve their military obligation. All draftees or enlistees aged 18 or older, whether in the Regular Army or Army Reserve, had to serve a total of six years. Everyone served one year in the stand-by reserves and at least two years of active duty. Their choices involved the exact mix of active duty and ready reserve service. Younger enlistees in the Army Reserve were obligated to serve only six months of active duty and the remainder of their time in the Reserves. Young men who enlisted in the Army National Guard did not incur an obligation for active duty training. Men in both these categories, however, incurred a total obligation for eight years. This legislation in conjunction with the 1952 law which it amended served as the statutory basis for reserve component policy throughout the remainder of the Cold War.

ONE ARMY CONCEPT
This policy, initiated by the Department of the Army in 1958, proclaimed that the Active Army, the Army Reserve, and the Army National Guard comprised a single team with a single mission. It sought to enhance the status of both the Army National Guard and the Army Reserve.

During the summer of 1961, the Soviet government, led by Premier Nikita S. Khrushchev, began a new round of pressure on the Western position in Berlin. On July 25, 1961, President John F. Kennedy announced the mobilization of 150,000 National Guardsmen and Reservists, including two National Guard divisions, one National Guard armored regiment, and one Army Reserve training division to train draftees. In mid-August 1961, East German border guards began erecting barbed wire barriers around the western zone of Berlin, blocking free access to all parts of the city. The barrier stopped the massive flow of refugees to the West that had grown as tension had increased over the summer.

The crisis ultimately ended in a kind of stalemate. The West remained in Berlin but the wall, converted into a concrete and masonry structure, also stayed in place. Consequently, the Soviets achieved their important secondary objective
of ending the refugee crisis which threatened to destabilize their East German satellite. The Wall also became a symbol for the lack of freedom in Communist countries. Its destruction in 1989 signaled the end of the Cold War.

**POST-BERLIN CRISIS**

**REORGANIZATION OF THE RESERVE COMPONENTS**

The Berlin mobilization revealed a number of problems in the Army’s reserve components. The Kennedy and Johnson administrations sponsored two major pieces of legislation and undertook one major reorganization to deal with them. The Reserve Enlistment Program of 1963 (REP-63) established a uniform six-year obligation of military service for young men once they entered the service. The program allowed them to choose to complete their reserve obligation in either the Army Reserve or the Army National Guard, and set a minimum of four months active duty training but allowed whatever additional military training was needed to permit an individual to become qualified in a military occupation specialty. While REP-63 provided both greater uniformity in the career patterns of individual reservists and flexibility in their training, Secretary of Defense Robert S. McNamara addressed the structure of the reserve forces in what became known as the Second McNamara Reorganization. The number of Army National Guard divisions declined from 27 before the Berlin crisis to 23, while the number of Army Reserve divisions dropped from 10 to 6. McNamara used the savings generated by the smaller force structure to improve readiness in the remaining units. The Department of the Army still had great difficulty in attracting enough officers to fill its active and reserve force structure. The ROTC Vitalization Act, signed into law by President Lyndon B. Johnson on October 13, 1964, authorized retainer pay to ROTC students and financial assistance under scholarships. The legislation also required all senior division Reserve Officer Training Corps cadets enrolled in the advance course to enlist in the U.S. Army Reserve. U.S. Army Reserve Control Groups would carry the cadets on their rosters until commissioning. On the eve of a major conflict, the Kennedy and Johnson administrations had succeeded in modernizing the Army’s reserve components.

**ARMY RESERVE COMPONENTS IN THE VIETNAM WAR**

In May and June 1965, Secretary of Defense McNamara toured South Vietnam to assess the military situation following a series of defeats that the North Vietnamese Army and the Viet Cong had inflicted on the South Vietnamese. McNamara recommended a substantial increase in the number of U.S. military personnel in country, from 75,000 to 175,000; the introduction of ground combat units; the declaration of a national emergency by the president; and a call to active duty of 125,000 reservists. President Johnson resolved to send additional forces to South Vietnam but to do so gradually. He also decided not to declare a national emergency and not to call up reserves. Although President Johnson never explained the reasons for these decisions, most commentators believe that they were largely political ones. He was moving toward war while at the same time pushing
for major social programs known as the “Great Society.” He meant to have, in the phrase of the day, both “guns and butter.”

The North Koreans seized a U.S. Navy intelligence ship, the U.S.S. Pueblo, in January 1968. That act caused the Johnson administration to make its first reserve call-up—all reservists and units came from the Naval Reserve, the Air Force Reserve, and the Air National Guard. Although this call-up was unrelated to the war in Vietnam, most of the units activated eventually served there. The Tet Offensive, one week after the capture of the Pueblo and its crew, produced a flurry of plans to call up Army Reserve and National Guard units. The question of a reserve call-up became intertwined with the debate in the Johnson administration over whether to continue to send more troops to Vietnam. Ultimately, President Johnson decided not to do so. Consequently, the actual reserve call-up was quite modest, about 70,000 men. The largest unit ordered into active service was an infantry brigade. As troop levels fell in Vietnam during the Nixon administration, the need for any additional reserve call-ups disappeared.

Section IV
Notes on Weapons and Equipment Developments

The Korean War spurred rearmament and resulted in vast improvements in the Army’s arsenal of weaponry. Most of this equipment did not reach the troops in quantity until after the fighting ended. The technical advances were, in some cases, very great and the resulting items proved to be long-lasting. A few of the major improvements in ground firepower from this period are listed below:

The M-14 Rifle (7.62-mm.): Following the adoption of the M-1 rifle by the Army during World War II, the Ordnance Department began the search for a lightweight automatic rifle with the killing power of the M-1 but a higher volume of fire. Adopted in 1957, the M-14 was, in effect, an improved M-1. Only a half pound lighter than the M-1, it was a .30 caliber shoulder weapon with a maximum
effective range of 460 meters and a maximum range of 3,725 meters. Durable and stable, this weapon could produce either semi- or fully-automatic fire. It used a twenty-round magazine and weighed around ten pounds when fully loaded. It was the United States Army’s first attempt to adopt a shoulder arm that would use the NATO standard cartridge. But some Army leaders considered short-range automatic fire to be wasteful. They feared that if everyone could fire full automatic, units could not be kept resupplied with ammunition. Consequently, the Army planned to equip only a few men per squad with M-14s fitted with a selector switch to fire full automatic. All other members of the squad would be able to fire only semi-automatically.

The Anti-aircraft Redeye Missile, XM41E1: This rocket-propelled infrared homing missile was one of the first generation of air defense missiles launched by individual soldiers, a concept pioneered by the U.S. Army. It consisted of a guidance section, a warhead/fuse section, a two-stage solid propelled rocket motor, and a tail assembly. It weighed approximately twenty-nine pounds. Carried by a soldier who fired it from his shoulder, the missile armed itself after it had traveled approximately 120 feet from the gunner. The Redeye would self-destruct if it did not hit a target within fifteen seconds after firing. Its purpose was “to provide short-range air defense of tactical operations, critical assets, and moving columns against low-flying aircraft.” It was “organic to battalions or squadrons of armored, airborne, air assault, infantry, and mechanized infantry divisions.” Normally, it was also assigned or attached “to separate brigades, armored cavalry regiments, nondivisional artillery battalions, and selected task units.” Because individual soldiers could easily carry the Redeye, the concept of employment called for its positioning throughout the forward area, thereby denying any aircraft safe rendezvous areas or corridors of approach.


The M-60 Main Battle Tank: The Department of the Army selected the XM60 main battle tank for production in December 1958. Vehicles began joining units in 1960. Armed with a 105-mm. main gun and capable of carrying 59 rounds of mixed types of ammunition, the M-60 was a formidable weapons system. The M60A1 followed in October 1960. It featured a redesigned turret with greater protection and could carry sixty-three 105-mm. rounds. With a minimum of two machine gun mounts and a road speed of 48 kilometers-per-hour, the M-60 compared favorably to the armor and anti-tank weapons of any potential enemies. During the 1960s, the Army experimented with the Shillelagh gun-missile system as an alternative to the 105-mm. gun, but it did not prove successful. The Army therefore continued to upgrade the basic model. The A-3 version featured a ruby laser rangefinder and a solid state ballistic computer. It had a range of from 200 to 5,000 meters and “greatly increased firing accuracy.” The M-60 provides an example of the development of hardware as a result of Cold War pressures.
The Army used it primarily in Europe to counter the Russian armor threat. The Army phased the last M60A3 models out of active units in late 1992.

Source:

The CH-47 Chinook Helicopter: Originally developed in 1958, this helicopter began to join units in 1962. During the Vietnam War, the principal mission of the Chinook was to provide air transportation for troops and cargo. It also was used extensively for aerial movement of artillery, evacuation of wounded, recovery of downed aircraft and evacuation of civilians from battle areas. Armed with three .30 caliber machine guns, the Chinook was capable of carrying 33 combat soldiers anywhere within its 115-mile range. The Chinook had a maximum speed of 178 miles per hour and cruised at about 168 miles per hour.

Section V
Notes on Uniforms of the Cold War Era

Although the Army attempted to upgrade its uniforms following World War II, it had not completed the process when the Korean War broke out. During the conflict, the Army had to draw upon stockpiles of World War II uniforms. More changes came after the war. These developments are described below.

New uniforms, carrying on the Army’s traditional blue, reappeared after World War II, and a new Army green semi-dress uniform came into use after 1956. These two uniforms, Army Blue and Army Green, are shown here.

In the left foreground, a master sergeant assigned to the 1st Armored Division wears the green uniform. His single-breasted coat has a roll collar and gilt buttons. On his collar, he wears the round 1st AD Master Sergeant, Transportation Corps Officer.
gilt insignia, on both sleeves the golden yellow chevrons of his grade, and on his left shoulder the 1st Armored Division shoulder sleeve insignia. The sergeant’s green service cap has a round gilt national coat of arms in the front and gilt buttons on the black leather strap. The black leather, also seen in the cap visor and the sergeant’s shoes, is a change from the russet leather worn in the Army from the Spanish-American War to this time.

In the right foreground stands a major of the Transportation Corps in the Army Blue uniform. His dark blue, single-breasted coat has gilt buttons and the letters U.S. in gilt on the collar. His branch is indicated by the gilt insignia of a ship’s steering wheel and a winged car wheel on a rail on his lapels, as well as by the brick red branch color shown on the stripe of the sleeve of his coat, on the cap band, and on the background of his shoulder straps, all of which are bordered with gold. His rank is shown by the gold oak leaves on his shoulder straps and the gold embroidery on the black visor of his dark blue cap. He wears the light blue trousers with a gold lace stripe down the side worn by officers. On the front of his cap is the gold colored coat of arms of the United States: the strap and buttons are also gold. In the background are enlisted men in olive green field/work uniforms.

Field/Work Uniforms (1963): In the right and left foreground are a private first class and a first lieutenant, and in the left background is a first sergeant, all participating in a demonstration by the 82d Airborne Division about 1963. They wear the olive green field uniforms introduced during the 1950s and carry the M-14 rifle. Note the compactness of their dark olive drab equipment, the large ammunition pouches, the location of various items of equipment—especially the protective mask—and the “arrangement of the torso and thigh web straps so as to most efficiently secure the variety of personal equipment they must carry.” Two features mark the men as airborne soldiers—the special chin-strap harness worn with the helmet and the red, white, and blue
“AA” insignia worn by the 82d Division in World War I with the “airborne” tab added during World War II. The sergeant’s gold chevrons show the form of the insignia for this grade in 1963.

In the right background is a Women’s Army Corps (WAC) officer passing by in her Army Blue uniform trimmed in gold. The green background on her shoulder straps and the green stripe on her sleeve indicate her branch.

Section VI
Notes on General Lyman L. Lemnitzer

General Lyman L. Lemnitzer served as a senior staff officer during World War II. His experiences vaulted him to the highest levels of the U.S. Army. He held high-ranking positions for two decades, making him almost unparalleled among post-World War II officers.

Born on August 29, 1899 in Honesdale, Pennsylvania, Lemnitzer graduated from West Point in 1920 and was commissioned in the coast artillery. From then until the outbreak of World War II, his assignments alternated between duty with troops and assignments as a student and instructor in the Army schools. He also became one of the Army’s leading marksmen as a member of the Coast Artillery Rifle Team.

A member of the last prewar class at the Army War College (1940), he established “a firm reputation as a thorough and imaginative planner,” which earned him a position in the War Plans Division of the War Department General Staff. Shortly after the U.S. entered World War II, the War Department promoted him to the rank of brigadier general. Sent to England in 1942 to command an anti-aircraft brigade, he simultaneously served on General Eisenhower’s staff as assistant chief of staff for plans and operations. Lemnitzer directed the final, detailed preparations for the landings and operations in North Africa, Operation TORCH. He accompanied Major General Mark Clark on his famous submarine mission to North Africa for secret talks with pro-Allied French officers. Lemnitzer received the Legion of Merit for his part in this very dangerous assignment. In January 1943 as deputy chief of staff to General Clark, he assisted in organizing the Fifth U.S. Army headquarters. He resumed command of his brigade in February and continued in that capacity until the German surrender in Tunisia in May 1943. In the Sicilian and Italian campaigns he served as Deputy Chief of Staff to Sir Harold Alexander, when
American Military Heritage

Alexander was commander of the Anglo-American Fifteenth Army Group and later Allied Commander-in-Chief in Italy. In this capacity Lemnitzer took part in negotiating the surrender of the German armies in Italy in May 1945.

After the war, Lemnitzer became deputy commander of the National War College and later director of the Office of Military Assistance, planning aid to Atlantic Pact Nations. In 1951–52, he led the 7th Infantry Division in Korea at the battles of Heartbreak Ridge, the Punch Bowl, and Mundung-ni Valley and in the fighting in the Chorwon Valley. During this period, he won the Silver Star for “conspicuous gallantry.” From 1952 to 1955, as deputy chief of staff for plans and research of the United States Army, he was heavily involved in the development of both guided missiles and tactical nuclear weapons. Promoted to full general in 1955, he became commander in chief of the United States and United Nations forces in the Far East. Appointed Army vice chief of staff in 1957, he succeeded General Maxwell D. Taylor as chief of staff in 1959. The following year he became Chairman of the Joint Chiefs of Staff. Lemnitzer followed General Lauris Norstad in 1963 as the supreme commander of North Atlantic Treaty Organization forces, a post which he held until his retirement in 1969. He died on November 12, 1988.

Lemnitzer enjoyed a well earned reputation as “a brilliant war planner and military diplomat.” He made one of his most valuable contributions as deputy commandant at the National War College from August 1947 until October 1949. As he recalled in retirement:

I was a part of General Eisenhower’s staff [early in World War II]…. We went into a world situation where it was no longer 100 percent military, but it was divided up between politics, diplomacy, economics, military, and everything thrown into a dictionary. In our observation, I’m talking about General [Alfred M.] Gruenther, General Eisenhower, and myself, that when we put an American officer into one of these strange areas of responsibilities, he did as well as could be expected. But whenever we picked a British officer, he seemed to do better. In each case when we looked behind it, we found that this guy had come from the Imperial Defense College….The British had had the foresight to see that war was going to involve a hell of a lot more than it had in the past.

Source:
Interview with General Lyman L. Lemnitzer by Lieutenant Colonel Walter J. Bickson, 17 February 1972, U.S. Army Military History Institute, Carlisle Barracks, Pennsylvania.

Eisenhower, Gruenther, and Lemnitzer pressed hard after the war for the establishment of a similar school in the United States. The National War College was the result.
Section VII
Notes on Sergeant Elvis Aron Presley

Elvis Presley was at the height of his singing career when he received his draft notice in 1958. He entered the Army at Memphis, Tennessee, on March 24, 1958. After spending three days at the Fort Chaffee, Arkansas, Reception Station, he was assigned to Fort Hood, Texas. He took basic and advanced military training as a member of Company A, 2d Medium Tank Battalion, 37th Armor, at that post. Like many other Cold War-era soldiers, Presley then rotated to Germany for his overseas service. He was assigned to Company D and subsequently to the Reconnaissance Platoon of the 1st Medium Tank Battalion, 32d Armor stationed at Friedberg, units of the 3d Armored Division. He arrived insisting that he wanted to be treated like any other soldier, a desire which the Army tried to accommodate. During the four days that he processed-in at Friedberg, the Army allowed reporters to conduct as many interviews and photographers to take as many pictures as they liked. After that, except for occasional formal press conferences, the Army declared him and all those who worked with him off-limits to the media. His celebrity status did cause occasional problems. One of the missions of the reconnaissance platoon was to place soldiers at crossroads to direct the battalion when moving in convoy. If Presley’s fans recognized him (he was by this point an international star), they could easily create a traffic jam and block the convoy’s route. His platoon sergeant, M. Sgt. Ira Jones, tried to minimize his assignment to traffic direction, but sometimes it could not be avoided. Presley would hide behind cover until one of the serials of the battalion’s convoy drew almost abreast and then step out and motion it in the correct direction. One of the officers in the battalion recalled: “Elvis, along with everyone else in the battalion, worked like hell in the snow, rain, sleet, and wind of harsh German winters. We left our families for weeks on end to be out in maneuver areas or on weapons firing ranges. Our training was deadly serious; after all, we were training to kill people.” Presley impressed everyone by being a team player. He was promoted to sergeant before he completed his tour. He left active duty at Fort Dix, New Jersey, on March 5, 1960, and received his discharge from the Army Reserve on March 23, 1964. He was the most famous Army enlisted man of the era.

Source:
William J. Taylor, Jr., Elvis in the Army: The King of Rock n’ Roll as Seen By an Officer Who Served With Him (Novato, Calif., 1995).
In Vietnam, the U.S. Army fought a much different kind of war. In the past, the Army had successfully used conventional tactics and weapons against an identifiable enemy along clear battle lines. Vietnam was different. The Army faced an insurgent force — a true “people’s army” which used conventional, guerrilla, and psychological tactics in a struggle for the loyalty of civilians rather than for territory. The enemy was not always immediately apparent and the battlefield was anywhere and everywhere.

U.S. involvement in Vietnam dated from World War II, but the number of American soldiers on the ground was small until the Kennedy administration. The Kennedy administration relied on American advisors working with the South Vietnamese forces. During the Johnson administration, the scope of the war widened, and units were deployed. By 1969 troop strength had risen from 23,000 to 543,000.

The first combat test for the Army came in October 1965 in the Ia Drang Valley, northeast of Saigon. The climax came in mid-November when two battalions of the 1st Cavalry Division (Airmobile) collided with a North Vietnamese
regiment. During the four-day battle, the 1st Cav overcame repeated ambushes and assaults to secure the first American victory in Vietnam.

During the next two years, American forces and their South Vietnamese allies conducted countless search and destroy operations aimed at inflicting maxi-
American Military Heritage

mum casualties while keeping the Communist forces away from major cities and agricultural areas.

The heaviest fighting of the entire war came as a result of the Tet Offensive, a coordinated set of attacks on cities, bases and provincial capitals in South Vietnam by Communist forces. Launched during a holiday season, the attacks forced rapid troop shifts to reinforce critical areas. The largest battles occurred at Khe Sanh, a key Marine combat base, and Hue City, the ancient imperial capital of Vietnam.

While the Tet Offensive was technically a victory for the American armed forces, it aroused increased opposition to the war on the American home front. In 1969, the Nixon administration began the gradual withdrawal of forces from Vietnam, and the last combat units left in the summer of 1972. The war came to an end for the United States when a cease-fire was declared in 1973. The war came to an end for Vietnam in 1975 when North Vietnamese forces unified the country.

**Section II**

**Ambush Patrol**

In Vietnam, the American Army’s biggest challenge was one it had not dealt with since the Indian wars — finding the enemy. Because of their home field advantage and technological disadvantage, the Vietnamese truly fought the war on their turf, picking the times and places for each meeting engagement. Consequently, ambush patrols characterized much of the war. A typical ambush patrol by the 2d Battalion, 28th Infantry, 1st Infantry Division, shows some of the more common problems NCOs and junior officers faced.

As part of Operation COCOA BEACH, Lieutenant Colonel Kyle W. Bowie’s 2d Battalion moved by foot on March 3, 1966, from its brigade base at Lai Khe to Lo Ke, a rubber plantation 25 miles north of Saigon. There, it established a defensive perimeter in flat terrain with a clear field of fire on all sides. The next day, Company A patrolled to the west and overran a small Viet Cong base camp. Company B, searching to the north, found a deep trench that had recently been occupied by a sizable force. Thinking that a large enemy unit must be nearby, Colonel Bowie arranged with brigade headquarters for air
and artillery support. His men built up their defensive positions, and sent out three 15-man ambush patrols to the northwest, east, and southwest, plus a four-man listening post in the thick jungle to the west. About thirty minutes after midnight, Bowie was notified by radio that a Viet Cong regiment lay four kilometers northeast of his position. He then ordered his companies to “stand to” at 0530 and get ready for a fight.

At about 0545, 2d Lieutenant Robert J. Hibbs and his ambush patrol northwest of the perimeter heard movement from the east. A group of women and children approached on a road that ran past his position, carrying weapons and ammunition. Using a night vision device, Hibbs could see a Viet Cong company moving toward his position from the north. The two enemy groups stopped only about 75 meters from Hibbs’ position, and a man in a white robe talked to the women and children. Hibbs told his men to turn their claymore mines toward the enemy and get ready to throw hand grenades. After a few minutes the man in the white robe led the enemy company further south. When the Viet Cong entered Hibbs’ killing zone, his men fired the claymores, and threw their grenades. The enemy was completely surprised and suffered many casualties. Under Bowie’s orders, Hibbs and his men withdrew toward the main perimeter, and on their way surprised and scattered another Viet Cong company that was advancing to attack the perimeter. Covering the retreat of his men, Hibbs was killed, but his patrol reached the perimeter about 0630. The courageous lieutenant later received a posthumous Medal of Honor.

To the south, Company A’s ambush patrol had also spotted an enemy force moving toward the perimeter. Using the darkness, the patrol joined onto the tail of a passing enemy squad. As the unit neared the perimeter, the patrol opened fire and threw grenades, then made a break for safety. Realizing that an all-out attack was imminent, Colonel Bowie called in his third ambush patrol and listening post. The Americans had all returned to the main perimeter by 0630.

Within five minutes, a series of enemy attacks began. The Viet Cong first assaulted the position from the northwest, then from the northeast, then from the east. Just after 0700, they tried again, this time from the southwest. The Americans threw back each attack. Meanwhile, the brigade commander sent his ready reaction force, the 1st Battalion, 16th Infantry, by helicopter to cut
the enemy’s line of retreat to the north and east. As the 1st Battalion arrived, it distracted the enemy’s attention from the 2d Battalion perimeter. By 1200, the Viet Cong were retreating, and Bowie sent a patrol to maintain contact with the fleeing enemy troops. This patrol called in artillery fire to break up a potential Viet Cong ambush position.

For Colonel Bowie and his 2d Battalion, it had been a good night’s work. The ambush patrols had provided him with enough advance notice to strengthen his defenses, and, at the same time, had disrupted Viet Cong plans. When the enemy attack came, it suffered severe casualties while inflicting little damage on the Americans. Often on the receiving end of surprise night attacks, the Americans had turned the tables on the enemy.

Section III
Heroes of the Vietnam War

Donlan, Roger H.C. The first Medal of Honor recipient in the Vietnam War, Captain Donlan commanded Special Forces Detachment A-726 at Camp Nam Dong in northernmost I Corps Tactical Zone. The camp occupied a key position along an infiltration trail used by many North Vietnamese units on their way south to reinforce the Viet Cong. On the night of July 6, 1964, an enemy battalion, after a mortar bombardment, assaulted the Nam Dong perimeter. During the five-hour battle that followed, Captain Donlan directed the defense of his camp while many of his comrades fell. He was wounded several times. When the enemy force called off its attacks and retreated into the jungle, it left fifty-four dead inside and outside the camp perimeter.

Marm, Walter J., Jr. While serving as a platoon leader in the 1st Cavalry Division, Lieutenant Marm was leading his platoon, accompanied by the rest
of the company, on a relief mission in the Ia Drang Valley on November 14, 1965. Under heavy fire from a concealed machine gun nest, the members of the platoon took cover but soon realized they could not hold out for long. Taking the situation into his own hands, Marm deliberately exposed himself to enemy fire and, once he had located the nest, attempted to destroy it with an anti-tank weapon. When the nest continued to fire, Marm rushed across thirty meters of open ground and hurled grenades at the enemy. Severely wounded, he nevertheless continued the attack with his rifle and grenades until he had wiped out the position. He later received the Medal of Honor.

Davis, Sammy L. A cannoneer in Battery C, 2d Battalion, 4th Artillery, 9th Infantry Division, Private First Class Davis and his comrades received a rude awakening when an enemy mortar barrage hit their position near Cai Lay at 0200 on November 18, 1967. The attack that followed rolled over a friendly listening post and paused on the far side of a river that anchored one side of the fire support base perimeter. Davis and his fellow crew members rushed to their artillery piece only to be knocked to the ground by an enemy recoilless rocket round. Amidst continuous enemy fire, Davis struggled back to the gun, lowered the barrel, and fired the piece by himself to prevent a cross-river assault on his position. As the enemy reeled from the direct fire, Davis disregarded his wounds and crossed the river on an inflatable mattress to rescue his comrades. Not until all had returned safely inside the battery perimeter would Davis accept medical assistance. For his heroism, Davis received the Medal of Honor.

Lemon, Peter C. A machine gunner in the 1st Cavalry Division, Specialist 4 Lemon and his unit were at Fire Support Base Illingworth in Tay Ninh Province when the position came under heavy attack on April 1, 1970. Lemon turned back several enemy assaults with his rifle and a machine gun until both malfunctioned. He then threw hand grenades until the determined Viet Cong were so close they had to be engaged in hand-to-hand combat. Despite a grenade wound, Lemon carried a more seriously
American Military Heritage

wounded comrade to an aid station, then returned to the endangered perimeter and stopped more enemy assaults by again throwing hand grenades and confronting attackers hand-to-hand. By now wounded three times, Lemon grabbed a machine gun and, standing atop an embankment in full view of the attackers, rallied the defenders in his sector and indicated enemy locations with his own bursts of fire before collapsing of exhaustion. For his heroism, Specialist Lemon received the Medal of Honor.

Johnson, Dwight H. A tank driver in the 69th Armor, which was operating with the 4th Infantry Division near Dak To in the Central Highlands, Specialist 5 Johnson was part of a reaction force called to assist another element of his platoon on January 15, 1968. As he maneuvered toward the enemy, Johnson’s tank threw a track, and he had to dismount. Armed with only a .45 caliber pistol, Johnson killed several enemy before running out of ammunition. He then returned to his disabled tank through heavy enemy fire, retrieved a submachine gun, and killed more enemy soldiers until he again ran out of ammunition. Running to another tank, he extricated a wounded man and carried him to shelter in an armored personnel carrier. Returning to the same tank, Johnson fired the main gun until it jammed. Again armed with only a pistol, he killed several more enemy troops near the tank, then returned to his own vehicle and, firing the external machine gun, turned away more assaults until the situation was brought under control. For his heroism, Specialist Johnson received the Medal of Honor.

Roberts, Gordon R. A rifleman in the 101st Airborne Division, Specialist 4 Roberts was moving with his platoon to assist a company pinned down on a ridgeline in I Corps Tactical Zone on July 11, 1969. Nearing the endangered unit, Roberts’ platoon was also stopped by heavy enemy fire from a network of
bunkers. To break the stalemate, Roberts crawled and ran toward the nearest enemy bunker and killed its occupants. From the first bunker Roberts could see other positions, which took him under fire as he surveyed the area. Without hesitation, he charged and silenced three more bunkers, using discarded weapons as the enemy shot his own out of his hands. Since he had advanced too far in front of his own platoon to use their support, Specialist Roberts fought his way through intense enemy fire to join the immobilized company. There, he rallied survivors to hold their position and moved wounded out of lines of fire until an evacuation could be organized. For his heroism, Specialist Roberts received the Medal of Honor.

Section IV
Weapons and Equipment Development

**UH-1 Iroquois Utility Helicopter:** The UH-1 helicopter — called the “Huey” by soldiers — was the most widely used rotary wing aircraft in the Vietnam War. Developed and improved by the Army between 1959 and 1969, the Huey made possible a number of innovations in field operations, performing command and control and reconnaissance missions, troop transport, armed escort of transport helicopters, fire suppression for ground units, insertion and extraction of covert patrols, and timely medical evacuation that allowed many seriously wounded soldiers to survive. The Huey carried eleven passengers, or six litter patients, and a crew of two, and its 1,100-horsepower turbine engine powered the 9,500-pound, single rotor “chopper” at a cruising speed of 106 miles per hour.

**M-113 Armored Personnel Carrier:** The APC solved the problem of moving troops across the many rice paddies and swamps of the coastal lowlands and the Mekong River Delta. Introduced in 1962, the 11.5-ton tracked vehicle carried twelve soldiers including the driver. With the addition of a .50 caliber machinegun the vehicle became a more potent offensive weapon and, between troop movements, could assume a defensive role as well.
M-16A1 Rifle: First ordered by the Army in large quantities in 1963 to replace the M-14 rifle, the M-16A1 gave soldiers more firepower while reducing the weapons/equipment load they had to carry. The rifle alone weighs only seven pounds loaded, and its 5.56-mm. cartridge weighs only half that of the NATO 7.62-mm. round. Operating at a cyclic rate of fire of 750 rounds per minute when on automatic, the M-16A1 enabled one soldier to deliver more fire on a target than an entire squad in World War II. Many an enemy ambush disintegrated when U.S. soldiers followed the field wisdom of the Vietnam War: “Put your sixteen on rock ‘n’ roll and fire up the Cong!”

M-79 Grenade Launcher: A single-shot, percussion-fired shoulder weapon first issued in 1961, the M-79 was designed to enable squads and platoons to cover the fire support gap between maximum grenade throwing distance and minimum mortar range. Its 40-mm. fragmentation projectile has an effective range of five meters, ideal for neutralizing hidden enemy concentrations such as those waiting in an ambush position.

M-72 Antitank Rocket with Launcher: First distributed in 1962, the M-72 gave infantry squads a light, easy to operate weapon effective against enemy armor. Weighing only five pounds and packaged in a disposable launcher barrel and ignition assembly, the M-72 provided a new flexibility to both the infantryman and his squad leader. Rather than having to coordinate with higher command echelons and wait for artillery or air support, the squad and platoon leader could immediately attack fortified positions. Built around a 66-mm. rocket capable of neutralizing a heavy tank, the M-72 was used more frequently in Vietnam against bunkers and crew-served weapons positions than armored vehicles.

M-60 Machine Gun: Already in use before the 1965 large-unit buildup in Vietnam, the M-60 incorporated several features that allowed easy adaptation to a variety of combat situations. An easily detachable barrel enabled gunners to continue firing without interruption due to overheating, and the fold-out bipod attached to the stock assembly allowed the gunner to move the weapon to a new location, drop to the prone position, and resume firing without delay. Primarily a ground weapon, the M-60 could be mounted on vehicles and helicopters for
counterambush and landing zone preparation tasks. The versatile weapon fired the 7.62-mm. NATO ammunition to a range of 3,200 meters. In an emergency, the sustained rate of fire of 150 rounds per minute could increase to an automatic fire rate of 550 rounds per minute. Although ideally operated on a tripod by a three-man crew, the M-60 was light enough at twenty-three pounds to be fired by one soldier from the sitting or standing position.

**AN/PRC-25 Radio:** The need for reliable communications became especially obvious in Vietnam, where the terrain and enemy tactics dictated that small units often operate independently for extended periods. First issued in 1963, the AN/PRC-25 was a transistorized, frequency modulated set with a range of five miles, three times the capacity of the radios it replaced. Weighing 21.5 pounds and smaller than a backpack, the radio was easily transported and offered no interference if the operator had to fire his weapon.

**AN/PVS-2 Night Vision Sight:** The Viet Cong preferred night operations to avoid U.S. air and artillery support. To combat the enemy’s night tactics, the Army developed and distributed the Night Vision Sight, a portable, hand-held, battery-powered, electro-optical instrument for passive observation and aimed fire of weapons. Better known as the “starlight scope,” the device concentrated and intensified available light from stars and the moon to bring into view objects as far away as 400 meters.

**M-18A1 Antipersonnel Mine:** More widely known as the “Claymore” mine, the M-18A1 was a lightweight directional mine used for defense against massed enemy attacks. The mine consisted of layers encaused in a curved, rectangular, molded frame of fiberglass-filled polystyrene. The frame measured 8.5 inches long, 3.25 inches high, and 1.4 inches wide. The layer at the front of the mine was a plastic matrix containing 700 steel balls, while the layer behind housed the explosive. The curvature of the frame dispersed the steel balls through a 60-degree arc 50 meters from the mine. A soldier could detonate
the mine by any one of three methods: an electrical blasting cap and magneto firing device, a non-electric blasting cap, or a lanyard and pull-type firing device.

**Food Packet, Long Range Patrol:** The new field ration developed during the Vietnam War was the LRP packet, designed by the Army for missions out of resupply range for periods of up to ten days. Because of its light weight — only eleven ounces per packet — the “lurp ration,” as it was called by the troops, could be carried in large quantities without adding appreciably to a soldier’s load. Each ration packet consisted of a precooked, freeze-dehydrated main dish in a reconstitution package and several other components, such as a confection, fruitcake bar, coffee, cream, sugar, toilet paper, and matches. A soldier could prepare the 1,000-plus calorie meal by adding hot water or eat it from the package like popcorn.

**Air Cavalry:** The major organizational innovation of the Vietnam War was the air cavalry division, the fastest moving large unit in the history of the U.S. Army. Deployed to Vietnam in 1965 as the 1st Cavalry Division and equipped with over 400 helicopters, the new formation allowed Vietnamese and American commanders to jump battalions and brigades over the jungles, swamps, roads, and mountains that had rendered French and South Vietnamese units so vulnerable to the favorite tactic of the Viet Cong, the ambush.

**Riverine Force:** To combine mobility and fire superiority in the impassable swamps and paddies of the Mekong River Delta south and west of Saigon, the U.S. command formed the joint Army-Navy Mobile Riverine Force. This force consisted of an Army division supported by Navy units. One Army brigade would operate afloat, while two others would remain at riverside bases. Operational units of the force included four River Assault Squadrons, each consisting of some 100 vessels. Two-thirds of these boats were Navy medium landing craft, converted to fulfill command and control, troop carrier, and fire support missions. Thirty-two vessels were high-speed armed patrol boats, which carried out landing support and interdiction roles. Other craft included barges serving as helicopter landing zones and artillery firebases, non-self-propelled barracks ships, salvage vessels, and “airboats,” which used large, above-water propellers to plow through marshes.
Section V

Notes on Awards of the Vietnam War

**Vietnam Service Medal:** Originally approved by the President in 1965, the VSM was awarded to all members of the armed forces of the United States who served in Vietnam or in bordering waters or airspace between 3 July 1965 and 28 March 1973.

**Republic of Vietnam Campaign Medal:** Awarded by the Republic of Vietnam to all American military personnel who served at least six months in Vietnam or in units that had supported in-country combat units from outside the borders of Vietnam. Soldiers who were wounded, captured, or killed in action less than six months after their arrival also received the VCM.

**Republic of Vietnam Cross of Gallantry:** Awarded by the Republic of Vietnam to American and allied service members who had exhibited either individual or unit heroism. In 1974, after the withdrawal of American combat units, the Republic of Vietnam awarded the VCG to all American units with Vietnam service between 8 February 1962 and 28 March 1973, regardless of prior awards of the same decoration.

Section VI

Notes on Uniforms of the Vietnam War Era

The U.S. Army made a variety of improvements to its field uniforms during the Vietnam War. Among the most obvious were jungle utilities and the jungle boot, both designed to stand up to the humid weather and the water-logged terrain of Southeast Asia. The Army made the new utilities of cotton poplin, which had better “breathing” capacity than other materials and dried quickly after immersion. The new boots featured a deep tread sole, more resistant to mine blasts and mud-caking, and treated leather at the toe and heel, with vents at the arch and nylon uppers.

Other uniform innovations included the substitution of nylon for cotton in the web gear and the rucksack, a camouflage helmet cover, and improvements to the flak jacket, a uniform addition first used in the Korean War.
The end of American involvement in the Vietnam War marked one of the lowest points in the history of the U.S. Army. Without a special appropriation to pay for the war, the conflict had drained the service financially. In turning against the war the American people seemed to have turned against their army as well, and that antipathy fostered similar discontent in the service. Mainly draftees, those individuals resented their service in the Army and disobeyed their officers. Determined to evade control wherever possible, up to 40 percent in Europe in 1972 admitted to drug abuse, particularly hashish. Seven percent were chronic heroin users, and 12 percent had been charged with serious crimes. Meanwhile, interracial relations were so bad that conflicts between blacks and whites appeared almost routine in some localities. Doctrine and force structure were outdated, the Army’s organization was too cumbersome, and the quality of enlistees was at an all-time low.

From these beginnings, during the 1970s and 1980s, arose the rejuvenated force that held the line to the end of the Cold War and that won an overwhelming victory in the Gulf War. Part of the reason was the creation of the Training and Doctrine Command. Its job was to reform the Army. Leaders made a concerted effort to improve professionalism, leadership, and the quality of the officer and NCO corps. Additionally and simultaneously, aggressive action was taken to address the drug abuse, racial discord, and the morale problems that had plagued the Army. The Army focused on basic mission and undertook a virtual revolution in training. Individual and group performance standards were set and standardized, and then attention turned to doctrine, materiel and organization.

TRADOC created and carried out sustained programs of training reform, doctrine revision, and equipment and force modernization. The Army of Excellence that conducted Operation JUST CAUSE in Panama in 1989 and DESERT STORM in the Persian Gulf in 1991 was the result.

The following chronology lists some of the main steps in this transformation:

1973
30 June End of the draft; Volunteer Army (VOLAR) goes into full operation
Oct Arab-Israeli War yields many lessons for the future of warfare
In 1971, Congress ordered the end of the draft by midyear 1973. Given the unpopularity of the Vietnam war and the military in general, few young Americans with any potential were attracted to Army life. As a result, by 1974, 40 percent of the new recruits lacked high school diplomas and 41 percent scored in the lowest acceptable mental aptitude range.

Gradually the situation changed. A rise in unemployment combined with the Army’s emphasis on education and the development of job skills applicable to civilian life encouraged better quality recruits. The quality continued into the 1980s. Congress passed a series of pay increases and other incentives, like
the GI Bill and the Army College Fund, that made enlistment even more attractive. Helping itself, the Army launched a powerful public relations campaign, best represented by the slogan “Be All You Can Be.” By 1991, 98 percent of all enlistees had high school diplomas and 75 percent were in the upper mental categories. Unauthorized absences dropped by 80 percent and courts martial by 64 percent. Positive indicators of drug abuse fell from 25 percent in 1979 to 1 percent in 1989.

Many people were instrumental in the transformation of the Army. One of the leaders of the reform movement was General Creighton W. (Abe) Abrams. As Chief of Staff of the Army from 1972 until his death in 1974, General Abrams confronted the Army’s problems head on. He pressed Congress and the White House to authorize the development of five new weapons systems, the M-1 Tank, the M-2/3 Bradley fighting vehicle, the UH-60 Blackhawk and AH-64 Apache helicopters, and the Patriot air defense system. He issued orders to his commanders to round up and court martial drug pushers and gang leaders and to begin random drug tests to identify abusers. The program had quick results. In a single four month period in Europe during 1973, the Army discharged 1,300 soldiers for discipline or drug related offenses.

Another reform that made a lasting impact on the Army was the Total Force policy. Having served as Vice Chief of Staff during the Vietnam buildup, Abrams remembered firsthand the shortages and dislocations caused by the administration’s failure to call up the Reserves. The Total Force policy paired active and reserve elements, forming round-out brigades to ensure full strength and requisite augmentation.

Working in consonance with General Abrams, General William E. (Bill) DePuy, Commander of the Army’s Training and Doctrine Command, took the first steps to align the Army’s doctrine and training regimens with the political and military realities. Drawing heavily from the lessons learned from the Arab-Israeli war of 1973,
DePuy launched a revision of FM 100–5, Operations. The work was written in simple English and initially bound in loose-leaf notebooks to encourage discussion and changes. From this revision came AirLand Battle doctrine, which stressed the interplay of air and ground forces in any conflict, and set up a close, rear, and deep battlefield.

DePuy also launched an evaluation and modification of the training system. What resulted was a virtual revolution — the systems approach to training was emplaced which brought in the ARTEP and the SQT and forced training to a set standard. Realistic training was devised with the creation of the Army’s combat training centers — the National Training Center at Fort Irwin, California; the Joint Readiness Training Center at Fort Chaffee, Arkansas; and the Combat Maneuver Training Center at Hohenfels, Germany were established over the late 1970s and early 1980s to provide practice fields for live training.

Education was also reformed as evidenced by the development of the TRADOC School Model, the revamping of programs of instruction, and creation of the Noncommissioned Officers Education System. Education and leader development became an acknowledged pillar in the development of a strong Army.

Section III
General Creighton W. Abrams

Creighton Williams Abrams was born in Springfield, Massachusetts, on September 15, 1914, and graduated from the U.S. Military Academy in 1936. Following tours with the 1st Cavalry Division and the 1st Armored Division, he joined the 4th Armored Division in 1941. Promoted to lieutenant colonel in 1942, he stayed with the division until VE Day in 1945.

During World War II, Abrams developed an approach to combat that much resembled what General Mark Clark characterized as “careful planning and violent execution.” As commander of the 4th Armored Division’s 37th Tank Battalion, he served as General George S. Patton, Jr.’s point man in the victorious Allied sweep across Europe. It was he, in his Sherman tank “Thunderbolt,” who led the relief column into Bastogne during the Battle of the Bulge. He
also spearheaded the Allied dash across the Rhine, advancing so rapidly that he reportedly once surprised a German general with his boots up on his desk. “I like to be out on the point where there’s nothing but me and the goddamn Germans,” he growled, “and we can fight by ourselves.” Patton admired Abrams. “I’m supposed to be the best tank commander in the Army,” the hard-nosed old general once remarked, “but I have one peer, Abe Abrams. He’s the world’s champion.”

Following the War, Abrams served as director of tactics at the Armor School, where he rewrote the Army’s field manuals for armored operations in wartime. In 1956, after assignments in Europe and Korea, he advanced to the rank of brigadier general. He became a major general in 1960.

At that point, Abrams became a crisis manager. He commanded the 3d Armored Division in Germany during the 1961 crisis in Berlin that saw the construction of the Berlin Wall. The next year, he was stationed in the Pentagon’s Office of the Deputy Chief of Staff for Military Operations. While there, in the fall of 1962, he received command of the Federal troops that deployed to quell racial disorders at the University of Mississippi. He did the same in Birmingham, Alabama, during the Spring of 1963. “I cannot recall any situation,” he remarked after those experiences, “when the opportunity was greater to slip off the gangplank into the quicksand. There couldn’t be too much force, or too little. It was a time when you didn’t use a sledge hammer when a tack hammer would do better.”

Abrams’ rise was rapid after his service in Birmingham. Returning to Germany later in 1963, he achieved the rank of Lieutenant General and command of V Corps. He received his fourth star scarcely a year after that, along with promotion to Vice Chief of Staff of the Army. Abrams became Deputy Commander of the Military Assistance Command, Vietnam (MACV) in 1967. A year later, he became General William C. Westmoreland’s successor as Commander. A crisis manager again, he presided over some of the most difficult years of the war, the period in which military morale slumped and the Army began its descent into the depths. While Chief of Staff of the Army from 1972 to 1974, Abrams set the course that would revive the Army, but he died prematurely in 1974 without ever seeing the fruits of his labors.

As a commander, Abrams was demanding. When problems in the field arose during his time in Vietnam, he was soon on the spot, gruff and growling, surrounded by a great billow of cigar smoke. More than willing to admit his own mistakes — “The higher up you get up the greasy pole,” he remarked, “the
more your tail shows.” — he had no stomach for lies or exaggerated official optimism. He wanted the facts straight and to the point. A lover of cigars and classical music, he hated the sorrow and anguish war caused and yearned for a better world. But when danger beckoned, he was always at, or near, the point.

Section IV
General William E. DePuy

General William E. DePuy was born in North Dakota in 1919 and entered the Army from ROTC in 1941. During World War II, he served with the 357th Infantry Regiment of the 90th Division, seeing action in both the Normandy invasion and the Battle of the Bulge. During its first eleven months in the field, the 90th suffered 25,000 casualties, including 150 percent of its officers. The experience made a lasting impression upon DePuy, who earned two Purple Hearts himself. Analyzing what had happened after the war, he noted that the troops of the 90th were as good as those in any other division but that their training had been technical and mechanical, rather than tactical. “Men and units proceeded through the program whether they learned or not,” he said. “. . . If you could survive the schedule you were presumed to be trained.” As a result, most soldiers learned the practical dimensions of their craft only after entering battle, when luck and natural cunning took over. In Normandy, however, officers and enlisted men often became casualties within a day or two, well before they could learn their business. Things only began to change after the campaign had ended, DePuy concluded, when losses declined and soldiers finally had a chance to ponder their experiences.

DePuy could do little with his insights at first. Emerging from the war, he began an active career that included service as a Russian student, a military attache in Hungary, a tour of duty with the CIA in Washington, a battalion commander with the 4th Division in Germany, and a tour in the Office of the Chief of Staff of the Army. Promoted to brigadier general in 1962, after a stint as a battle group commander with the 3d Infantry Division, he returned to Washington to become the Director of Special Warfare in the Office of the Deputy Chief of Staff for Military Operations. Two years later, after a year as Director of Plans and Programs in the Office of the Assistant Chief of Staff for Force Development, he traveled to South Vietnam to become Director of Operations (J–3) for the Military Assistance Command, Vietnam.

An expert on counterinsurgency by the time he reached Vietnam, DePuy became a forceful advocate of firepower. Taking command of the 1st Infantry Division in
1966, he invented the cloverleaf tactic. Under that approach, a force would drop by helicopter into a landing zone, split into squads, and then branch off into the jungle along circular routes that curled back upon themselves in a manner that resembled the outline of a cloverleaf. Units that met with no opposition would end up where they started. Those that did would find and fix the enemy’s forces so that artillery and air power could finish them off.

By the time he left Vietnam in 1968, DePuy had acquired a reputation as one of the Army’s most intelligent generals. Upon his return, he became Assistant Vice Chief of Staff of the Army. Following that, in 1973, he took charge as Commanding General of the Army’s new Training and Doctrine Command. In that position, he finally had a chance to draw upon his World War II experience. Asserting that “In Normandy, the 90th Division was a killing machine — of our own troops!” he made revision of the training process his first priority. Where in the past training had been oriented toward time — “in the next hour we will discuss the operation of the PRC-77 radio” — he tuned it to performance — “at the completion of this demonstration, you will be required to place the PRC-77 into operation in the proper manner. If you cannot do that, you will repeat the instruction on an individual basis.” As a result of these efforts, he would say in 1985, the performance and battle capabilities of the Army rose from the twenty to the sixty percent level and continued to climb.

Hard-nosed and energetic, DePuy left his mark on the post-Vietnam Army. Before his death in 1992, he recalled that the Army had given him “an exciting and satisfying life... a purpose and a fulfillment.” Although not without imperfections and sometimes hard to love, it was “solid and honest and sincere in its unremitting efforts to achieve excellence.”

Section V
Notes on Weapons Systems

The M-1 Abrams Tank: The Abrams Tank became part of the Army’s inventory in February 1980. Weighing more than 69 tons but propelled by a high performance turbine engine, it has a top speed of 41 miles an hour and a range of 288 miles. Eight feet high, 12 feet wide, and 32.3 feet long when measured with its gun, the vehicle shows a low profile and is difficult to target. Nevertheless, it is a first-rate predator. Mounting either a 105-mm. (M1) or a 120-mm. (M1A1) smoothbore gun, augmented with thermal-
imaging night sights, laser range finders, and digital ballistic computers, it is capable of destructive and accurate fire at ranges in excess of 3,000 meters. The tank’s secondary weapons include the ever reliable .50 caliber and 7.62-mm. machine guns. Clad in Chobham-spaced armor — ceramic blocks set in resin between layers of conventional armor — and containing compartmentalized fuel and ammunition stores, the Abrams can withstand the harshest combat while affording its crew superior protection. During the Persian Gulf War of 1991, some took direct hits from Iraqi tanks but never slowed. Their crews only learned what had happened at the end of the day, when they dismounted and saw the marks of shell bursts on their vehicles.

The Bradley Fighting Vehicle: The 1973 Arab-Israeli War demonstrated that tanks, whatever their sophistication, still need the protection of infantry to survive in some high intensity combat environments. The old M-113 armored personnel carrier, however, was too slow to keep up with the new Abrams. The Army designed the Bradley to fill the need. It operates at the same speed as the Abrams tank while providing substantially greater protection for its passengers and three-man crew than the M-113. The vehicle comes in two versions. The M-2 Infantry Fighting Vehicle transports a squad of infantry and is designed to provide combat units with a light armored fighting vehicle capable of augmenting their anti-armor capabilities. The M-3 Cavalry Fighting Vehicle carries a scout section in addition to its crew and is supposed to provide scout and armored cavalry units with a vehicle for screening, reconnaissance, and security missions. Each Bradley measures 20.5 feet in length and 10.5 feet in width, while standing 9.7 feet high. Both weigh slightly less than 25 tons and have top speeds and operating ranges compatible with those of the Abrams. Their primary armament is a 25-mm. cannon. Their secondary weapons include a 7.62-mm. machine gun and two launch tubes for TOW (tube launched, optically tracked, wire guided) missiles. The infantry model has firing ports for modified M-16 rifles.

High Mobility Multipurpose Wheeled Vehicle (HMMWV): Also known as the “Hummer,” the HMMWV is a versatile, four-wheel-drive tactical vehicle. Built on the M-998 chassis, it comes with various modules and kits that allow for a number of configurations, including armament carrier for the TOW missile system, ambulance, and cargo-and-troop
carrier. It is 15 feet long, 7.1 feet wide, 6 feet high, weighs 3.8 tons, and reaches a top speed of 65 miles per hour with a range of 300 miles. It can carry either TOW missiles, a .50 caliber or 7.62-mm. machine gun, or a 40-mm. Mark 19 automatic grenade launcher.

The AH-64 Apache Attack Helicopter: The Vietnam experience had shown that the Army’s existing helicopter, the AH-1 Cobra, was vulnerable to light antiaircraft fire and lacked the maneuverability to fly close to the ground over long periods. The Apache filled the gap. Equipped with night vision equipment and target sensing devices, it can fly some 300 miles at low altitude, even after dark, at a speed of 227 miles per hour. Once it reached its target, it can defeat an enemy’s defenses with infrared countermeasures or radar jammers. It carries sixteen HELLFIRE (helicopter launched, fire and forget) anti-tank missiles in four launchers, or seventy-six Hydra 70 folding fin rockets, or a half-and-half combination of the two. It also has a 30-mm. chain gun mounted in its nose. Counting its rotors, the Apache is 58.3 feet long and possesses a wingspan of 16.3 feet. The machine itself is 6.5 feet wide and stands 12.7 feet in height. It weighs 10.5 tons.

The UH-60 Black Hawk Utility Helicopter: Fielded as a replacement for the Vietnam War’s UH-1 “Huey” helicopter, the Black Hawk can fill either a utility or an assault role. With a top speed of 184 miles per hour and a range of 368 miles without auxiliary gas tanks and well over a thousand with them, it is flexible enough to accomplish air cavalry, electronic warfare, or medical evacuation missions. As a utility aircraft, it can lift, along with its own crew of from three to four men, an entire infantry squad of eleven men with their equipment or a 105-mm. M102 howitzer with its six-man crew and thirty rounds of ammunition. The aircraft stands 12.3 feet in height, spans 64.9 feet in length with its rotors, and is 8 feet wide. It normally carries a 7.62-mm. machine gun.
The Patriot Missile Air Defense System:  
The Patriot provides protection against enemy planes and tactical ballistic missiles. It consists of the M901 launch station, a remotely operated four-canister unit on an M-860 semi-trailer with its own electronics pack, data link cable, and generator. Either an M-818 tractor or the M-983 heavy expanded mobility tactical truck can pull the M-901. The Patriot usually deploys in a battery of five to eight launchers, supported by an electric power plant, an OE-349/MRC antenna mast group, an AN/MPQ-53 radar unit, and an AN/MSQ-116 engagement control center. Each battery also has other support vehicles, including missile reload trailer transporters and maintenance trucks. The missiles fly at a velocity of Mach 3.7, can reach an altitude of 24,240 meters, and have a range of 160 kilometers.

Section VI  
Notes on Uniforms

The Battle Dress Uniform:  The soldier of the 1980s also received a new camouflage uniform. Reinforced with patches on the elbows, knees, and seat and slightly heavier than the wash and wear jungle fatigues of the 1970s, its “bush type” coat and trousers are more durable than their predecessors and can be worn in mild weather. Given their loose fit, they also provide their wearers with more ventilation and thus more comfort. A camouflage cap comes with the uniform. It is wind resistant and water repellent. Special dyes reduce the outfit’s infrared signature, an important asset on modern day battlefields.

The Personnel Armor System for Ground Troops (PASGT):  Introduced in 1985, PASGT includes a new protective vest and a molded, laminated, Kevlar helmet. For comfort, fit, and protection, the Army’s new fragmentation vest is a major improvement over the old flak jacket, which had been around since 1950. Its inner core is the reason. Composed of fourteen ounces of a cloth
compounded from Kevlar, a tough polymer originally developed by DuPont to replace steel belts in radial tires, it offers one of the best shields in the world against wounds from fragmentation grenades and other munitions.

The new helmet, a one-piece item molded from the same Kevlar, replaced the M-1 helmet, which had been in the Army’s inventory since 1941. The product of eleven years of research and testing that led to some thirty-two separate studies and three U.S. patents, it weighs about the same as its predecessor, but soldiers who have worn both say it feels lighter because of its better fit and improved stability. Covering eleven percent more of a soldier’s head than the M1 by folding down over his ears and around the nape of his neck, it will withstand impact from a projectile 2 times greater than before. It reduces head injuries in combat by from 25 to 30 percent.

The helmet met with considerable resistance from within the ranks when introduced because of its superficial resemblance to the old German helmet of World War II. In fact, the German design had been the product of an artist’s concept rather than of solid scientific research and was not nearly as good as even the M-1. Acceptance came only in 1983, when the troops of the 82nd Airborne Division wore the Kevlar helmet during Operation URGENT FURY in Grenada. In two well documented cases, the helmet stopped fragments from a 20-mm. missile and a round from an AK47 rifle. “Stopping that round was luck, like a Doug Flutie Hail Mary pass,” one of the helmet’s developers, Lawrence McManus of the Army’s Research and Development Center at Natik, Massachusetts, remarked, but the response was quick. Units throughout the armed services began to put in orders. By 1988, nearly two million PASGT helmets were in use.
14

The Transformed Army:
Contingency and Combat After Vietnam

Section I
Intervention in Grenada:
Operation URGENT FURY

Many of the problems facing the Army after the Vietnam War came to a head in 1983, during the American invasion of the Caribbean island of Grenada. The largest American military undertaking since the end of the Vietnam conflict, Operation URGENT FURY was a response to the overthrow and execution of Grenada’s Marxist leader, Maurice Bishop, by a gang of even more radical Communists. Already concerned that Grenada was about to become a Soviet satellite, President Ronald Reagan decided to eliminate the threat by sending a task force. Several hundred Cubans were present on the island, upgrading its airport or serving as military trainers. Once the airport was completed, so the reasoning went, its lengthened runway would advance the introduction of Soviet forces and military equipment into the Caribbean and disrupt the entire region.

The attack came on the night of October 24–25. Under cover of darkness, special operations teams moved to capture a radio broadcasting tower six kilometers north of Grenada’s capital city, St. Georges; to secure Government House and the British Governor General, Sir Paul Scoon; and to gain the release of political detainees in a local prison. The attacks on the tower and Government House succeeded, but insufficient planning and a lack of timely air support left the special operators exposed in both locales and forced them to abandon the tower. Poor intelligence and flawed planning also hindered the attack on the prison, where the helicopters were repulsed by unexpectedly heavy antiaircraft fire.

Although disappointing, none of those developments had much weight in the overall scheme of things. The joint task force directed its primary attack at Grenada’s main airport, located at Point Salinas on the island’s southwest coast, and a secondary attack by the Marines at the Pearls airport on the northern coast. Under instructions to secure the runway at Port Salinas, the commander of the 1st Battalion, 75th Infantry (Ranger), Lieutenant Colonel Wes Taylor, and his men arrived over that target shortly before dawn on the morning of the twenty-fifth.
Taylor’s men were also operating at a disadvantage. They had only a photo-
copied British Overseas Development map to guide them, and their communi-
cations frequencies were incompatible with the joint task force’s headquarters
offshore. Furthermore, the intelligence they possessed was so poor that they
were en route by air to the combat zone before they learned that the troops
defending Salinas had blocked the airport’s runway. As a result, they would
have to parachute into the airfield under enemy fire.

Flying in the dark, forty-five men to an aircraft, Taylor’s Rangers jumped into
a hail of red and green enemy tracers that cut through the air all around them.
Although enemy fire damaged some of the planes, none of the men were hit.
Once they had landed, the forty-four men of the first wave initially thought
that they were under automatic weapons fire from the hills above the airport.
After a few moments, however, it became clear that the defenders were mainly
firing at the approaching aircraft bearing the remainder of Taylor’s battalion.
Concluding that he and his men were at little immediate risk, Taylor ordered
everyone to clear the runway, which was littered with abandoned bulldozers,
trucks, 55-gallon drums, and stakes connected by wire.

By 0730, all of Taylor’s men had arrived. The colonel directed Company A,
under Captain John Abizaid, to rescue a group of American medical students
located on a college campus code-named True Blue near the eastern end of
the runway. Before the Rangers could move to the campus, however, Abizaid
recognized that they would have to clear Cuban positions in the hills north of
the area. With Taylor’s approval, he ordered his 1st and 3d platoons to attack
into the hills, while his 2nd took a roundabout course along the coastline to
the college.

The two assault platoons drove forward, firing as they went and shouting in
Spanish for the Cubans to surrender. The Cubans responded with obscenities
and gunfire. One Ranger went down, the only American to be killed in the battle
for the runway. Fighting at a disadvantage and with enemy fire increasing,
Sergeant Manous Boles recognized that an armored vehicle might tip the odds
in his unit’s favor. Spying a bulldozer on the runway, he started it, raised its
blade, and drove it toward the enemy’s positions, hunching down behind the
blade. Other Rangers took up station to the sides of the vehicle, also taking
cover behind the blade. Plowing into the enemy’s positions and firing in every
direction, the force cleared the hill and took its objective.

While Boles was improvising with such success, Taylor’s Company B pushed
west into the hills overlooking the airport’s control tower and terminal. The
unit took heavy fire for a time but killed one Cuban and captured twenty-two
without suffering serious casualties of its own. By mid-morning, the Cubans
had pulled out of the hills, leaving both True Blue and the airfield in American
hands, and C-130 aircraft were beginning to land a stream of reinforcements.
Fighting continued for three more days, with the Rangers, backed by the 82nd Airborne Division, carrying out most of the remaining combat tasks in the region around Point Salinas, while Marine units conducted operations elsewhere on island. Two days after the capture of Point Salinas, the Rangers rescued a second group of American students trapped on a campus some distance up the coast. They also conducted an airmobile assault on a Cuban barracks complex north of the airport.

Repeatedly throughout Urgent Fury, as was the case with Boles, the ingenuity of the troops compensated for the poor planning and lack of radio connections that continued to impede the operation. On one occasion, a young forward air controller used a reflecting mirror to pinpoint a house concealing an enemy recoilless rifle. By the end of the operation, despite losses that amounted to eight killed and sixty-nine wounded, the task force had attained virtually all of their objectives. Observing it all, the task force’s deputy commander, Major General H. Norman Schwarzkopf, could only remark that the American soldier had carried the day. “Even though higher headquarters screws it up every way you can possibly screw it up,” he told interviewers, “it is the initiative and valor . . . of the small units, the small-unit leadership, and the soldiers on the ground that will win for you every time.”

Section II

Operation Just Cause

Urgent Fury occurred while the Army and the other military services were still repairing the damage left by the Vietnam War. Over the years that followed, spurred by what they had learned in the Caribbean, the services made readiness a primary theme. In 1986, Congress passed the Goldwater–Nichols Act to improve the conduct of joint operations by strengthening the positions of both operational commanders in chief and the Chairman of the Joint Chiefs of Staff. Meanwhile, benefitting from a long-needed infusion of funds, the Army made imaginative use of combat simulators in training and continued to invest in such technical innovations as night vision equipment. The effect of all those efforts and of the continuing heavy emphasis on leadership development became clear when President George Bush ordered American forces to intervene in Panama in late December 1989.

Operation Just Cause was the result of the increase in assaults on American servicemen in Panama, and of evidence that the country’s leader, General Manuel Noriega, was involved in drug trafficking. The effort came under the overall direction of the Chief of the Southern Command, General Maxwell W. Thurman, who had been specially selected for the job. Thurman’s close friend, the Commander of the XVIII Airborne Corps, Lt. Gen. Carl Stiner, would actually conduct the mission. The team the two put together included regular and special operations forces from all of the military services.
The attack that Thurman and Stiner devised was one of the most complicated in American history. It included a range of simultaneous, airborne, night assaults against twenty-seven targets across the country. Preparations were painstaking. Unlike URGENT FURY, which the services conducted on the spur of the moment with little advance planning, many of the units involved in JUST CAUSE conducted full-scale rehearsals to prepare for any eventuality. In addition, all the units involved would have the benefit of thorough intelligence coordination, and all, once they went into action, would have access to compatible communications circuits.

Those preparations paid off. The operation initially went as planned, with American forces gaining the upper hand almost immediately. Special operations forces infiltrated key targets around Panama City. Rangers parachuted into Rio Hato Airfield, fifty miles to the west, to keep Noriega’s forces located in that area from joining the fight. Despite heavy odds, a Special Forces team kept a mechanized task force from crossing the Pacora River bridge in Panama City. While they were doing that and other units were moving to secure the locks, dams, and waterways of the Panama Canal, Task Force BAYONET, composed of the 193rd Infantry Brigade reinforced by the 5th Infantry and tanks from the 82nd Airborne, attacked Noriega’s headquarters, the so-called Commandancia.

The fighting was occasionally heavy, especially around the Commandancia and the Tinajitas army barracks, which housed Noriega’s elite Tiger Company. Time and again, American troops showed their discipline and good training. “As soldiers attempted to move into their blocking positions, they received heavy volumes of machine gun fire from PDF soldiers fighting from the multi-story buildings above them,” the commander of the 4th Battalion of the 6th Infantry, Lieutenant Colonel James W. Reed recalled. “Many, if not most, of the PDF soldiers were dressed in civilian clothes, and many of them fought from the civilian apartment buildings which ringed the area. I recall being impressed by the fire discipline of our soldiers as they fired upon only those personnel who were actively engaging us. Fighting in built-up areas really tests small-unit leaders.... Once the battle for the Commandancia was joined, it truly was a story of junior leaders taking charge, doing what had to be done, and controlling their people.”
By evening of the first day, most of Noriega’s forces had abandoned their equipment and fled. The attack, much of it under cover of darkness and often with precision weapons, had proved too much for them.

The disappearance of the enemy left the American troops with an unexpected role. Since parts of Panama City had suffered heavy damage, the city’s people in some areas lacked food and water and such basic services as police protection. Over the days that followed, the Americans filled the gap. The troops had come looking “for aggressive action,” Command Sergeant Major Thurman Beaver of the 3d Battalion, 9th Infantry, remarked, “and didn’t want to be policemen, but they accepted that role when it came.... [They] were very, very disciplined during their missions and didn’t fire their weapons at animals, each other, or even at armed Panamanian shopkeepers, who were protecting their property from looters.... I’m proud of everybody in this battalion.”

It was an effort in which everyone could take pride, the climax of more than fifteen years of hard rebuilding. Over that time, the Army had recreated itself, shedding old weapons for new while making the difficult switch from the draft to an all-volunteer format. In the process, it had fine-tuned its thinking and adjusted its doctrine to make the best use of the American soldier’s finest traits — his imagination and creativity. When a crisis rose again, just a year later in the Persian Gulf, all was in readiness. The American people could once more say that they had the best Army in the world.

Section III
The Gulf War

OPERATION DESERT SHIELD AND DESERT STORM
When Iraqi tanks overran Kuwait in early August 1990, the United States and the rest of the world community reacted quickly to contain and then roll back the Iraqi aggression. A string of resolutions from the United Nations condemned the Iraqi action and imposed an embargo on Iraq. The armed forces of many countries, including 297,000 troops of the U.S. Army, rushed to the defense of Saudi Arabia, and then prepared to evict Iraqi forces from Kuwait. The defense of Saudi Arabia received the designation Operation DESERT SHIELD. When Iraq did not withdraw from its ill-obtained gains by the January 15 deadline set by the United Nations, the coalition launched Operation DESERT STORM. For over a month, American and allied aircraft pounded the Iraqis, knocking out communications, destroying key facilities, and wearing down the Iraqi force poised to defend Kuwait. Finally, on February 24, the allies launched their ground attack. While U.S. Marines, an Army armored brigade, and Arab forces drove north over the Kuwaiti–Saudi border toward Kuwait City, the XVIII Airborne Corps to the northwest rapidly advanced 260 miles across the desert to reach the Euphrates River, cutting most of the Iraqi lines of retreat. Meanwhile, the VII Corps, carrying out the main effort, attacked across the Iraqi border
and struck the flank of the Iraqi forces in Kuwait. In ninety hours of maneuver and combat against the Republican Guard, the cream of the Iraqi Army, the VII Corps wiped out over a dozen Iraqi divisions and captured nearly 22,000 Iraqis at the cost of 22 soldiers killed. In all, coalition forces destroyed 3,847 of 4,280 enemy tanks, captured an estimated 60,000 Iraqi prisoners, and left, at most, seven of the 43 Iraqi combat divisions capable of continued offensive operations. The Americans lost 148 killed.

Although the long-term implications of the war remain unclear and its conduct at the highest levels a matter of some dispute, the campaign itself was one of the most lop-sided victories in American military history. Never before had mechanized forces moved so far, so fast, with so much combat power. The coalition forces, including the U.S. Army, had decisively defeated the fourth-largest army in the world at a cost which, while real enough to those who paid it, was amazingly low for a conflict on such a scale. In the Middle East, the war, at the least, curbed Iraqi ambitions and, indirectly, boosted the Arab-Israeli peace process. In the United States, the war inspired renewed pride in the nation’s armed forces after the anti-military feeling that arose as a result of the Vietnam War. And, for the professional soldiers of the U.S. Army, the war was the capstone of their efforts to rebuild a force that had almost disintegrated in the dismal aftermath of the Vietnam years. Once again, the U.S. Army appeared as an efficient, professional force and reliable instrument for the defense of American interests around the globe.

1990

Aug 2  Iraq invades Kuwait
Aug 6  Saudi Arabia requests U.S. assistance
Aug 9  First elements of the 82d Airborne Division arrive in Saudi Arabia
Aug 13  Equipment of the 24th Infantry Division (Mech) leaves Savannah, Georgia for Saudi Arabia
Aug 17  First ship carrying prepositioned Army equipment arrives in Saudi Arabia
Aug 23  Secretary of Defense authorizes call up of 25,000 National Guardmen and Army Reservists for combat and combat service support units
Aug 27  First fast sealift ship reaches Saudi Arabia and begins off-loading; first M-1 Abrams tanks arrive in theater
Aug 29  82d Airborne Division closes in theater
Sep 12  Major combat elements of 24th Infantry Division (Mech) close in theater
Oct 6  101st Airborne Division (Air Assault) closes in theater
Oct 22 1st Cavalry Division closes in theater
Nov 8 VII Corps and 1st Infantry Division alerted for deployment
Nov 14 Secretary of Defense increases Army selected Reserve call-up authority to 80,000 and authorizes call-up of Reserve combat units
Nov 21 VII Corps begins deployment from Germany to Saudi Arabia
Nov 30 First Army National Guard roundout brigades called to active duty
Dec 1 XVIII Airborne Corps closes in theater
Dec 6 First ship carrying VII Corps equipment arrives in theater

1991
Jan 15 UN deadline for Iraqi withdrawal
Jan 17 Operation DESERT STORM begins
Jan 18–19 Iraq fires first Scud missiles at Israel and Saudi Arabia
Jan 20 XVIII Airborne and VII Corps begin movement to forward assembly areas for ground phase of the campaign
Feb 3 XVIII Airborne and VII Corps (minus elements of 3d Armored Division) complete movement to forward assembly areas
Feb 6 VII Corps closes in theater with the arrival of the last elements of the 3d Armored Division
Feb 24 Coalition forces begin ground phase of campaign
Feb 28 Temporary cease-fire initiated
Mar 3 Cease fire terms accepted by Iraq at Safwan Airfield
Mar 8 Redeployment of Army units begins
Apr 7 Iraq accepts UN cease-fire conditions and resolutions

**TASK FORCE NORMANDY UNLEASHES THE STORM**
When Lieutenant Colonel Richard A. Cody’s 1st Battalion of the 101st Aviation Brigade, 101st Airborne Division, arrived in Saudi Arabia with its AH-64 Apache helicopters in mid August 1990, it enjoyed the reputation of being the best maintained, best prepared Apache battalion in the theater. It therefore seemed the natural choice for the mission that would open Operation DESERT STORM: an undetected flight deep into southwest Iraq to eliminate two key early warning radar sites and clear a 20-mile wide corridor for over 100 American
and coalition aircraft to enter Iraqi air space. From his battalion, Cody carefully selected crews to form a task force, which he named Task Force NORMANDY in honor of the 101st Airborne Division troopers who had parachuted into Normandy during World War II. In cooperation with the U.S. Air Force’s 20th Special Operations Squadron, these crews flew hundreds of miles in exercises and practiced hitting ground targets with their HELLFIRE missiles, 2.75-inch rockets, and 30-mm. cannons. Cody divided his task force into two teams, one for each site.

After arriving at the lonely outpost of Al Jouf, 100 miles south of the Iraqi border, on January 14, the task force received the order to proceed about 1400 on January 16. At 0100 the next morning, Cody led the White Team out of Al Jouf, while Captain Newman D. Shufflebarger led the Red Team. By 0237, both teams had closed within three to six kilometers of their targets and hovered in position fifty feet above the ground, awaiting the “10 seconds” call from each team leader. At ten seconds before 0238, First Lieutenant Thomas R. Drew in the lead helicopter of the White Team broke the silence with the terse phrase, “Party in ten.” Ten seconds later, the two groups launched a salvo of HELLFIRE missiles.

The Iraqis were completely surprised. Neither group took antiaircraft fire as it destroyed its targets. Twenty-two minutes after the attack, as the Apaches raced south, coalition planes poured through the gap in such numbers that the helicopter pilots dubbed them, “Aluminum Overcast.” When asked later about the factors contributing to the mission’s success, Drew pinpointed: “training — we had
trained so well that the mission could not fail; teamwork — a group of Americans working toward a common goal cannot be stopped; leadership—the leadership in the Task Force was truly outstanding; and the Cody Factor — he is extremely intelligent and he has a strength within that drives him to be the best he can be in everything.” Cody himself added another factor. “The Apache,” he stated, “is the finest combat helicopter ever produced — bar none.”

**McMaster at 73 Easting**

By the early afternoon of February 26, 1991, the third day of the ground offensive, the Iraqi defense of Kuwait was obviously crumbling. To the east, U.S. Marines, Army tankers of the Tiger Brigade, and other coalition troops drove on Kuwait City, from which Iraqi troops were already fleeing along the so-called “Highway of Death.” To the west, the XVIII Airborne Corps, protecting the coalition’s flank, had driven into the Euphrates River valley. Between the Marines and coalition forces and the XVIII Airborne Corps, the VII Corps was turning the direction of its advance from the northeast to the east as it strove to come to grips with the Republican Guard divisions in the Iraqi rear areas. Screening the advance of the 1st Infantry Division in the VII Corps center was Colonel Leonard D. Holder’s 2d Armored Cavalry Regiment. As the cavalrymen emerged from another dust storm, they encountered the Iraqis desperately trying to reposition tanks, artillery, and other vehicles to meet the massive blow from the west.

About 1600, Captain H. McMaster’s Eagle Troop of the 2d Squadron, 2d Armored Cavalry Regiment, was approaching 73 Easting, a north-south line on military maps. He later described the ensuing action: “It was 1618 hours. The sandstorm had not let up. I was issuing final instructions to the troop when my tank crested another, almost imperceptible rise. As we came over the top, SSG Koch [his tank gunner] yelled ‘Tanks, direct front!’ In an instant, I counted eight tanks in dug-in fighting positions. Large mounds of loose dirt were pushed up in front of the vehicles, and they were easily discernible to the naked eye….They were close! Koch hit the button on the laser range finder and the display under the gun sight showed 1,420 meters. I yelled, ‘Fire, fire Sabot’…. As Koch depressed the trigger, the gun breach recoiled and the HEAT round flew toward the enemy tank…. The enemy tank exploded in a huge fireball as Koch swung onto another tank. This tank was much closer and was positioned forward of the main defense. It was swinging its turret toward our tank. Taylor [the loader] actuated the ammunition door. As the door slid open, he grabbed a Sabot round, slammed it in the breach and screamed, ‘Up!’ Only three seconds had elapsed since we destroyed the first tank. I was talking on the radio as Koch let the round go. The enemy tank’s turret separated from its hull in a hail of sparks. The tank hull burst into flames as the penetrator ignited the fuel and ammunition compartments.

“PFC Hedenskog [his tank driver] slowed the tank down to about 20 kilometers an hour. He spotted an enemy minefield and was weaving between the mines while trying to keep the tank’s thick frontal armor toward the most dangerous
enemy tank…. Two T-72s fired on us but their rounds fell short on either side of the tank. Taylor threw in another Sabot round. As Koch destroyed another T-72, our two tank platoons crested the ridge. The seconds of solo fighting had seemed an eternity. All of the troop’s tanks were now in the fight. Eight more T-72s erupted into flames as the tanks fired their first rounds…. The enemy was now in a panic…. Enemy tanks and BMPs (Soviet-made armored personnel carriers) erupted in innumerable fireballs. The troop was cutting a five-kilometer wide swath of destruction through the enemy’s defense.”

It had been an awesome demonstration of proficiency and teamwork for the American tankers. Firing every two seconds with deadly accuracy, McMas-ter’s crew had knocked out three tanks in seven seconds. Within twenty-three more minutes, the troop demolished another 5 tanks and 30 armored vehicles. Only nine American tanks had wiped out a force four times their size, in the process penetrating three miles through the elite of the Iraqi armed forces. At 73 Easting and numerous other engagements in the Gulf War, the Army showed that years of weapons and doctrinal development — and tough, realistic training — had paid off in a force that could fight even the initial engagement of a war with considerable skill.

CONTRIBUTIONS OF SUPPORT TROOPS TO VICTORY IN THE GULF WAR
When the first American troops arrived in Saudi Arabia during the anxious days immediately following Saddam Hussein’s occupation of Kuwait, they faced a major challenge in creating the logistical base necessary to support a
large force. The Saudis did possess a good telephone system, excellent port facilities, modern airfields, some good roads, and a few unoccupied housing developments that could serve as improvised barracks. But facilities away from the cities were often primitive, and, even in Dhahran, the initial troop arrivals overwhelmed the local resources to accommodate them. As one logistical officer put it, “we just didn’t have anything. We had... soldiers here with no place to put them, no way to get them out of here if we did have a place to put them, and difficulty in feeding them.” The newly arriving paratroopers took whatever living space they could find, digging slit trenches for latrines and sleeping on the sand, handball or tennis courts, or on the grounds of the U.S. Military Training Mission to Saudi Arabia. When Army Central Command’s deputy commander for logistics, Major General William G. Pagonis, landed in Riyadh on August 8, he found a shortage of trained logisticians and staff for the task ahead. Three training officers from the training mission had tried to handle arrangements for the incoming soldiers, but, lacking personnel, facilities, resources, or information, they were soon exhausted.

From these unpromising beginnings, General Pagonis and his support troops achieved a logistical miracle. In less than half a year, they unloaded 500 ships and 9,000 aircraft, containing 126,400 tracked and wheeled vehicles, 38,000 containers, 1,800,000 tons of cargo, and more than 350,000 soldiers, airmen, Marines, sailors, and civilians. This buildup, in addition to the shipment of troops, equipment, vehicles, and supplies to Saudi Arabia, was an achievement of vast proportions for Army logisticians, the equivalent of moving a city the size of Atlanta halfway around the world and establishing it in a new surrounding. For this achievement, the Army owed an immense debt to its reserve components. More than seventy percent of the soldiers who built the new theater came from the National Guard or Army Reserve.

The logistical buildup began within days of the disembarkation of the first American troops. Four prepositioned ships, bearing rations, blankets, medical supplies, refrigerated trailers, and water purification units, arrived from the offshore island base of Diego Garcia to service the most essential needs of the troops. Then transports began to arrive from the United States, bearing vehicles, aircraft, and sea-land containers with ammunition, spare parts, and other supplies. During October, Pagonis’ Provisional Support Command established
two huge forward logistical bases to provide critical medical, maintenance, fuel, and ammunition resupply services. These bases had perimeters of as much as eighty miles, within which they dispersed combat service facilities, each with low, earthen hills around its borders. When the Bush Administration decided to send the VII Corps to Saudi Arabia, the logisticians established three more bases to support the new arrivals. Along the road nets that connected these key points, support troops established convoy support centers, each providing fuel, latrines, food, tents, and limited repair facilities. At the convoy support centers and other points in the theater, roving hamburger stands, dubbed “Wolfmobiles” after Pagonis’ food service advisor, soon became a frequent and welcome sight for American troops tired of local cuisine and MREs (Meals-Ready-to-Eat). The Saudis gave enormously to the buildup, providing, along with telecommunications and port facilities, 4,800 tents, 333 heavy equipment transporting trucks, and millions of meals and gallons of fuel.

By the start of the air war in January, the logisticians had largely accomplished their incredible feat of building a supply structure in Saudi Arabia, but they now faced another major venture. Once allied air forces had established aerial supremacy, the VII and XVIII Airborne Corps could start to reposition for the movement around the Iraqi western flank—a 330-mile shift for the VII Corps, 500 for the XVIII Airborne Corps. Even before the two corps started their shift, supply troops moved west to establish a forward logistics base for each corps. By February 24, the day the ground offensive opened, each base had 29 days of food, 5.2 days of fuel, and 45 days of ammunition.

The shift west by the two corps began on January 20 and continued for the next three weeks. To save tracked vehicles from excessive wear during the move, the 22d Support Command acquired almost 4,000 heavy trucks and gave them to the corps. Pagonis obtained these trucks from American military inventories in the theater, European donations, local commercial sources, and loans, including an entire Egyptian battalion of heavy equipment transporters. Over 2,000 civilian drivers, many contracted from India, joined military personnel for the movement. Through the rest of January and February, these drivers worked long hours, moving troops and equipment northwest along the Tapline Road to the corps assembly areas. If an Iraqi pilot had penetrated the air space over the border area during the great move west, he would have been astonished by the panorama of “mile
after mile of tank transporters, gasoline tankers, troop and ammunition carriers,” filling the Tapline Road.

In the end, the short duration of the ground offensive reduced the need for the extensive store of supplies that the logisticians had stocked in the forward bases. Still, the theater’s support troops could take considerable pride in their achievements between August 1990 and March 1991. The support that they provided in first building the base and then shifting two corps around the Iraqi flank made possible the overwhelming allied victory in the Gulf War.

**SOLDIER LIFE IN SAUDI ARABIA**

American soldiers living and working in the kingdom of Saudi Arabia faced a variety of challenges, including stress, boredom, physical discomfort, the difficulties of dealing with an unfamiliar culture, and the harsh desert environment. Troops had to watch for the scorpions, sand vipers, and camel spiders which roamed the desert floor, and flies were a constant nuisance. At the forward bases, many basic items formerly taken for granted reached the status of luxury goods. For some GIs, every meal was an MRE, and the water in their canteens was often hot by mid morning. Aviators had a hard time negotiating the desert terrain, especially at night when the dunes could be almost invisible. American troops stationed in urban areas enjoyed more amenities, but they also had to acclimate themselves to Saudi Arabia’s Islamic culture, with its ban on alcohol and the practice of religions other than Islam, its restrictions on women showing their faces on the streets, and its frequent daily prayers toward Mecca.

Both the Americans and the Saudis made concessions to each other to keep tensions to a minimum, but American troops still had to deal with a series of unfamiliar restrictions. Despite the law against women driving in Saudi Arabia, American servicewomen could drive discreetly while on duty, but those who ventured off base had to adhere to Saudi laws on appearance and behavior. The Army enforced the Saudi prohibition of alcoholic beverages, one of the consequences of which was an increased use of tobacco. Army leaders asked chaplains to be discrete in religious observances, and requested that soldiers refrain from displaying religious symbols in areas frequented by Saudis. Chaplains displayed considerable ingenuity in working around many of the restrictions. To circumvent Saudi laws on the use of wine, for example, they introduced a “chaplain consumable resupply kit” that contained a two-week supply of materials for the sacrament.
In the field, support troops quickly established mobile field PXs, distributed health and comfort items, installed facilities for the Armed Forces Radio and Television Service, and instituted mail service. The long period away from home, and the lack of access in many cases to telephone service, made mail an especially valued commodity among the troops. After the first few weeks of DESERT SHIELD, the theater was flooded by mail from the United States, much of it from individuals writing supportive letters to “any soldier.” In December alone, 2.3 million pounds of mail were arriving every week in the area of operations.

Given the need for diversion, recreation officers played an especially critical role. As one recreation officer later remembered, “Our mission…was to provide recreation activities and opportunities for the soldiers. Most facilities provided sodas, popcorn, snacks, care packages, gift packages, ‘any soldier’ mail, videotape loan, free books, video viewing, bands, board games, weight equipment, volleyball courts, ping pong tables, pool tables, chilled water bottles, free newspapers, and recreation equipment issue, including everything from VCRs and popcorn poppers to radio/cassette players….Aside from the individual services provided, the big chore was to distribute donated items, ‘any soldier’ mail, care packages, etc. This proved to be a massive undertaking as patriotism was high in the United States. Donations by the plane and ship-load arrived daily during the initial war effort.”

Much of the soldiers’ time was devoted to maintenance. Under the harsh desert conditions, vehicles had to be greased and engines washed with water repeatedly; even the use of a helicopter for an hour meant four hours of mechanics turning wrenches afterward. Air filters on wheeled vehicles had to be changed two to three times daily. To guard against the effects of sand and dust, aviators applied special paint, and later tape, to the leading edges of helicopter rotor blades, and mechanics developed improved particle separators, and tested and purchased windscreen covers.

American troops in the field adapted to the harsh conditions as best they could. They showed remarkable improvisation in building homes in the desert. As they became accustomed to the hot, dry climate, their water requirements returned to about three gallons per man per day after reaching as high as six gallons immediately after the deployment. Boredom, however, remained a problem under daily conditions characterized by one private first class as “heat, flies, and training.” Such special functions as Thanksgiving dinner helped ward off much of the boredom, but perhaps the most valuable tool was a sense
of humor. According to one would-be reporter, “During area improvement yesterday, SSgt. Craig Blauvelt, while reaching for a box of sand, was suddenly stung by a scorpion. He was immediately rushed to the area medical facility. Despite the valiant efforts of some of the top medical experts in the area, the scorpion was pronounced dead at 11:30 a.m. local time.”

**FAMILY SUPPORT DURING THE GULF WAR**

For Supply Spc. Michele Brown, a 21-year-old single mother, the Gulf War proved an especially harrowing ordeal. She left her three-year-old daughter with her mother, when her unit, the 202d Military Intelligence Battalion, deployed to the Persian Gulf. While in Saudi Arabia, she learned that her daughter had been hospitalized with asthma. “It’s hard being a single mother and going to war,” she stated, “I don’t want to be here.”

Fortunately, the Army had in place by the deployment to Saudi Arabia an extensive family support system. Family support took many forms. Over 160 Army-sponsored family assistance centers provided 24-hour service to families encountering problems. Under one roof, they assembled chaplains, lawyers, relief workers, and other social service specialists. Aided by volunteers, these professionals monitored possible trouble areas, provided information and counseling, and trained unit support groups. Briefings provided family members with the latest information from the desert. To support reservists and families at installations without family assistance centers, the Army established a 24-hour toll free hotline in an operations center at the Community and Family Support Center in Alexandria, Virginia. Volunteers were especially essential to the success of family support during Desert Shield and Desert Storm.

**MASTER SERGEANT SIMS, CHIEF WARRANT OFFICER 4 CRISAFULLI, AND SPECIAL RECONNAISSANCE MISSION SR 008**

On the evening of February 23, 1991, three men of Team B, Special Forces Operational Detachment A-532 under Master Sergeant Jeffrey W. Sims infiltrated by Blackhawk helicopter to a landing zone near Qawam am Hamzal, deep inside Iraq. After moving four kilometers to the mission area, Sergeant
Sims stood watch while his two companions hastily dug four feet into the clay soil to construct a hideout. From there, with a clear field of observation over Highway 7, they were in a good position to carry out their mission of spotting any Iraqi vehicles moving over that route into the sector opposite XVIII Airborne Corps.

But the mission, despite its promising beginning, soon went awry. At daylight, the Special Forces troopers found themselves surrounded by goat herds and shepherds, many with children. The contingent attempted to remain concealed, but a villager and his young daughter soon discovered the entrance to their hiding place. Emerging quickly from the hole, Sergeant Sims apprehended the two, only to see twenty more villagers nearby. He and his team released their captives and tried to figure another way to continue their mission, but, within moments, the villagers opened on the party with single-shot rifles.

Under the random fire, the team retreated 100 meters down an irrigation ditch. There, they stopped to assess the situation and called for close air support and an emergency exfiltration. Moving another 500 meters up the wadi, they encountered a truck with over fifty soldiers. The group took a defensive position and prepared to fight for their survival. Firing selectively to avoid hitting women and children, they picked off the enemy leaders with aimed shots and waited for help. But their situation appeared desperate.

Finally, one and one-half hours after they first reported the compromise, an F-16 appeared. Firing a marker rocket into the middle of the enemy position, the F-16 then dropped cluster bombs on the enemy in the open, killing or wounded an estimated fifty Iraqis. The presence of the F-16 and its successors on station kept the enemy at bay, although enemy troops continued to circle the position.

At 1414, Sims and his beleaguered compatriots heard an exfiltration helicopter approaching and Sims popped a white pen flare. The crew chief of the helicopter initially thought the flare was an enemy missile launch, but the crew then spotted the team’s VF17 panel and notified the pilot, Chief Warrant Officer 4 James Crisafulli of the 3d Battalion, 160th Special Operations Aviation Regiment. Standing the Blackhawk on its nose, Crisafulli jumped his helicopter over a power line, pointed the nose toward the team, and landed in a controlled crash. One team sergeant quickly jumped on the plane, but as Sims moved to board, enemy rounds landed between him and the aircraft. One of the helicopter crew killed two Iraqis approaching the craft from the rear, while a crew chief killed three more Iraqis approaching from another direction. Once he was sure that Sims and everybody else were aboard, Crisafulli took off as soon as possible.
The Blackhawk had sustained such severe damage from the rescue that it remained out of commission for the rest of the war. One round had barely missed a control rod, and another had almost hit a rack of M203 rounds. Enemy fire had hit the rotors in several places. It was a much relieved helicopter crew and Special Forces contingent that returned to base.

For their heroism, Chief Warrant Officer Crisafulli received the Distinguished Flying Cross, and Sergeant Sims received the Silver Star. Sims and his team had not accomplished their primary mission. Nevertheless, they had shown great courage and resourcefulness, fought hard when cornered, and in the end, survived to fight another day. And they were deeply grateful for their rescue by Chief Warrant Officer Crisafulli and his helicopter crew. As Sims later remarked, “I’ll do anything in this world — go through hell with gasoline drawers on — if I know that we got people like that pilot backing us up…. That pilot saved our lives.”

**Section IV**

**Mission to Somalia—Living the Creed**

Soon after the overwhelming success of Desert Storm in 1991, the Army began to learn the meaning of the transition from a force focused on a particular threat to one ready to meet any contingency. The rapid collapse of Soviet power was accompanied by major disturbances around the world. In almost every corner of the earth, fighting between different groups broke out. In some cases, this conflict took the form of border disputes between nations. In other parts of the world, confrontation traced its roots to ethnic conflict, where groups with different languages, religions, and cultures fought for the control of fledgling governments.

Since these conflicts had the potential to cause entire geographic regions to flare up, many affected the interests and security of the United States. Thus, American leaders called on their military forces to perform a range of military operations from combat to peacekeeping and humanitarian assistance. Army doctrine changed to reflect this new reality, evolving a whole new category of peace operations. Although the Army had conducted many of these kinds of operations throughout its history, the new doctrine reflected the expectation that, in the future, it would perform them as a matter of course.

Following an initial mission of assisting and protecting the Kurds in northern Iraq through Operation Provide Comfort, the Army carried out its next major peacetime mission in Somalia, a country with serious problems.
Somalia lies in the northeast corner of the African continent, on the coast of the Gulf of Aden. After a decade of chronic economic and political turmoil, the nation was torn by civil war. Severe drought and an enormous flood of refugees added to the misery of its people. By 1991 the entire southern half of the nation, including the capital Mogadishu, was one giant war zone. One of President George Bush’s last actions in office was to dispatch American troops to Somalia as part of a United Nations force in December 1992. The UN force was supposed to stop clan violence and begin moving food and supplies to the Somali people.

The initial humanitarian mission soon expanded beyond its original bounds. American troops moved into Somalia without incident and began to bring food to the starving population in the countryside. After successfully combating famine, they stayed in Somalia to help stabilize the country and secure a political solution to the civil war. Violence against them and other United Nations peacekeepers increased. After fifteen months, President Bill Clinton ordered the troops home. During combat in Somalia, 30 American troops had been killed and 175 wounded. As the United States left, the two biggest clans signed a peace agreement.

The mission in Somalia demonstrated that, even in peacetime, being part of America’s Army entails service and sacrifice. In the four years after DESERT STORM, the Army awarded over 600 purple hearts, even though it had only participated in operations short of war during this period. Soldiers often found that they were never very far from risk and danger. Every day, they demonstrated that words like duty, honor, and selfless service to the nation were more than words — they were a creed by which every soldier lived.

The most tragic and inspiring act of “living the creed” during these operations short of war occurred in Operation RESTORE HOPE. During a firefight in Mogadishu, October 3–4, 1993, Somali gunfire forced a Black Hawk helicopter to crash land in enemy territory. From another helicopter, Master Sergeant Gary I. Gordon and Sergeant First Class Randall D. Shugart fired their rifles to protect their comrades at the crash site below them, even though they themselves came under a heavy barrage of fire. With Somali gunmen closing on four
critically wounded soldiers at the crash site, the two NCOs volunteered to help and fought their way through to the wounded crew. They provided cover until they ran out of ammunition. When Sergeant Shugart fell fatally wounded, Sergeant Gordon picked up a rifle from the crash site and handed the weapon and five rounds to the pilot. Sergeant Gordon said, “Good Luck” and, armed only with a pistol, continued the fight until he was killed. For their heroism, Sergeant Gordon and Sergeant Shugart each received the Medal of Honor.

The courage shown by these two valiant NCOs exemplified the American soldier’s commitment to the Army’s values and traditions. As Stephanie Shugart said so eloquently at the award ceremony for her late husband, “It takes a special person to not only read a creed and memorize a creed, but to live a creed.” Living the creed is what Army courage means.

In operations short of war, however, a soldier needs more than bravery in battle. Soldiering also involves the moral courage, reflected in discipline and mental toughness, to handle both lethal and non-lethal situations. Today’s soldiers must be able to follow disciplined rules of engagement under stressful and demanding conditions. Soldiers in Somalia and the many other operations that the United States has conducted since the end of the Cold War have demonstrated that America’s Army remains the best trained, best disciplined, and most courageous force in the world.

Section V
UPHOLD DEMOCRACY—The Joint Team in Action

Only a few months after the disaster on the Green Ramp (see page 253) and less than a year after their departure from Somalia, American forces embarked upon another major mission. Like Somalia, the Caribbean nation of Haiti was plagued by political and economic conflict. After a coup in 1991 ousted a democratically elected government, the Haitian people were ruled by a military dictatorship characterized by harshness and gross human rights abuses. Conditions became so bad that the United States, along with its regional allies, prepared to use force to oust Haiti’s illegitimate government.
In the case of Haiti, the United States planned an operation using forces from the Army, Navy, Air Force and Marine Corps. From the smallest unit to the highest levels, commanders and staff officers found that being a professional in a post-Cold War force required not only expertise in ground operations, but an understanding and knowledge of the systems, doctrine, tactics, techniques, and procedures employed by the other services.

On September 19, 1994, following successful last-minute negotiations by an American delegation led by former President Jimmy Carter, the U.S. Army landed peacefully at the Port-Au-Prince International Airport to initiate Operation UP HOLD DEMOCRACY. On almost a moment’s notice, the Army transformed the operation from one of combat to one of nation building. The new aims of UP HOLD DEMOCRACY — restoring civil order, assisting in the reorganization of the Haitian armed forces and police, and easing the transition to a democratic government — were achieved on October 15, 1994, with the successful return of Haitian President Jean Bertrand Aristide.

While this operation was marked by many “firsts” for the Army, such as the employment of a Navy aircraft carrier as a base and the positioning of command and control facilities aboard the USS Mt. Whitney, the highly trained, physically tough, combat-ready soldiers, sailors, airmen, and marines who turned policy into action provided the real cornerstone. Operations in Haiti proved to be another example that soldiers in the 1990s were expected to conduct joint operations as a matter of course.

Section VI
Operations in Bosnia—Trained and Ready

With the end of the Cold War, the central European country of Yugoslavia split into a number of independent republics. Bosnia, one of these new nations, quickly fell into a bitter civil war. Concerned about widespread human rights abuses, waves of refugees, and the threat of ethnic conflict spreading beyond Bosnia’s borders, the North Atlantic Treaty Organization (NATO) in 1995 agreed to provide a military force to supervise the implementation of peace accords reached at a conference in Dayton, Ohio.

The NATO contingent included forces from the United States Army in Europe (USAREUR). Before the first troops from the 1st Armored Division deployed from Germany to Bosnia, all troops completed pre-deployment training. One of the features of the Army’s success during the Cold War had been tough, realistic training,
based on the Army’s eight-step training model. The principles of good training were important to any kind of operation and were the key to executing a safe and successful mission.

The rewards of training were demonstrated at the outset of the Army’s mission in Bosnia. In order to enter the country, the 1st Armored Division had to bridge the Sava River, which marked the border with Croatia. This mission — the construction of the longest assault bridge in modern history — was conducted by Army engineers under the most difficult conditions with no casualties or serious injuries. Despite rain, cold, snow, mud, and a flooding river, the bridge was complete on December 31, 1995. Around the globe, people were impressed by the technical competence, drive, and determination of the American soldier. As Sgt. Lawrence Galuski of the 502d Engineer Company said, “We can’t be stopped; we’ve had floods, high water, rain snow – makes no difference. We still bridged it.”

Bridging the Sava River proved to be the first of a series of successful operations in Bosnia as the NATO force carried out the charter of the Dayton Peace Accords. In 1998, Army forces still remained in Bosnia. Although their mission was not yet complete, they had accomplished a great deal. As the Army Chief of Staff, General Dennis J. Reimer, concluded:

Our soldiers in Bosnia have shown that they have handled this high tempo of operations very well. They have demonstrated the importance of tough, realistic training, the importance of discipline and the importance of professionalism. They have made a difference over there. As I talk to them, I always tell them that people can argue the policy, whether we should be there or not, but what people can’t argue with is the fact that they have saved thousands of lives. I absolutely believe that’s true. They’re doing a great job — and that’s not by chance. It’s because they went through a tough realistic training program.

The success of the Army’s operations in Bosnia are a testimony not only to the American soldier, but to the best training system in the world, a system designed to make sure that every soldier was prepared before he went into harm’s way.
During the Gulf War, the Army made several changes to its desert combat uniform (DCU). To make the uniform more comfortable, designers eliminated the shirt yoke and elbow, seat, and knee patches and made plans to test a lighter fabric than the existing half-cotton, half-nylon blend. At the start of Desert Shield, the standard Army desert DCU contained seven colors, a pattern commonly known among the soldiers as “chocolate chip.” About the start of Desert Shield in August, the Army changed the fabric design from seven to three colors. Because of the time necessary for procurement, however, most soldiers in the Gulf wore the seven-color design. Many units, especially those of VII Corps, never received DCUs and, like the soldier in the Rumayiah oil fields painting, went to war in their temperate, “woodland”—pattern battle dress uniforms. Since the Gulf conflict was a coalition war, the troops wore American flags on the sleeves of their uniforms; these flags placed the blue field to the left. Later issue flags placed the blue field to the right, because Army regulations called for its display on the right sleeve, and heraldry stipulated that the blue canton be forward.

The Army’s hot-weather gear required several changes with the deployment to the Gulf. Designed for Vietnam, the hot-weather boot proved unsuitable for the desert environment. Its black and olive-green color attracted heat, as did the steel insert designed to protect the foot from booby-trap stakes, and the drainage holes in its instep allowed sand to enter. Many soldiers plugged the holes by melting parachute cord into them. A new desert version of the hot-weather boot changed the color to desert tan, reversed the upper of the boot to flesh-side leather, eliminated the holes, and replaced the stainless steel plate with a thermal barrier. This “Schwarzkopf boot” also had improved ankle support, a padded collar, and a form-fitting contoured insole. Designers provided for the addition of parkas to compensate for the nighttime drops in temperatures in the Arabian desert. The parkas came in a grid-print, mottled, two-color camouflage, designed to confuse night vision devices.
Individual equipment for the desert environment did not change radically. The soldier from the 101st Airborne Division is carrying the All-Purpose, Lightweight, Individual Carrying Equipment (ALICE). The soldier in the Rumayiah oil fields painting is carrying the M-16A2 rifle, a version of the M-16 allowing more selective, three-round bursts than its predecessor. Note the M-17A1 protective mask with the Military-Oriented Protective Posture (MOPP) suit that he is wearing. Brown cloth rags and camouflage-print mosquito nets were issued to some troops, who often wore them over the face, mouth, and neck.

**Section VIII**

**Notes on Awards**

**The Southwest Asia Service Medal:** The Southwest Asia Service Medal (SWASM) was established by Executive Order 12754, March 12, 1991. Its depiction of a tank, armored personnel carrier, helicopter, ship, and aircraft with a desert and seascape recognizes the joint nature of the operation. The reverse side, with an upraised sword, entwined with a palm frond and with “United States of America” around the edge, symbolizes military might and preparedness in defense of peace. The sand-colored ribbon, with red, white, blue, green and black stripes, represents the colors of the United States and coalition members.

The SWASM is awarded to members of the American armed forces serving in Southwest Asia and contiguous waters or airspace from August 2, 1990 to a date to be determined. American servicemen and servicewomen who served in Israel, Egypt, Turkey, Syria, and Jordan between January 17 and April 11, 1991 also are eligible for this award, although they must have been under U.S. Central Command or directly supporting military operations in the combat theater. To be eligible, a service member must be attached to, or regularly serve for one or more days with an organization participating in operations, or he must be serving on temporary duty for thirty consecutive days or sixty nonconsecutive days although the latter stipulation may be waived for those participating in actual combat operations. Also eligible were those who lost their lives while participating in **Desert Shield or Desert Storm**. One bronze service star can be worn on the suspension and service ribbon of the SWASM for participation in each designated campaign.

**The Kuwait Liberation Medal of the Government of Saudi Arabia:** The Kuwait Liberation Medal is awarded by the government of Saudi Arabia to members of the American armed forces who participated in
DESERT STORM between January 17 and February 28, 1991. The sunburst on the medal symbolizes the light of freedom. The globe shows the theater of operations, and it is encircled by a palm, signifying victory. The palm tree with crossed sabers is the emblem of the Kingdom of Saudi Arabia. Green, red, white, and black are the colors of the flag of Kuwait. Green and white are the colors in the flag of Saudi Arabia.

To be eligible for the Kuwait Liberation Medal, personnel must have been attached to, or regularly served for one or more days with, an organization participating in operations, or they must have been serving on temporary duty for thirty consecutive days, although the latter stipulation may be waved by the U.S. Army’s Personnel Command for those who participated in actual combat operations. PERSCOM may also issue the award without regard to length of service to the next of kin for those who lost their lives while participating in DESERT STORM. The Department of Defense authorized issue of the medal on January 3, 1992. An initial issue to eligible personnel from a onetime stock provided by the Government of Saudi Arabia was accomplished by the Army in 1992.

The Kuwait Liberation Medal of the Government of Kuwait: The Kuwait Liberation Medal is awarded to American servicemen who participated in Operation DESERT SHIELD or DESERT STORM, or their aftermath, between August 2, 1990 and August 31, 1993. The obverse bears the coat of arms of Kuwait, consisting of a shield of the flag design in color superimposed on a winged falcon. Falconry is the sport of kings in the Persian Gulf, and the falcon symbolizes Kuwaiti prowess. The falcon supports a disk containing a sailing ship, symbolic of Kuwait's history as a nation of seafarers, and the full name of Kuwait is written at the top of the disk. The inscription 1991 with Arabic letters appears at the top of the disk. On the reverse is a map of Kuwait on a rayed background. Of the colors in the award, black stands for battlefields, white for deeds, green for meadows, and red for the blood of Kuwait’s enemies.

The government of Kuwait offered the medal to members of the American armed forces on July 16, 1994. Secretary of Defense William J. Perry accepted the medal on March 16, 1995.
America’s Army after the Cold War, 1991 and Into the Future

Section I
A Decade of Change

The end of the Cold War at the beginning of the 1990s marked the close of a half-century of global tension between the United States and the Soviet Union. New opportunities and emerging threats have characterized the post-Cold War era. As was the case after past wars, the Army has undergone cuts in personnel and force structure. At the same time, it has sought new ways of handling changes in doctrine without sacrificing readiness. Indeed, the Army’s most remarkable achievement in the first decade of the post-Cold War world was that, throughout this period of dramatic change, the force not only remained trained and ready, but also performed a great number of unique and demanding missions around the world such as in Somalia, Haiti, and Bosnia, discussed in the previous chapter.

Section II
Reductions in the Post Cold War Army

In the 1990s, the Army underwent major structural changes. Between 1990 and 1996, the service reduced the number of its divisions from twenty-eight to eighteen, the fewest since the Korean War, ten in the active component and eight in the United States Army National Guard. In all, cuts took over 630,000 people from the Army’s active component, the Army National Guard, the United States Army Reserve, and the Army’s civilian component, leaving an Army which today ranks eighth in the world in size.

The reduction in the number of divisions was a challenge for the Army. Many of its most honored units disappeared from its force structure—among others, the VII U.S. Corps, the 5th, 7th, 8th, 9th, and 24th Infantry Divisions, and the 2d Armored and 3d Armored Divisions cased their colors. To ensure that the active Army continued to draw on its rich heritage and traditions, the Army also reflagged (renamed) several units.

In addition to the changes in the active component, the Army conducted a major reorganization of its reserve components. All the combat forces in the United States Army Reserve were transferred to the Army National Guard.
The Guard and Reserve also endured force reductions, although together they still comprised fifty-four percent of the Army. By the end of 1996, most of the reflaggings of the reserve components and the active force had been finished, completing one of the largest reorganizations of the Army in the modern era. In all, the Army inactivated or reflagged over 400 units from corps to battalion.

Every soldier and veteran feels a strong unit allegiance. Inactivation ceremonies were characterized by tremendous sadness, but also by dignity and pride. Ceremonies were significant not only to the units, but also to friends and neighbors in nearby civilian communities. These reactions demonstrated the power of the Army’s traditions and heritage to motivate and inspire young soldiers. As the Army grows smaller, lineages and honors have more importance than ever, because they help to build strong and cohesive organizations that, in turn, become the source of strength and solidarity for their members in difficult and turbulent times.

Section III
Doctrinal and Cultural Change in the Post-Cold War Army

The Cold War was a very dangerous, but predictable era in the Army’s history. Almost everything that the Army did during the Cold War centered on defeating a Soviet invasion of Western Europe. The Army wrote doctrine to counter the Soviet Red Army, trained at its Combat Training Centers against opposing forces structured like the Red Army, and modernized its equipment to defeat the Red Army. All of that changed with the disbanding of the Warsaw Pact and the breakup of the Soviet Union. The Army required a change in outlook, a transition from a force focused on a particular threat to a more flexible organization with a wide range of capabilities to meet the new, uncertain challenges of the 21st Century.

Shortly after Desert Storm, the Army’s Training and Doctrine Command (TRADOC) established six Battle Labs to experiment with changing methods of warfare and aid the application of new technology to military uses. Before the Battle Labs, it normally took six years for the Army to develop and deploy a new system envisioned by researchers; the goal of Battle Labs was to reduce the cycle to one year. The labs linked the developers directly to units in the field, often having soldiers experiment with prototypes during a training exercise and then provide feedback directly to the engineer who designed the system. Using the practical knowledge and shrewd judgment of soldiers early in the design process gave the Army a distinct advantage in developing and fielding new equipment.
In July 1994, the Army embarked on the next stage of its transformation: the implementation of the new ideas and initiatives that would shape the future force. Called Force XXI, the new process was designed to spearhead the development of Army XXI, the modernized force that would see the Army into the next century. The Force XXI process centered on a series of Advanced Warfighting Experiments (AWE) using real soldiers in real units to test new systems and operational concepts. Between 1994 and 1998, the Army conducted six AWEs with forces ranging from battalion to division size.

Section IV
Women in America’s Army

During the Gulf War, many Americans realized for the first time the huge contribution that women now make to today’s Army. Women served in the air, at sea, and on the ground, performing as pilots, military police, communications specialists, operations officers, and in a variety of other roles. They drove jeeps and heavy trucks, refueled tanks, delivered supplies, and guarded harbors. On television, and in newspapers and magazines, millions of Americans saw women capably performing duties that had formerly been reserved for men.

The superb performance of military women in the Gulf reopened the debate over whether women should serve in ground combat positions. In 1992, a Presidential Commission on the Assignment of Women in the Armed Forces decided to continue the ban as far as the Army was concerned. But in 1993, Secretary of Defense Les Aspin ordered the armed forces to remove most restrictions barring women from aerial or naval combat. Restrictions against women in ground combat remained in place but under increasing fire.

In an address to the Reserve Officers Association on January 27, 1998, the Army’s Chief of Staff, General Dennis J. Reimer, alluded to the key role played by women in today’s military. During a recent trip to Bosnia, he had visited the 396th Combat Support Hospital, a Reserve unit from Washington state. The hospital’s commander, Colonel Kristine Campbell, was the first woman to command a hospital unit in a combat area. Her achievement would probably have received more attention except for the fact that “firsts” by women were becoming almost commonplace in America’s Army.
Section V  
Disaster on the Green Ramp—Taking Care of America’s Army

While American forces were disengaging from operations in Somalia, the attention of those back in the United States was diverted by a terrible tragedy at Pope Air Force Base, North Carolina. On March 23, 1994, several hundred paratroopers from nearby Fort Bragg had assembled on Green Ramp, an area adjacent to the airstrip. Two aircraft that were landing collided, creating a massive fireball that killed or injured more than one hundred soldiers. The disaster was the worst peacetime loss of life suffered by the 82d Airborne Division since its activation during World War II.

The story of the disaster on Green Ramp, however, goes beyond the horrible training accident. Soldiers, doctors, medics, chaplains, and volunteers came together to respond to the needs of the victims and their family members. Two days after the tragedy, President Clinton toured the crash sites and met with victims and support personnel. The President stated, “I wish everyone in America could see the faces and the eyes and the spirit of these people. They would realize how fortunate we are to be served by men and women like them. They are so brave and selfless.” In the end, the story of the Green Ramp disaster was as much about the courage, determination and teamwork of the Fort Bragg community as it was about the terrible loss of brave and faithful soldiers.

The family support programs that underlay the military and civilian response to the Green Ramp disaster followed in a long tradition of the Army helping its own. Since the first days on the frontier, family and community programs have been an important part of Army life. The Army at heart has always considered itself a community, bringing together soldiers, civilian employees, and families. Communities thrive when people care about one another, work for one another, and trust one another. This sense of community has provided a source of strength and support for the Army family in troubled times.

Section VI  
Army Values—A Matter Of Dignity and Respect

Although the Army’s post-Cold War accomplishments were impressive, the institution itself underwent serious scrutiny. Even though extremist behavior, racial and sexual discrimination, and sexual misconduct are opposed to everything the Army stands for, the service encountered some serious problems in these areas. The most publicized incidents occurred at Aberdeen Proving
Ground, Maryland, where soldiers faced court martial on charges involving sexual offenses. The event gained worldwide media attention.

In the wake of the events at Aberdeen, the Army commissioned two major investigations. The two reports provided the Army with an occasion to reaffirm its commitment to basic values. Both found that the Army was fundamentally sound and that its men and women were committed to the highest standards of values, discipline, and teamwork. Nevertheless, the reports portrayed a weakening in the trust and respect for human dignity between some leaders and soldiers. The bedrock of the Army is its commitment to seven core values: duty, honor, personal courage, loyalty, integrity, respect, and selfless service. Sexual discrimination, harassment and abuse undermined every one of those values, threatening the readiness of the force and ultimately the security of the nation.

The Army recognized that the issue of sexual harassment and discrimination was essentially about leadership and standards. In response to the two reports the Army developed a long-range Human Relations Action Plan to ensure that the tragic events at Aberdeen would never be repeated. Although the Army’s action plan included a number of wide ranging initiatives, the core of the plan emphasized challenging and empowering leaders to set the right standards. General Reimer put it best when he concluded:

A sergeant major once told me that, “the Army is an easy place in which to succeed. The Army has standards for everything and all we have to do to get ahead is to meet those standards.” He had it about right. Every time leaders fall off a commitment to standards, trouble follows. We must ensure that all leaders understand standards and enforce them as well as set the example. In particular, I have charged our Noncommissioned Officers Corps with being the keeper of Army standards. Standards are the “crown jewels of the Army”; without them soldiers will never know what to expect from their leaders.

Section VII
One Team—One Fight—One Future
The Total Army and Ice Storm 98

The Army’s mission in the 1990s is too great for any one of its components. Operations in Bosnia, with twenty-five percent of Army forces originating in the reserve components, provide a case in point. In fact, every mission that the Army has conducted from DESERT STORM to Bosnia shows that success can only be achieved by a Total Army effort, uniting the capabilities of the active force, Army National Guard, and the United States Army Reserve.
To symbolize its commitment to the principles of a Total Army, the Army, in October 1997, adopted a concept called “One Team, One Fight, One Future.” More than just a slogan, these words reflect three ideas at the core of the Army’s effort to provide the most effective and efficient ground force for the 21st Century. The Total Army represented “one team”: the active United States Army, the Army Reserve, and the Army National Guard. This Total Army would always wage “one fight,” as part of an integrated joint combat force in concert with other federal agencies providing for the common defense. Finally, the Total Army would work for “one future” — a better and more secure place for America in a safer and more prosperous world.

Only a few months after the Army began to develop a series of “One Team, One Fight, One Future” initiatives, an event occurred that demonstrated the importance of the combined efforts of the Total Army. During the second week of January 1998, a sudden winter storm hammered eastern Canada, upstate New York, Vermont, New Hampshire, and Maine in a five-day torrent of rain and sleet. The storm covered much of the northeastern United States with a blanket of ice. It left hundreds of thousands of people without electricity and stranded many without heat or food.

Before the weather had cleared, the soldiers of America’s Army everywhere responded to the crisis. In Maine, over 1,000 National Guard troops helped their friends, neighbors, and civilian authorities cope with Ice Storm 98. “First we’re trying to keep people from freezing,” said Major David Duehring, who helped the Maine Emergency Management Agency coordinate the Guard’s response to the storm. To help deal with the power shortage, the Massachusetts National Guard trucked to Maine nineteen generators, including three 100-kilowatt units on flatbed trucks and five technicians to operate them.

Active duty soldiers from Fort Drum, New York, also joined in the effort. Hundreds of soldiers deployed throughout a six-county disaster area, helping to remove debris and providing emergency services. Troopers of the 3rd Squadron, 17th Cavalry Regiment, worked to clear fallen tree limbs from a cemetery near Clayton, New York, while soldiers from the 110th Military Intelligence Battalion and the 41st Engineer Battalion served hot meals in a Canton, New
York shelter. It was a Total Army effort. As Staff Sergeant Richard Trotter, a cook with Headquarters and Headquarters Company, 110th MI Bn said, “It lets us give the community an outlook of what we do in the military, and it lets us show, yes, the military cares.” The Army’s response to Ice Storm 98 not only showed that soldiers care, but it demonstrated what the combined capabilities of the force could achieve when the Total Army committed to an effort.

Section XI
Notes on Equipment

**Force XXI Land Warrior (LW):** The Force XXI land warrior program meets the Army’s pressing need to improve the individual soldier’s performance, deadliness, and ability to survive. The advanced technologies developed by this program lower the weight carried by the soldier while adding to his capabilities. These innovations include an integrated sight and improved weapon interface and radio enhancements, among others. It especially stresses the use of products of the commercial microelectronics and telecommunications industries to achieve light, miniaturized components.

**The M-1A2 Abrams Tank:** The M1A2 tank represents a major advance on the M1A1 model. The new Abrams provides the tank commander with an independent thermal viewer and an improved weapon station. It also includes position/navigation equipment and a distributed data and power architecture. The digital data architecture makes the M1A2 the first fully integrated, computer-driven ground combat system. The M1A2 was approved for rate production in April 1994. In October of that year, the contractor delivered the first M1A2 upgrade. The first unit equipped with the new tank was the 3d Squadron, 1st Cavalry Division, at Fort Hood in December 1995. The Army’s current program seeks to field M1A2 tanks throughout the Army while reducing the inventory of older M1A1 tanks.
Section XII
An Army on the Move—Shape, Respond, and Prepare

The need for land power during peacetime is greater than ever. Since the end of the Cold War, soldiers have gone around the world, handling a broad range of military missions. Army troops have participated in twenty-eight of the thirty-two major post-Cold War deployments by American forces, providing over sixty percent of the personnel involved in those operations. In 1997, for example, the Army stationed 31,000 Active, Reserve and National Guard soldiers in seventy countries around the world. Approximately 62,000 men and women were either preparing to deploy, deploying, or had just returned from operations. Thus, during the year, a large portion of the Army’s soldiers were on the move, supporting active operational commitments, while others were training and preparing for all types of military operations. The requirements of America’s post-Cold War defense have made the U.S. Army busier than ever.

Where the Army goes in the future will largely depend on the national military strategy. Strategy is important to the armed forces; it defines the ways, means, and ends of how America applies its military power. Strategy drives what kind of equipment the Army has, the size of the force, and how, when, where and why that force will be used.

Today, the nation’s military strategy rests on three pillars—“shape, respond, and prepare.” Responding is the ability to answer a crisis, wherever and whenever it arises. The ability to respond, however, is not enough. It is better to deal with problems before they become too big, and to diminish threats before they become dangers to national interests. Therefore, American strategy also includes being able to shape the international environment, creating the conditions that will make the world safer for America’s children and grandchildren. Finally, the strategy requires preparation now for the challenges of the 21st Century by modernizing the force, by introducing technology to ensure American soldiers have an overwhelming advantage in the next battle.

Thus, the national military strategy lays out three demanding and important tasks for the soldiers and leaders of the Total Army. If the history of the 1990s is any measure, the Army will, without a doubt, be equal to the challenge. In fact, the Army will always succeed as long as it continues to rely on its greatest asset — soldiers, the men and women of America’s Army, who will help move the nation into the 21st century.
Postscript: Looking Into the Future From 1998

Changes in warfare became apparent during Operations JUST CAUSE and DESERT STORM, and the Army began changing in order to take advantage of the international change, the bow wave of technology that marked the onset of the Information Age, and the military reductions that were imposed to accommodate a lesser threat. Indeed, during the years after the end of the Cold War and into the new century, the Army has been focused on change — change in the way we do business, change in the way we change.

Training and Doctrine Command was charged with the mission of transforming the tactical Army. TRADOC focused on doing that across all the Army’s mission areas: doctrine, training, leader development, equipment, and force design, ensuring quality in each area. The process of change is called Force XXI.

The Army is moving into the future in a new way. The service no longer has the time or resources to proceed in a step-by-step, sequential, linear fashion. Rather we are engaging in holistic spiral development — developing, experimenting, analyzing, deciding, then developing some more. It takes about one fifth the time the old process would have taken, and is reaping all kinds of benefits.

We are building the basis for Army XXI, tomorrow’s Army. Because of our spiral development process, and because we are addressing the six Army imperatives simultaneously, any change that we make affects all the other imperatives. Each equipment change, for instance, inspires change in doctrine, which then affects training, leader development, force design, and people. So there is no such thing as isolated change.

In the beginning of our experimentation process, some years ago, we concentrated on materiel improvements. As technology was pushing the equipment end, we responded. The 1994 Advanced Warfighting Experiment at the National Training Center, our first large-scale experiment, showed us that integration of materiel alone was not improvement; that a force is modernized only when all the mission areas are addressed. We took that lesson, and the NTC rotation in the spring of 1997 showcased a wholly restructured force and a wholly restructured way of thinking of change.
We have been revamping our doctrine, to include manuals on digitized and non-digitized operations, division organization, and even our capstone manual FM 100–5. Along the lines of equipment, perhaps the easiest to see, we are importing combat computers, information management systems, total asset visibility, on old and new weapons platforms, just to name a few innovations. In leader development we are concentrating on decision-making at all levels and the character attributes that best support that ability. We are continuing to emphasize the importance of the warrior ethos and the significance of values-based, competent and confident people. In training, we are experimenting with schools linked to units, field training linked to simulations and simulators, training devices embedded in operational equipment, and distance learning. And in force design we are looking at a redesign of the division which will give us more lethality, mobility, flexibility, survivability, and responsiveness. What we are doing is creating tomorrow’s Army. This is an exciting time for the Army — we are seeing pieces of the future today!

The foundation of the future is apparent today. Today, the TRADOC commander of 2010 is a lieutenant colonel in battalion command. The brigade commanders of Army XXI are currently company commanders. Army XXI’s drill sergeants are in high school. They are all moving up in a world far different than the world I grew up in. Their world in 2010 will move faster; their army will move faster. They will have more information at their fingertips; they will know much more about their battlefields. Their doctrine, equipment, organizations may be different. But the soldiers will be the same — well trained, educated, motivated, dedicated — ready to face whatever the future hands them. As they always have.
Appendix

A

The Medal Of Honor

The United States Army bestows awards for both service and bravery. The Army uses the phrase “pyramid of Honor” to describe its award system. This system resembles a pyramid in which many receive the decoration at its broad base, but only a precious few earn the decoration that stands alone at its pinnacle. That decoration is the Medal of Honor, a title majestic in its simplicity. The qualifications for the Medal of Honor are severe: “The recipient must have risked his life ‘... above while in actual conflict with the act must have demonstrated intrepidity.’” In other words, selflessness and nobility other form of award might at this point, perceive that the Medal of Honor is reserved for a very select group of men who willingly involve themselves in military acts without equal, and this is certainly the intention of the medal. The awarding of the medal is, accordingly, jealously guarded through a system of laws, regulations, and boards of officers which permit little margin for error or doubt.

The deed of the potential medal winner must be substantiated by the uncontestable evidence of at least two eyewitnesses, must meet those requirements already mentioned and must be the type of effort which, if the soldier had not performed it, would not have subjected the soldier concerned to any justified criticism.

It should be noted that, although the Army usually awards the medal for an act committed in battle, some precedents exist for its award for acts during peacetime. Captain Charles A. Lindbergh received the medal for his “heroic skill and courage as a navigator, at the risk of his life for his nonstop flight in his airplane from New York to Paris, France, May 20–21, 1927.” The Army posthumously made a similar award to Brigadier General William C. Mitchell in 1948 for his outstanding service as a pioneer in the field of military aviation. Six other soldiers, sailors, and airmen have received the Medal of Honor for similar events. Nevertheless, in war or peace, this decoration remains the highest that the nation can bestow.
The actual medal awarded to members of the Army and the Air Force is different in design from that awarded members of other branches of the armed services. The Army Medal of Honor was created by an Act of Congress on July 12, 1862. The law called for the issue of the award in “... the name of Congress”; thus, it is occasionally referred to as the “congressional” Medal of Honor. Each detail of the medal is rich in meaning and tradition. The thirteen stars on the ribbon symbolize the original thirteen states, and the eagle represents the nation itself. The laurel wreath backing the five-pointed star represents wreaths worn by the leaders of ancient Rome. A bust of Minerva, the Roman goddess of wisdom and technical skill, appears in the center of the star.

One must look far back into the history of the Army to find a specific reason for the Medal of Honor’s existence. It is a bit simple to say only that the nation needed a significant decoration to recognize gallantry and that Congress established a medal to fill that need. A more accurate tracing of the medal’s development finds it to be a several-step affair, beginning with the concept of George Washington, who provided for an award to recognize the soldier, sailor or marine who distinguished himself through valorous or gallant acts. Washington instituted the Purple Heart at Newburgh, New York on August 7, 1782, as a decoration for “singular meritorious action.” Three men received the Purple Heart under these regulations in 1783. Army records show no other recipients of the Purple Heart during this particular era. In 1847, a “Certificate of Merit” recognized the valorous soldier of the Mexican War. However, it did not provide for a medal, but simply a certificate — a document. Congress later directed that holders of the award that were still in the service would receive extra pay of some $2.00 per month. Congress continued, however, to deny the award of a medal or other form of decoration.

During the first half of the nineteenth century, a system of “brevet” promotions recognized bravery and exceptional performance of members of the armed services. This system allowed an officer mentioned in dispatches to carry a rank higher than that which he held and for that officer to wear that temporary grade. By the Civil War, the brevet system had been politically abused to such an extent that it sometimes failed to represent the brevet recipient’s courage or manner of performance.

In 1861, the Chairman of the Senate Naval committee introduced a bill to create a Medal of Honor for Navy and Marine Corps servicemen. That bill, approved by President Lincoln on December 21, 1861, produced the first badge or medal to signify gallantry in action or “other soldier like qualities.” Two months later, a similar bill provided for a like award for members of the Army and Volunteer Forces.
The first actual Medals of Honor went to six members of the now famous Andrews raiding party. In 1862, they had slipped deep into Confederate territory and captured an entire train. Their mission — to destroy bridges on the railroad to block Confederate reinforcements — proved a success due to their unquestionable gallantry and courage. Of the twenty-two members of the party, nineteen eventually received the medal. The earliest dated award of the Medal of Honor was to Bernard J. D. Irwin, a young Irish immigrant doctor. Although he did not receive the medal until early 1864, his award honored his heroism in February 1861, before the medal was created, when he voluntarily led a party through hostile Indian territory to rescue a surrounded detail of soldiers.

Each war has produced its own particular “brand” of Medal of Honor recipients, and each has displayed its own particular flavor of language in the phrases used in the citation of each medal. Some of the most colorful of all of the historic citations occurred during the Civil War. They were sprinkled with words such as “... saving a wounded comrade under murderous fire, voluntarily extinguishing the fuse of a burning shell which had been thrown into the lines of the regiment by the enemy,” and “... among the first to mount the enemy’s works in the assault.” Recipients of the Medal of Honor participated in major battles, such as the Wilderness and Gettysburg, as well as in smaller, more obscure skirmishes. During the Civil War were established the high standards which still remain today.

The Medal of Honor has played its part through each of the succeeding conflicts in which the nation has participated. The medal was present on the Western Plains with obscure Indian scouts named Blanquet, Elastousoo and Nantaie, as well as with troopers with more familiar names such as Taylor and O’Sullivan. In the thirty years of conflict on the plains between the forces of the United States and the mighty Indian nations — the Sioux, the Comanche, the Apache and all of the rest of the plains tribes — the brave and courageous received the medal. The medal has been awarded in each conflict of the 20th century, in Cuba, St. Mihiel, Alsace, Lorraine, Normandy, Bougainville, Leyte, Guam, Korea and in South Vietnam, and in each of these wars and on all of these battlefields, it has acknowledged that rare act which is truly “above and beyond” the call of duty.
More legislative action has taken place in regard to the awarding and protection of the Medal of Honor than in relation to any other award of any armed service of this nation. Congress has repeatedly acted to safeguard the award and to preserve the prestige and intent involved with its bestowal. Periodically, boards have convened to review the decisions made in each case of its presentation, and close scrutiny is made of the facts and actions involved. In some cases, awards already made have been recalled when, in the opinion of the review board in session, it was in the best interests of the preservation of the standards of the medal. All of these measures have added to the retention of the medal at its rightful place at the apex of the pyramid of armed forces heraldry honors.
Appendix

B

United States Army
Commanding Generals,
Chiefs of Staff, Secretaries of War
and
Secretaries of the Army

United States Army Commanding Generals

Continental Army General and Commander In Chief

Senior Officer

United States Army Senior Officer
Maj. John Doughty 20 Jun 1784–12 Aug 1784
Lt. Col. Commandant Josiah Harmar 12 Aug 1784–4 Mar 1791

Commanding General
Gen. Jacob J. Brown Jun 1821–24 Feb 1828
Maj. Gen. Winfield Scott 5 Jul 1841–1 Nov 1861
Maj. Gen. George B. McClellan 1 Nov 1861–11 Mar 1862
Gen. Ulysses S. Grant 9 Mar 1864–4 Mar 1869
Gen. William T. Sherman 8 Mar 1869–1 Nov 1883
United States Army Chiefs of Staff

Gen. Tasker H. Bliss ..................... 23 Sep 1917–19 May 1918
Gen. Peyton C. March ................... 20 May 1918–30 Jun 1921
Gen. of the Armies John J. Pershing .... 1 Jul 1921–13 Sep 1924
Gen. of the Army George C. Marshall .... 1 Sep 1939–18 Nov 1945
Gen. of the Army Dwight D. Eisenhower ... 19 Nov 1945–6 Feb 1948
Gen. Lyman L. Lemnitzer ................... 1 Jul 1959–30 Sep 1960
Gen. Peter J. Schoomaker .................. 1 Aug 2003–Present

United States Army Secretaries of War

Henry Knox .......................... 12 Sep 1789–31 Dec 1794
Timothy Pickering ....................... 2 Jan 1795–10 Dec 1795

264
James McHenry .............................................. 2 Jan 1796–13 May 1800
Samuel Dexter .............................................. 13 May 1800–31 Jan 1801
Henry Dearborn ............................................. 5 Mar 1801–7 Mar 1809
William Eustis .............................................. 7 Mar 1809–13 Jan 1813
John Armstrong ............................................. 13 Jan 1813–27 Sep 1814
James Monroe .............................................. 27 Sep 1814–2 Mar 1815
William H. Crawford ...................................... 1 Aug 1815–22 Oct 1816
John C. Calhoun ............................................ 8 Oct 1817–7 Mar 1825
James Barbour ............................................. 7 Mar 1825–23 May 1828
Peter B. Porter .............................................. 26 May 1828–9 Mar 1829
John H. Eaton .............................................. 9 Mar 1829–18 Jun 1831
Lewis Cass ................................................. 1 Aug 1831–5 Oct 1836
Joel R. Poinsett ........................................... 7 Mar 1837–5 Mar 1841
John Bell .................................................... 5 Mar 1841–13 Sep 1841
John C. Spencer ........................................... 12 Oct 1841–3 Mar 1843
James M. Porter ........................................... 8 Mar 1843–30 Jan 1844
William Wilkins ........................................... 15 Feb 1844–4 Mar 1845
William L. Marcy ......................................... 6 Mar 1845–4 Mar 1849
George W. Crawford ...................................... 8 Mar 1849–23 Jul 1850
Charles M. Conrad ........................................ 15 Aug 1850–7 Mar 1853
Jefferson Davis ............................................. 7 Mar 1853–6 Mar 1857
John B. Floyd .............................................. 6 Mar 1857–29 Dec 1860
Joseph Holt .................................................. 18 Jan 1861–5 Mar 1861
Simon Cameron ............................................ 5 Mar 1861–15 Jan 1862
Edwin M. Stanton .......................................... 20 Jan 1862–28 May 1868
John M. Schofield ......................................... 1 Jun 1868–13 Mar 1869
John A. Rawlins ............................................ 13 Mar 1869–6 Sep 1869
Alphonso Taft ............................................... 8 Mar 1876–22 May 1876
James D. Cameron ......................................... 22 May 1876–3 Mar 1877
George W. McCrary ....................................... 12 Mar 1877–10 Dec 1879
Alexander Ramsey ........................................ 10 Dec 1879–5 Mar 1881
Robert T. Lincoln ......................................... 5 Mar 1881–5 Mar 1885
William C. Endicott .................................... 5 Mar 1885–5 Mar 1889
Redfield Proctor .......................................... 5 Mar 1889–5 Nov 1891
Stephen B. Elkins ........................................ 17 Dec 1891–5 Mar 1893
Daniel S. Lamont ......................................... 5 Mar 1893–5 Mar 1897
Russell A. Alger ........................................... 5 Mar 1897–1 Aug 1899
Elihu Root .................................................. 1 Aug 1899–31 Jan 1904
William H. Taft ........................................... 1 Feb 1904–30 Jun 1908
Luke E. Wright ............................................. 1 Jul 1908–11 Mar 1909
Jacob M. Dickinson ..................................... 12 Mar 1909–21 May 1911
Henry L. Stimson ......................................... 22 May 1911–4 Mar 1913
Lindley M. Garrison ...................................... 5 Mar 1913–10 Feb 1916

265
Newton D. Baker .......................... 9 Mar 1916–4 Mar 1921
John W. Weeks ............................. 5 Mar 1921–13 Oct 1925
Dwight F. Davis I ........................ 4 Oct 1925–5 Mar 1929
James W. Good ........................... 6 Mar 1929–18 Nov 1929
Patrick J. Hurley .......................... 9 Dec 1929–3 Mar 1933
George H. Dern ......................... 4 Mar 1933–27 Aug 1936
Harry H. Woodring ...................... 25 Sep 1936–20 Jun 1940
Henry L. Stimson ....................... 10 Jul 1940–21 Sep 1945
Robert P. Patterson ..................... 27 Sep 1945–18 Jul 1947
Kenneth C. Royall ...................... 19 Jul 1947–17 Sep 1947

Secretaries of the Army

Kenneth C. Royall ........................ 17 Sep 1947–27 Apr 1949
Gordon Gray ............................. 20 Jun 1949–12 Apr 1950
Frank Pace, Jr ........................... 12 Apr 1950–20 Jan 1953
Robert T. Stevens ...................... 4 Feb 1953–21 Jul 1955
Wilber M. Brucker ..................... 21 Jul 1955–19 Jan 1961
Cyrus R. Vance ......................... 5 Jul 1962–21 Jan 1964
Stephen Ailes ............................ 28 Jan 1964–1 Jul 1965
Robert F. Froehlke ..................... 1 Jul 1971–4 May 1973
Togo D. West, Jr ..................... 22 Nov 1993–1 Jan 1998
Thomas E. White ..................... 31 May 2001–9 May 2003
Francis J. Harvey ................. 18 Nov 2004–Present
Appendix

C

Military Music

As is the case with most of the tactics, techniques, and weaponry of the United States Army, the music of the Army finds its roots deep in the history of European warfare. During the half century just before the American Revolution, German military bands enjoyed a reputation superior to all of the others in Europe. They were very unlike anything that one might recognize today as a military band. They had no drums, no cymbals, and none of the pomp and bombast normally associated with military music. These early German bands consisted of two flutes, two oboes, two horns, either one or two trumpets, two bassoons, and a bass trombone. A major change in the complexion of military music took place in England during this period when the clarinet successfully replaced the oboe as the major wind instrument in marching units.

One of the earliest efforts to bring music of this level to the colonial settlers took place in Boston in 1773. Mr. Josiah Flagg (1738–1794), himself a consummate musical artist, established a band of wind instrumentalists and vocalists and gave several concerts in Faneuil Hall. Unfortunately, nearly all instrumental music was viewed by the peoples of Boston as “works of the devil” at that particular time and, as a result, Flagg’s efforts were ill received by the general populace. As seemingly unsuccessful as he was, Flagg is recognized as one of the nation’s earliest bandsmen and certainly a strong contributor to the military music of the Revolutionary War era.

The first recorded notes of the now famous “fife and drum” were heard during a celebration after Ethan Allen and his Green Mountain Boys drove the British from Fort Ticonderoga. During the same early stages of the war, the Americans used the drum much like today’s bugle to “call” troops to various formations and activities. The drum first received mention in the orders of the Commander-in-Chief, dated July 14, 1775. In those orders, General George Washington directed that the drum would beat the major divisions and duties of each “military” day from Reveille to Taptoo (now called tatoo). In many units during non-battle conditions, the ceremony of Reveille which started each day was a long, pompous affair, which included the massed fifes and drums of the regiment playing, oddly enough, several British tunes along with the day’s first “calls.” In 1778, musical
uniformity was beginning to appear within the Continental Army. Each regiment possessed a fife major and a drum major, and a superintendent of music for the entire Army had been appointed. Fifers and drummers received the same monthly pay as a corporal, or 7 and 1/3 rd dollars per month. As the war progressed, it became increasingly difficult to maintain an entire band organization in any regiment. As would happen in the many wars to come, the fifer and drummer, when needed, went into the line as riflemen, and they soon found it extremely difficult to play and fight at the same time.

General Washington early realized the significance and stirring qualities of martial music. Even in some of the darkest times of the war at the frozen camp of Valley Forge, he wrote these words:

At Valley Forge on May 7, 1778, at nine o’clock in the morning, the American Army was on parade. A gala parade, with cheers and rejoicing; the fifers and drummers playing as if they were celebrating some victory. It was a day of jubilee, held in commemoration of the beginning of an armed alliance between France and the United States.

The final musical ceremony of the Revolutionary War took place at Rings Ferry, New York during the summer following Lord Cornwallis’ surrender to General Washington at Yorktown. The Americans were holding a review for General Rochambeau of the French Army, and on that day, all of the music was decidedly French. In 1783, the American Army was, in effect, disbanded and the first chapter of the history of American military music ended.

By the outbreak of the Civil War, the art of military music had reappeared and begun to flourish to an extent not foreseen by even the wildest of dreamers. Each of the militia regiments called to service by the Union had a military band. When one considers that four or five regiments formed each brigade, and that a division consisted of three or more brigades, the sound of military music must have been significant indeed. In addition to the militia bands, as each new regiment of volunteers formed, twenty-four men per regiment found themselves assigned as bandsmen. The pay for bandsmen of the Civil War period was generally as follows:

<table>
<thead>
<tr>
<th>Role</th>
<th>Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief musician (leader)</td>
<td>$45.00 per month</td>
</tr>
<tr>
<td>One-Fourth of the bandsmen</td>
<td>$34.00 per month</td>
</tr>
<tr>
<td>One-Fourth of the bandsmen</td>
<td>$20.00 per month</td>
</tr>
<tr>
<td>One-Half of the bandsmen</td>
<td>$17.00 per month</td>
</tr>
<tr>
<td>Drum Major</td>
<td>$17.00 per month</td>
</tr>
<tr>
<td>Fifers, Buglers and Drummers</td>
<td>$12.00 per month</td>
</tr>
</tbody>
</table>
As fighting intensified, the same attrition of bandsmen and finally of bands that had occurred during the Revolution again took place. The regimental band became a ready source for stretcher bearers and medics on the battlefield. Few regimental level bands were able to remain intact throughout the war.

The music of the Civil War inspired its listeners both on the field of battle and on the parade ground. General Phil Sheridan appreciated its combat value. On April 1, 1865, as he sat on his horse during the battle of Five Forks, he listened to one of his brigade bands playing “Nelly Bly” under heavy enemy fire. He encouraged the band to continue its good work and remarked to a member of his staff that “Music has done its share, and more than its share in winning this war.” In 1865, shortly after the close of the war, the Grand Army of the Republic marched in review from the Capitol to the White House. Each brigade had its own band and played continuously throughout the line of march. Both the North and South in the Civil War had several camp songs that have survived. The Army of the Union had its famous, “Glory Hallelujah,” and “John Brown’s Body,” the latter of which has survived (with Julia Ward Howe’s words), as the “Battle Hymn of the Republic.” The South had its “Lorena,” “Bonnie Blue Flag,” and the ever popular “Dixie.”

In the period between 1866 and 1941, military music and bands within the United States Army continued to flourish. Each war had its own distinctive music. Still familiar today are the bouncing rhythms of “Over There,” and stirring strains of “The Stars and Stripes Forever.” Of all the men and all the music involved during this era, one giant stands far above the rest. John Philip Sousa has been dubbed in American history as the “March King,” but he also rightly holds the distinction of being the nation’s most popular bandmaster and composer. At a very early age, Sousa was recognized as a concert violinist, and he played with several musical groups of note in the Washington area. By the turn of the century, Sousa had his own band of forty-nine musicians, using nearly all of the accepted musical instruments of the world. During his career, Sousa was decorated by numerous foreign heads of state, and during the First World War, held the rank of Lieutenant Commander in the Naval Reserve. By the end of his career, Sousa’s compositions numbered over three hundred and included ten operas, eight suites, a symphony, and over one hundred marches. He died in 1932, and is buried in the congressional cemetery in Washington, D. C.

A major force in the development of military music in the United States has been the United States Military Academy Band at West Point, New York. The unit, active today, can trace its continual existence to the fifers and drummers of the West Point garrison during the American Revolution.
In 1782, General Washington gave a great banquet in honor of the reigning rulers of France, and it is recorded that at that banquet, martial music was rendered by the musicians at West Point. In 1802, a congressional order formally provided for four musicians within each of the twenty companies of the Academy’s staff and faculty. In 1816, a Lieutenant Gardiner was appointed as the band’s first Commanding Officer. The band’s duties throughout its history have centered almost exclusively on cadets. From the first of May until the first of November, dress parades and daily formations are accompanied by the band. During the summer months, the band performs concerts in an outdoor band shell on the Academy’s scenic Trophy Point, and the band also performs in a multitude of other shows, dances, and formations. It is certainly safe to say that had military music not been part of our Army’s heritage, it would have been sorely missed.
The American Flag

Several events in American history have immortalized the particular flag flying at that time and place. In each case, the flag provided a symbol of liberty and a free nation, a nation united.

One of the most memorable of these flags flew over the Capitol in Washington, D.C. on December 7, 1941. That same flag was raised on December 8, 1941, as war was declared on Japan and also 3 days later, as Germany and Italy formally became enemies of the United States. Four very long years later, the same flag again flew as the Japanese accepted surrender terms and World War II came to an end.

The U.S. Military Academy Museum houses, in one of its numerous display cases, a small torn remnant of red and white bunting. That tattered bit is all that remains of the flag that flew over Corregidor during World War II. Before the fortress fell, Colonel Paul Bunker burned the flag to preclude its capture. As it burned, he cut a small piece and sewed the fragment under his shirt pocket. Before Bunker died in a POW camp, he gave the bunting to Colonel Delbert Ausmus, a fellow prisoner, and bade him carry the remnant to the Secretary of War. Ausmus carried the bit under his pocket until his release from the camp. After the war, the torn fragment was enshrined in the Academy Museum.

One of the myths of the flag’s gallant history is that the “first” flag was made by Betsy Ross as the result of a specific request by General Washington. Several flags of varied design were carried by various groups prior to Betsy Ross’ effort. Many of the era’s banners took as their themes the struggle of the early settlers in the wilderness with beavers, pine trees, rattlesnakes and the like. Such mottos as “Hope,” “Liberty,” and “Don’t Tread on Me” were commonplace. The first true “Stars and Stripes” were adopted by Congress on June 14, 1777; however, Congress did not specify the pattern of the stars on the blue background. Although
flagmakers used several different star arrangements, the “Betsy Ross” flag arranged the stars in a circle. This version has been the one most universally accepted as “Old Glory.” General Washington explained the symbolism of the components of the “Star Spangled Banner” first flown by the Continental Army as follows, “We take the stars from heaven, the red from our mother country, separating by white stripes showing that we have separated from her, and the white stripes shall go down to prosperity representing liberty.”

Over ensuing years, the flag underwent several alterations. In 1794, after the admission of two new states, the flag was altered to bear fifteen stars and fifteen stripes. By 1828, the flag consisted merely of thirteen stripes to represent the original thirteen colonies, with an additional star added to the blue field for each new state in the United States. The flag grew in this fashion until 1912, when a forty-eight-star field heralded the addition of Arizona and New Mexico. Alaska became the forty-ninth star in 1959, and Hawaii the fiftieth in 1960. No particular star in the galaxy of the flag represents a particular state; rather, they collectively represent the United States.

Much has been spoken and written about the American flag, but few have captured the essence of its meaning to the common man in a more penetrating fashion than did President Woodrow Wilson in his 1917 Flag Day message:

We celebrate the day of its birth, and from its birth until now, it has witnessed a great history, has floated on high the symbol of great events, of a great plan of life worked out by a great people.... Woe be to the man or group of men that seeks to stand in our way in this day of high resolution when every principle we hold dearest is to be vindicated and made secure for the salvation of the nation. We are ready to plead at the bar of history, and our flag shall wear a new luster. Once more we shall make good with our lives and fortunes the great faith to which we were born, and a new glory shall shine in the face of our people.

Throughout the many years of the nation’s existence, people of all walks of life and of every race and religion have served valiantly the country for which the flag waves. The modern United States Army is but another link in that long and strong chain. In the 1970s, that same flag was used as a hippie’s shirt and as a car sticker or poster. It has been burned and battered by dissident groups, defiled by radical demonstrators, and at the same time, used to honor the caskets of thousands of veterans as they are laid to rest. Through all this turmoil, the tricolored banner has remained the true, firm symbol of a great nation. Where the flag was first flown, who made it or when the idea of the banner was born, are certainly of less importance than the profound legacy of two centuries of citizens and soldiers who have honored its existence. Its greatness is truly inseparable from that of our country’s past, present and future. Thus, it has been and continues to be the one unchanging symbol of the United States.
Appendix

E

Principal Wars in which the United States Participated
U.S. Military Personnel Serving and Casualties

<table>
<thead>
<tr>
<th>War or Conflict</th>
<th>Branch of Service</th>
<th>Number Serving</th>
<th>Battle Deaths</th>
<th>Other Deaths</th>
<th>Wounds not Mortal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolutionary War 1775–1783</td>
<td>Total</td>
<td>—</td>
<td>4,435</td>
<td>—</td>
<td>6,188</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>—</td>
<td>4,044</td>
<td>—</td>
<td>6,004</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>—</td>
<td>342</td>
<td>—</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>—</td>
<td>49</td>
<td>—</td>
<td>70</td>
</tr>
<tr>
<td>War of 1812 1812–1815</td>
<td>Total</td>
<td>286,730</td>
<td>2,260</td>
<td>—</td>
<td>4,505</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>—</td>
<td>1,950</td>
<td>—</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>—</td>
<td>265</td>
<td>—</td>
<td>439</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>—</td>
<td>45</td>
<td>—</td>
<td>66</td>
</tr>
<tr>
<td>Mexican War 1846–1848</td>
<td>Total</td>
<td>178,718</td>
<td>1,733</td>
<td>11,550</td>
<td>4,152</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>—</td>
<td>1,721</td>
<td>11,550</td>
<td>4,102</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>—</td>
<td>1</td>
<td>—</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>—</td>
<td>11</td>
<td>—</td>
<td>47</td>
</tr>
<tr>
<td>Civil War 1861–1865 (Union Forces Only)</td>
<td>Total</td>
<td>2,213,363</td>
<td>140,414</td>
<td>224,097</td>
<td>281,881</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>2,128,948</td>
<td>138,154</td>
<td>221,374</td>
<td>280,040</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>—</td>
<td>2,112</td>
<td>2,411</td>
<td>1,710</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>84,415</td>
<td>148</td>
<td>312</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Spanish-American War</td>
<td>Total</td>
<td>306,760</td>
<td>385</td>
<td>2,061</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>280,564</td>
<td>369</td>
<td>2,061</td>
<td>1,594</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>22,875</td>
<td>10</td>
<td>—</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>3,321</td>
<td>6</td>
<td>—</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>World War I 1917–1918</td>
<td>Total</td>
<td>4,734,991</td>
<td>53,402</td>
<td>63,114</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>4,057,101</td>
<td>50,510</td>
<td>55,868</td>
<td>93,663</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>599,051</td>
<td>431</td>
<td>6,856</td>
<td>819</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>78,839</td>
<td>2,461</td>
<td>390</td>
<td>9,520</td>
</tr>
<tr>
<td>War or Conflict</td>
<td>Branch of Service</td>
<td>Number Serving</td>
<td>Battle Deaths</td>
<td>Other Deaths</td>
<td>Wounds not Mortal</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>----------------</td>
<td>---------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>World War II 1941–1946</td>
<td>Total</td>
<td>16,112,566</td>
<td>291,557</td>
<td>113,842</td>
<td>671,846</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>11,260,000</td>
<td>234,874</td>
<td>83,400</td>
<td>565,861</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>4,183,466</td>
<td>36,950</td>
<td>25,664</td>
<td>37,778</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>669,100</td>
<td>19,733</td>
<td>4,778</td>
<td>68,207</td>
</tr>
<tr>
<td>Korean Conflict 1950–1953</td>
<td>Total</td>
<td>5,720,000</td>
<td>33,651</td>
<td>3,262</td>
<td>103,284</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>2,834,000</td>
<td>27,709</td>
<td>2,452</td>
<td>77,596</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>1,177,000</td>
<td>475</td>
<td>173</td>
<td>1,576</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>424,000</td>
<td>4,269</td>
<td>339</td>
<td>23,744</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>1,285,000</td>
<td>1,198</td>
<td>298</td>
<td>368</td>
</tr>
<tr>
<td>Vietnam Conflict 1964–1973</td>
<td>Total</td>
<td>8,744,000</td>
<td>47,378</td>
<td>10,799</td>
<td>153,303</td>
</tr>
<tr>
<td></td>
<td>Army</td>
<td>4,368,000</td>
<td>30,922</td>
<td>7,273</td>
<td>96,802</td>
</tr>
<tr>
<td></td>
<td>Navy</td>
<td>1,842,000</td>
<td>1,631</td>
<td>931</td>
<td>4,178</td>
</tr>
<tr>
<td></td>
<td>Marines</td>
<td>794,000</td>
<td>13,084</td>
<td>1,753</td>
<td>51,392</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>1,740,000</td>
<td>1,741</td>
<td>842</td>
<td>931</td>
</tr>
</tbody>
</table>
# Appendix F

## Worldwide U.S. Active Duty Military Deaths

### Selected Military Operations Since 1980

<table>
<thead>
<tr>
<th>Military Operation/Incident</th>
<th>Casualty Type</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iranian Hostage Rescue Mission April 25, 1980</td>
<td>Nonhostile</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Lebanon Peacekeeping, August 25, 1982 – February 26, 1984 *</td>
<td>Hostile</td>
<td>3</td>
<td>19</td>
<td>0</td>
<td>234</td>
<td>256</td>
</tr>
<tr>
<td></td>
<td>Nonhostile</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8</td>
<td>21</td>
<td>0</td>
<td>236</td>
<td>265</td>
</tr>
<tr>
<td>URGENT FURY, Grenada, 1983</td>
<td>Hostile</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Nonhostile</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>JUST CAUSE, Panama, 1989</td>
<td>Hostile</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>23</td>
</tr>
</tbody>
</table>

**Persian Gulf War, 1990 – 1991**

<table>
<thead>
<tr>
<th>Military Operation/Incident</th>
<th>Casualty Type</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESERT SHIELD</td>
<td>Nonhostile</td>
<td>21</td>
<td>36</td>
<td>9</td>
<td>18</td>
<td>184</td>
</tr>
<tr>
<td>DESERT STORM</td>
<td>Hostile</td>
<td>98</td>
<td>6</td>
<td>20</td>
<td>24</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>Nonhostile</td>
<td>105</td>
<td>146</td>
<td>26</td>
<td>299</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>203</td>
<td>20</td>
<td>26</td>
<td>50</td>
<td>299</td>
</tr>
</tbody>
</table>

**DESERT SHIELD/STORM Total**

<table>
<thead>
<tr>
<th>Casualty Type</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>224</td>
<td>56</td>
<td>35</td>
<td>68</td>
<td>383</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Casualty Type</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostile</td>
<td>27</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Nonhostile</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>43</td>
</tr>
</tbody>
</table>

**UPHOLD DEMOCRACY, Haiti, 1994 – 1996**

<table>
<thead>
<tr>
<th>Casualty Type</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonhostile</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

* Place of Casualty, Lebanon
Acknowledgments

Illustrations courtesy Company of Military Historians:

By H. Charles McBarron:
Pages 3, 12, 17, 19, 20, 21, 23, 30, 37, 38, 39, 40, 47, 62, 64, 65, 71, 80, 111, 163, 176, 216

By Frederick T. Chapman: Page 40

By George Woodbridge: Page 80

Artwork courtesy of Don Troiani:

“Union Standard Bearer, 3rd U.S. Infantry,” page 79
“7th Regiment, New York State Militia,” page 81
“Federal Infantryman,” page 81
“1st South Carolina Infantry, U.S.,” page 81
“3rd New Jersey Volunteer Cavalry,” page 83
“Cemetery Hill, Battle of Gettysburg, July 1,” page 88
“The High Water Mark, Battle of Gettysburg, July 3,” page 93

Photograph courtesy of Dr. William Schultz, page 65, upper right

Photograph courtesy Anne K. Brown Collection, page 65, middle left


Maps created by Ms. Stefanie Giangrande.
# Index

Readers should begin searches with the extensive subheadings in the Table of Contents. This rudimentary index concentrates on references in the text which may not be obvious in subheadings or which clarify them.

## A

- Abrams, Creighton W., ........................................... 217
- Alamo, .............................................................. 54
- Antitank rocket, .................................................. 210
- Apache, see helicopters
- Armed Forces Reserve Act of 1952, .......................... 193
- Armor, personal, ................................................... 223
- Army, Continental, ............................................... 18, 23
- Army, United States,
  - Chiefs of Staff, .................................................. 264
  - Cold War era, .................................................... 185
  - Commanding Generals, ....................................... 263
  - education in, .................................................... 177
  - family and social life, ....................................... 98, 177
  - Korean War, ..................................................... 171
  - Mexican War, .................................................... 34
  - mobilization, Spanish-American War, ....................... 105
  - operations since 1980, ....................................... 275
  - organization of, 1950, ....................................... 178
  - pay in 1830s, .................................................... 52
  - personnel serving, by war or operation, ................... 273.
  - post-Berlin Crisis, ............................................ 194
  - post-Civil War and Spanish-American War, ................. 94
  - post-Cold War, .................................................. 249
  - post-Vietnam, ................................................... 214
  - post-World War II, ............................................ 171
  - pre-World War I, 1900–1917, ................................. 109.
  - reorganization after 1812, ................................... 50
  - Reserve components, Vietnam ................................ 194
  - Secretaries of the Army, ..................................... 266
  - Secretaries of War, ............................................ 265–67
  - Spanish-American War, ....................................... 94
  - Vietnam, .......................................................... 202
  - War of 1812, ..................................................... 33
  - westward expansion and exploration, ......................... 44–46
  - women in, ........................................................ 254
  - World War I, ..................................................... 109
  - World War II, ..................................................... 148
American Military Heritage

Army, United States, life in,  
1783–1800, ................................................................. 19  
1870–1900, ................................................................. 98  
   enlisted life in 1950s, ....................................................... 177  
Artillery, World War I, ..................................................... 126  
Aviation, early, .............................................................. 111  
   World War I, .............................................................. 133  
Awards, ........................................................................... see decorations

B

Baker, Vernon J., ............................................................... 170  
Bayonet, ........................................................................... 24  
Berlin Crisis, 1961–1962 ................................................... 193  
Bosnia, ............................................................................. 244  
Braddock, Sir Edward, ................................................. 10  
Bradley Fighting Vehicle, .............................................. 221  
Brown, William, .............................................................. 30  
Buffalo soldiers, .............................................................. 96  
Bunker Hill, Battle of, ..................................................... 16  
Burt, Elizabeth, .............................................................. 98

C

Carriages, gun, ............................................................... 4  
Casualties, active duty military, ...................................... 275  
Chippewa, Battle of, ....................................................... 41  
Churchill, Elijah, ............................................................. 30  
Civil War, United States, .............................................. 70  
Coast and harbor defenses, ........................................... 52  
Colonization, American, ............................................... 1  
Crisafulli, James, ............................................................. 240

D

Davis, Jefferson, ............................................................. 74–75  
Davis, Sammy L., .......................................................... 207  
Deaths, active duty military, ........................................... 275  
Decorations,  
   Air Medal, ................................................................. 157  
   Army Commendation Medal, ..................................... 157  
   Bronze Star, .............................................................. 156  
   Civil War era, ............................................................ 85  
   Distinguished Flying Cross, ....................................... 123

278
American Military Heritage

Distinguished Service Medal, ......................... 122, 159
Good Conduct Medal, ............................. 158
Gulf War, ........................................... 241
Kuwait Liberation Medal (Kuwait), .......... 248
Kuwait Liberation Medal (Saudi Arabia), .. 247
Legion of Merit, .................................. 156
Medal of Honor, .................................. 159, 259
Purple Heart, ...................................... 123
Silver Star, .......................................... 122
Soldier’s Medal, .................................. 123
Southwest Asia Service Medal, .............. 247
Vietnam Campaign Medal, ....................... 213
Vietnam Service Medal, ......................... 213
Vietnamese Cross of Gallantry, ............... 213
World War I, ....................................... 121

DePuy, William, ................................. 219–20
DESERT SHIELD, Operation, ................. 229–41
DESERT STORM, Operation, .................. 229–41
Donlan, Roger H.C., .............................. 206

E

Eisenhower, Dwight D., ............................ 167

F

Flag, United States, ................................ 271
Flintlock, ........................................... 5
Food Packet, LRP, ............................... 212
Force XXI, ......................................... 255

G

Gas, World War I, ................................. 130
German soldiers, WWII, ......................... 153
Gettysburg, Battle of, ............................ 86
Grant, Ulysses S., ................................. 77
Gray Board, ...................................... 191
Grenada, .......................................... 225
Grenade launcher, ................................. 210
Grenades, ......................................... 5
## American Military Heritage

### H

<table>
<thead>
<tr>
<th>Helicopters,</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-64A Apache,</td>
<td>222</td>
</tr>
<tr>
<td>CH-47 Chinook,</td>
<td>197</td>
</tr>
<tr>
<td>UH-1 Iroquois (“Huey”),</td>
<td>209</td>
</tr>
<tr>
<td>UH-60A Black Hawk,</td>
<td>222</td>
</tr>
</tbody>
</table>

| Helmets, World War I, | 132 |
| Heritage, European, | 1 |
| Honor, | 35, 37, 41, 54, 66, 75, 76–77, 140–41 |
| Howitzer, | 24 |
| 105mm, | 161 |

| Hydrogen bomb, | 189 |

### I

| Ice Storm ’98, | 253 |

### L

| Lee, Robert E., | 76 |
| Lemnitzer, Lyman L., | 199 |
| Lemon, Peter C., | 207 |
| Lincoln, Abraham, | 75 |

| Lundy’s Lane, Battle of, | 41 |

### M

| MacArthur, Douglas C., | 138 |
| Machine guns, | 124 |
| Hotchkiss, | 126 |
| M-42, | 161 |
| M-60, | 210 |

| Marm, Walter J., Jr., | 206 |
| Marshall, George C., | 164 |
| McMaster, H.R., | 233 |
| 73 Easting, | 233 |
| Militia, colonial, | 8 |

| Mines, | |
| antipersonnel, | 211 |
| anti-tank, | 162 |
| German Tellermine, | 162 |
| pressure, | 162 |
American Military Heritage

Missiles,
  anti-aircraft, Redeye, ................................. 196
  guided, .............................................. 190
Mortar, .................................................. 24
Murphy, Audie, ........................................ 169
Music, military, ....................................... 267–70
Musket, .................................................... 4
National Defense Act of 1916, ......................... 119, 120
National Military Strategy, ............................ 185
New Orleans, Battle of, ............................... 42
Night vision sight, ..................................... 211
Non-commissioned Officers, 
  1830s, .................................................... 52
  Civil War, .............................................. 78
  World War I, ......................................... 146
Normandy, ............................................... 149, 231
North Atlantic Treaty Organization (NATO), ......... 188

O

Operations,
  Bosnia, ................................................... 244–45
  DESERT SHIELD, ....................................... 229–41
  DESERT STORM, ....................................... 229–41
  JUST CAUSE, ........................................... 227–29
  Philippines, ............................................ 108
  Somalia, ............................................... 241–43
  UPHOLD DEMOCRACY ................................. 243–44
  URGENT FURY, ......................................... 225–27

Organization,
  air cavalry, ............................................. 212
  field artillery, mobile, ................................. 5
  regimental system, .................................... 175
  riverine force, ........................................ 212
  World War I, .......................................... 134

P

Palo Alto, Battle of, ....................................... 59
Panama, .................................................... 227
  canal built in, ........................................ 113
Patriot Air Defense System, ......................... 223
Patton, George S., Jr., ................................. 165
Personal courage, .................................................. see courage

Pistols,
 .45 caliber, .................................................. 126
Colt Army revolver, .......................................... 69
Colt Navy revolver, .......................................... 69
Wesson and Leavitt revolver, .............................. 69

Presley, Elvis Aron, ........................................ 201

R
Radio AN/PRC 25, .............................................. 211
Recruiting reform, 1822, .................................... 51
Resaca de la Palma, Battle of, ............................. 59
Reserve components, ........................................ see Army, United States
Respect, .... 41, 49, 78–79, 91–92, 142–44, 165, 175, 201, 218, 239
Revolution, American, ...................................... 15
Ridgway, Matthew B., ...................................... 180

Rifles,
Browning Automatic, ........................................ 159
.30 caliber (1917), ............................................. 124
.30 caliber M-1, ................................................ 159
Chauchat automatic, ......................................... 125
M-16, ............................................................. 210
Revolution, ..................................................... 24
Russian three-line, .......................................... 125

Rocket launcher, U.S., ........................................ 160

Rogers, Robert, ............................................... 13
Rogers’ Rangers, .............................................. 13
Root, Elihu, .................................................... 106

S
Scott, Winfield, ............................................... 35, 66
Secretaries of the Army, .................................... 266
Secretaries of War, .......................................... 265–67
Selective Service Act, ....................................... 119
Selfless service, .... 27–30, 58, 74–76, 98–99, 106–07, 108, 141, 155,
170, 237–39, 239–45, 252, 253–55

Shot,
hollow, ......................................................... 5
solid, ............................................................ 5

Shrapnel, .......................................................... 25, 132

Siege warfare, .................................................. 6

Somalia, .......................................................... 241

Steuben, Frederick Wilhelm von, ......................... 26
### T

Tactics,
- 1500–1600, ......................................................... 4
- 1600–1700, ......................................................... 5
- 18th Century, ....................................................... 25
- linear, ................................................................. 6
- Post-Civil War, ................................................... 102, 104
- Revolutionary War, ........................................... 24
- World War I, ..................................................... 124, 136

Tanks,
- German, ............................................................. 162
- M-1 Abrams (also M1A1 and M1A2), .................. 220
- M-4 Sherman, ..................................................... 160
- M-60 Main Battle, ................................................ 196
- warfare, World War I, ......................................... 129
- Taylor, Maxwell D., ............................................. 179
- Taylor, Zachary, ................................................ 66
- Thayer, Sylvanus, ............................................... 48

### U

Uniforms,
- 1810–1840, ........................................................ 37
- battle dress, ...................................................... 223
- changes (1963), ................................................ 198
- Civil War, ......................................................... 80
- Cold War, .......................................................... 197
- Gulf War, .......................................................... 246
- Korean War, ...................................................... 174
- Mexican War, ..................................................... 64
- Post-Civil War, .................................................. 100
- Revolutionary War, ......................................... 22
- Vietnam War, .................................................... 213
- World War I, ..................................................... 135
- World War II, .................................................... 163
- United States Military Academy, ....................... 48
- Universal Military Training and Service Act, ........ 192

### V

Values (see also loyalty, duty, respect, selfless service, honor, integrity, courage), ........................................ 252

Vehicles,
- armored personnel carrier, ................................ 209
- High Mobility Multipurpose Wheeled Vehicle (HMMWV), 221
- Vera Cruz, Battle of, .............................................. 63
Wars,
listed, ......................................................... 273
1812, ............................................................. 33
French and Indian, ............................................. 2
Gulf War, ......................................................... 229
Indian, ............................................................. 96
Korean Conflict, .................................................. 171
Mexican War, ..................................................... 34, 55
Seminole Wars, ..................................................... 46
Spanish-American War, ........................................... 105
Vietnam, .......................................................... 202
World War I, ....................................................... 116
World War II, ...................................................... 148
Washington, George, .............................................. 27
Weapons (see also individual weapons by type)
1500–1600, .......................................................... 4
1600–1700, .......................................................... 5
atomic, .............................................................. 189
Civil War, .......................................................... 82
German, ............................................................ 161
Japanese, .......................................................... 162
Mexican War, ....................................................... 67
post-Civil War, ..................................................... 102
post-Korea, ........................................................ 195
post-Vietnam, ....................................................... 220
Revolutionary War, ................................................. 24
Vietnam Era, ....................................................... 209
World War I, ....................................................... 124
World War II, ...................................................... 159
West Point ...................................................... (see United States Military Academy)
Wheelock, .......................................................... 4
Woodfill, Samuel, .................................................. 146

Y
York, Alvin C., ..................................................... 146