

NAVAL RESERVE OFFICERS TRAINING CORPS

EVOLUTION OF WARFARE



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**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

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LETTER OF PROMULGATION

Evolution of Warfare is a survey of the operational art of warfare from the beginning of recorded history to the present. This curriculum guide provides an introduction, suggested lessons, and reference material for a single semester course in Evolution of Warfare.

The guide is a generic solution to a multi-faceted problem and should be viewed and used as a tool in the preparation of more detailed and personalized lesson plans. It is in no way intended to limit the individual instructor's creativity or academic freedom. It is expected that Marine Officer Instructors will tailor their respective course syllabus and individual lesson plans to their own strengths as instructors, the unique needs of their students, and available classroom resources. However, instruction should encompass the maximum breadth of the course feasible while ensuring that each of the professional core competencies is mastered.

Instructors should promote critical thinking skills throughout this course of instruction and provide opportunities for students to demonstrate progression in both the cognitive and affective domains. Although this course focuses primarily on the cognitive and offers many opportunities for analysis, synthesis and evaluation, this curriculum can also be instructive in the affective domain as students practice valuing, organizing and internalizing aspects of the military's culture and methods. Instructors are encouraged to use their own past experiences to illustrate and enrich their classroom instruction.

This course is approved for implementation upon receipt. The NROTC curriculum for Evolution of Warfare, CNET P1550/7 (3/94), is hereby cancelled and superseded by this curriculum guide.


C. J. STEIN
NROTC Program Manager

22 May 2006
Date

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DEFINITION OF MEASUREMENT TERMS

- I. **Know** - Recall facts, bring to mind and recognize appropriate material.

Examples: Know the objectives of damage control aboard ship.

Know the safety procedures used to provide the fullest measure of safe small boat operations.

- II. **Comprehend** - Interpret principles and concepts and relate them to new situations.

Examples: Comprehend the mission of the U.S. Navy and the U.S. Marine Corps.

Comprehend the concept of internal forces (e.g., stress, strain, shear, etc.).

- III. **Apply** - Utilize knowledge and comprehension of specific facts in new relationships with other facts, theories, and principles.

Examples: Apply correct plotting procedures when navigating in piloting waters.

Apply correct procedures to determine times of sunrise and sunset.

- IV. **Demonstrate** - Show evidence of ability in performing a task.

Examples: Demonstrate third-class swimming skills and fundamental water survival skills.

Demonstrate the correct procedures used in radio-telephone communications.

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PROFESSIONAL CORE COMPETENCY OBJECTIVES

The professional competency objectives for this course are from the Professional Core Competency Manual for Officer Accession Programs promulgated in April 2001.

Comprehend the evolution of the means and methods of warfare, particularly land warfare, including the following typical areas:

1. Know the preeminent leaders and military organizations of history and the reasons for their success.
2. Know the interrelationship between technological progress and military change in rendering obsolete previous successful strategies, policies, doctrines, and tactics.
3. Comprehend the evolution of the influence of economic, psychological, moral, political, and technological factors.

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COURSE OVERVIEW

- I. OVERVIEW. The purpose of the Evolution of Warfare course is to provide the Marine Option midshipmen with a very basic understanding of the art and concepts of warfare from the beginning of recorded history to the present day. Emphasis should be placed upon educational value, vice training. The intent of the curriculum is to familiarize the students (future Marine officers) with an understanding of the threads of continuity and the interrelations of political, strategic, operational, tactical, and technical levels of war from the past, while bringing into focus the application of these same principles and concepts to the battlefields of today and the future.

- II. EDUCATIONAL OBJECTIVES. Throughout this course, military history is used as a means by which the future officer may challenge and question the decisions of the past. While the violence and uncertainty of the battlefield cannot be recreated, an appreciation for the complexities and dynamics posed by the art and science of warfare can be realized. Therefore, we must take the opportunities to learn lessons presented by the past, while acquiring knowledge of the present and future, in order to better anticipate future conflicts.

- III. METHODOLOGY
 - A. The curriculum guide is divided into 12 chronological topic areas, with 33 lesson outlines (each designed for approximately one hour of classroom time). This material provides a "skeletal" framework of content, references, readings, broad learning objectives, and key points or highlights geared toward a single semester (one term) course. This allows the instructor to fill in the "muscle" of the course outline and provide whatever perspectives deemed necessary to assist the student in gaining insights into the relationship between politics and war and/or between societal values and their respective military forces.

 - B. The primary element in a successful education is the student. Every effort should be made to encourage

active participation. It is the job of the Marine Officer Instructor to ensure each student meets the professional core competency objectives of the course. Any method employed to make the material more alive, to encourage problem solving, and to make this survey of military history more relevant and useful is highly encouraged.

- C. Every instructor will approach the task of teaching the professional competency objectives in a manner best suited to his or her strengths, weaknesses, and experiences. For those who are beginning in earnest their professional historical studies, "Military History: Is it Still Practicable?" by Jay Luvaas, "Fundamental Concepts: History of the Military Art" (USMA), and "How to Get the Most out of a Seminar Format," by Dr. Bradley J. Meyer, are provided as part of this overview. It is hoped that the ideas and framework provided in these articles will be of help to both the avid military historian and those with less knowledgeable backgrounds.

- IV. COMMON THREADS/THEMES. The study of warfare and weapons can be presented in a number of ways. MCDP 1, Warfighting, and MCDP 1-2, Campaigning, review and consider the levels of war from the political/strategic through tactical levels of warfare and provide one framework. This framework is by no means the only method for studying warfare at the introductory level, but it is a good starting point. The examination of leadership and its effect on combat effectiveness could present some interesting challenges. The framework used to add focus to these diverse areas of concern can be developed using the course's professional competency objectives and more specific learning objectives designed by the instructor for the lessons. This design assumes instructor preparation and knowledge of the subject matter and, in most cases, demands that the student prepare and actively participate.

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As noted previously, sample "slides" are available at <https://www.cnet.navy.mil/cnet/nrotc/cig.html> and from the Course Coordinator. Also available from the Course Coordinator are additional lessons for each of the twelve topic areas. These lessons were deleted from the previous edition of this guide in an effort to reduce the size of the document, which was originally designed to support a two-term course. However, some instructors may still find them of value as a reference or to add depth and focus to an area of limited coverage. They may be especially useful for the instructor planning a lecture format.

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TOPIC AREA OUTLINES

Throughout this curriculum guide, 12 chronological topic areas are used to provide continuity between the volumes. The following outlines provide a general framework that instructors can use to develop their own personalized curriculum.

1. The Nature of War

This topic will set the tone for the remainder of the course. The student should be introduced to the concepts contained in MCDP 1, Warfighting, particularly those found in Chapters 1 and 2. This will give the student a sound theoretical foundation and a point of reference for the remainder of the course. Additionally, the handouts "Military History: Is it Still Practicable?" and "Fundamental Concepts: History of the Military Art" should be used to examine the usefulness of history and to provide a sound foundation of military operational language.

2. Classical Warfare: Macedonians and Romans

The era of the ancient Greeks and Romans presents the first well-documented period of military history in the western world. The impacts of political and economic institutions on warfare are introduced. The development of the phalanx (Greek), articulated phalanx (Macedonian) and legion (Roman) as weapon systems, as well as tactical organizations, can be studied. Great Captains, such as Alexander, Hannibal, and Julius Caesar, are also examined.

3. Byzantine and Feudal Warfare (Mongol Warfare)

The collapse of the Roman Empire in the West presents a whole new set of political, economic and social realities -- the result of which is the establishment of the feudal system relying on heavy cavalry for military effectiveness. The Battle of Hastings is studied as an example of the enduring value of combined arms despite prevailing conventional wisdom. The Byzantines, on the other hand, continue the Roman tradition of scientific warfare, albeit adapted to new conditions. Their system of staffing and education is in many ways a precursor of the German General Staff system. The Byzantine cataphract was the mounted successor of the Roman legionary. The campaigns of Belisarius and Narses are

of particular interest for their applications of speed, deception and combined arms.

Of all the military systems of the ancient world, the Mongols have the most to offer modern students. The Khwarezmi Campaign of Genghis Khan (1219-1220) and Subotai's invasion of Europe (1237-1241) are used to vividly illustrate the operational concepts contained in MCDP 1-2. As these campaigns demonstrate, the Mongols were the supreme practitioners of maneuver warfare prior to the age of gunpowder.

4. The Age of Transition (15th and 17th Centuries)

The breakdown of the old feudal order and the emergence of the modern world had far reaching effects on warfare. Technology began to have a significant and rapidly evolving impact on weapons, tactics and organizations. The solutions to the problems posed by this evolving technology used by Gonzalvo de Cordoba, Maurice of Nassau, and Gustavus Adolphus are worth serious attention. The pace of change and the suddenly increased lethality of weapons during this period are precursors to modern times. The emergence of the strong, centralized, dynastic state results in the bureaucratization of warfare. The expense and lethality of late 17th to early 18th century battles lead to a highly stylized, even ritualistic, approach to warfare with emphasis on maneuver, fortification and siege operations. Mercantilist economic philosophy is a critical component of this period. Commanders, such as Marlborough and Frederick the Great, who attempted to transcend the bonds of their time, are examined. The French and Indian War of 1754-1763 (Seven Years' War in Europe) is in many ways the First World War, and its impact is studied. The reintroduction of light troops and the theories of Marshal de Saxe are also important elements of this topic.

5. The Revolutionary Period

While not all that remarkable from a purely military standpoint, the contrasting approaches of Washington and Greene are an interesting case study. From the political/social standpoint, the American Revolution paves the way for the emergence of nationalism as the most important force in world affairs.

Frenchmen are no longer subjects of a king, but citizens of a modern nation-state with the right and the responsibility to bear arms in defense of the state. This revolutionary concept makes available hitherto unimagined manpower for military purposes. The military currents of the latter portion of the age of

maneuver (e.g., light troops, skirmisher tactics, divisional organization and the artillery reforms of Gribeauval) also come together to change the face of the battlefield. One of the greatest of the military captains, Napoleon, capitalized on all that preceded him during the revolutionary period and forged one of the finest, most cohesive, and most responsive military instruments in history. The Grand Army, under his leadership, practiced maneuver warfare in a manner clearly reminiscent of the Mongols. The Italian Campaigns (1796-97 and 1800), Ulm-Austerlitz and Jean-Auerstadt all provide abundant material to illustrate concepts found in MCDP 1-1. Wellington's counter to Napoleonic methods and Napoleonic interpreters, Jomini and Clausewitz, are introduced to round out this topic.

6. American Civil War

Not only is the Civil War considered the first modern war in history, it affects American military thought and practice up to this very day. The impact of technology on tactics is never more clearly illustrated than when Napoleonic tactics run headlong into rifled weapons in the early years of the war. While the tendency to attack in massed formations was never entirely overcome, the last year of the war saw considerable modifications in tactical practice. On the operational and strategic levels, Grant, as the first great modern commander, and Lee, as the great Napoleonic general, are juxtaposed very successfully.

7. Pax Britannica and the Prussian Influence

As England's colonization program expanded and industrialization spread throughout Europe, North America, and Japan, the military potential of the nation-state increased exponentially. While the Prussian-German General Staff had its roots in the Napoleonic Age, it came into its own during the late 19th century, providing a means to harness this greatly expended military power. Its evolution and the spread of the general staff idea was one of the key military developments leading to the 20th century.

8. World War I

The fully mobilized military power of technologically advanced, industrialized nation-states is seen on the battlefield for the first time. Stalemate ensues on both Eastern and Western Fronts. The various approaches to breaking this stalemate are examined in depth. The Allies largely relied on material-technological solutions (i.e., more and heavier artillery fire, tanks, etc.), while the Germans took a doctrinal-tactical approach. Gallipoli

is looked at as one of the Allies' few strategic initiatives away from the Western Front. The reasons for its failure in execution should be looked at closely. Be careful not to duplicate Amphibious Warfare instruction.

9. Interwar Years

The 1920's and 1930's were a period of reaction against the horrors of total war. The various attempts to limit war are examined. Against this political/economic/social background, the theories of strategic airpower, naval airpower, mechanization of warfare, and amphibious warfare are studied. The developments in strategic airpower and mechanization were aimed at returning decision at a reasonable cost to the industrialized battlefield. Naval airpower and the development of amphibious warfare, particularly in the United States, were studied to ensure the viability of sea power in the modern world. The conduct of World War II is a direct outgrowth of the developments in these areas.

10. World War II

This topic is a broad and complex period to be totally analyzed. An examination of the Blitzkrieg as unleashed by the Germans against the Allies in 1940 (with its lessons in leadership, command and control, and combined arms) is conducted. Secondly, the Allied strategic bombing campaign against Germany is studied, with objective analysis of its strengths and weaknesses. Finally, a Pacific war overview with its interplay between carrier task force and amphibious operations will drive home the desired concepts.

11. Post World War II

Strategic nuclear strategy, limited war, counterinsurgency/revolutionary warfare, terrorism, continued technological progress, and the enduring value of maritime power are all subjects that are included in this topic. Korea, Vietnam, the Arab-Israeli Wars, the wars of decolonization, and the Gulf War provide fertile ground for appropriate case studies.

12. War Today

Drawing upon a semester/year's worth of experience, students should be prepared to draw logical and supportable conclusions regarding the shape of future warfare.

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INSTRUCTIONAL AIDS

1. Although this material may be presented in a myriad of conventional means (chalkboard/whiteboard, overhead projector, easel, etc.) and you should select the format with which you are most comfortable, most classrooms are now equipped to display lessons electronically. Students, too, have grown more sophisticated and most will be expecting lectures to be augmented by some type of presentation software (Microsoft PowerPoint, et al). These digital presentations will likely be included as part of your turnover at your NROTC unit; however, sample "slides" are available online at: <https://www.cnet.navy.mil/cnet/nrotc/cig.html>, as well as from the current Course Coordinator.
2. The World Wide Web offers easy access to a tremendous amount of information. With powerful search engines (Google, et al), you are rarely more than a few mouse clicks away from additional information, video clips, graphics, maps, etc. There are far too many websites to list here, and the fluid nature of online information would limit the value of such a list. History-specific sites, such as The History Channel website (www.historychannel.com), often offer useful material and/or suggestions on where to point your browser to find an answer.
3. The history department and library at your local college/university is another ready source of instructional aids. It is highly recommended that you seek out these local contacts and explore what they may have to offer to contribute to your instruction.
4. A wide variety of Department of Defense (DOD) materials is available through the Defense Automated Visual Information System/Defense Instructional Technology Information System (DAVIS/DITIS) website at: <http://dodimagery.afis.osd.mil>. This site contains listings and descriptions of thousands of audiovisual productions/videotapes and interactive multimedia instructional products used by DOD. The NETPDTC Norfolk Regional Electronic Media Center may also be able to provide desired multimedia resources by contacting Mr. Ron Burk at ron.burk@navy.mil or (850) 452-1001, ext. 2020.

5. NOTES OF CAUTION:

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- b. Instructors should be aware that commercial videos provided by NSTC or purchased by the unit are for use in an academic setting only. They are not to be reproduced, sold, copied, or shown in their entirety. Academic privileges allow instructors to utilize portions of videos, books, articles available to the public, and other media in academia to teach and educate. Using or distributing these videos in any fashion other than outlined here may constitute copyright infringements. Many short video clips from commercial movies supply the instructor with contemporary, intriguing materials that provide examples of the issues they are trying to teach, but these segments should be used appropriately. Seek official legal advice for any use not mentioned in this guide. Additional guidance may be found in SECNAVINST 5870.4 (Series).
- c. All personnel must exercise caution in using material downloaded from the Internet. Access to works on the Internet does not automatically mean that these can be reproduced and reused without permission or royalty payment. Before using any materials downloaded from the Internet for use in training, you must determine what, if any, copyright restrictions might apply. A good rule of thumb would be to presume that any information on the Internet is copyrighted and that you should not use it without obtaining permission from the copyright

holder. SECNAVINST 5870.4 (Series) provides specific guidelines that should be addressed in the copyright permission request letter.

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4. **Optional references** are listed throughout the lesson guides. These references are not available from NSTC but may be found in your university's library system or through the interlibrary loan system. (NOTE: Universities will usually place books on hold for instructors during the academic semester.) These optional materials include:

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Military History: Is It Still Practicable?

by
Jay Luvaas

Originally published in the Army War College's Parameters, March 1982. Public Domain.

THERE was a day, before the advent of the A-bomb and its more destructive offspring, before smart bombs and nerve gas, before computer technology and war games, when professional soldiers regarded reading history as a useful pastime. Many who have scaled the peaks of the military profession have testified to the utility of studying military history.

Most of these, however, seem to be commanding voices out of the past. MacArthur, steeped in family tradition and familiar with many of the 4000 volumes inherited from his father, was never at a loss for a historical example to underscore his point of view; Krueger, as a young officer, translated books and articles from the German military literature; Eisenhower spent countless hours listening to the erudite Fox Conner on what could be learned from military history; Marshall and his contemporaries at the Army Staff College at Leavenworth reconstructed Civil War campaigns from the after-action reports; Patton took the time in 1943 to read a book on the Norman conquest of Sicily nearly nine centuries earlier and to ponder "the many points in common with our operations";[1] and Eichelberger summoned from memory a passage he had read ten years before in Grant's *Memoirs* (which ought to be required reading for all officers) and thereby stiffened his resolve to press home the attack at Buna. These Army commanders were all remarkably well versed in history.

So were many of their civilian superiors. President Franklin D. Roosevelt was an avid reader of naval history, and Harry Truman frequently acknowledged the pertinent lessons that he had gleaned from a lifetime of exposure to history:

Reading history, to me, was far more than a romantic adventure. It was solid instruction and wise teaching which I somehow felt that I . . . needed . . . It seemed to me that if I could understand the true facts about the . . . development of the United States Government and could know the details of the lives of . . . its political leaders, I would be getting for myself a valuable . . . education . . . I know of no surer way to get a solid foundation in political science and public administration than to study the histories of past administrations of the world's most successful system of government.[2]

Because the military is a "practical" profession geared much of the time to problem-solving, soldiers--like engineers and scientists--tend to be pragmatic about what is meant by the word "practicable." History is "practicable" if it yields lessons, especially exemplary lessons in tactics and strategy that can be directly applied to some current situation. History is "useful" in illustrating points of doctrine, in instilling in the young officer the proper military values or an appreciation for our military heritage. The "practical" man often scans the past for some magical formula that may ensure success in war, like Field Marshal von Schlieffen's theory of envelopment, or Captain B. H. Liddell Hart's strategy of indirect approach.

Such assumptions inevitably determine the way military history is taught. Because an important duty of the officer in peacetime is to teach, and because in the Army *teaching* usually involves *explaining*, it is often assumed that history, to be taught, must be explained. The emphasis therefore is on organizing and presenting information in a lucid, often lavishly illustrated lecture, in which tidy answers outrank nagging questions in the minds of everyone involved. The inference on the part of most students, if not the instructor, is that a person who remembers the lecture will somehow have learned history. It's a mistaken assumption we all make.

It is also true that no other field of history is under as much pressure as military history to provide "practical" answers to some current problem. If military history cannot provide such answers, why study it? The specialist in Renaissance diplomacy is rarely solicited for his views on foreign policy but, rather, is left alone to concentrate his thoughts on the cold war with the Turks in the 15th century. Nor is the scholar who has spent a lifetime studying the ramifications of the French Revolution apt to be consulted when news breaks of still another palace coup in some Latin American banana republic. But let a historian or journalist prowl around in some remote corner in the field of military history and often he will be expected, even tempted, to function as a current-affairs military analyst.

Perhaps we think this way because, as a society, we are largely ignorant about both the facts and the nature of history. In high school, European history no longer is required, having been replaced by something called "Western Civilization." We know astonishingly little about the history of other societies, and most of us, unfortunately, care even less. Students voting with their feet in colleges and universities across the nation have caused enrollments in history courses to plummet as they turn to "more practical" subjects such as economics, psychology, biology, engineering, and business administration. In the Army's schools, history has become a casualty of the Vietnam War, clearly the emphasis now is upon training. Even at the Military Academy, the required course in the military art was severely curtailed several years ago and only recently has been restored to its logical place in the curriculum. For that matter, how many officers who have invested off-duty hours to work toward an advanced degree have taken it in history? In the officer corps of today, the subject is rarely considered "practicable."

More to the point, is the Army as an institution as historical-minded as it was in the past? For without even a rudimentary understanding of history and its processes, there is no way that the past can be made to offer object lessons for the future. Professor Pieter Geyl, a distinguished Dutch historian, reminds us that it is useless to talk about "the lessons of history" when the historian "is after all only a man sitting at his desk."^[3] The lessons that we would learn are his--the fruits of *his* labors, the creation of *his* imagination, perhaps the idea that *he* is to sell to the reader. For, as a German general asserted a hundred years ago, "it is well known that military history, when superficially studied, will furnish arguments in support of any theory or opinion."^[4]

Common Fallacies

Perhaps the most frequent error in the abuse of history is to take historical examples out of context. Once removed from its historical context, which is always unique, a battle or a campaign ceases to offer meaningful lessons from history. According to Napoleon, "old

Frederick laughed in his sleeve at the parades of Potsdam when he perceived young officers, French, English, and Austrian, so infatuated with the manoeuvre of the oblique order, which (in itself) was fit for nothing but to gain a few adjutant-majors a reputation." Napoleon appreciated that the secret of Frederick's successes was not the oblique order, but Frederick. "Genius acts through inspiration," Napoleon concluded. "What is good in one case is bad in another." [5]

One of Frederick's own soldiers demonstrated that in another environment even Frederick's maneuver's might fail. When Baron von Steuben, who had served in the Prussian Army throughout the Seven Years' War, was trying to make soldiers out of Washington's shivering, half-starved volunteers at Valley Forge, he knew better than to waste precious time teaching those complex maneuvers he had mastered under Frederick. Instead he selected only those that were essential to meet the unique conditions that prevailed in America, where volunteers had only a few months instead of years to master the intricacies of Frederick's drill, and where officers had to learn to lead by example instead of relying upon the severity of the Prussian system. Soldiers, Frederick repeatedly had warned, "can be held in check only through fear" and should therefore be made to "fear their officers more than all the dangers to which they are exposed . . . Good will can never induce the common soldier to stand up to such dangers; he will only do so through fear." [6] Whatever may have motivated Washington's amateur soldiers at Valley Forge, most certainly it was not fear.

If there is a lesson here for us, it is simply that solutions to problems are not to be viewed as interchangeable parts. Even the Germans in World War II apparently failed to heed this lesson in drawing conclusions from their own war experiences. In addition to displaying a tendency to generalize from personal or limited experience, they often indiscriminately applied the experiences of one situation to entirely different circumstances. Thus the German Supreme Command "applied the experiences acquired on the Western Front in 1940, unchanged, to the war against Russia" despite the "greater tenacity" of the Russian soldier, his "insensibility against threatening the flanks," the scarcity of roads, and the vast space involved "giving . . . the opponent the possibility of avoiding decision." In the words of one German general, not only did this misapplication of experience influence the operational plan against Russia, it also "contributed to the final disappointment." [7]

It is also a distortion to compress the past into distinctive patterns, for it is as true of history as it is of nature that "each man reads his own peculiar lesson according to his own peculiar mind and mood." [8] History responds generously to the adage "seek and ye shall find." At the turn of the century the Chief of the German General Staff, Count Alfred von Schlieffen, was faced with the need to plan for a war on two fronts. His solution was to point toward a quick victory on one front in order to avoid ultimate defeat on both, and his inspiration for the battle of annihilation essential to a quick victory came, at least in part, from reading the first volume of Hans Delbruck's *Geschichte der Kriegskunst*, which was published in 1900. Delbruck's treatment of the battle of Cannae in 216 B.C. convinced Schlieffen that Hannibal had won his lopsided victory by deliberately weakening his center and attacking with full force from both flanks. The much publicized Schlieffen Plan was an adaptation of this idea. Having thus discovered the "key," Schlieffen turned in his writings to the idea of envelopment to unlock the secrets of Frederick the Great and Napoleon, both of whom, he claimed, had always attempted to envelop the enemy. Similarly, Captain B. H. Liddell Hart was to discover from his research for a

biography of Sherman that the key to Sherman's success lay in a strategy of indirect approach. When he turned to history at large for confirmation, of course he "discovered" that nearly all successful generals, whether they had been aware of it or not, had employed something akin to the strategy of indirect approach. The future British field marshal Sir Archibald Wavell, who always found Liddell Hart's ideas stimulating whether he agreed with them or not, once slyly suggested to the captain: "With your knowledge and brains and command of the pen, you could have written just as convincing a book called the `Strategy of the Direct Approach.'"[9] Wavell appreciated that it was Liddell Hart and not the muse of history who preached this attractive doctrine.

Moreover, nothing is necessarily proven by citing examples from history. There are many works on military theory that provide examples of bad argument from analogy or authority; such faulty use of historical examples, according to Karl von Clausewitz, "not only leaves the reader dissatisfied but even irritates his intelligence." The mere citation of historical examples provides only the *semblance* of proof, although the reader who understands little about the nature of history may set aside his book convinced of the essential truth of some new theory, and the audience exposed to a well-organized and seemingly cogent lecture sprinkled with examples from history is equally vulnerable. "There are occasions," Clausewitz noted,

where nothing will be proven by a dozen examples. . . . If anyone lists a dozen defeats in which the losing side attacked with divided columns, I can list a dozen victories in which that very tactic was employed. Obviously this is no way to reach a conclusion.

And if the author or lecturer has never mastered the events he describes, "such superficial, irresponsible handling of history leads to hundreds of wrong ideas and bogus theorizing." [10]

Perhaps the greatest disservice to history and its lessons comes from its frequent association with a given set of military principles of doctrine, and here the celebrated Swiss theorist Baron de Jomini may have had an unfortunate influence. Drawing upon an exhaustive examination of 30 campaigns of Frederick and Napoleon, Jomini deduced certain fixed maxims and principles which he claimed were both eternal and universal in their application. If such maxims would not produce great generals they would "at least make generals sufficiently skillful to hold the second rank among the great captains" and would thus serve as "the true school for generals." [11]

To future generations of young officers, Jomini said, in effect: "Gentlemen, I have not found a single instance where my principles, correctly applied, did not lead to success. They are based upon my unrivaled knowledge of the campaigns of Napoleon, much of it acquired at first hand, and of the basic works of Thiers, Napier, Lloyd, Tempelhof, Foy, and the Archduke Charles. Thanks to my labors you need not invest years of your own time in scrutinizing these voluminous histories. Did not Napoleon himself confess: `I have studied history a great deal, and often, for want of a guide, have been forced to lose considerable time in useless reading'? You have only to study my principles and apply them faithfully, for `there exists a fundamental principle of all the operations of war' which you neglect at your peril." [12]

Jomini had many prominent disciples, and their books were nearly all written on the assumption that battles and campaigns, ancient as well as modern, have succeeded or failed to the degree that

they adhered to the principles of war as explained by Jomini and could be confirmed by the "constant teachings of history." But where Jomini read history, many of his followers read primarily Jomini and thus were one step removed from history and its processes.

The emergence of doctrine (as late as the American Civil War there were only drill manuals) and the introduction of historical sections on most European general staffs after the Prussian victories in 1866 and 1870 meant that increasingly, in the eyes of professional soldiers at least, military history was linked to doctrine and more specifically, to the principles of war as these principles were rediscovered and refined. Since World War I it has become fashionable to use history to illustrate the official principles of war as they are variously defined.

There are three dangers inherent in this approach. In the first place, pressed into service in this way history can only *illustrate* something already perceived as being true; it cannot prove its validity or lead to new discoveries. This is probably the terrain on which most soldiers first encounter the subject, and they would do well to heed the warning of Clausewitz that if "some historical event is being presented in order to demonstrate a general truth, care must be taken that every aspect bearing on the truth at issue is fully and circumstantially developed--carefully assembled . . . before the reader's eyes." In other words, the theorist ought to be a pretty good historian. Clausewitz goes so far as to suggest that, even though historical examples have the advantage of "being more realistic and of bringing the idea they are illustrating to life," if the purpose of history is really to explain doctrine, "an imaginary case would do as well." [13] Moreover, to use history primarily to illustrate accepted principles is really to put the cart before the horse. If one starts with what is perceived as truth and searches history for confirmation or illustrations, there can be no "lessons learned." How can there be?

A second weakness in linking history to doctrine is the natural tendency to let doctrine sit in judgment of historical events. Sir William Napier, who had a healthy respect for Jomini's theories, used his maxims as a basis for rendering historical judgment on the generalship of French and British leaders in his classic *History of the War in the Peninsula*. Similarly, Major General Sir Patrick MacDougall "discovered" that these maxims could also serve as criteria for judging the generalship of Hannibal, and Matthew F. Steele's *American Campaigns*, which was published in 1909 and endured as a text at the Military Academy and other Army schools even beyond World War II, used the maxims of Jomini, von der Goltz, and other late 19th-century theorists to form the basis for historical commentary on the generalship of individual American commanders.

Most serious of all is the ease and frequency with which faith in doctrine has actually distorted history. This was happening frequently by the end of the 19th century as each army in Europe developed and became committed to its own doctrine. It is the primary reason why the tactical and strategical lessons of the Civil War, which in many respects was the first modern war, went unheeded. [14] Even the elaborate German General Staff histories on the wars of Frederick the Great and the wars of liberation against Napoleon never failed to drive home the soundness of current German doctrine, [15] and the German official histories of the Boer War and the Russo-Japanese War similarly serve to demonstrate above all else the continuing validity of German doctrine. The Boers had applied that doctrine and *therefore* usually won, at least in the earlier battles before the weight of numbers alone could determine the outcome. British doctrine was

faulty, if indeed the British yet had a doctrine, and therefore the British suffered repeated defeats. The Germans had trained the Japanese Army and the Japanese had won in 1904-05, "proving" again the superiority of German doctrine. Had a trained historian instead of an officer serving a tour with the Military History section analyzed the same campaigns, surely he would have asked some searching questions about the differences in the discipline, morale, and leadership of the two armies. Did the Japanese cavalry win, for example, because of superior doctrine based on shock tactics or because it was better disciplined and led? To the officer corps of the day, the results demonstrated the weakness of the Russian Army's mounted infantry concepts in the face of shock tactics, whereas 10 years later, in a war that, at the outset, was strikingly similar in the conditions prevailing on the battlefield, shock tactics did not prevail anywhere for long.

Thus military history distilled by Jomini and his disciples ultimately found itself shaped by a commitment to doctrine, and the instinct of most professional soldiers before World War I was to explain away exceptions to the official rules rather than to use history as a means of testing and refining them.

Facts in History

Although it is not always evident in a lecture or a textbook, we can never be completely certain--and therefore in agreement--about what actually happened in history. Frederick and Napoleon knew this well. Skeptical both of the historian's motives and of the reliability of his facts, they evinced a healthy skepticism about the ability of the human mind ever to recreate an event as it actually had happened.

"The *true truths* are very difficult to ascertain," Napoleon complained. "There are so many truths!"[16]

Historical fact . . . is often a mere word; it cannot be ascertained when events actually occur, in the heat of contrary passions; and if, later on, there is a consensus, this is only because there is no one left to contradict. . . . What is . . . historical truth? . . . An agreed upon fiction. . . . There are facts that remain in eternal litigation.[17]

A Union staff officer whose corps bore the brunt of Pickett's charge at Gettysburg put it a different way:

A full account of *the battle as it was* will never, can never, be made. Who could sketch the charges, the constant fighting of the bloody panorama! It is not possible. The official reports may give results as to losses, with statements of attacks and repulses; they may also note the means by which results were attained . . . but the connection between means and results, the mode, the battle proper, these reports touch lightly. Two prominent reasons . . . account for the general inadequacy of these official reports . . . the literary infirmity of the reporters, and their not seeing themselves and their commands as others would have seen them. And factions, and parties, and politics . . . are already putting in their unreasonable demands. . . . Of this battle greater than Waterloo, a history, just, comprehensive, complete, will never be written. By-and-by, out of the chaos of trash and falsehood that newspapers hold, out of the disjointed mass of reports, out of the traditions and tales that come down from the field, some

eye that never saw the battle will select, and some pen will write what will be named the history. With that the world will be, and if we are alive we must be, content.[18]

This writer intuitively understood that as soon as the historian begins to impose order on something as chaotic as a battle, he distorts. If his narrative is to mean anything at all to the reader he must simplify and organize the "disjointed mass of reports." He must, for lack of space, omit incidents that did not contribute to the final result. He must resolve controversies, not merely report them, and he must recognize that not every general is candid, every report complete, every description accurate. Orders are not always executed; not every order is even relevant to the situation. At Gettysburg, the watches in the two armies were set 20 minutes apart, and after the battle Lee had some of his subordinates rewrite their after-action reports to avoid unnecessary dissension. Well may it be said that "on the actual day of battle naked truths may be picked up for the asking; by the following morning they have already begun to get into their uniforms." [19]

During World War I, German General Max Hoffman confided to his diary: "For the first time in my life I have seen 'History' at close quarters, and I know that its actual process is very different from what is presented to posterity." [20] *Plutarch Lied* is the descriptive title of an impassioned indictment of the French military leadership on the other side of no-man's land:

Men who yesterday seemed destined to oblivion have, today, acquired immortality. Has some new virtue been instilled in them, has some magician touched them with his wand? . . . Civilian historians have studied historical events from a point of view which is exclusively military. Far from trusting to their judgment, they have not considered it respectful to exercise their critical faculties on the facts as guaranteed by a body of specialists. An idolatrous admiration for everything which concerns the army has conferred upon them the favour of having eyes which do not see and memories which are oblivious of their own experiences. . . . An incredible conspiracy exists in France at this very moment. No one dares to write the truth. [21]

Even with the best of intentions and an impartial mind, it is difficult to reconstruct what actually happened in history. This truth was given eloquent expression by a French pilot on a reconnaissance flight to Arras in May 1940 as he reflected on the chaos engulfing a dying society 30,000 feet below.

Ah, the blueprint that historians will draft of all this! The angles they will plot to lend shape to this mess! They will take the word of a cabinet minister, the decision of a general, the discussion of a committee, and out of that parade of ghosts they will build historic conversations in which they will discern farsighted views and weighty responsibilities. They will invent agreements, resistances, attitudinous pleas, cowardices. . . . Historians will forget reality. They will invent thinking men, joined by mysterious fibers to an intelligible universe, possessed of sound far-sighted views and pondering grave decisions according to the purest laws of Cartesian logic. [22]

Even where there can be agreement on facts, there will be disagreements among historians. "To expect from history those final conclusions which may perhaps be obtained in other disciplines

is . . . to misunderstand its nature." Something akin to the scientific method helps to establish facts, but the function of the historian is also to explain, to interpret, and to discriminate, and here "the personal element can no longer be ruled out . . . Truth, though for God it may be One, assumes many shapes to men." [23]

This explains the oft-quoted statement of Henry Adams, the famous American historian: "I have written too much history to believe in it. So if anyone wants to differ from me, I am prepared to agree with him." [24] No one who does not understand something about history could possibly know what Adams meant by this apparently cynical statement. Certainly he did not intend to imply that history, because it lacked unerring objectivity and precision, is of no practicable use to us. Quite the contrary. To recognize the frail structure of history is the first essential step toward *understanding*, which is far more important in putting history to work than blind faith in the validity of isolated facts. History tends to inspire more questions than answers, and the questions one asks of it determine the extent to which the subject may be considered practicable.

Making History Instructive

What, then, can the professional soldier expect to learn from history? If it can offer no abstract lessons to be applied indiscriminately or universally, if it cannot substantiate some cherished principles or official doctrine, if the subject itself is liable to endless bickering and interpretation, what is the point of looking at history at all?

Here Napoleon, whose writings and campaigns formed the basis of study for every principal military theorist for a hundred years after his death, [25] provides a useful answer in his first major campaign. When he assumed command of the French army in Italy in 1796, he took with him a history of a campaign conducted in the same theater by Marshal Maillebois half a century before, and more than one authority has noted the similarity in the two campaigns. "In both cases the object was to separate the allies and beat them in detail; in both cases the same passes through the maritime Alps were utilized, and in both cases the first objectives were the same." [26] In 1806, when he sent his cavalry commander, Murat, to reconnoiter the Bohemian frontier, he recommended that Murat take with him a history of the campaign that the French had waged there in 1741, and three years later Napoleon approved the location of pontoon bridges at Linz because Marshal Saxe had successfully constructed two bridges there in 1740. In 1813 he sent one of his marshals "an account of the battle fought by Gustavus Adolphus in positions similar to those which you occupy." [27]

Obviously history served Napoleon not so much because it provided a model to be slavishly followed, but because it offered ways to capitalize on what others before him had experienced. History, Liddell Hart reminds us,

is universal experience -- infinitely longer, wider, and more varied than any individual's experience. How often do we hear people claim knowledge of the world and of life because they are sixty or seventy years old? . . . There is no excuse for any literate person if he is less than three thousand years old in mind. [28]

By this standard Patton was at least 900 years old after studying the Norman conquest of Sicily.

Napoleon also proposed, in 1807, the establishment of a special school of history at the College of France that would have practical application for officers. Trained historians would teach the military student how to make sound historical judgments, for Napoleon understood that "the correct way to read history is a real science in itself." He regarded the wars of the French Revolution as "fertile in useful lessons," yet apparently there had been no systematic effort to retrieve them. This too "would be an important function of the professors in the special school of history." For similar reasons Napoleon ordered his War Minister in 1811 to have the Depot of War prepare comprehensive records of the sieges and attacks of the fortified towns captured by the French armies in Germany, not for publication but for ready reference. And he did not discourage the printing of a similar volume on the sieges in Spain.[29]

Napoleon thus conceived of history as serving a purpose similar to that of the publications of the Old Historical Division and its ultimate successor, the Center of Military History. He would have applauded the appearance of the *Guide to the Study and Uses of Military History*,[30] for some way had to be found to steer the military student through the "veritable labyrinth" of campaign studies, technical treatises, and memoirs. Like Frederick, who viewed history as "a magazine of military ideas,"[31] Napoleon would have been delighted with the official histories of the campaigns of World War II, Korea, and Vietnam, and with the extensive monographs on specialized subjects such as mobilization, logistics, and medical services.

On St. Helena Napoleon spoke of the need to publish manuscripts in the Imperial Library as a way of establishing a solid foundation for historical studies. Probably one of the first proposals of its kind, it anticipated by half a century the decision of the US War Department to publish in 128 meaty volumes *The Official Records of the Union and Confederate Armies*, a unique compilation of the after-action reports and official correspondence of Union and Confederate leaders. Napoleon also gave the first impetus to official military history when he created a historical section of the General Staff and named Baron Jomini to head it.[32]

His most enduring suggestion, however, was the deathbed advice he offered to his son: "Let him read and meditate upon the wars of the great captains: it is the only way to learn the art of war." [33]

Because Napoleon occasionally mentioned certain "principles of the art of war," he is often thought to have meant that the study of the Great Captains is valuable because it leads to the discovery of enduring principles or illustrates their successful application in the hands of genius. While acknowledging that these Great Captains had "succeeded only by conforming to the principles" and thus had made war "a true science," Napoleon offered more compelling reasons for studying the campaigns of Alexander, Hannibal, Caesar, Gustavus Adolphus, Turenne, and Frederick:

Tactics, the evolutions, the science of the engineer and the artillerist can be learned in treatises much like geometry, but the knowledge of the higher spheres of war is only acquired through the study of the wars and battles of the Great Captains and by experience. It has no precise, fixed rules. Everything depends on the character that nature has given to the general,

on his qualities, on his faults, on the nature of the troops, on the range of weapons, on the season and on a thousand circumstances which are never the same.

The Great Captains must therefore serve as "our great models." Only by imitating them, by understanding the bases for their decisions, and by studying the reasons for their success could modern officers "hope to approach them." [34]

Napoleon agreed with Frederick, who considered history "the school of princes"--princes, that is, who are destined to command armies--and who wrote his own candid memoirs in order that his successors might know "the true situation of affairs . . . the reasons that impelled me to act; what were my means, what the snares of our enemies" so that they might benefit from his own mistakes "in order to shun them." And both would have endorsed Liddell Hart's observation that "history is a catalogue of mistakes. It is our duty to profit by them." [35]

Whereas Jomini concentrated upon *maxims*, Frederick and Napoleon focused their attention on *men*. They stressed the need for a commander to view a military situation from the vantage point of his opponent, and for the military student to become privy to the thinking process of successful commanders. This was the advice Prince Eugene, Marlborough's sidekick and the greatest commander who ever served the Hapsburgs, gave to young Frederick when, as the heir to the Prussian throne, Frederick accompanied the Prussian contingent serving with the Imperial Army along the Rhine in 1734. After he had become the foremost general of his day, Frederick urged his own officers, when studying the campaigns of Prince Eugene, not to be content merely to memorize the details of his exploits but "to examine thoroughly his overall views and particularly *to learn how to think in the same way*." [36]

This is still the best way to make military history practicable. "The purpose of history," Patton wrote shortly before his death,

is to learn how human beings react when exposed to the danger of wounds or death, and how high ranking individuals react when submitted to the onerous responsibility of conducting war or the preparations for war. The acquisition of knowledge concerning the dates or places on which certain events transpired is immaterial . . . [37]

The future Field Marshal Earl Wavell gave similar advice to a class at the British Staff College shortly before World War II:

The real way to get value out of the study of military history is to take particular situations, and as far as possible get inside the skin of the man who made a decision and then see in what way you could have improved upon it. "For heaven's sake," Wavell warned, don't treat the so-called principles of war as holy writ, like the Ten Commandments, to be learned by heart, and as having by their repetition some magic, like the incantations of savage priests. They are merely a set of common sense maxims, like 'cut your coat according to your cloth,' 'a rolling stone gathers no moss,' 'honesty is the best policy,' and so forth.

Merely to memorize the maxim "cut your coat according to your cloth" does not instruct one how to be a tailor, and Wavell reminded his listeners that no two theorists espoused exactly the

same set of principles, which, he contended, "are all simply common sense and . . . instinctive to the properly trained soldier."

To learn that Napoleon in 1796 and 20,000 men beat combined forces of 30,000 by something called 'economy of force' or 'operating on interior lines' is a mere waste of time. If you can understand *how* a young, unknown man inspired a half-starved, ragged, rather Bolshie crowd; how he filled their bellies, how he out-marched, out-witted, out-bluffed, and defeated men who had studied war all their lives and waged it according to the text books of the time, you will have learnt something worth knowing.

But the soldier will not learn it from military texts.[38]

Sometimes military history is treated, in books and lectures alike, as though it exists primarily for the future field commander. Frederick might have assumed something of the sort in his own writings, but he wrote more about such practical subjects as feeding and drilling an army, the gathering and evaluation of intelligence, and how to treat friendly and hostile populations than he did about strategy. Likewise, Napoleon was concerned about military education at every level, and his advice to his son on studying the decisions of the Great Captains should not obscure the fact that he believed strongly in military history in his officers' schools and also as a practical subject for research.

History can be made practicable at any level. The future field marshal Erwin Rommel did not have future corps commanders necessarily in mind when he wrote *Infantry Attacks* in 1937. His lessons, deduced from the experiences of his battalion in World War I, could indeed have been of value to any company or field grade officer. For example, describing the events he witnessed in September 1914, Rommel concluded:

War makes extremely heavy demands on the soldiers strength and nerves. For this reason make heavy demands on your men in peacetime exercises.

It is difficult to maintain contact in fog. . . . Advances through fog by means of a compass must be practiced, since smoke will frequently be employed. In a meeting engagement in the fog, the side capable of developing a maximum fire power on contact will get the upper hand; therefore, keep the machine guns ready for action at all times during the advance.

All units of the group must provide for their own security. This is especially true in close terrain and when faced with a highly mobile enemy.

Too much spade work is better than too little. Sweat saves blood.

Command posts must be dispersed Do not choose a conspicuous hill for their location.

In forest lighting, the personal example of the commander is effective only on those troops in his immediate vicinity.

The rain favored the attack.[39]

Rommel drew his own conclusions from his experiences, but a discriminating reader could probably have extracted them for himself.

These observations were not lost on Patton, who probably shared similar experiences and had been involved in training troops. During the Saar campaign in early 1945, Patton confided to his diary:

Woke up at 0300 and it was raining like hell. I actually got nervous and got up and read Rommel's book, *Infantry Attacks*. It was most helpful, as he described all the rains he had in September 1914 and *also the fact that, in spite of the heavy rains, the Germans got along*. [40]

And so, shortly, did the Third Army.

Another book of this genre is *Infantry in Battle*, which was prepared at the Infantry School in 1934 under the direction of then Colonel George C. Marshall and revised four years later. Written on the assumption that "combat situations cannot be solved by rule," contributors to this book fell back upon numerous examples from World War I to introduce the reader to "the realities of war and the extremely difficult and highly disconcerting conditions under which tactical problems must be solved in the face of the enemy." [41]

Military history has also been used to test the ability of military students. In 1891 a British colonel published a tactical study of the battle of Spicheren, fought 20 years earlier. In the introduction he explained:

To gain from a relation of events the same abiding impressions as were stamped on the minds of those who played a part in them--and it is such impressions that create instinct--it is necessary to examine the situations developed during the operations so closely as to have a clear picture of the whole scene in our minds eye; to assume, in imagination, the responsibilities of the leaders who were called upon to meet those situations; to come to a definite decision and to test the soundness of that decision by the actual event. [42]

Learning from History

What Frederick, Napoleon, Rommel, Patton, Wavell, and many others referred to here have shared in common can be summed in one word: *reading*. An English general in the 18th century urged young officers to devote every spare minute to reading military history, "the most instructive of all reading." [43]

"Books!" an anonymous old soldier during the Napoleonic wars pretended to snort. "And what are they but the dreams of pedants? They may make a Mack, but have they ever made a Xenophon, a Caesar, a Saxe, a Frederick, or a Bonapart? Who would not laugh to hear the cobbler of Athens lecturing Hannibal on the art of war?"

"True," is his own rejoinder, "but as you are not Hannibal, listen to the cobbler." [44]

Since the great majority of today's officers are college graduates, with a healthy percentage of them having studied for advanced degrees, they have probably long since passed the stage at which they can actually benefit from a conventional lecture on history, with the emphasis on factual content and the expectation of a clear conclusion. The leading question therefore becomes: How do we teach them to learn from history? J. F. C. Fuller, coauthor of the concept that later became known as *blitzkrieg*, had this problem in mind when he addressed a class at the British Staff College a few years after World War I. "Until you learn how to teach yourselves," he told the students, "you will never be taunted by others." [45]

Fuller did not specify how this was to be accomplished, but he probably would insist that to teach the officer how to teach himself should be a vowed objective of every course in military history. Certainly he would agree that no course in military history can really do much good if the officer is exposed every half dozen years throughout his career to no more than a structured course of only a few months' duration, especially if in the process he has gained little understanding of history as a discipline or a scant appreciation for how it can be used and abused. Assuredly such a voracious reader as Fuller--who at age 83 confessed to having recently sold off all of the books in his library that he could not read within the next 10 years--would argue that there would be no point to any history course whatever if the student is not stimulated to spend some time afterwards poking around the field a bit on his own. "Books," Fuller once wrote, "have always been my truest companions." [46]

Any student of history must learn to identify with the men and events he reads about, seeking above all to understand their problems and to accept the past on its own terms. The student must also learn to ask questions, not of the instructor necessarily, but of his material and especially of himself. Historians usually worry more about asking the right questions than finding definitive answers, for they know from experience that no document or book can answer a question that is never asked. Had Patton read Rommel's book when the sun was shining, for example, and all was going well, chances are he would never have paid any attention to the casual observation that rain seemed to favor the attack. Cannae was an important battle to Schlieffen because the double envelopment achieved by Hannibal suggested a method by which a battle of annihilation might be fought in a war against France and Russia. But to Colonel Ardant du Picq, the foremost French military theorist of the 1860s, Hannibal was a great general for a quite different reason--"his admirable comprehension of the morale of combat, of the morale of the soldier." [47] The two men were searching for solutions to different kinds of problems, and in reading about Cannae each responded to his individual interests.

In the old Army, when there was enough leisure time for reading, riding, or a regular game of golf, it was probably understood that the burden of learning from military history must rest primarily upon the individual officer. The annual historical ride to the Civil War battlefields--which had been preserved by Act of Congress "for historical and professional military study" [48]--directly involved students from the Army War College in the unending dialogue between past and present. Students were frequently asked on location how they would have handled some problem in tactics or command and control that had confronted a commander during battle. "It is not desirable to have the question answered," the instructions specified. "Some will know the answer, but all who do not will ask themselves the question." [49]

This is the only way to learn from history. The textbook or the instructor can organize information, but only the student can put it to work. "Mere swallowing of either food or opinions," Fuller reminds us, "does not of necessity carry with it digestion, and without digestion swallowing is but labour lost and food wasted." [50]

Today there is a shortage of both "labour and food," as other budgetary priorities and manpower shortages have forced severe cutbacks in history courses throughout the Army.

But in a sense this blinds us to the real problem, for it does not necessarily follow that more money and instructors must be the solution. A formal course in military history, however desirable, is not the only way and may, in fact, not be the best way to teach students how to teach themselves history, which is the goal. George C. Marshall, as future Chief of Staff, regarded his two years at the Army Staff College in 1906-08 as having been "immensely instructive," but not because of the quality of the courses there. "The association with the officers . . . the reading we did and the discussion . . . had a tremendous effect. . . . I learned little I could use," Marshall wrote, but "I learned how to learn. . . . My habits of thought were being trained." [51]

Marshall's words touch upon the essence of practicability. Military history may be of indeterminate value for the immediate future (if World War III were to be fought next week, for example), but among the captains in the career courses today are the Army's top administrators and leaders of tomorrow, and not all graduates of the war colleges in June will retire in the next six or eight years. Those that remain are bound to benefit from anything that can heighten their understanding of society, of other armies, of the political process, of leadership, of the nature of war, of the evolution of doctrine, and of a dozen similar areas of human activity in which history, pursued by an intelligent and inquisitive reader, can still be strikingly practicable to the modern soldier.

To any set of military maxims, whatever their origin, perhaps the following literary maxims should be added: [52]

The history that lies inert in unread books does no work in the world.

If you want a new idea, read an old book.

'Tis the good reader that makes the good book.

A book is like a mirror. If an ass looks in, no prophet can peer out.

Notes

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FUNDAMENTAL CONCEPTS: HISTORY OF THE MILITARY ART

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1. Fundamental Concepts. A primary purpose of this course is to teach each midshipman to master the fundamental concepts listed below. Such mastery provides a common language for professional discourse and a basis for analysis of military operations of the past, present and future.

This is by no means a comprehensive list. Instructors may add a concept here or there. As an officer, the graduate will encounter many more than these ideas as well as different definitions of each. The purpose here is to provide each midshipman with a solid foundation upon which to build his post-graduate professional development. These ideas are consistent with joint doctrine.

By the end of the course, each midshipman must be able to define each of these terms and to demonstrate his/her understanding of it with historical examples. Additionally, he/she will be expected to have mastered them, that is, to use them readily and in combination, verbally and in writing, to critically analyze military events.

2. Threads of Continuity. The study of military history reveals the art of war as an ever-changing phenomenon. Each war is different in some way from those preceding it. Sometimes the changes have been evolutionary; other times, they have been revolutionary. Military leaders must adapt to these changes, often under the pressure of battle. Failure to recognize the impact of these changes, often because reliance upon ideas and concepts that proved successful in the past, has resulted in defeat. On the other hand, we see historical examples of leaders who have accurately judged the impact of these changes, reacted accordingly, and emerged victorious. In the hope of joining the latter group, we study the process of change in military history.

Although the art of war has changed from age to age, we are able to distinguish several factors in different ages, in different societies, and in different armies, the changes that have occurred which stand out more clearly and can be better understood. These factors that provide a common reference for the study of the changes in the art of war are called threads of continuity. These factors fall into two groups: the internal threads, which are predominantly or exclusively a part of the military profession; and the external threads, which are part of a greater social milieu in which the military exists.

a. Internal Threads: The threads of continuity that are entirely or almost entirely a part of the military profession are: military professionalism, tactics, operations, strategy, logistics and administration, generalship, and military theory and doctrine.

(1) Military Professionalism. The definition of military professionalism is dependent on an understanding of a profession. A profession is an occupation or a calling that requires specialized knowledge of a given field of human activity, that requires long and intensive training, that maintains high standards of achievement and conduct through force of education or concerted opinion, that commits its members to continued study, and that has the rendering of a

public service as its prime purpose. Military professionalism as a thread of continuity, then, is the conduct of war. Attitude thus distinguishes the “professional” members of the military from those who are not professionals. Those who are seeking to create or striving to perfect the profession of arms are military professionals. Those who practice or think about the conduct of war solely for personal glory or material gain are not military professionals.

(2) Tactics. The second thread of continuity that is strictly part of the military profession is tactics. Tactics are the specific techniques smaller units use to win battles and engagements. This includes activity out of enemy contact that is intended to directly and immediately affect such battles and engagements. The word tactics is derived from the Greek taktos, which means ordered, or arranged; modern usages restrict the word to ordered arrangement, to include the positioning of supporting weapons, that facilitates the defeat of a rival in battle. In the nineteenth and early twentieth centuries, “tactics” was further refined by the adjectives “grand” and “minor”. Grand tactics were the tactics of large organizations, and minor tactics were the tactics of small organizations or of organizations consisting entirely of one arm (infantry, cavalry, or artillery). Grand tactics are now included in the operational level of warfare.

(3) Operations. The third thread of continuity, operations, is also strictly part of the military profession. Operations involves the planning and conduct of campaigns designed to defeat an enemy in a specific space and time with simultaneous and sequential battles. While this thread of continuity can be used to analyze even the earliest campaigns, its origins as a separate field of study date only from the era of Napoleon. The two theorists who are most famous for their analysis of Napoleon’s success, Karl von Clausewitz and Henri Jomini, both discerned the difference between Napoleon’s conduct of the battle and the actions that preceded and followed it. They believed these techniques differed enough from the conduct of the battle to merit separate study.

By the beginning of the 20th century most military writers accepted this distinction, although they differed on terms and limits. “Grand tactics” and “military strategy” have both been used in the past to describe what is now termed “operations.” The Prussians and later the German Army made the most systematic studies of the subject, while it is a relatively new concept in the American army. FM 100-5 Operations had identified “operations” as the link between strategy and tactics which governs the way campaigns are planned and conducted. As a result, operations is concerned with using available military resources to attain the objectives in a specific theater of war. Therefore, operations seeks to attain the objectives of strategy while at the same time addressing the way in which campaigns are planned and pursued in a theater.

(4) Strategy. The fourth internal thread of continuity, strategy, no longer belongs entirely to the military profession, for today’s military leaders generally work closely with government officials in the field of strategy. “Strategy” is derived from the Greek strategos, which means the art or skill of the general, and this definition remains useful in understanding modern definitions of the term. Until late in the 18th and early in the 19th centuries, the specific tasks of generals differed little from the tasks of subordinate commanders or from the tasks of politicians, and no specific term was used to describe the art or the skill of the generals. Political and military leadership of a group was often vested in the same individual, and the resources of

small unit leaders on the battlefield differed little from the resources of the general in overall command.

By the late 18th century the existence of a resource available to higher leaders was recognized and given the “stratagem”: a ruse or a trick that gives an advantage to one side in battle or in war. By the early 19th century, “strategy” referred to the use of resources or the particular tasks of war that were peculiar to the high-ranking officer. It was defined as the preparation for war that took place on the map or the use of battles to win campaigns. Since the modern appearance of the term, however, no precise definition has approached universal acceptance. Yet the term continues to be widely used, and it finds itself among the vital concepts used to examine and describe the evolution of the profession of arms. The following definition attempts to facilitate the student’s quest; the student should also be aware that many other thoughtful definitions exist. Strategy is the long-range plans and policies for distributing and applying resources to achieve specific objectives. Strategy allows the achieving of adopted goals. But because conditions in war and peace are constantly changing, strategy must be modified as it is being executed, and at times even the goals of strategy must be altered.

Strategy, like tactics, can be further refined by restricting modifiers. For example, grand strategy is the strategy of a nation or of an alliance. The goal of grand strategy is the attainment of the political objective of a war.

Grand strategy is formulated by heads of state and their principal political and military advisors. Grand strategy is more accurately called national strategy if the goals of a single nation are being sought. A third refinement or level of strategy is military strategy, which is a strategy where the means and resources are those of the armed forces of a nation and where the goal of strategy is the securing of objectives consistent with national policy through the application of force or the threat of force. Military strategy can be formulated by military commanders at all levels, but commanders below general officer rank are rarely involved in strategy that affects national policy. A fourth level of strategy is campaign strategy, which is the strategy of a commander of a force of considerable size that is acting independently. Its immediate goals are generally the occupation of territory or the defeat of all or a significant part of the enemy armed forces; its long-term goal remains to support political goals.

(5) Logistics and Administration. The fifth thread of continuity, logistics and administration, is much like strategy, in the sense that even though most of its functions are wholly a part of the profession of arms, many functions are dependent upon and interact closely with civilian-controlled activities. In addition to this similarity with strategy, logistics and administration are closely involved with strategy, for logistics and administration provide many of the resources that strategy puts to work. Logistics is the providing, movement and maintenance of all services and resources necessary to sustain military forces. Administration is the management of all services and resources necessary to sustain military forces.

Logistics includes the design, development, acquisition, storage, movement, distribution, maintenance, evacuation and disposal of material; the movement, evacuation, and hospitalization of personnel; the acquisition of construction, maintenance, operation and disposition of facilities; the acquisition of civilian labor; and the acquisition or furnishing of services, such as baths,

laundry, libraries, and recreation. Since administration applies to the management of men, material and services, it is intimately associated with logistics.

(6) Military Theory and Doctrine. The sixth internal thread of continuity, military theory and doctrine, is almost wholly a part of the profession of arms, but since it is involved with external factors, it too has some application to areas outside the military. Military theory is the body of ideas that concern war, especially the organization and training for and the conduct of war. Doctrine is the authoritative fundamental principles by which military forces guide their actions in support of objectives. Those men whose thoughts about war have influenced considerable numbers of soldiers are known as military theorists. Doctrine in modern armies is generally disseminated through manuals, regulations, circulars, and handbooks that prescribe standardized procedures and organizations. After examination and acceptance by highly experienced professionals, theory becomes doctrine, with a reasonable assurance of positive results. Doctrine does not, however, alleviate the requirement for sound judgment, for the solutions to every critical decision cannot be found in doctrine.

(7) Generalship. The final thread of continuity that is wholly or largely a part of the profession of arms is generalship, which is defined as exercising the qualities and attributes necessary to command major units. Generalship is closely involved with each of the threads of continuity discussed above. It involves strategy, that is, an ability to use all means and resources available to achieve an assigned goal. It involves tactics – the formation and control of ordered arrangements of troops when training for the clash of arms or when the clash of arms is imminent or underway. It involves logistics – that is, a concern for services and material and administration, the ability to control and manage all the resources available to a senior commander. And it involves military theory and doctrine – the formulation of new ideas about war, their evolution, and acceptance or rejection. Generalship also connotes a deep understanding of the conduct, aims and qualities of members of the military profession. Generalship involves leadership at the highest levels of command and represents a deep understanding of the value of moral and esprit to the profession.

b. External Threads. In addition to the important role played by strategy, operations, tactics, logistics and administration, military theory and doctrine, and military professionalism, the perceptive student of war is keenly aware that there are also external factors that influence the military profession. The most significant of these external factors, or “threads of continuity,” are political factors, social factors, economic factors, and technology.

(1) Political Factors. Those ideas and actions of governments or organized groups that affect the activities of whole societies are political factors. They shape warfare, determine the composition and strength of military organizations, and often establish the goals and policies for which wars have been fought. Until the middle of the 19th century, the political chiefs, or heads of state or government, were usually the commanders of the military as well. Alexander, Caesar, Gustavus Adolphus, Frederick the Great, and Napoleon are prime examples. In such cases, political policy and military goals were nearly synonymous. However, in democratic societies of more recent vintage, such as Great Britain since the 17th century and the United States since its founding, political policies often have been quite removed from military capabilities and goals. Regardless of the conditions, political factors maintain a major influence

upon the military profession. In modern democratic societies, political factors have a double meaning: at one level, they involve the activities of the military profession that influence legislation and administrative decisions regarding national security; at another level, they involve the consequences of military actions on the international balance of power and the behavior of foreign states. The two levels are closely related, and in spite of the many differences between military leaders and civilian politicians, political factors themselves remain closely intertwined with the military profession.

(2) Social Factors. The activities or ideas emanating from human groups and group relationships that affect warfare are social factors. These factors involve such diverse concepts as popular attitudes, the role of religious institutions, level of education, roles of educational institutions, psychological warfare, reactions to and roles of mass media, interracial and minority rights questions, combat psychology, standards of morality and justice, and ultimately the will of a people to resist. In total war social factors are objectives that can be as important as terrain objectives or the destruction of the military forces in the field.

(3) Economic Factors. Those activities and ideas that involve the production, distribution, and consumption of the material resources of the state are economic factors. Different types of economies (for example: capitalist, communist, laissez-faire, industrial, agrarian, commercial, subsistence, or common market) affect warfare differently. Economic war, which takes such forms as blockade or boycott, is a part of total war, but it can also occur when war as a general condition does not exist.

The interrelation of political, economic and social factors is generally complex, especially in modern societies, and the detailed study of one alone is often impossible. Together, these factors provide the foundations of national power.

(4) Technology. Political, social, and economic factors provide the foundations of power, and technology often provides the limits to power. Technology is the using of knowledge to create or improve upon practical objects or methods. Within the military profession, technology leads to progressive advancement in such important areas as transportation, weaponry, communications, construction, food production, metallurgy, and medicine. Technology has an undeniable influence on strategy, tactics, logistics, military theory and doctrine and generalship; when a group's technology is superior to its adversary's, it greatly enhances the probability of success in military endeavors.

The 11 threads of continuity discussed above do not provide an infallible means for learning about every aspect of the military past. Rather they offer a conceptual framework that seeks to provide a means to reconstruct at least the general outline of the tapestry of the military past. The full meaning and magnitude of that tapestry can be appreciated only after long study or long years of service and significant contribution to the profession of arms.

3. The Principles of War: (FM 100-5, App A)

a. **OBJECTIVE**: Direct every military operation towards a clearly defined, decisive and attainable objective.

- b. **OFFENSIVE:** Seize, retain and exploit the initiative.
- c. **MASS:** Concentrate combat power at the decisive place and time.
- d. **ECONOMY OF FORCE:** Allocate minimum essential combat power to secondary efforts.
- e. **MANEUVER:** Place the enemy in a position of disadvantage through the flexible application of combat power.
- f. **UNITY OF COMMAND:** For every objective, ensure unity of effort under one responsible commander.
- g. **SECURITY:** Never permit the enemy to acquire an unexpected advantage.
- h. **SURPRISE:** Strike the enemy at a time or place, or in a manner, for which he is unprepared.
- i. **SIMPLICITY:** Prepare clear, uncomplicated plans and clear, concise orders to ensure thorough understanding.

4. Levels of War. War is a national undertaking which must be coordinated from the highest levels of policy making to the basic levels of execution. Strategic, operational, and tactical levels are the broad divisions of activity in preparing for and conducting war. While the Principles of War are appropriate to all levels, applying them involves a different perspective for each.

a. The Strategic Level of Warfare. The level of war at which a nation or group of nations determines national or alliance security objectives. Activities at this level establish national and alliance military objective; sequence initiatives; define limits and assess risks for the use of military and other instruments or power; develop global or theater war plans to achieve those objectives; and provide armed forces and other capabilities in accordance with the strategic plan. (JCS Pub 1-02)

The strategic perspective is worldwide and long-range. The strategic planner deals with resources, capabilities, limitations, and force postures. He sets broad priorities for allocation of resources and time frames for accomplishment. Working within a broad perspective of forces and capabilities, strategy concerns itself with strategic mobility, mobilization, civil defense, forward force deployments, nuclear deterrence, rapid reinforcements and rapid deployment. Cooperation among the services and allied nations to produce a unity of effort is of vital concern in the strategic arena. Strategic planning is not a military function only. It is formulated by input from the Joint Chiefs of Staff, The National Security Council, members of Congress, and selected advisors to the President.

b. The Operational Level of Warfare. The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within

theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives, initiating actions, and applying resources to bring about and sustain these events. These activities imply a broader dimension of time or space than do tactics; they insure the logistic and administrative support to tactical forces, and provide the means by which tactical successes are exploited to achieve strategic objectives. (JCS Pub 1-02)

The operational art of war is primarily the planning and conduct of campaigns and practiced by large field, air, and fleet unity of the services. It involves joint, combined, and coalition forces that maneuver with the objective of defeating the enemy and achieving strategic objectives within a theater of operations, rather than a specific battlefield.

Operations take the form of large-scale maneuvers such as penetrations, envelopments, double envelopments, frontal attacks, naval blockades, air interdiction, turning movements, feints, amphibious landings, and airborne assaults. At the operational level, maneuver may be sometimes entirely movement.

c. The Tactical Level of Warfare. The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical units and task forces. Activities at this level focus on the ordered arrangement and maneuver of combat elements in relation to each other and to the enemy to achieve combat objectives. (JCS Pub 1-02)

The objective of the tactical level of war is the detailed destruction of enemy forces or thwarting directly the enemy intentions. Tactics consists of the employment of division size and smaller units in weapons engagements and battles with the enemy. Close support, interdiction, destroying equipment, disrupting facilities, reconnaissance and surveillance, killing or capturing personnel, positioning and displacement of weapons systems, and supply and support are tactical activities.

The tactical commander's perspective is one of a battle or engagement when he "executes" a plan of movement with fire support to achieve a specific objective such as clearing an area, blocking enemy movement, protecting a flank, gaining fire superiority or seizing a location. The room for anticipating opportunities and risk-taking is somewhat limited by the confines of the immediate aspects of the battle and the specificity of the objective.

Maneuver at the tactical level is nearly always a combination of movement and supporting fires. These two functions are tightly integrated instead of being somewhat discrete as they may frequently be at the operational level. Movement, instead of resulting from opportunities for positional advantage, is usually an effort to position forces to concentrate fires on the enemy or to escape enemy fires.

Tactical unit commanders depend on their higher operational level commander to move them effectively into and out of battles and engagements. Success or failure at the tactical level, when viewed as a whole by the operational-level commander, are the basis for a wider scheme of maneuver. Small unit actions stimulate the operational-level commander's anticipation for result in victory. The perspective of the tactical commander is somewhat more subjective – his concern is destruction of the enemy forces in his zone of action and his own force's survival. He

must concentrate on executing his portion of the overall mission effectively, at the same time visualizing the overall operational-level perspective.

d. Schematic

(1) Grand Strategy. A coalition's long-range plans and policies for using military and other resources of each member to achieve specific, shared objectives.

(2) National Security. The art and science of development and using the political, economic, and psychological powers of a nation or alliance, together with its armed forces, during peace and war, to secure national or alliance objectives.

STRATEGIC LEVEL OF WAR

(3) Military Strategy. The art and science of employing the armed forces of a nation or alliance to secure policy objectives by the application or threat of force.

(4) Campaign Strategy. A military commander's long-range plans and policies for using the resources available to him to achieve specific, assigned objectives in a given space and time.

OPERATIONAL LEVEL OF WAR

(5) Operations. The process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to gain the objectives of any battle or campaign.

TACTICAL LEVEL OF WAR

(6) Tactics. The employment of units in combat or the ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to utilize their full potentialities.

5. Forms of Strategy

a. **EXHAUSTION** – A strategy which seeks the gradual erosion of an enemy nation's will or means to resist.

b. **ATTRITION** – A strategy which seeks the gradual erosion of the combat power of the enemy's armed forces.

c. **ANNIHILATION** – A strategy which seeks the immediate destruction of the combat power of the enemy's armed forces.

6. Operations and Tactics

a. Categories of Operations

(1) **OFFENSIVE.** Operations designed to achieve one's purpose by attacking the enemy.

(2) **DEFENSIVE.** Operations designed to cause an enemy's attack to fail.

(3) **JOINT.** Military operations involving more than one service.

(4) **COMBINED.** Military operations involving the armed services of more than one allied nation.

b. Operational Design

(1) **Center of Gravity:** This concept derives from the idea that an armed combatant, whether a warring nation or an alliance, an army in the field, or one of its subordinate formations, is a complex organism whose effective operation depends not merely on the performance of each of its component parts, but also on the smoothness with which these components interact and the will of the commander. As with any complex organism, some of the components are more vital than others to the smooth and reliable operations of the whole. If these are damaged or destroyed, their loss unbalances the entire structure, producing a cascading deterioration in cohesion and effectiveness which may result in complete failure, and which will invariably leave the force vulnerable to further damage. Clausewitz defined the idea as "the hub of all power and movement, on which everything depends." (FM 100-5)

(2) **Line of Operation:** The directional orientation of a force in relation to the enemy. Lines of operation connect the force with its base of operation on the one hand and its operational objective on the other. Normally a campaign or major operation will have a single line of operation, although multiple lines of operation in a single campaign are not uncommon. Classical theory makes special note of the relationship between opposing lines of operations. A force is said to be operating on interior lines when its operations diverge from a central point and when it is therefore closer to separate enemy forces than the latter are to each other. Interior lines benefit a weaker force by allowing it to shift the main effort laterally more rapidly than the enemy, or due to the successful conduct of the defense.

(3) **Culminating Point:** That point in any offensive operation where the strength of the attacker no longer significantly exceeds that of the defender, and beyond which continued offensive operations risk overextension, counterattack, and defeat. In operational theory, this point is called the culminating point. The art of attack at all levels is to achieve decisive objectives before the culminating point is reached. Conversely, the art of defense is to hasten the offensive when it arrives. Culminating points may occur because movement of supplies cannot keep pace with the attack or because lines of communication are under attack by partisans or other forces such as airborne or air mobile units capable of attacking rear area assets.

c. Forms of Maneuver. (FM 100-5, pp. 101-106). For map references, see pamphlet from Avery Publishing Group -- the West Point Military History series.

(1) **FRONTAL ATTACK** – An offensive action that strikes the enemy across a broad front and over the most direct approaches. Pickett’s Charge, depicted on Map 37b of the Civil War Atlas, is an example of a frontal attack.

(2) **PENETRATION** – An offensive action that breaks through the enemy on a narrow front and seizes deep objectives to destroy the coherence of his defense. Map 5c in the back of Chapter 5 of The Dawn of Modern Warfare depicts Marlborough’s penetration of the French line at the Battle of Blenheim.

(3) **ENVELOPMENT** – An offensive action that passes around or over enemy defenses to seize objectives on his flank or rear. Jackson’s flank march and his subsequent attack at Chancellorsville, shown on Map 28 of the Civil War Atlas, is an example of an envelopment.

(4) **TURNING MOVEMENT** - An envelopment that forces the enemy to abandon his position, divert major forces and fight in two directions simultaneously. An attacker who conducts a turning movement usually attempts to avoid the defense entirely, seeking instead to secure terrain deep in the enemy’s rear and along his line of communication. Map 26 of the Civil War Atlas shows the turning movement conducted by Hooker at the opening of the Chancellorsville Campaign.

(5) **INFILTRATION** – The covert movement of all or part of the attacking force through enemy lines to a favorable position in their rear.

d. Types of Offensive Operations (FM 100-5, ch. 6)

(1) **MOVEMENT TO CONTACT** - An offensive action whose purpose is to gain or reestablish contact with the enemy. The movement of the Grand Armeé through the Thuringian Forest Campaign, shown on Maps 27 and 28 of the Napoleonic Atlas, is an excellent example of a movement to contact.

(2) **HASTY ATTACK** – A planned offensive action made without pause in the forward momentum of the force upon initial contact with the enemy. A hasty attack was conducted by Henry Heth’s division against Union infantry and cavalry situated west of Gettysburg on 1 July 1863. It is described on pages 156-157 of the Civil War text and depicted on Map 35a of the accompanying atlas.

(3) **DELIBERATE ATTACK** – A thoroughly planned and coordinated offensive action whose purpose is to initiate the forward momentum of friendly forces in contact with a prepared enemy. Soult’s corps conducted a deliberate attack at the Battle of Austerlitz. It is shown on Map 23 in the Napoleonic Atlas.

(4) **EXPLOITATION** – An offensive action the purpose of which is to prevent the enemy from reconstituting his defense or conducting an orderly withdrawal. The operations conducted by the Army of Italy after the crossing of the Po River in 1796 is an example of exploitation. It is depicted on Map 4 of the Napoleonic Atlas.

(5) **PURSUIT** – An offensive action the purpose of which is to intercept and annihilate a retreating enemy which has lost its ability to react effectively. The actions of the Grand Armee following the Battle of Jena, shown on Map 32 of the Napoleonic Atlas, are excellent examples.

e. Types of Defensive Operations (FM 100-5, ch. 8-9)

(1) **MOBILE DEFENSE** – A defense that employs a combination of offensive, defensive, and delaying action to defeat the enemy attack. Robert E. Lee’s conduct of the Chancellorsville Campaign, depicted on Maps 26-31 of the Civil War Atlas, is an example of a mobile defense at the operational level of war.

(2) **AREA DEFENSE** – A defense which is conducted to deny the enemy access to specific terrain for a specified time. The fortifications at West Point are representative of an area defense. Their mission: do not allow the west point of the Hudson River to fall into British hands.

f. Retrograde Operations (FM 100-05, ch. 10)

(1) **DELAY** – A retrograde operation whose purpose is to gain time for friendly forces to reestablish the defense, cover a defending or withdrawing unit, protect a friendly unit’s flank, or to participate in an economy of force effort. The 1st Cavalry Division and the I Corps of the Army of the Potomac fought a delay on the hills west of Gettysburg on the morning of 1 July 1863. It is shown on Maps 35a and 35b of the Civil War Atlas.

(2) **WITHDRAWAL** – A retrograde operation the purpose of which is to remove subordinate units from combat, adjust defensive positions, or relocate the entire force. After the Battle of Gettysburg, Lee’s Army of Northern Virginia conducted a withdrawal. It is shown on Maps 38a and 38b of the Civil War Atlas.

(3) **RETIREMENT** – A rearward movement away from the enemy by a force not in contact. The actions of the Russian Army prior to the Battle of Austerlitz, described in The Wars of Napoleon, pp. 49-50, and on Map 20 of the Napoleonic Atlas, constitute a retirement.

(4) **RETREAT** – Though it is not officially recognized by U.S. Army doctrine, the term “retreat” is often used generically in literature to describe any movement of a unit away from the enemy. The term generally implies that the movement is forced by the enemy and is often characterized by a high degree of disorder.

g. Main and Supporting Attacks

(1) **MAIN ATTACK** – An offensive action constituting the commander’s principal effort to achieve his purpose. Soult’s corps conducted the main attack at Austerlitz. It is shown on Map 22 of the Napoleonic Atlas.

(2) **SUPPORTING ATTACK** – An offensive action, separate from the main attack, intended by the commander to facilitate the success of the main attack. Common purposes of a supporting attack can include deception, fixing the enemy in position, and seizing key terrain. Lannes' corps conducted the supporting attack at Austerlitz (Map 22).

7. Terms

a. **CAMPAIGN** – A series of related military operations intended to accomplish a common objective, usually within a given space and time.

b. **COMBAT POWER** – A unit's fighting ability. Combat power is an abstraction that represents one's judgment of a unit's fighting ability considering size and weaponry, but also esprit, leadership, training, discipline, and other relevant subjective qualities. Because these are not constant factors, a unit's combat power is not constant. Combat power is significant only in relation to a specific enemy; therefore, the degree to which a unit's combat power is superior to that of the enemy can be increased by the manner of employment, such as achieving surprise, attacking a flank, or exploiting the advantages of terrain.

c. **GUERRILLA WARFARE** – Military and paramilitary operations conducted in hostile territory by irregular and primarily indigenous forces.

d. **INSURGENCY** – An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.

e. **INTELLIGENCE** – The product resulting from the collection, evaluation and analysis of all available information about opposing forces or nations.

f. **INTERIOR LINES** – The ability to reinforce one's separated units faster than one's opponent, due to central position, superior mobility or both, relative to the enemy. Robert E. Lee utilized interior lines at the tactical level in his conduct of the Battle of Antietam, depicted on Map 14 of the Civil War Atlas.

g. **LIMITED WAR** – A war prosecuted by a belligerent who voluntarily exercises restraints on means, objective, geographical area, or time.

h. **LINES OF COMMUNICATION** – The land, sea and/or air routes that connect a military force with its base of operations and along which logistical support is provided.

i. **LOGISTICS** – The provision, movement and maintenance of all services and resources necessary to sustain military forces.

j. **NATIONAL OBJECTIVES** – Those fundamental aims, goals, or purposes of a nation -- as opposed to the means for seeking these ends -- towards which a policy is directed and efforts and resources of the nation (or alliance) are applied.

k. **NATIONAL POLICY** – A broad course of action or statements of guidance adopted

by the government (or alliance) at a national level in pursuit of national objectives.

l. **RESERVE** – A combat element intentionally withheld from action by the commander so as to be available for commitment at the decisive moment. The decisive moment can be one anticipated in the commander's plan or one imposed by enemy action.

m. **STRATEGIC CONSUMPTION** – The loss of available combat strength due to diversions and irreplaceable casualties imposed by the expansion of one's base of operations. Examples of diversions include guarding one's line of communication as one advances and garrisoning key positions in one's rear.

n. **SUPPORTING DISTANCE** – The distance by which two or more forces can be separated while retaining the ability to reinforce each other before anyone can be defeated individually. Supporting distance is estimated on the basis of terrain, relative mobility, and relative strength.

o. **TOTAL WAR** – A war conducted by a belligerent in which few restraints on means, objective, geographic area, or time are exercised and in which the involvement of all resources of the society are normally committed.

“HOW TO GET THE MOST OUT OF A SEMINAR FORMAT”

by
Dr. Bradley J. Meyer

Written for this course by Dr. Meyer.

The seminar discussion is one of the most powerful teaching tools available. It has a number of advantages. First, discussion is an active rather than a passive form of learning. In a well-run discussion, students do not simply “absorb” material, as in a lecture. They react to what is being said: they agree or disagree, they come up with something to add to the discussion, they express a point of view in their own words. They continually compare and integrate their own knowledge with that of others. Sometimes, they come up with ideas that are new to themselves or to others.

Preparing for the discussion is also an exercise in active learning. Typically, a reading assignment constitutes the base of knowledge upon which the discussion will be built. While knowledge derived from work or life experience can often be worked into a seminar discussion, and this is an advantage of the discussion format, in an academic situation, a reading assignment will normally form the basis of the discussion.

Reading itself is a form of active learning. The words on the page are clues to the writer’s meaning, but each reader must make his or her own sense out of them. Normally, in a well-organized seminar, students will already have a topic for discussion in mind as they do the assigned reading, so that even before the discussion group meets, they begin relating the reading material to the discussion topic. Then again, for most people, reading is the most time-effective way of acquiring information, much more efficient than hearing a lecture or watching a video presentation. The typical seminar will cover a lot of ground, simply in terms of processing information efficiently.

Reading is a powerful learning tool, but a good seminar discussion will enhance the payoff from time spent in reading. If a group of 8 to 10 people all read the same material, they will likely come away with 8 or 10 interpretations of that material. If they then spend an hour or two attempting to reconcile those interpretations, chances are good each person will gain a clearer understanding of the issues at hand. If nothing else, each discussion participant hears how other people have interpreted the material, and this helps to fill in some of the blanks and blind spots that everyone has. By arguing about and discussing the issue at hand, discussion participants sort out the evidence that speaks for and against a given point of view.

This brings us to the most important advantage of the seminar: it promotes synthesis. Synthesis, bringing the factors that bear on a complex problem into an ordered whole, is the ultimate goal of most education in the humanities. Discussion helps the students make sense of the assigned material. All members of the discussion group, and not just the teacher, can help each other come to terms with the material. In a good discussion, everyone comes away with a better grasp of the issues.

Finally, a good seminar is one of the most enjoyable forms of learning. Everyone can make a contribution to the group effort, and everyone should. Generally speaking, people like

being able to say something in class, to throw in their two cents worth, rather than simply to listen while someone talks to them. A good discussion is lively and it helps keep the interest of the class in the subject matter high.

HOW TO RUN A SEMINAR DISCUSSION

From the instructor's point of view, running a good discussion is an exercise in backwards engineering. The instructor first synthesizes material bearing on the discussion topic. Then the instructor assigns to the students that portion of the material which allowed him or her to achieve that synthesis, together with a discussion topic to focus the student's attention. The students read the material in light of the discussion topic, work the matter over in their heads, and come to class, not necessarily knowing all the answers, but at least ready to discuss the question. The instructor guides the class discussion, generally in light of some prearranged plan. At the end of the discussion, hopefully, a body of insight and knowledge the instructor alone had possessed is now the common property of all.

The role of the discussion leader might be compared to the helmsman on a ship. The discussion leader chooses the destination the discussion will aim for. This goal is based on the course objectives and the discussion leader's own synthesis of the material. With an objective in mind, the discussion leader sets the initial course of the discussion, through selection of readings (in some educational settings) and through selection of the discussion topic, which the students keep in mind as they do the readings. The discussion leader generally helps get the discussion moving, and stands ready to restart it if it gets stalled. Having chosen an objective and set a course, the discussion leader applies rudder corrections if the discussion strays too far off course. But the steering mechanism is somewhat loose: the discussion leader expects a somewhat meandering course across the bay, and realizes that to a great extent a discussion has a life of its own – so long as the discussion leader allows the discussion to occur.

Once a general objective for the discussion has been assigned, the instructor surveys the material that bears on the topic, attempting to achieve a synthesis of the subject. Once the instructor has come to a general understanding of the problem suggested by the topic, the instructor assigns to the students those materials from which the synthesis was achieved.

Note that the instructor has already done the students a service, by preselecting the materials the students will read to achieve a synthesis through the discussion process. It might be possible to send the students into the library with a learning objective and have the students research the topic themselves. The students would then come to their own synthesis based upon their own research -- if they had the necessary research skills (a major "if" at certain levels of education). But this would take more time. The instructor can do the selection and sorting for the students in advance. A discussion seminar can cover more ground than the students could on their own -- more learning can take place.

Generally speaking, once the instructor has achieved a synthesis, there is no need to worry that the students will be able to "get it." In the seminar format, the students will have a lot of help in "getting it." First, the materials they will read are preselected, so they don't have to read

through a lot of superfluous material. Second, the students have a discussion topic to focus their inquiry. Third, the discussion format allows the instructor to “jump start” the students to a higher level of understanding than they could achieve on their own, at least in the amount of time available for the course.

A well-chosen discussion topic, provided to the students before they do the reading, can be great assistance in dealing with a mass of information presented in the reading. Basically, the discussion topic will ask the question which the discussion will attempt to answer. All of the assigned reading will be relevant (hopefully), at least in terms of providing necessary background, but only a small amount, perhaps scattered in several places, will actually answer the discussion topic.

When the actual discussion arrives, the goal is to have a lively discussion that stays on the topic and arrives at some kind of conclusion. The students should talk more to each other than to the instructor. The discussion leader should not talk to the discussion group for any length of time, should not deliver a lecture, impromptu or otherwise. The discussion is not a lecture. Neither should the instructor ask a series of questions of the students, which they answer. The discussion is not a recitation. (Neither should everyone sit around and stare at each other.)

Discussable questions are the discussion leader’s stock in trade. A discussable question is one that is open-ended enough to form the basis for a portion of the discussion, but at the same time is based on the discussion topic and the reading. Obviously, a discussable question does not have a short definite answer: “1862” or “Abraham Lincoln.” A discussable question is something like this: “How would different political groups in the North react to Lincoln’s Emancipation Proclamation?” Such a question does not lend itself to short, simple answers, but to longer, more complex answers. Discussable questions that have two sides to them are particularly prized by the discussion leader: they get discussions going. They get arguments going (always good for the liveliness of the discussion) that force people to answer objectives and present their point of view to others. Discussable questions that demand an answer to unanswerable questions can sometime be quite useful: “Did Lincoln issue the Emancipation Proclamation to free the slaves or to save the Union?”

Drawing up, in advance, an outline of a discussion, just as one would draw up an outline of a lecture or a paper, is an excellent idea. The discussion leader should ask: “What is the ultimate objective of this discussion, what understandings should be reached, and what is the best way to proceed towards the objective? What are the intermediate understandings that have to be reached? What critical points have to be brought out? What is the evidence for these critical points? In other words, a discussion can be “gamed out,” just as an essay writer or a lecturer games out what his audience needs to know, and in what order they need to know it.

All of these considerations give the discussion leader a rudder for controlling the discussion. If the discussion has exhausted a given sub-topic and needs to go in a certain direction, the discussion leader can throw out an introduction to a whole area of intermediate consideration, according to the pre-arranged plan. On the other hand, very often the discussion will tend to move on from an issue before it has been well enough explored. Now is the time for the discussion leader to throw out a specific, focused question about the issue. Now is the time

to ask specific questions about the evidence for a given point of view. These tactics help to ensure that an important subsidiary point is fully discussed before the group moves on to something else.

Frequently, as a discussion gets going, four or five major issues will be thrown out by the discussants within the first five minutes. There are, after all, only so many things that can be said about a given discussion topic, based on a given set of readings. Each of those four or five areas is a potential lead into a major area of discussion. The discussion leader can come back to some of them 20 or 30 minutes down the road. But if the discussion leader has not “gamed out” the course of discussion, the major issues thrown out by the students probably will not be recognized for what they are.

In many ways the only difference between the discussion leader and any ordinary member of the discussion group is that the discussion leader has more authority than the other members of the discussion group, and it is generally easier for the discussion leader to get “into” the discussion than for anyone else. One thing this means is that the discussion group generally will look to the discussion leader to get the group back on track if it gets off the topic. Discussion is a spontaneous, open-ended form. One aspect of this is that even the most “high-powered” groups can spiral off into meaningless drivel in about nine seconds flat. In such cases, experienced discussion groups will automatically look to the discussion leader to restore order.

A very powerful means of steering a discussion is to have a comment, or a new line of inquiry “ready to go,” when the discussion bogs down, as all discussion will from time to time. If everyone is wondering what to say, particularly if a particular point has been “talked out,” the group will generally seize the new line of attack and run with it.

All the techniques (and reasons) for steering a discussion are available to the students as well as to the instructor. Members of a long-standing discussion group will gradually learn to be better discussants, which is an important skill in many professions. Humanity makes many of its decisions through discussions -- and arguments -- and it is important for many people to be known as someone who makes comments that are relevant to the discussion, as opposed to irrelevant, and perhaps even a reputation for saying things that are conclusive. Perhaps most importantly, the most serious mistakes are often made when argument and discussion have not taken place, and as a result no one knows what decisions truly mean and what is at stake.

SOME PRACTICAL ASPECTS OF LEADING A DISCUSSION

No matter how many people are in the room, only about four or five will be in discussion at any time. This seems to be an empirical fact. In a large group, the more articulate and informed, or those most determined to be heard, will tend to dominate the discussion. It follows that, for optimal learning, discussion groups need to be small. Four or five people probably are too small: then everyone needs to be in the discussion all the time. A group of about 8 or 10 seems to work well: that way, it is relatively easy for an individual to get into the discussion, but everyone doesn't have to be in it all the time. In groups larger than this, it becomes harder for an individual to get into the discussion. Not being able to get a word in edgewise can be frustrating.

Groups where the members know each other outside of a formal classroom setting are more likely to discuss freely in class. If there is a free and easy interchange around the table before class starts, it is more likely discussion will come easily. It follows that discussion leaders should encourage students to get to know each other outside the formal classroom setting, even if this just means having introductions around the table before class starts. Obviously, it also helps if discussants are all more or less at the same knowledge level.

People who say too much, and who say it in ways that do not contribute to the discussion, can be one of the biggest problems a discussion leader faces. Generally, if the discussion leader is aware of a problem, everyone else is as well. People who try to dominate a discussion for their own ends, whether for the sheer pleasure of hearing themselves talk, or because they have an ax to grind, typically are not subtle about it. The discussion group won't like this phenomena, and group pressure is one of the most effective ways of bringing this problem under control.

CONCLUSION

As a pedagogical tool, the discussion can be an important part of a quality educational program. Just as with any pedagogical tool, there are a number of techniques which can enhance the success of the experience. How to run a discussion is rarely taught. Although it is apparent to most that a good lecture involves a good deal of preparation and technique, most people probably think that a good discussion just happens. The approach outlined above has worked well for the author of this piece, and he hopes that it will be of interest and benefit to others.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 1

HOURS: 1

TITLE: Introduction

I. Learning Objectives

- A. The student will comprehend the value and purposes of a study of military history.
- B. The student will know and recall the course professional competency objectives.
- C. The student will know and state the pertinent administrative aspects of the course (e.g., presentation methods, testing/grading, student responsibilities).

II. References and Texts

A. Instructor references

- 1. "Fundamental Concepts: History of the Military Art" (in front matter of this curriculum guide)
- 2. "Military History: Is It Still Practical?" (in front matter of this curriculum guide and, at the time of this writing, also available at: www.au.af.mil/au/awc/awcgate/luvaas.htm.)
- 3. Warfighting, MCDP-1 (Available online at: http://www.dtic.mil/doctrine/jel/service_pubs/mcdp1.pdf.)

B. Student texts: (Articles to be distributed and discussed at the first opportunity, prior to the course lessons being taught.)

- 1. "Fundamental Concepts: History of the Military Art"
- 2. "Military History: Is It Still Practical?"

III. Instructional Aids

A. Course outline

- B. Chalkboard/whiteboard
- C. Copies of materials to be used by the students

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
- B. Procedural and student activity options
 - 1. A suggested means to accomplish the objectives of this lesson is to describe basic course objectives and purposes, and then to emphasize the importance of a sense of warfare history.
 - 2. A review of the course syllabus will aid the student's appreciation of the scope of the course and will serve to further demonstrate the importance of warfare in world history.
 - 3. Course mechanics and administrative matters should be discussed to ensure the student knows what he/she can expect from the course and what the instructor expects from the student.

V. Presentation

- A. Discuss course purpose and professional core competency objectives.
- B. Ask, "Why do you suppose it's important to study the evolution of warfare?" Discuss answers and provide instructor's point of view. Discuss the high points of the Luvaas article ("Military History: Is It Still Practical?") to illustrate how history can be used to help understand and impact the future.
- C. Briefly review the course syllabus, highlighting areas of importance or of unique interest (e.g, student presentations, exercises, etc.).
 - 1. Emphasize the importance of each student

formulating his/her own ideas about how warfare has evolved, changed, remained the same, etc.

2. Use the course syllabus as a guide in discussing course materials.

D. Course administration. Discuss the following:

1. Participatory nature of the course, if applicable.
2. Attendance policy.
3. Reading assignments and class preparation.
4. Testing policy, quizzes, projects.
5. Grading policy.
6. Resource bibliography - unit and university libraries, other sources.
7. Vocabulary of warfare - use and importance. Have students read the "Fundamental Concepts: History of the Military Art" handout on military terms and threads of continuity in order to better study warfare and levels of war.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 2

HOURS: 1

TITLE: Man and War

I. Learning Objectives

- A. The student will know and discuss varying definitions related to the operational art of war.
- B. The student will know, list, and explain the nine principles of war as presented in class.
- C. The student will know and discuss the relevance of the threads of continuity and political and strategic considerations as they apply to warfare and how/where operations and tactics fit in.
- D. The student will know, list, and discuss the six causes of international conflict as defined by Jomini.

II. References and Texts

A. Instructor references

- 1. The Face of Battle, pp. 15-78
- 2. Men in Arms, pp. 5-14
- 3. War in the Modern World, pp. 11-15
- 4. "Fundamental Concepts: History of the Military Art" (in front matter of this curriculum guide)
- 5. Instructor Resource Manual (optional)

B. Student texts/resource materials

- 1. The Face of Battle, pp. 15-78
- 2. Men in Arms, pp. 5-14
- 3. "Fundamental Concepts: History of the Military Art" (handout)

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Guided discussion
 - 2. Lecture and discussion
- B. Procedural and student activity options
 - 1. A suggested means to accomplish the objectives of this lesson is to begin soliciting varying definitions of war, followed by a discussion of war as a natural or unnatural, constructive or destructive force in society and whether it's an art or a science.
 - 2. Present a brief lecture on the principles of war and Jomini's causes of conflict to provide a framework for studying the evolution of warfare.

V. Presentation

- A. Definitions of war.
 - 1. Solicit definitions from students and discuss.
 - 2. Instructor definitions of war:
 - a. Conflict carried on by force of arms, as between nations or states.
 - b. "Any conflict between rival groups by force of arms or other means, ...recognized as a legal conflict." (Preston and Wise)
 - c. Other definitions.
 - 3. Conflict as a common denominator .

4. Types of conflict:
 - a. Military.
 - b. Political.
 - c. Economic.
 - d. Religious/moral.
 - e. Ideological.
 - f. Psychological.
 - g. Other.

- B. Principles of war and a description of each. (Refer to the "Fundamental Concepts: History of the Military Art" article.)
 1. Mass - Combat power and its concentration at the decisive point and time.
 2. Objective - General areas or points of strategic or tactical value (including the enemy force itself), the destruction of which is the ultimate end of military operations.
 3. Offensive - Use of initiative in combat to set the time, place, strength, type, and direction of attack.
 4. Surprise - Psychological weapon applied by action that cannot reasonably be expected.
 5. Economy of Force - Distributing available forces in the most advantageous manner; corollary of mass.
 6. Movement - Maneuvering forces in the execution of a scheme of maneuver.
 7. Unity of Command - Cooperation; teamwork.
 8. Security - Never being surprised.

9. Simplicity - The acid test of the soundness of any plan for a military operation and of the orders issued for its execution.

C. Causes of international conflict (Jomini).

1. To reclaim certain rights or to defend them.
2. To protect and maintain the great interests of the state.
3. To maintain the balance of power.
4. To propagate political or religious theories, to crush them or to defend them.
5. To increase the influence and power of the state by acquisitions of territory.
6. To gratify a desire for conquest (or glory).

D. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 3

HOURS: 1

TITLE: Development of Warfare in Ancient Times

I. Learning Objectives

- A. The student will know and trace the evolution of weaponry from rudimentary to the Assyrian Iron Age.
- B. The student will know and describe the Assyrian military system, to include military organization, siege tactics, and the use of terror.
- C. The student will know and describe the Persian military ascendancy under Cyrus and Darius, with emphasis on methods used to consolidate their conquests.
- D. The student will know, identify, and discuss Graeco-Persian conflicts, with emphasis on Marathon, Thermopyale, and Salamis.
- E. The student will know and trace the development of the Greek military system, with emphasis on Spartan training and the phalanx.
- F. The student will comprehend the nature of the Peloponnesian War (land power versus sea power) and the resolution of that conflict.

II. References and Texts

- A. Instructor references
 - 1. Encyclopedia of Military History
 - 2. The Art of War in the Western World, pp. 1-21
 - 3. War Through the Ages, pp. 3-15 (optional)
 - 4. Instructor Resource Manual (optional)
- B. Student text: The Art of War in the Western World, pp. 1-21

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
- B. Procedural and student activity options: Read and study assignment.

V. Presentation

- A. Trace the development of ancient weapons.
 - 1. Rocks and clubs.
 - a. Weapons were either hand-held or in some way projected through the air.
 - b. Rocks evolved into darts, javelins, and arrows.
 - c. Clubs evolved into hatchets, spears, and swords.
 - 2. Protective armor.
 - a. To assist in warding off blows.
 - b. Evolved from leather stretched over a wooden frame (plus wooden and wicker varieties) into use of metals.
 - c. As soldiers suffered injury to different parts of their bodies, armor was developed to protect those parts.
 - 3. Use of metals.
 - a. In both weapons and armor.

- b. Reflected evolving technology.
 - c. Iron replaced bronze.
- B. First great military power.
- 1. Some fragmentary accounts of fighting in Egypt during the period 3100-1000 B.C.
 - 2. First detailed accounts are of the Assyrians who were dominant for five centuries.
 - a. Beginnings.
 - (1) Initial dominance under Tiglath-Pileser I (1166- 1093 B.C.).
 - (2) Fought off roving invaders.
 - (3) Zenith under Tiglath-Pileser III (745-727 B.C.).
 - (4) First to recognize superiority of iron over bronze.
 - (5) First to equip army with iron weapons.
 - b. Organization.
 - (1) Had a military society.
 - (2) Divided forces into separate branches (spear-men, archers, charioteers, cavalry) and trained them.
 - (3) First to use cavalry effectively.
 - (4) Developed siege tactics and built special siege equipment to attack walled cities that had developed in response to roving invaders.
 - (5) Could move and supply 50,000 men across all types of terrain.
 - (6) Senior army officers were also priests

and the word for "rebel" was the same as for "sinner."

c. Tactics.

- (1) First to have siege capabilities.
- (2) Used terror deliberately to intimidate enemies.
- (3) Some cities would surrender without a fight, hoping to avoid mass slaughter.

d. End.

- (1) Fell in 612 B.C. to a coalition of Babylonians and Medes.
- (2) Assyrians' king threw himself into the flames of the city.
- (3) Defeat and subsequent enslavement and deportation were so thorough that Assyria, as a separate nation, disappeared.

C. Persian military ascendancy.

1. Transition.

- a. Coalition that defeated Assyrians collapsed.
- b. Persia became independent in 559 B.C.

2. Cyrus the Great.

- a. Primary military victory at Thymbra in 546 B.C. against the Lydians who outnumbered him.
- b. To avoid being outflanked, he put troops in a huge square with archers in the middle.
- c. Improvised a camel corps, which frightened the Lydian horses.
- d. Subjugated the largest territory (conquered and held) at that time.

- e. Considered the first Great Captain in history.
 - f. Killed in battle in 530 B.C.
 - 3. Darius the Great.
 - a. Cousin of Cyrus.
 - b. Consolidated Cyrus' area and then began expanding.
 - c. Relatively enlightened governing policies.
 - d. Made first attempt to reach Greece in 492 B.C.
- D. Greek military development.
 - 1. Phalanx.
 - a. Common to all Greek city-states, including two dominant ones -- Athens and Sparta.
 - b. Made up of hoplites-warriors who could afford their own equipment, which consisted of a shield, a short "cut and thrust" sword, and a 10-foot spear.
 - c. Marched virtually shoulder-to-shoulder and usually eight deep with all spears pointing to the front.
 - 2. Spartan system - All spartans, male and female, were screened and trained in military matters from age 7 to 60.
- E. Graeco-Persian conflicts.
 - 1. Marathon, 490 B.C.
 - a. Persians landed in Marathon, intent on pulling forces away from Athens, which they would then attack.
 - b. Athenians, under Miltiades, pressed attack

and sprang a double envelopment.

- c. Athenian Army countermarched rapidly back to Athens. Its presence deterred the Persians from attacking.

2. Thermopylae, 480 B.C.

- a. Between Spartans and Persian land force.
- b. Spartans outnumbered, put up a legendary fight, and died to the last man.
- c. Did delay and punish Persians.

3. Salamis, 480 B.C.

- a. First decisive naval engagement in history.
- b. Outnumbered Greeks; lured Persian fleet into constricted area where Persian numbers did not help.
- c. Greek leader, Themistocles, had contributed to Persian overconfidence by sending Persian leader, Xerxes, a message stating falsely that the Greeks were on the verge of widespread desertion.
- d. In aftermath, Persian land force was defeated at Plataea.

F. Peloponnesian War.

1. Transition.

- a. Having freed themselves of invaders, the Greek city-states began to fight among themselves.
- b. Period of Peloponnesian Wars: 431 B.C. to 404 B.C. Described by Thucydides.
- c. Primary antagonists were Athens and Sparta.

2. Athens - primarily, a sea power.

3. Sparta.
 - a. Primarily, a land power.
 - b. Up until the decisive battle, Athens won the sea battles, and Sparta, the land battles.
4. Resolution.
 - a. At Syracuse (Sicily) in 413 B.C.
 - b. Sparta defeated the Athenian fleet, breaking Athens' back, though fighting drags on for several more years.
 - c. Final battle was the victory of the Spartan Admiral Lysander at Aegospotamoi (405 B.C.).
 - d. Thus, Sparta, the land power, adapted to and ultimately defeated Athens at sea.

G. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 4

HOURS: 1

TITLE: Alexander and the Macedonian System

I. Learning Objectives

- A. The student will know and briefly discuss the continuing strategic and tactical innovations of Sparta, Epaminondas of Thebes, and Philip of Macedon.
- B. The student will know and discuss the organizational and tactical improvements of the Macedonian military system, 350-320 B.C.
- C. The student will know and describe Alexander's unique resolution of the land power/sea power dichotomy.
- D. The student will know and trace Alexander's route of conquest, with emphasis on his use of tactical concentration in striking at the decisive point at the decisive time.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 21- 54, 57-62
- 2. Men in Arms, pp. 27-31
- 3. War Through the Ages, pp. 16-42 (optional)
- 4. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 21- 54, 57-62
- 2. Men in Arms, pp. 27-31

III. Instructional Aids

- A. Chalkboard/whiteboard
 - B. Map
- IV. Suggested Methods and Procedures
- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
 - B. Procedural and student activity options: Read and study assignment.
- V. Presentation
- A. The Battle of Leuctra - Epaminondas of Thebes.
 - 1. Parallel advance.
 - 2. Refused wing.
 - B. Philip of Macedon.
 - 1. Cooperative arms.
 - a. Infantry.
 - (1) Sarissa.
 - (2) Light infantry.
 - b. Cavalry.
 - (1) Scouting.
 - (2) Skirmishing.
 - c. Artillery.
 - (1) Ballista.
 - (2) Catapult.
 - 2. Organizational staff.

3. Engineering Corps.
 4. Baggage train.
 5. Medical service.
 6. Drill masters.
 7. National standing army.
- C. Alexander's strategy of defeating sea power by the taking of seaports from the land side.
- D. Alexander the Great.
1. Battle of Issus.
 2. Siege of Tyre.
 3. Discuss the following aspects of Alexander's siege craft:
 - a. Ram.
 - b. Bore.
 - c. Penthouse.
 - d. Mantelets.
 - e. Siege tunnels.
 - f. Naphtha.
 - g. Spies.
 - h. Mole.
 4. Siege of Gaza.
 5. Tactics employed by Alexander at the Battle of Arbela.
 6. Crossing the Jaxartes and the Battle of the Hydaspes.
- E. Explain the success of Alexander in relation to:

1. Principles of war.
2. The man.
3. Human resources.

F. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 5

HOURS: 1

TITLE: Roman Modifications, Hannibal, and the Punic Wars

I. Learning Objectives

- A. The student will comprehend, know, and explain the organization of the Roman army, with emphasis on the legionary system.
- B. The student will know and trace the Roman subjugation of the Italian peninsula, with emphasis on the campaigns against King Pyrrhus.
- C. The student will know/describe the First Punic War, with emphasis on the campaigns against King Pyrrhus.
- D. The student will know and recount the major battles of the Second Punic War, to include the battles of Trebia, Lake Trasimene, and Cannae.
- E. The student will know and evaluate Hannibal as a Great Captain.
- F. The student will comprehend and explain Hannibal's failure to gain strategic victory despite tactical success.
- G. The student will know and review the Battle of Zama and Scipio's impact on the outcome.

II. References and Texts

- A. Instructor references
 - 1. Encyclopedia of Military History
 - 2. The Art of War in the Western World, pp. 26- 45, 65-72
 - 3. Men in Arms, pp. 32-39
 - 4. War Through the Ages, pp. 43-69 (optional)

5. Instructor Resource Manual (optional)
- B. Student texts
1. The Art of War in the Western World, pp. 26- 45, 65-72
 2. Men in Arms, pp. 32-39
- III. Instructional Aids
- A. Chalkboard/whiteboard
 - B. Maps
- IV. Suggested Methods and Procedures
- A. Method options
 1. Lecture
 2. Lecture and discussion
 - B. Procedural and student activity options: Read and study assignment.
- V. Presentation
- A. Roman Military Organization.
 1. Legion composition.
 - a. Three lines.
 - b. First two lines composed of 20 maniples each, with a maniple having 12 men across and 10 deep.
 - c. Maniples spaced, checkerboard style, allowing second line to step up or first line to step back smoothly, forming one solid line in either case.
 - d. Soldiers in first two lines carried two 7-foot javelins and a 2-foot sword.
 - e. First line = hastati = 25-30 years old.

- f. Second line = principes = 30-40 years old.
 - g. Third line had some 120-man maniples and some 60-man maniples, adding flexibility and weight.
 - h. Soldiers in third line carried a 12-foot spear, plus sword and javelin.
 - i. Third line = triarii (veterans on last campaign) and velites (17-25 years old).
 - j. One maniple of each classification, from front to rear formed a cohort, and 10 cohorts made up the infantry strength of the legion.
 - k. Supported by cavalry, archers, and skirmishers.
2. Discipline.
- a. Harshesht ever inflicted on citizen soldiers.
 - b. Thoroughly trained.
- B. Rise of Rome.
- 1. Origin.
 - a. According to legend, founded in 753 B.C.
 - b. A city-state, blessed with a particularly good location.
 - 2. Conquest of Italy - Required conquering other city-states.
 - 3. Pyrrhus.
 - a. Was a Greek soldier-king invited in by an Italian city-state trying to avoid Roman take-over.
 - b. Pyrrhus brought 20,000 infantry and more than 3,000 cavalry.

- c. Pyrrhus defeated Romans (partially due to judicious use of elephants), but suffered heavy, difficult-to-replace casualties (280 B.C.).
- d. Credited with saying, "One more such victory and I am lost;" thus, the phrase, "Pyrrhic victory."
- e. Decisively defeated in 275 B.C. and returned to Greece saying, "What a fine field of battle I have here for Rome and Carthage."
- f. Pyrrhus was killed in a street fight in 272 B.C. Hannibal rated Pyrrhus as second only to Alexander the Great.

C. First Punic War.

- 1. Nature of powers.
 - a. Carthage - a sea power.
 - b. Rome - a land power with no navy.
- 2. Roman Navy.
 - a. Took a Carthaginian ship that washed up on the beach and used it as a model.
 - b. To make up for weaknesses in close-in boat handling; introduced the corvus, a huge hook mounted on prow of a warship (used to grapple an enemy vessel, facilitating boarding).
- 3. Sea Battles.
 - a. Mylae, 260 B.C.
 - b. Cape Ecnomus, 256 B.C.
 - c. Went ashore and set down harsh surrender terms.
- 4. Carthaginian reaction - Hired Xanthippus; defeated Roman army in Africa.

5. Resolution.
 - a. Carthaginian fleet destroyed in 241 B.C., in the Battle of Aegusa.
 - b. Rome was victorious.
- D. Second Punic War.
 1. Origins.
 - a. Hamilcar in Spain.
 - b. Hannibal assumed leadership in 221 B.C.
 2. Hannibal's campaigns.
 - a. Move to Italy.
 - b. Trebia, 218 B.C.
 - c. Lake Trasimene, 217 B.C.
 - d. Campaigns against Quintus Fabius Maximum (Fabian tactics).
 - e. Cannae, 216 B.C.
 - f. Defeat of Hasdrubal - a good example of use of interior lines.
 3. Resolution - Publius Cornelius Scipio.
 - a. Rome defeated Spanish bases at Carthage.
 - b. Threatened Carthage.
 - c. Zama, 202 B.C., victory by Scipio.
- E. Evaluation of Hannibal.
 1. Strategic victory versus tactical victory. An officer of Hannibal's told him after Cannae: "You know how to win victories, but not how to use them."
 2. Accomplishments particularly noteworthy in view of

long supply line.

F. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 6

HOURS: 1

TITLE: Pax Romana

I. Learning Objectives

- A. The student will know and identify the changes made in the Roman military organization after the Third Punic War and the causes of these changes.
- B. The student will know and describe the civil wars between Caesar and Pompey, with emphasis on the reasons for Caesar's success militarily.
- C. The student will comprehend and explain the power struggle after the death of Caesar, with emphasis on the Battle of Actium.
- D. The student will know and recall the key changes in the Roman military system from Actium to Adrianople and the causes of these changes.
- E. The student will comprehend and explain the concept of Pax Romana.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 34- 45, 72-86
- 2. Men in Arms, pp. 39-49
- 3. War Through the Ages, pp. 70-88 (optional)
- 4. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 72-86
- 2. Men in Arms, pp. 39-49

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Maps

IV. Suggested Methods and Procedures

- A. Lecture
- B. Lecture and discussion
- C. Guided discussion

V. Presentation

- A. Changes in Roman military organization after Third Punic War.
 - 1. Legions were composed of Roman and non-Roman citizens.
 - 2. Legions loyal to their generals, vice the state itself.
 - 3. Civil disorder.
 - 4. Garrison duty.
 - 5. Unlimited powers of Proconsula.
 - 6. Cohort becomes the basic unit of the order of battle.
- B. Caesar.
 - 1. Greatest Roman political general.
 - 2. Took command of legions in Gaul.
 - 3. The man:
 - a. Personal courage.

- b. Tactical skill.
 - c. Intelligence.
 - d. Loyalty.
 - e. Inspiring leader.
4. Defeated Pompey in 48 B.C. in Greece; later in Spain and Africa.
- C. Caesar's Lieutenants.
- 1. Mark Anthony - ruled from Egypt.
 - 2. Octavian - ruled from Rome.
 - 3. Battle of Actium.
 - a. Sea battle conducted in Ionian Sea.
 - b. Over 400 galleys and 80,000 men involved.
 - c. Anthony and Cleopatra defeated and betrayed.
 - d. Established Roman Navy as the premier Navy of the time.
 - e. Combined with Army to secure frontiers and to police Mediterranean.
 - 4. Octavian reaches Alexandria in July 30 B.C.; Anthony and Cleopatra commit suicide.
 - 5. Octavian takes title of Caesar Augustus.
- D. Pax Romana and changes in the military system.
- 1. "Pax Romana" refers to period from Caesar Augustus (27 B.C.) to Battle of Adrianople (A.D. 378).
 - 2. Longest period of peace Roman Empire had experienced.
 - 3. Army was oriented to defense.

4. Primary goal was consolidation and security of frontiers.
5. Soldiers recruited for 16-year tours; later increased to 20 years.

E. Battle of Adrianople.

1. Legion weakened by increasing number of light foot and cavalry.
2. Moral decay of the state.
3. Roman General Valens and 40,000 infantry annihilated.
4. Battle of Adrianople signified the end of the Roman military tradition.

F. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 7

HOURS: 1

TITLE: The Byzantine Empire

I. Learning Objectives

- A. The student will know and recall the attempt by Justinian to reunite the old empire and his use of the tactical genius of his commanders, Belisarius and Narses.
- B. The student will know and discuss the Byzantine military philosophy.
- C. The student will know and outline the Byzantine military system.
- D. The student will know and identify the tactical and philosophical innovations of the Byzantines (i.e., cavalry, stirrup, and greek fire).
- E. The student will know and trace the succession of battles that culminated in the fall of Constantinople.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History
- 2. The Art of War in the Western World, pp. 92- 109
- 3. Men in Arms, pp. 50-63
- 4. War Through the Ages, pp. 104-131 (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 92- 109
- 2. Men in Arms, pp. 50-63

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Map

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
 - 3. Guided discussion
- B. Procedural and student activity options: A suggested means to accomplish the objectives of this lesson is to develop the Byzantine military system in isolation and then to offer some comparative remarks about the Byzantines and previous military systems.

V. Presentation

- A. Byzantium - Origin and Philosophy.
 - 1. Eastern Roman Empire - Fervently nationalistic; survival-oriented.
 - 2. Commercial dominance and geographical considerations.
 - 3. Centralized, autocratic rule.
 - 4. Military philosophy.
 - a. Defensively-oriented; Constantinople - the heart.
 - b. Native-born soldiers vice mercenaries.
 - c. Use of ruses, stratagems, etc.; morality in war not crucial.
 - d. Studies all aspects of war carefully.

- e. Cavalry - an important ingredient.
 - f. Stern discipline and incessant drilling.
 - g. Heavy emphasis on "generalship."
- B. Justinian as emperor - Attempts to reunite the old empire by going on the offensive.
- 1. Small-sized expeditionary forces.
 - 2. Use of horse archers and cavalry lances.
 - 3. Excellence in weaponry and use of mounted bowmen.
 - 4. No reunification per se, but Justinian's efforts halted the decline of the East Roman (Byzantine) Empire.
 - 5. Used tactical genius of Belisarius and Narses.
- C. Post-Justinian Byzantium.
- 1. Maurice initiates a long period of defensive orientation.
 - 2. Theme system.
 - a. Small standing army as a central reserve.
 - b. Themes individually organized.
 - c. Massive frontier fortifications.
 - 3. Naval affairs important because of economic situation.
 - 4. Military innovations.
 - a. Cavalry.
 - b. Stirrup.
 - c. Greek fire.
- D. The empire declines; Constantinople falls.

1. Persians and Slavs in 7th century.
2. Islamic attackers in 7th and 8th centuries.
3. Battle of Manzikert (1071) - fatal to the empire.
4. Constantinople finally falls to the Ottoman Turks (1453).

E. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 8

HOURS: 1

TITLE: Feudal Warfare and the Renaissance of the Military Art

I. Learning Objectives

- A. The student will know and trace the development of the Franks, with emphasis on the Battle of Tours.
- B. The student will know and discuss Charlemagne and the beginning of feudalism, and its acceleration due to the pressure of Viking raids.
- C. The student will comprehend and analyze the Battle of Hastings and its impact on the armored rider becoming the preeminent instrument of medieval warfare.
- D. The student will know and describe the influence of religious and technological factors on the Crusades, to include rudimentary mass communication and the crossbow.
- E. The student will know and trace the decline of mounted knights, cavalry, and crossbow and the emergence of the longbow, pike, and gunpowder.
- F. The student will comprehend and explain the contribution of Machiavelli, with emphasis on his attitudes on ethical war and the Condottieri.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History
- 2. The Art of War in the Western World, pp. 102-122, 134-142
- 3. The Face of Battle, pp. 79-116
- 4. Men in Arms, pp. 65-97
- 5. War in the Modern World, pp. 19-25

6. War Through the Ages, pp. 91-103 (optional)
 7. Instructor Resource Manual (optional)
- B. Student texts/resource materials
1. The Art of War in the Western World, pp. 102-122, 134-142
 2. The Face of Battle, pp. 79-116
 3. Men in Arms, pp. 65-97

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options
 1. Lecture
 2. Lecture and discussion
 3. Guided discussion
- B. Procedural and student activity options: Read and study assignment.

V. Presentation

- A. The Franks - A Germanic group of tribes which moved slowly into Gaul during the late 5th and early 6th centuries.
 1. Initially, they were a primitive, albeit effective, infantry force.
 - a. They wore no body armor.
 - b. They employed javelins, swords, daggers, and the "francisca," a heavy, well-balanced battle-axe that was thrown with great

accuracy just prior to making contact with the enemy.

- c. Defeat of the Franks by the Byzantines at Casilinum (A.D. 554) demonstrated the impotence of their formation when facing a well-trained cavalry force.
 2. A.D. 496 - The various Frankish bands were forced to recognize Clovis as king.
 3. Charles Martel.
 - a. Victor at Battle of Tours (A.D. 732).
 - (1) Franks assumed a strong defensive position wherein they massed.
 - (2) Moslems foolishly and futilely assaulted the massed Frankish infantry.
 - b. As a result of Charles' administrative skill, the Franks also developed a large body of mounted soldiers.
- B. Charles the Great (Charlemagne), King of the Franks, A.D. 768-814.
1. His military and administrative ability resulted in the creation of an extensive empire that collapsed soon after his death.
 - a. Although he continued to employ infantry, the percentage of cavalry in the Frankish army constantly increased under Charlemagne.
 - b. He issued a variety of edicts designed to develop the cavalry arm.
 2. The rise of feudalism.
 - a. The comitatus.
 - b. Development of the system of vassalage.
 - (1) Widened in scope under Charles Martel.

- (2) Further extended by Charlemagne to include conquered areas.
 - c. Reform of the infantry levy by Charlemagne, which narrowed the social bounds within which the military art was practiced.
 - d. Social disorder after the division of the empire among Charlemagne's grandsons.
 - e. Raids by the Vikings and Maggars.
 - (1) The local lord, his castle, and his army provided the only protection from these raids.
 - (2) The effect was to increase the power of the local noble with a concomitant diminution in power of the central monarchy.
- C. The Battle of Hastings (1066).
- 1. The Norman Army.
 - a. Cavalry was the leading element.
 - b. Also included archers and infantry.
 - 2. English Army - all infantry.
 - 3. The Norman cavalry failed to penetrate the shield wall of the English infantry.
 - a. The wings of the English army, however, reacted to cavalry feints and were destroyed.
 - b. Norman high-trajectory missile fire was then employed to weaken the ranks of the English center, rendering it vulnerable to a cavalry assault.
 - 4. Thus, the medieval view that this battle proved the preeminence of the cavalry arm was simplistic, since the Norman archers and the poor performance of the English infantry contributed substantially to the Norman victory.

D. The Crusades.

1. In an age of universal faith, the medieval church was an extraordinarily powerful and influential institution.
2. By virtue of its centralized authority, the church was unique among medieval institutions in its ability to communicate its position to the nobility and to the masses. Support for and participation in these "holy wars" were emphasized from every pulpit in Europe.
3. The crossbow, developed during the 11th century, fired a metal bolt that could penetrate chain mail.
 - a. As a consequence, chain mail began to be replaced by cumbersome and costly armor plate.
 - b. Most feudal armies included a complement of cross-bowmen, despite efforts by the Papacy to limit its employment to wars against infidels.
 - c. The victories won by the crusaders resulted from an intelligent use of a combined force of cross-bowmen, infantry, and cavalry -- lessons that were forgotten upon returning to Europe.

E. Two essentially contemporaneous and independent developments signaled the beginning of the end of the armored cavalry's dominance.

1. Swiss infantry.
 - a. Used a phalanx formation and long pikes to withstand the shock of a cavalry charge.
 - b. Halberds were then employed to unseat and kill the riders.
2. English long bow.

- a. Could outrange and outshoot the crossbow.
 - b. Employed with great effect at Crecy (1346), Poitiers (1356), and Agincourt (1415).
- F. Gunpowder, which was employed only sparingly prior to the mid-15th century, rendered the stone castle obsolete.
- G. Niccolo Machiavelli.
 - 1. He perceived and expressed the effect of emerging nation-states on warfare.
 - a. He separated politics from morality, arguing that expediency shall be the prince's guide and that power was the secret of the state's success.
 - b. War, which was a struggle for the state's existence, could not be fettered by ethical considerations or any other limitation.
 - 2. Condottieri-Mercenaries employed by the Italian city-states.
 - a. Their leisurely, safe campaigns resembled games more than war.
 - b. They proved completely incapable of resisting the French invasion of 1494.
 - c. The Condottieri represented the antithesis of Machiavelli's views on warfare.
- H. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 9

HOURS: 1

TITLE: The Spanish Square and the Great Armada

I. Learning Objectives

- A. The student will know and trace Spain's tactical evolution on land with her infantry, emphasizing Cordoba and the Battle of Pavia.
- B. The student will know and describe the Battle of Lepanto.
- C. The student will know and identify the significant developments in weaponry during the mid-16th century.
- D. The student will know and discuss the revolt in the Netherlands and the defeat of the Spanish Armada.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 195-213
- 2. Men in Arms, pp. 98-109, 119-131
- 3. War in the Modern World, pp. 19-40, 60-66
- 4. War Through the Ages, pp. 211-214, 227-261 (optional)
- 5. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 195-213
- 2. Men in Arms, pp. 98-109, 119-131

III. Instructional Aids

- A. Chalkboard/whiteboard

B. Map

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lecture and discussion
3. Guided discussion

B. Procedural and student activity options: Read and study assignment.

V. Presentation

A. Spain's tactical evolution on land.

1. Conquest of Grenada during the late 15th century involved numerous siege operations necessitating professional soldiers and heavy artillery.
2. Gonzalo de Cordoba, "the Great Captain," combined infantry arms (i.e., pikes, swords, and firearms) in the proper proportions to score impressive victories in Italy during the late 15th and early 16th centuries.
 - a. For perhaps the first time, small arms fire was decisive on the battlefield.
 - b. As one might expect, Cordoba's victories resulted also from his tactical ability, which was at least equal to his organizational skill.
3. 1505 - Spain began to group four or five companies together under a colonel.
 - a. Initially, this grouping was only for organization and administration on the march.
 - b. By 1534, the tercio was developed, a tactical unit of some 3,000 men armed with pikes and arquebuses.

4. Pavia (1525) - Again, Spanish small arms proved decisive. The French Cavalry was methodically shot as it attacked piecemeal.
- B. Battle of Lepanto (1571) - The last significant galley battle, influenced by gunpowder, but otherwise little changed from the "infantry battle at sea" characteristics of earlier naval engagements.
1. The opposing Christian and Turkish forces were nearly equal.
 2. The Christian forces made good use of the new galleasses, which differed from galleys in that they were wider, heavier, and had a gundeck over the rowers.
 3. The overwhelming Christian victory was won by hand-to-hand fighting, but the ability of the Christian forces to adapt the new gunpowder weapons to sea warfare was a contributing factor.
- C. Weapons development during the mid-16th century.
1. The musket, due to its greater range and stopping power, gradually replaced the arquebus.
 2. The wheel-lock pistol resulted in the renewed importance of the cavalry arm.
 3. The prototype ship-of-the-line was developed during the reign of Henry VIII.
- D. The revolt in the Netherlands and the defeat of the Armada.
1. The Netherlands were inherited by the Spanish branch of the Hapsburgs upon the abdication of Charles V in 1555.
 2. The Netherlands revolt (1568-1609).
 - a. Resulted from religious differences (the northern Netherlands provinces were strongly Protestant) and patriotic feelings.
 - b. Initial Spanish successes culminated in 1585

with the recapture of Antwerp by Alexander Farnese, Duke of Parma, the finest soldier of his age.

- c. Parma's achievements forced the English to intervene openly on the side of the rebels.

3. The Spanish Armada.

- a. An amphibious operation designed to invade England and dethrone its Protestant Queen, Elizabeth I.

- (1) The Spanish Plan.

- (a) The armada was to rendezvous with Parma's army in the vicinity of Dunkirk and escort it across the channel.

- (b) The armada itself carried a subsidiary landing force.

- (c) The naval force was designed to be strong enough to engage the English fleet if necessary, but its principal mission was to convoy the two landing forces.

- (2) The English plan was to prevent the junction of the armada with Parma's force.

- b. The English fleet engaged the armada off Gravelines after a week of skirmishing.

- (1) English ships, guns, and gunnery proved decisively superior.

- (2) The armada's only chance was to close and attempt to board, but the English succeeded in thwarting these efforts.

- (3) The junction with Parma was prevented, and only a sudden squall saved the armada from destruction.

- c. Shortages of provisions and bad weather resulted in additional serious personnel and ship losses to the armada during the voyage around Scotland and back to Spain.
- 4. The revolt in the Netherlands continued for 21 years after the defeat of the Spanish Armada.
 - a. Under Maurice of Nassau, the rebels succeeded in gaining control of the seven northern provinces.
 - b. The Truce of 1609 resulted in the independence of the northern provinces, whereas, the nine southern Catholic provinces remained under Hapsburg control.

E. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 10

HOURS: 1

TITLE: The 17th Century and Military Innovations

I. Learning Objectives

- A. The student will know and discuss the continuing religious strife that led to the Thirty Years' War and the total nature of such ideological struggles.
- B. The student will know and describe the Thirty Years' War from the standpoint of Gustavus' strategy and tactics.
- C. The student will know and review the military innovations introduced by Gustavus Adolphus.
- D. The student will know and describe the growth of defensive fortifications during the reign of Louis XIV.
- E. The student will know and recall the development of the law of nations in reaction to the unlimited warfare of the Thirty Years' War.
- F. The student will relate/apply the development of Cromwell's New Model Army to the changes in civil-military relationships in 17th century England.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 221-266
- 2. Men in Arms, pp. 109-131
- 3. War in the Modern World, pp. 40-44
- 4. War Through the Ages, pp. 262-346 (optional)
- 5. Instructor Resource Manual (optional)

B. Student texts

1. The Art of War in the Western World, pp. 221-266
2. Men in Arms, pp. 109-131

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options
 1. Lecture
 2. Lecture and discussion
 3. Guided discussion
- B. Procedural and student activity options: Read and study assignment.

V. Presentation

- A. The Protestant Reformation and Catholic Counter-Reformation of the 16th century resulted in innumerable conflicts.
 1. Conflicts between Catholic Spain and the Protestant Netherlands and England were examined during the previous class.
 2. Spain was also involved in attempts to suppress the Huguenot uprisings in France.
 3. Since both sides felt they were defending the "true faith," these wars were ferociously fought.
 4. The Thirty Years' War (1618-1648) was initially a continuation of this religious strife.
 - a. It would be simplistic to suggest that any of these conflicts were precipitated exclusively by religion. Economics, dynastic rivalries, etc., were also underlying causes.

- b. As the Thirty Years' War progressed, it became a power struggle between monarchs as opposed to a religious war. Catholic France was ultimately allied with Protestant Sweden against the Catholic Holy Roman Emperor.
 - c. The ruthlessness associated with religious wars continued to characterize the Thirty Years' War.
- B. Gustavus Adolphus, King of Sweden, the "Great Captain" of the Thirty Years' War.
 - 1. Strategy.
 - a. Secured and developed a firm base of operations on the Baltic Coast prior to commencing active campaigning.
 - b. His marches and attacks were made with a view toward future operations.
 - c. He coordinated the actions of armies in various parts of the country.
 - d. The mobility of his forces served him in good stead strategically, as well as tactically.
 - 2. Gustavus' tactical skill was demonstrated most clearly at the Battle of Breitenfeld.
 - a. His battle groups were capable of skillful and expeditious maneuver to meet threats from the flanks.
 - b. His infantry, artillery, and cavalry were coordinated to an extent that was heretofore unique.
- C. Military innovations of Gustavus Adolphus.
 - 1. A national standing army.
 - 2. By reducing the weight of the weapons and equipment carried by the individual soldier, he enhanced the army's mobility.

- a. Musketeers ceased using armor, save for a helmet.
 - b. Lighter muskets enabled the musketeers to divest themselves of the cumbersome rest and to arm themselves with a sword.
 - 3. Paper cartridges, which greatly increased the rate of fire.
 - 4. Artillery innovations.
 - a. Standardization and reduction of weight.
 - (1) Siege, field, and regimental guns were standard in the Swedish army.
 - (2) Regimental gun was 1,000 pounds lighter than that used in other armies.
 - b. Introduction of the artillery cartridge greatly increased the rate of fire and made ammunition handling significantly safer.
- D. Louis XIV and the development of defensive fortifications.
 - 1. The efficiency and organization of Louis' army resulted from the reforms of the Marquis de Louvois, the War Minister.
 - 2. Colbert, the Finance Minister, obtained the wealth necessary to pay for the French military.
 - 3. Defensive fortifications.
 - a. By the end of the Middle Ages, artillery had rendered the medieval castle obsolete, thus giving a marked advantage to the offensive.
 - b. The period from the mid-17th century to Frederick the Great saw little advance in artillery and a resurgence in military engineering.
 - c. Sebastien le Prestre de Vauban, Louis XIV's

great engineer, constructed three systems of fortifications that were instrumental in reducing the advantage that artillery had given the offensive.

- (1) His fortresses probably saved Paris during the War of the Spanish Succession and the French Revolution.
- (2) Vauban also devised a system for attacking fortifications by digging parallels to approach the walls.
- (3) His fortresses and his methodical siege system resulted in these aspects of warfare resembling a geometric exercise and contributed to the limited nature of conflicts during the latter portion of the 17th century.

E. The atrocities associated with the Thirty Years' War precipitated a moral revulsion that was partially responsible for the formulation of laws to govern the conduct of nations.

1. Hugo Grotius' Rights of War and Peace (1625).
 - a. Treated states as individuals within the society of nations.
 - b. The law of nations contemplated that each nation would respect the rights of other nations and would honor its obligations contracted with them.
2. The law of nations, together with the rationalism of the late 17th and 18th century, tended to limit the way in which wars were fought.

F. Oliver Cromwell and the New Model Army.

1. Civil War in England, 1642.
2. Initially, both the Royalists and Parliamentary forces were composed of untrained militia.
3. After the Royalist victory at Edgehill (1642),

Cromwell recognized the importance of raising a disciplined and well-trained force. The result was the New Model Army.

- a. This Army proved superior to both the Royalists and the Scots. Cromwell became the first ruler of England to conquer the whole British Isles.
- b. The New Model was the foundation of the British Army of the Future.
- c. Ultimately, however, the New Model Army became the instrument of the military dictator that Cromwell became.
- d. The Anglo-American distrust of standing armies stems from the experiences during the Protectorate.

G. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 11

HOURS: 1

TITLE: Limited Warfare in the Age of Monarchs

I. Learning Objectives

- A. The student will comprehend and explain the resurrection of mobility and the offensive by Marlborough.
- B. The student will know and trace the emergence of limited war, international law, and the tight professional armies of kings.
- C. The student will know and describe strategy, tactics, and the means of limited warfare.
- D. The student will comprehend and explain the emergence of Great Britain as the dominant maritime and colonial power by the end of the 18th century.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 289-309, 314-319
- 2. Men in Arms, pp. 133-163
- 3. War in the Modern World, pp. 44-59, 66-75
- 4. War Through the Ages, pp. 347-414 (optional)
- 5. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 289-309, 314-319
- 2. Men in Arms, pp. 133-163

III. Instructional Aids

- A. Chalkboard/whiteboard
 - B. Map
- IV. Suggested Methods and Procedures
- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
 - B. Procedural and student activity options: Read and study assignment.
- V. Presentation
- A. Reaction to Thirty Years' War: Revulsion so thorough it touched all aspects of international life.
 - B. Mobility and offensive.
 - 1. Marlborough.
 - 2. Frederick the Great.
 - C. International law.
 - 1. Attempts to codify rules of war.
 - 2. No real attempts to outlaw war completely; was seen as a worthwhile means of achieving political ends, if violence and destruction could be moderated.
 - D. Limited war.
 - 1. Nature of armies.
 - a. Drew officers from idle nobility and enlisted men from the dregs of society -- two non-productive groups.
 - b. Heavy reliance on harsh discipline, both to keep men in the army and to prepare for battle.

- c. No relationship between military and civilian segments of society.
 - 2. Examples of discipline.
 - a. Frederick the Great.
 - b. Barracks, no night marches, no marching near forests.
 - c. Bright uniforms to facilitate spotting deserters.
 - 3. Objectives of limited wars.
 - a. Small, carefully defined.
 - b. Did not require collapse of opposing government to win.
 - c. Military used to gain the edge at bargaining table.
 - d. Civilian populace not involved.
- E. Conduct of limited war.
 - 1. Strategy.
 - a. Maneuver most important; better for forcing the enemy into a situation requiring surrender.
 - b. Soldiers expensive to replace, since it took two years to train one.
 - c. Maneuver and strategy pinned to supply points with primary ones (magazines) located 3 days' march apart and supplementary ones (ovens) located at one-day intervals.
 - 2. Tactics.
 - a. Fighting fierce when two armies chose to meet in battle.

- b. Occurred when both commanders were fairly sure of winning.
- c. Needed a broad, reasonably level plain, since all armies practiced linear tactics.
- d. Key was to shoot second.
- e. Frederick's "Oblique Order."

3. Means.

- a. Bayonet with socket invented in 1678; made the musket man also a pike man.
- b. Flintlock musket.
- c. Frederick improved artillery both mechanically and functionally; also introduced horse artillery and indirect firing.

F. Emergence of Great Britain.

- 1. Defeat of Spanish Armada in 1588 - difference in tactics.
- 2. Response to Cardinal Richelieu's fleet - "ship money" tax in 1634.
- 3. Anglo-Dutch Wars.
 - a. Third ended in 1647 with Britain victorious.
 - b. During these conflicts, British refined fighting technique of "line-ahead."
- 4. Defeat of France at sea.
 - a. In War of Spanish Succession, drove France and Spain from sea and exhausted her ally, Holland.
 - b. Mahan: "She [*Great Britain*] was the sea power."
- 5. Solidification of hold.

a. Establishment of colonial empire.

b. Defeat of France in Seven Years' War.

G. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 12

HOURS: 1

TITLE: The American Revolution

I. Learning Objectives

- A. The student will comprehend and contrast/compare the expressions "strategy of attrition" and "partisan warfare" and apply them to the American Revolution.
- B. The student will know and discuss British and American strategy and objectives, and note how they changed during the course of the American Revolution.
- C. The student will comprehend and contrast the Continental Army with the professional armies of the 18th century and show how this difference dictated Washington's strategy.
- D. The student will comprehend and explain how French intervention tipped the balance in favor of America in the War of Independence.

II. References and Texts

A. Instructor references

- 1. Men in Arms, pp. 164-178
- 2. War in the Modern World, pp. 76-97
- 3. The American Way of War, pp. 3-39
- 4. War Through the Ages, pp. 417-439 (optional)

B. Student texts

- 1. Men in Arms, pp. 164-178
- 2. The American Way of War, pp. 3-39

III. Instructional Aids

- A. Chalkboard/whiteboard

- B. Map
- IV. Suggested Methods and Procedures
- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
 - B. Procedural and student activity options: Read and study assignment.
- V. Presentation
- A. Definition of terms.
 - 1. Strategy of attrition.
 - 2. Partisan warfare. (Discuss current models, such as Vietnam and Afghanistan.)
 - B. Application of terms.
 - 1. Strategy of attrition.
 - a. Long-term British support.
 - b. European enemies.
 - c. Length of war.
 - 2. Partisan warfare.
 - a. American militia rising to local occasions around hard core of continental soldiers, such as Saratoga and in the south.
 - b. Tactics suited to capabilities, with classic example being Cowpens.
 - C. American strategy and objectives.
 - 1. At Lexington.
 - 2. At Saratoga.

3. In the southern campaigns.
- D. British strategy and objectives.
1. At Lexington.
 2. At Saratoga.
 3. In the southern campaigns.
- E. Opposing forces.
1. British.
 - a. Began as classic 18th century European army.
 - b. Loyalty/dedication suspect, especially with Hessians.
 2. American.
 - a. Prior to van Steuben, little to no discipline.
 - b. Van Steuben blended European military philosophy to American individualism.
 - c. Used musket much more than British.
 - d. More flexible.
 - e. Length of service and training sometimes impacted on strategy and tactics, such as at Quebec, Trenton, and Cowpens.
- F. Impact of French.
1. Contributions.
 - a. Individual leaders, such as Lafayette.
 - b. Soldiers.
 - c. Weapons.
 - d. Sea power.

2. Coordination.
 - a. Difficult, as evidenced at New York and Newport.
 - b. France's assistance at the decisive Battle of Yorktown.
- G. Impact of American Revolution on warfare.
 1. Began democratization of warfare (again).
 - a. Started on movement from limited to total warfare.
 - b. Napoleon would carry trend to extreme.
 2. Changed linear tactics -- Use of musket made linear tactics difficult.
- H. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 13

HOURS: 1

TITLE: The French Revolution

I. Learning Objectives

- A. The student will know and trace the transition from limited war to unlimited war during the French Revolution.
- B. The student will comprehend the uniqueness of the Revolutionary Army, the role of ideology in the levee en masse, and the problems of controlling such an army.
- C. The student will comprehend and relate the rise of Napoleon to the failure of the French Revolution.
- D. The student will know and discuss the impact of new technology on warfare in the Napoleonic period.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History
- 2. The Art of War in the Western World, pp. 320-330
- 3. War in the Modern World, pp. 98-117
- 4. Men in Arms, pp. 179-187
- 5. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 320-330
- 2. Men in Arms, pp. 179-187

III. Instructional Aids

- A. Chalkboard/whiteboard

- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Map

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture
 - 2. Lectures and discussion
 - 3. Guided discussion
- B. Procedural and student activity options: Read and study the assignments in The Art of War in the Western World and Men in Arms.

V. Presentation

- A. The dramatic increase in the size of armies was the principal reason for the change to unlimited warfare. Reasons for the increased size include, but are not necessarily limited to:
 - 1. Emergence of democratic ideal, with its emphasis on individual freedom, equality, and "popular" government.
 - a. John Locke.
 - b. Jean Jacques Rousseau.
 - c. American Revolution.
 - d. Conscription (i.e., levee en masse) is unthinkable without this ideology. Since the governed were now governing, at least ostensibly, they had an affirmation obligation to defend the government.
 - 2. Larger populations, improved communications systems, beginnings of mass production, and improved agricultural methods made it possible to man, control, arm, and feed these huge new armies.

3. Military theories of Comte Jacques de Guibert:
 - a. "Ordre mixte."
 - b. Breaking the army down into smaller, more manageable units or divisions.
 - c. Dispersion and then concentration at the critical time and place.
 4. Lazare Carnot succeeded in gaining control of the Revolutionary Army, which initially had been little more than undisciplined, untrained rabble.
 - a. Emphasis on the offensive in mass; enemy to be pursued until he is destroyed.
 - b. Foraging enhanced mobility by divesting the army from its cumbersome baggage train.
 - c. By 1794, the French Army was enjoying the advantages of both mass and mobility.
- B. The armies that the Revolution created ultimately made Bonaparte the Emperor of France, thereby turning the clock back to autocracy.
1. Moderate legislature elected in 1797 desirous of ending the war.
 2. Radical Directory conspired with Bonaparte.
 3. In the ensuing coup, Carnot was fortunate to escape to Switzerland. Many of his supporters were executed or banished.
- C. The impact of technology.
1. Gribeauval's artillery reforms.
 - a. Interchangeable parts.
 - b. Improved carriages.
 - c. Tangent sight.

d. By the time of the Revolution, French artillery was clearly superior to that of other armies.

2. Mobility and communication enhanced by:

a. Improved roads and maps.

b. Signal telegraph.

3. It should be noted that Napoleon was a conservative relative to new weapons and technology. He, for example, failed to make use of:

a. Balloons.

b. Shrapnel.

D. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 14

HOURS: 1

TITLE: Napoleon

I. Learning Objectives

- A. The student will know and contrast Napoleon's victory at Austerlitz and his defeat at Waterloo.
- B. The student will comprehend and explain how the stalemate at sea and on land in 1805 dictated a strategy of economic warfare.
- C. The student will comprehend and explain how Napoleon's Russian campaign underscored his weakness as a "grand strategist".
- D. The student will know and list Napoleon's major contributions to military thought.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 330-358
- 2. The Face of Battle, pp. 117-203
- 3. Men in Arms, pp. 179-199
- 4. War in the Modern World, pp. 117-139
- 5. The Art of Warfare in the Age of Napoleon (optional)
- 6. Instructor Resource Manual (optional)

B. Student texts/resource materials

- 1. The Art of War in the Western World, pp. 330-358
- 2. The Face of Battle, pp. 117-128
- 3. Men in Arms, pp. 179-199

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
- B. Procedural and student activity options: Read and study the assignment.

V. Presentation

- A. French Revolution.
 - 1. Brief historical/philosophical review.
 - 2. Pre-Napoleon battles.
 - 3. Available technological improvements.
 - 4. Decree of 23 August 1793, by the Committee on Public Safety.
- B. Napoleon.
 - 1. Brief historical background.
 - 2. Rise to power.
 - a. Italian campaign.
 - b. Control of battle action reports.
 - c. Return from Egypt.
- C. Austerlitz - Describe battle (considered by many to be Napoleon's best).
- D. Conflict with England.

1. Lord Nelson:
 - a. The great naval captain of his age.
 - b. Ensured English remained dominant at sea.
 2. Economic war.
- E. Russian Campaign.
1. Spanish problems - Guerilla war sapping French strength.
 2. Weaknesses in grand strategy - Resupply? Timing?
 3. Russian reaction.
 - a. Scorched earth.
 - b. Partisan warfare.
 - c. Weather - harsh winter.
 4. Retreat - losses.
- F. Post-Russian Campaign.
1. Considering problems, the battles before his first exile were well done.
 2. Waterloo.
 - a. Background, to include ability to put together another army.
 - b. Description.
 - c. Compare to Austerlitz.
- G. Napoleon's impact on warfare.
1. Philosophy.
 - a. Stress on offense.
 - b. Would come back to haunt French in World War I.

2. Technology.

- a. Refused lighter-than-air balloons and a Fulton submarine.
- b. Used mass production, improved roads and bridges, signal telegraph, more mobile and accurate artillery, improved mapping, and quickstep march.
- c. Used ideas like division concept and propaganda (both internal and external).

H. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 15

HOURS: 1

TITLE: Clausewitz/Jomini

I. Learning Objectives

- A. The student will comprehend Clausewitz's statement that "war is nothing but a continuation of political intercourse with an admixture of other means."
- B. The student will comprehend and contrast the present day acceptance of Clausewitz's dicta to those of Jomini's.
- C. The student will know and describe the wide spectrum of the types of war that Clausewitz addressed (e.g., People's War).
- D. The student will comprehend the importance assigned by Clausewitz to moral force vice physical force.
- E. The student will know and discuss Clausewitz's impact on current communist military and political thoughts and practices.
- F. The student will know and describe Jomini's contribution to the theory of warfare, especially his "discovery" of the "fundamental principles of war."

II. References and Texts

A. Instructor references

- 1. Men in Arms, pp. 207-208, 238-240, 338
- 2. War in the Modern World, pp. 149-160
- 3. The American Way of War, pp. 82-83, 88-89, 210-213
- 4. Makers of Modern Strategy, pp 92-113, 143-213
(optional)
- 5. On War (optional)

B. Student texts

1. Men in Arms, pp. 207-208, 238-240, 338
2. The American Way of War, pp. 210-213

III. Instructional Aids: None

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lectures and discussion

B. Procedural and student activity options: Read and study the assignment.

V. Presentation

A. Clausewitz.

1. Background - Personal military experience.
 - a. Began at age 12.
 - b. Wanted command; did not like writing.
 - c. Left Prussia rather than fight under Napoleon.
 - d. Director of War Academy.
2. Most quoted/famous statement.
 - a. "War is nothing but a continuation of political intercourse with an admixture of other means."
 - (1) Political dialogue should not stop; only adds facets.
 - (2) Defines current communist approach.
 - b. Further defined idea: "Is not war merely another kind of writing and language for

political thoughts? It has certainly a grammar of its own, but its logic is not peculiar to itself."

3. Acceptance then and now.
 - a. Then:
 - (1) Jomini was a contemporary and a rival.
 - (2) Jomini was far more popular.
 - (3) Jomini was read by Civil War generals.
 - b. Now:
 - (1) Jomini is little read.
 - (2) Clausewitz's philosophy has stood the test of time and is readily applicable to current world.
 - (3) Provides a standard against which military actions may be measured.
4. Clausewitz's scope.
 - a. Primary work is On War, published by his widow.
 - b. Absolute war was described in opening chapter to give a starting place. [Note that the state of "absolute war" was not physically possible for a nation in that era, but it is now possible (i.e., nuclear war).]
 - c. Chapters devoted to many types of war (for example, People's War chapter applicable to both Vietnam and Afghanistan).
 - d. Defined their primary objectives of war:
 - (1) Conquer and destroy the enemy's armed force.
 - (2) Gain possession of material elements of aggression of the enemy.

- (3) Gain public opinion.
- 5. Moral force.
 - a. Agrees with Napoleon. Napoleon had said that moral force was to physical as 3 is to 1.
 - b. He compared physical force to the wooden handle of a sword and moral to the shining blade.
- 6. Clausewitz and Communism.
 - a. Mao and Lenin.
 - (1) Both quote him in their works.
 - (2) Lenin read him thoroughly prior to 1917.
 - b. Vietnam - Communists followed Clausewitz theory precisely.
- 7. Other quotations.
 - a. War is "a trinity of violence, chance, and reason."
 - b. "As soon, therefore, as required expenditure of force exceeds the value of the political, the object must be abandoned and peace will be the result." (Reason why the U.S. got out of Vietnam.)
- B. Jomini.
 - 1. Brief historical background.
 - a. Chose to be a part of history.
 - b. Lived to enjoy his fame.
 - 2. Nature of approach.
 - a. That of a scientist seeking to condense his observations into a workable formula for use by those who follow.

- b. Books have many diagrams and geometrical references.
- c. Produced a system of war, while Clausewitz would produce a philosophy of war.
- d. Felt that object of war was occupation of territory.

C. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 16

HOURS: 1

TITLE: Industrial Revolution and Warfare

I. Learning Objectives

- A. The student will comprehend the overall impact of the Industrial Revolution on civilization and particularly on the art and science of war.
- B. The student will know, trace, and discuss the various specific developments of the Industrial Revolution that affected the waging of war in the first 60 years of the 19th century.
- C. The student will comprehend and assess the impact of the Industrial Revolution on the face of war in the 19th century.
- D. The student will know and explain the Marxist response to the Industrial Revolution.

II. References and Texts

- A. Instructor references
 - 1. War in the Modern World, pp. 143-164, 208-212
 - 2. Makers of Modern Strategy, pp 155-171, 415-456 (optional)
- B. Student texts: None

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector

IV. Suggested Methods and Procedures

- A. Method options

1. Lecture
 2. Lectures and discussion
 3. Guided discussion
- B. Procedural and student activity options
1. A suggested means to accomplish the first three objectives is to build a list (using student input) of the technological innovations from the Industrial Revolution and apply them to conflicts in which they were used.
 2. This exercise should be followed by a discussion of how Marx, as a social revolutionary, responded to the forces of technological revolution. This will provide the student with both the "hardware" and the philosophical impacts of the Industrial Revolution.

V. Presentation

- A. From agriculture to technology.
1. Overall impact - Greatest "revolution" of all?
 - a. Mass production.
 - b. Dominance of unskilled workers.
 2. Social consequence.
 - a. Emergence of a "class" of permanent wage-earners.
 - b. Poor working/living conditions.
 - c. Rising discontent.
 3. Impact on the military.
 - a. Military slow in taking advantage of new technology during first half of 19th century.
 - b. A different story in second half of century

(Civil War, etc.).

B. A catalogue of inventions and their applications.

1. Iron-clad vessels.
2. Screw propeller/steam propulsion.
3. Rockets.
4. "Machine-guns", rifle-muskets.
5. Rifled cannon, projectiles.
6. Hand grenades.
7. Submersibles.
8. Floating mines.
9. Land mines.
10. Balloons for aerial observation.
11. Locomotives - military transportation.
12. Communications - telegraph, etc.
13. Mass production - the common denominator.

C. The Marxist response.

1. Some important philosophical ideas from Marx:
 - a. Material world is the fundamental and only reality.
 - b. Production of means to support life is the principle that governs all human relations.
 - c. There are only two classes in society: Those who control the means of production and those who do not.
 - d. The dictatorship of the proletariat (a classless and stateless society) is inevitable.

2. Fourfold nature of warfare - an escalating process.

a. Diplomatic.

b. Economic.

c. Psychological.

d. Military.

D. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 17

HOURS: 1

TITLE: The American Civil War

I. Learning Objectives

- A. The student will know and trace the evolution of American military thought from the time of the War of 1812 to the Civil War.
- B. The student will know and describe Winfield Scott's campaign to seize Mexico City and discuss the political motivation for that strategy.
- C. The student will comprehend and compare the Civil War belligerents with regard to the military and economic resources and the socio-political fabrics of the opposing populations.
- D. The student will comprehend and explain how the waging of the Civil War changed from limited warfare to total warfare upon the ascendancy of Grant, Sherman, and Sheridan.
- E. The student will comprehend and relate Lincoln's issuance of the "Emancipation Proclamation" to the South's need for European Allies.
- F. The student will comprehend and compare/contrast Lee and Grant as "Great Captains."

II. References and Texts

A. Instructor references

- 1. The Art of the War in the Western World, pp. 409-418
- 2. Men in Arms, pp. 247-258
- 3. The American Way of War, pp. 59-76, 92-152
- 4. War Through the Ages, pp. 573-580, 590-632 (optional)

5. Instructor Resource Manual (optional)
- B. Student texts
1. The Art of the War in the Western World, pp.409-418
 2. Men in Arms, pp. 247-258
 3. The American Way of War, pp. 59-76, 92-152
- III. Instructional Aids: Chalkboard/whiteboard
- IV. Suggested Methods and Procedures
- A. Method options
1. Lecture
 2. Lectures and discussion
- B. Procedural and student activity options: Read and study the assignment.
- V. Presentation
- A. Post-war of 1812.
1. Professional development.
 - a. Improvements of West Point under Thayer.
 - b. Opening of artillery school (Fort Monroe) and infantry school (St. Louis).
 - c. Writings (e.g., by Halleck, Mahan, and Scott).
 2. Professional staff - Initially, functionally independent of senior military men.
 3. Military - political relationships.
 - a. Exchanges between Secretary of War Davis and Commanding General Scott.
 - b. By 1848, Polk would actually function as

Commander-in-Chief.

B. Mexican War.

1. Vera Cruz.
 - a. 10,000 men and 150 vessels.
 - b. Even though unopposed, the mere fact that they could organize and execute the operation is indicative of solid staff work.
2. Mexico City campaign.
 - a. Cut own supply lines.
 - b. Series of successful battles, though always outnumbered.
 - c. Final attack on Mexico City.
3. Military-political aspects.
 - a. Taking capital in accordance with Clausewitz.
 - b. Fatal because Mexican population, government, and army anchored on Mexico City.
 - c. Scott considered a political rival by Polk, as was Taylor.
4. Innovations introduced.
 - a. First American war in which West Point graduates took part.
 - b. First modern war correspondent.
 - c. First active Commander-in-Chief.
 - d. Navy's shift from sail to steam.

C. Beginning the Civil War.

1. First modern war, although it would not be recognized as such in Europe.

2. Populations.
 - a. North - 23,000,000 in 22 states.
 - b. South - 9,000,000 (including 3,500,000 slaves) in 11 states.
 3. Resources.
 - a. North - 109,000 manufacturing plants employing over 1,000,000 men.
 - b. South - 31,000 manufacturing plants employing less than 200,000 men, plus only one ironworks (the Tredegar Ironworks in Richmond).
 - c. South - agriculture, mostly cotton.
 4. Military leadership.
 - a. Of 1,080 officers in the Regular Army, 286 went south, including 184 of 824 West Pointers.
 - b. Of 900 West Pointers in civilian life, 114 joined the Northern Army, and 99, the Southern.
 - c. In 55 of the 60 largest battles of the Civil War, West Pointers led both sides.
 5. Political leadership.
 - a. South - Davis, a former Secretary of War, a West Pointer, and a veteran of the Mexican War, yet too busy with details; unable to delegate authority.
 - b. North - Lincoln had no military experience, but had good instincts and learned fast.
- D. Northern attempts at Richmond.
1. Necessity.
 - a. Overemphasizing Clausewitz's one point at

- expense of others.
 - b. Southern population not anchored on Richmond, either numerically or psychologically.
 - c. Only southern ironworks located there.
2. McClellan's Peninsula Campaign.
- a. Urged by Lincoln.
 - b. Preceded by Monitor-Virginia clash.
 - c. Cautious movement throughout.
 - d. Hampered by Jackson's moves in Shenandoah Valley.
 - e. CSA General Magruder made up for troop shortages through deception.
 - f. Malvern Hill - a demonstration of new strength of defense and of Lee's fallibility.
3. Burnside's Fredericksburg Campaign.
- a. Lost edge by waiting for bridging.
 - b. Successive attacks against Marye's Heights.
 - c. Tactical use of telegraph communications by North.
 - d. Demonstration of futility of massed assaults against strongly positioned defense.
4. Hooker and Chancellorsville.
- a. Lee's greatest tactical victory.
 - b. Hooker lost initial advantage.
 - c. Jackson killed.
5. Grant and Richmond.
- a. Intent on destruction of Southern Army.

- b. Constant pressure.
 - c. War of attrition.
- E. Change of warfare.
 - 1. Defense relatively strong.
 - a. Thanks to entrenchment, advances in small arms technology and improved artillery.
 - b. Malvern Hill, Cold Harbor, and other attempts at frontal assaults prove point -- Napoleonic tactics obsolete.
 - 2. Industrial impact.
 - a. Products of the mature industrial revolution precluded a successful Napoleonic strategy.
 - b. These lessons would be relearned at great expense in World War I.
- F. Limited war to total war.
 - 1. North had to bring down the Southern government in order to win.
 - 2. Not total war until Grant, Sherman, and Sheridan took over.
 - a. A conscious effort to take decision for ending the war away from CS Army and give it to Southern populace.
 - b. Introduced constant pressure, rather than "fight and rest" system of first few years.
 - c. Sherman's march across Georgia equivalent to saturation bombing, except better aimed and more personal.
- G. Emancipation Proclamation impact.
 - 1. Military-political relationship - A political move that aided the military effort.

2. Direct effects:
 - a. Freed no one immediately.
 - b. Declared only "their" slaves free on coming 1 January.
3. Indirect effects:
 - a. Labeled the South as "pro-slavery."
 - b. Cut off last chance of European help.
 - c. Served absolute notice that it was to be a fight to the finish.

H. Great Captains.

1. Lee.
 - a. Not given command of all Southern Armies until February 1865.
 - b. Much loved by men.
 - c. Master of the defense.
 - d. Essentially, was an 18th century warrior fighting a 19th century war.
 - e. Sought the climactic, Napoleonic battle.
2. Grant.
 - a. Gained command in March 1864.
 - b. Crude, rough-edged man.
 - c. With Sherman, changed the nature of war - a strategy of annihilation.
 - d. Was a 20th century warrior fighting a 19th century war.

I. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 18

HOURS: 1

TITLE: Pax Britannica and Colonialism

I. Learning Objectives

- A. The student will comprehend the meaning of Pax Britannica and how the British Fleet provided the deterrence to renewed total war.
- B. The student will know and discuss the weaknesses of the British Army as demonstrated in the Crimean War.
- C. The student will comprehend and explain the reasons for the revival of the race for empires and the necessary military requirements.
- D. The student will comprehend and explain how the Boer War put 19th century British imperialism to its most severe test.

II. References and Texts

- A. Instructor references
 - 1. Encyclopedia of Military History, pp. 820-855
 - 2. Men in Arms, pp. 200-237
 - 3. War in the Modern World, pp. 164-169, 206-214
 - 4. The American Way of War, pp. 167-191
- B. Student text: Men in Arms, pp. 200-237

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Maps

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lecture and discussion
3. Guided discussion

B. Procedural and student activity options

1. A suggested means to accomplish the objectives of this lesson is to define (with student assistance) Pax Britannica.
2. Relate it to British naval strength, British Empire designs, and the race for empires among other nations (French, American, Germans).

V. Presentation

A. Pax Britannica.

1. Background - British negative attitude concerning colonial acquisitions following Napoleonic wars and exceptions ("far-flung" strategic bases). Point out these bases to demonstrate strategic significance and British coverage of key areas.
2. Importance of sea power versus land power to British hegemony.
 - a. Industrial Revolution caused increased importance of commerce and the concomitant used to control the seas.
 - b. Continental land power weakened by Napoleonic Wars.
 - c. Royal Navy "supreme in the world at a time when sea power was of increasing growth and when Britain was the only power able to wield it."
3. Pax Britannica - A "peace" silently enforced by

British sea power. No real challenges due to British deterrence.

- B. Crimean War - British Army ineptitude in a time of British maritime dominance. British Army weaknesses and shortcomings:
 - 1. Poor staff training and abuse of command appointments.
 - 2. Low level of cooperation among units.
 - 3. Tactical ineptitude.
 - 4. Disorganized, poorly designed logistical system.

- C. Imperialism regains prominence with European powers (1880's, 1890's).
 - 1. Increasing industrial capacity produces trade rivalry (U.S., Germany, France, Russia, Japan), and colonialistic desires reappear.
 - 2. Naval power no longer totally dominated by British.
 - 3. European countries recognize the requirements to settle colonial problems militarily, which leads to an increased emphasis on naval capabilities.
 - 4. New technology aids in backing up imperialist nations.
 - a. Submarine and torpedo.
 - b. Modern naval guns.

- D. Pax Britannica tested in the Boer Wars.
 - 1. Small, stubborn foe gave British Army a difficult time.
 - a. Over half a million troops eventually required a drawdown from other empire resources.
 - b. Boers resorted to guerrilla warfare and

protracted the struggle over two and a half years.

2. Demonstrated the degree of control and unusual dedication of resources required to keep an "empire" intact.
- E. Pax Britannica ends (early 20th century) - challenge of German, French, and U.S. naval power.
- F. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 19

HOURS: 1

TITLE: The Prussian Influence

I. Learning Objectives

- A. The student will comprehend and relate the forces of nationalism in the three wars for the unification of Germany.
- B. The student will comprehend and explain the emergence of the German General Staff under Moltke.
- C. The student will comprehend and explain the Prussian victory in the Franco-Prussian War.
- D. The student will comprehend and compare/contrast Moltke and Bismarck as grand strategists.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History, pp. 820-842
- 2. The Art of War in the Western World, pp. 392-409
- 3. Men in Arms, pp. 252-258
- 4. War in the Modern World, pp. 152-158, 169-175, 195-206
- 5. Makers of Modern Strategy, pp. 172-205, 281-325, 320-325 (optional)
- 6. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 392-409
- 2. Men in Arms, pp. 252-258

III. Instructional Aids

- A. Chalkboard/whiteboard
 - B. Map
- IV. Suggested Methods and Procedures
- A. Method options
 - 1. Lecture
 - 2. Lecture and discussion
 - 3. Guided discussion
 - B. Procedural and student activity options: Read and study assignments in Men in Arms and The Art of War in the Western World.
- V. Presentation
- A. Austria and Prussia vie for dominance in Germany from the Congress of Vienna (1815) until the Prussian victory at the Battle of Koeniggratz (1866).
 - 1. Prussian Zollverein (customs union) by 1841 included all of Germany except for the Austrian dominions.
 - 2. Treaty of Olmuetz (1850) - Austria successfully thwarts a German union under King Frederick William IV of Prussia.
 - 3. Prussia and Austria join to defeat Denmark in Schleswig-Holstein War (1864).
 - a. Schleswig-Holstein placed under joint control of Austria and Prussia.
 - b. Disagreements over Schleswig-Holstein lead to war between Austria and Prussia.
 - 4. Defeat of Austria results in Prussian preeminence in Germany.
 - a. North German Confederation formed in 1867 under Prussia.

- b. Fear of France forces the southern German states into an alliance with Prussia.
 - 5. Victory in the Franco-Prussian War results in the unification of Germany.
- B. General Staff
- 1. Originated with Scharnhorst and other reformers of the late Napoleonic Period.
 - a. Quasi-autonomy within the War Ministry.
 - b. Attention to military theory and doctrine.
 - c. Rotation of General Staff officers to positions with the field forces.
 - d. General Staff a separate "planning and education" branch.
 - 2. Count Helmuth von Moltke becomes Chief of the Prussian General Staff in 1857.
 - a. He attained this position by virtue of intellectual achievement, not "practical" soldiering.
 - b. He set up the Railway Section of the General Staff, recognizing that railways made possible much more precise calculations of movements of troops and supplies.
 - c. His intellectual and administrative skill, together with the organization (i.e., General Staff) that he inherited, developed the plans that resulted in Prussia's lightning mobilization for the wars with Austria and France.
- C. Franco-Prussian War - Prussian victory resulted from:
- 1. The detailed mobilization plan and flexible battle plan of Moltke and the General Staff.
 - 2. The lack of such planning on the part of the

French.

3. Superior Prussian artillery.
4. Inability of the French to properly employ their superior infantry weapons.

D. Moltke and Bismarck.

1. Moltke not a grand strategist in the classic sense; he never questioned the powers that be and was neither a statesman nor an original political thinker.
2. Bismarck's skill of grand strategy demonstrated by:
 - a. Limited aims of the three wars of unification.
 - b. His diplomacy after the unification.
 - c. Erring only in the harsh terms imposed upon France.

E. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 20

HOURS: 1

TITLE: World War I

I. Learning Objectives

- A. The student will know and trace the reorganization of the French General Staff and military system, focusing on the ideas and contributions of du Picq and Foch.
- B. The student will know, identify, and discuss the harbingers of total war.
- C. The student will know and summarize events of July and August 1914.
- D. The student will know and outline the Schlieffen Plan and the French Plan XVII and describe how they were implemented.
- E. The student will know and summarize the campaigns on the Eastern Front and evaluate the Russian failures.
- F. The student will comprehend and compare/contrast the British, French, American, and German approaches to and objectives in World War I.
- G. The student will comprehend the Allied problems of coalition warfare and the evolution of the unified command.
- H. The student will know and describe the final Allied offensive on land that defeated Germany, with emphasis on the American contribution.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 392-409, 434-488
- 2. Men in Arms, pp. 259-277

3. War in the Modern World, pp, 215-235, 239-274
4. The American Way of War, pp. 192-222

B. Student texts

1. The Art of War in the Western World, pp. 434-488
2. Men in Arms, pp. 259-277
3. The American Way of War, pp. 192-222

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Maps

IV. Suggested Methods and Procedures

- A. Method options
 1. Lecture
 2. Lecture and discussion
 3. Guided discussion
- B. Procedural and student activity options: Read and study assignments.

V. Presentation

- A. Reformed French military philosophy.
 1. Germany replaces France as the foremost military power following the Franco-Prussian War (1870-1871).
 2. Reforms hastily instituted to overcome problems of poor army organization, incomplete staff work, and incompetent leadership at the highest levels. French General Staff reorganized (1874) using the Prussian model.
 3. Ardant du Picq - obscure but important military philosopher.

- a. Approached the military problem scientifically.
 - b. Man is the decisive instrument in battle.
 - c. Importance of combat psychology, drill training.
 - d. Mind over matter.
 - e. Emphasis on quality rather than quantity.
4. Ferdinand Foch - the re-creator of French military thought.
- a. Influenced greatly by Clausewitz.
 - b. No victory without battle (the offensive and maneuver).
 - c. Basic principles applied to particular situations.
- B. Harbingers of total war.
- 1. The "little" wars.
 - a. Spanish-American War (and American imperialism).
 - b. Boer War.
 - c. Russo-Japanese War.
 - 2. European alliances - old balances of power upset.
 - 3. International arms race.
 - 4. Economic and colonial rivalries.
 - 5. British and German belief in racial superiority.
 - 6. Writings of Ivan S. Bloch.
- C. Austria.

1. Assassination of the Austrian Archduke.
2. Obtains a free hand from Germany.
3. Invades Serbia on 23 July 1914.
4. Russia drawn in war by Austria's actions.
5. Germany sends ultimatum to Russia and France 21 July 1914.
6. German strategy: Defeat France first, then Russia.
7. 1 August 1914, Germany declares war and invades Belgium as Schlieffen Plan put into effect.
8. Violation of 1839 treaty guaranteeing Belgium neutrality and her military agreements with France brought Britain into the war.

D. Opposing plans.

1. Schlieffen Plan called for 1,500,000 troops divided into 7 armies.
 - a. Four German armies to pass through Belgium by passing supposedly impregnable fortress at Liege.
 - b. After 11 days, Liege falls.
 - c. 20 August, Brussels falls.
2. Plan XVII.
 - a. Adopted in 1912.
 - b. Total strength of Allied forces numbered 950,000.
 - c. An offensive plan without the accepted 3 to 1 superiority ratio.
 - d. Underestimated strength of German Army.
 - e. Designed to be a counteroffensive plan, which

would strike center of German line near Lorraine, disrupting communications, and then roll back both wings.

f. Joffre commanded French forces.

g. Sir John French commanded British forces.

E. The Eastern Front.

1. Austria initiates opening of Eastern Front when she attacks Serbia.
2. Russia is drawn in against Austria and Germany.
3. Great Britain and France required to arm Russia.
4. Germany required to support Austria.
5. Political incompetence cripples Russian effort.
6. Neither Britain nor France could supply Russia with war supplies due to their failure to secure Dardanelles.
7. Germany successfully aided Austria.
8. Ludendorff and Hindenburg defeat Russians in East Prussia as a result of superior German rail system.
9. Political exiles of Russia played on the conditions of Russian military man. Results: Overthrow of the Czar in 1917.
 - a. To project colonialism.
 - b. National prestige.
 - c. Committed to aid France/Belgium.

F. French.

1. Bent on revenge after the humiliation of 1870.
2. Return of Alsace-Lorraine.

3. Elimination of Germany as a commercial rival.

G. Germans.

1. Believed their race superior to all others.
2. Believed war was inevitable.
3. Vanquished by British and French in the Agadir diplomatic crisis of 1911.
4. Involved in armament race.
5. Wanted colonial equality.

H. Americans.

1. Sympathy for Allied cause.
2. German torpedoing of neutral ships - Americans included.
3. Allied economic investment with America.
4. Constitutionalism versus autocracy.
5. Allied propaganda.
6. German presence in Mexico.

I. Coalition warfare/unified command.

1. General J. J. Pershing commands American army.
2. Americans refuse to piecemeal their army.
3. Unified command takes place 26 March 1917. Foch appointed.

J. Final Allied offensive.

1. Second Battle of the Marne.
2. St. Mihiel.
3. Meuse Argonne.

4. Kriemhilde Line.

5. War ends - 11 November 1918.

K. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 21

HOURS: 1

TITLE: The Rise of Communism

I. Learning Objectives

- A. The student will comprehend and explain how the Bolsheviks assumed power in Russia and then took Russia out of World War I.
- B. The student will comprehend and explain the reasons for Allied intervention in the Russian Civil War and its failure to deflect the course of the revolution.
- C. The student will comprehend the Russian Communists' philosophy of war, emphasizing its Clausewitzian base and the conflicting ideas of Lenin, Trotsky, and Stalin in the early 1920's.
- D. The student will comprehend the role of the Comintern in fomenting political unrest outside of Russia, and explain the failure of the Communists to assume political control in China in the 1920's.

II. References and Texts

A. Instructor references

- 1. Men in Arms, pp. 289-290, 323-324
- 2. War in the Modern World, pp, 285-290
- 3. Makers of Modern Strategy, pp. 322-364, 648-675 (optional)

B. Student text: Men in Arms, pp. 289-290, 323-324

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Maps

IV. Suggested Methods and Procedures

- A. Method options: Lecture
 - B. Procedural and student activity options: Study assignment
- V. Presentation
- A. Define "communism" and trace its origins from Karl Marx.
 - 1. Socialism before and after 1850 - contrast and compare.
 - 2. The decline in revolutionary fervor in Western Europe by the end of the 19th century.
 - B. Discuss the Bolshevik rise to power in Russia.
 - 1. Socioeconomic unrest and the rise of political parties in the 1890's.
 - 2. The Revolution of 1905.
 - 3. World War I and its calamitous effect on the Russian populace.
 - 4. The Russian Revolutions of 1917 - why the Communists came to power.
 - 5. Treaty of Brest-Litovsk.
 - C. Explain Allied motives for intervening in the Russian Civil War.
 - 1. Loss of an ally or fear of communism?
 - 2. The Czech Legion.
 - 3. Allied military operations in the Civil War.
 - 4. Failure to deflect the course of the revolution.
 - D. Define the Soviet philosophy of war by comparing the ideas of Lenin, Trotsky, and Stalin. Lenin was thoroughly familiar with Clausewitz by 1917. War to the Soviets was, and is, "a continuation of political

intercourse with an admixture of other means."

- E. Discuss the Comintern and its role in fomenting international communism.
 - 1. Borodin's mission to China.
 - 2. Chinese Communist Party (CCP), the Kuomintang, and political unrest in China in the 1920's.
 - 3. The Comintern, CCP, and Mao Tse-tung's bitter lesson.
- F. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 22

HOURS: 1

TITLE: Interwar Years

I. Learning Objectives

- A. The student will comprehend why the interwar period represented only an armistice, rather than genuine peace or international stability, by describing attempts at peace and why they failed.
- B. The student will know and explain the bases of American isolationism in 1920-30's and the resultant impact on defense preparedness.
- C. The student will know and explain the "doctrine of defense," with emphasis on the Maginot philosophy and the thoughts/contributions of Liddell Hart.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History, pp. 1027-1050
- 2. Men in Arms, pp. 278-294
- 3. War in the Modern World, pp. 275-313
- 4. The American Way of War, pp. 223-265
- 5. Makers of Modern Strategy, pp. 598-623 (optional)
- 6. Instructor Resource Manual (optional)

B. Student texts

- 1. Men in Arms, pp. 278-294
- 2. The American Way of War, pp. 223-265

III. Instructional Aids

A. Chalkboard/whiteboard

B. Instructor-prepared PowerPoint slides or transparencies

C. Computer/projection system or overhead projector

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lecture and discussion
3. Guided Discussion

B. Procedural and student activity options

1. A suggested means to accomplish the first objective of this lesson is to assign students to be prepared to discuss the various attempts at post-World War I peace and why they failed.
2. Learning Objective C of this lesson can be used to highlight the overall defensive/isolationist mood during the interwar period.

V. Presentation

A. The interwar period - Attempts at peace.

1. The aftermath.
 - a. High costs of war in human and material terms.
 - b. A new attitude of revulsion against war and the need to recover and build a system to prevent recurrences.
2. Peacemaking endeavors and their outcomes.
 - a. League of Nations - Principle of collective security.
 - (1) Problems.
 - (2) Results.

- b. Disarmament - Not total, but a limit on arms.
 - (1) Problems.
 - (2) Results.
 - c. Moral compulsion - An idealistic approach.
 - (1) Problems.
 - (2) Results.
 - 3. True peace or a 20-year cease-fire?
 - a. Temporary, shallow peace.
 - b. No practical solutions.
 - B. Americans withdraw from the mainstream.
 - 1. Isolationism is a reflection of the war experience.
 - a. Avoid being dragged in again.
 - b. A return to prewar strengths.
 - c. U.S. - its own best guarantor of peace.
 - 2. Isolationism deepens as the Depression years unfold.
 - a. Economic problems at home demand full attention.
 - b. Military establishment shrinks. Ford had more auto workers than America had soldiers.
 - c. Anti-military service sentiment appears.
 - 3. Defense preparedness takes a back seat.
 - C. Doctrine of defense - An outgrowth of post-World War I reaction. Need for passive security dominates military thought.
 - 1. Maginot Line in France.

- a. Fortifications with integrated firepower.
 - b. Created false sense of security, the "Maginot mentality;" invincibility of the defense ("Remember Verdun!").
 - c. Stifled offensive thought; long a French tradition.
2. B. H. Liddell Hart.
- a. Personal background.
 - b. Basic orientation was defensive.
 - c. Ideas based on needs of Great Britain.
- D. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 23

HOURS: 1

TITLE: Technological Advances

I. Learning Objectives

- A. The student will comprehend the impact of the airplane on military thought in the 1920-1930's.
- B. The student will comprehend and compare/contrast the air power theories of Douhet and Mitchell.
- C. The student will know and describe the development of aircraft carrier doctrine and offensive naval air power in the U.S. between World War I and World War II.
- D. The student will know and summarize the development of amphibious doctrine in the 1920's and 30's as a part of "the new sea power".

II. References and Texts

- A. Instructor references
 - 1. In Peace and War, pp. 221-236
 - 2. The American Way of War, pp. 223-265
 - 3. Makers of Modern Strategy, pp. 598-623 (optional)
 - 4. Instructor Resource Manual (optional)
- B. Student text: The American Way of War, pp. 223-265

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Map

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lecture and discussion
3. Guided discussion

B. Procedural and student activity options

1. A suggested means to collectively accomplish the objectives of this lesson is to blend air and sea power together as a new force, and to briefly introduce amphibious warfare as another form of sea power and warfare.
2. To set the stage for World War II, the students should complete the study assignment and classroom work with a sense of the enormity of sea power (in its many forms).

V. Presentation

A. Air power strategic theorists.

1. Giulio Douhet.
 - a. Personal background.
 - b. Major assumptions.
 - (1) Aircraft are offensive instruments against which no effective defense can be foreseen.
 - (2) Civilian morale will be shattered by aerial bombardment.
 - c. Basic argument: Once command of the air is achieved, victory in other dimensions of war will follow.
 - d. Key supporting ideas.
2. General Billy Mitchell.

- a. Personal background.
 - b. Major beliefs.
 - c. Compare/contrast with Douhet.
 - (1) Important difference in geographical outlook (Douhet - Italy).
 - (2) Mitchell - global.
- B. Mobile air power - U.S. carrier doctrine as part of the "new sea power."
- 1. Early carriers - British and U.S.
 - 2. Mitchell versus the Navy - land-based or carrier-based air?
 - 3. Internal Navy controversy - carriers or battleships?
 - 4. The Japanese settle the controversy at Pearl Harbor.
- C. U.S. amphibious doctrine as part of the "new sea power."
- 1. Background.
 - a. Advanced base concept.
 - b. Expeditionary force.
 - c. LtCol Ellis' predictions.
 - d. FMF established.
 - 2. The first textbook (Tentative Manual for Landing Operations).
 - 3. Supporting equipment - assault craft.
- D. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 24

HOURS: 1

TITLE: Japanese Ascendancy in the Pacific

I. Learning Objectives

- A. The student will know and trace the development of Japanese military thought from the Sino-Japanese War of 1895 to the Manchurian Incident.
- B. The student will comprehend and explain the role of the Kwantung Army in influencing Japanese foreign policy.
- C. The student will comprehend and compare/contrast the military policies of Chiang Kai-shek and Mao Tse-tung, with emphasis on their campaigns against the Japanese.
- D. The student will know and recall Japanese decision-making, which led to war with western allies in the Pacific.

II. References and Texts

A. Instructor references

- 1. The Encyclopedia of Military History, pp. 1123-1198
- 2. In Peace and War, pp. 263-289
- 3. Men in Arms, Chapter 18, pp. 311-330
- 4. The American Way of War, Chapter 13, pp. 269-311
- 5. War Through the Ages, pp. 843-963 (optional)

B. Student texts

- 1. Men in Arms, Chapter 18, pp. 311-330
- 2. The American Way of War, Chapter 13, pp. 269-311

III. Instructional Aids

A. Chalkboard/whiteboard

B. Map

IV. Suggested Methods and Procedures

A. Method options: Lecture and discussion

B. Procedural and student activity options: Study assignment

V. Presentation

A. Compare and contrast China and Japan's response to the West.

1. The Opium War to the Boxer Rebellion.

2. Meiji Restoration and the modernization of Japan.

B. Discuss the evolution of Japanese military thought from the Sino-Japanese War of 1895 to the Manchurian incident in 1931.

1. Code of Bushido.

2. Sino-Japanese and Russo-Japanese Wars.

3. Confrontation with the West (San Francisco School Board edict, the Twenty-One Demands, Washington Naval Disarmament Conferences).

4. Manchurian incident - causes and effects.

C. Explain the role of the Kwangtung army in determining Japanese foreign policy.

1. Militarism in the 1930's.

2. Domestic political turbulence and the response of the army.

3. Marco Polo Bridge incident.

D. Compare and contrast the military policies of Chiang Kai-shek and Mao Tse-tung.

1. The Long March.
 2. The Sian incident.
 3. Chiang Kai-shek, the Americans, and operations against the Japanese.
 4. Mao Tse-tung's operations against the Japanese in north China and the socio-political effects on the populace.
- E. Discuss the Japanese decision for war.
1. The U.S. role in China and the Open-Door Policy.
 2. American response to the Sino-Japanese War.
 3. U.S. and Allied embargoes.
 4. Final decisions in late 1941 and attempts to avert war.
- F. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 25

HOURS: 1

TITLE: The Rise of Nazism and War in Europe

I. Learning Objectives

- A. The student will know and trace Hitler's rise to power and explain his subjugation of the German General Staff and the officer corps.
- B. The student will know and describe German military development.
- C. The student will know and summarize the key events of German political-military expansion in the Rhineland, Austria, and Czechoslovakia.
- D. The student will comprehend the importance of the Nazi-Soviet nonaggression pact.
- E. The student will know and explain the failure of the western allies to respond militarily to the invasion of Poland and the subsequent "Phoney War".

II. References and Texts

- A. Instructor reference
 - 1. War in the Modern World, pp. 294-313
 - 2. War Through the Ages, pp. 754-775 (optional)
- B. Student text: None

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options

1. Lecture
 2. Lecture and discussion
 3. Guided discussion
- B. Procedural and student activity options: Read and study assignment.
- V. Presentation
- A. Of the myriad socioeconomic reasons for Hitler's rise to power, among the most important were:
1. General, intense dissatisfaction with the Versailles Treaty.
 - a. Took from Germany all its colonies, one-eighth of its territory, one-tenth of its population, and most of its iron, steel, and shipping.
 - b. Placed the Rhineland and Saar temporarily under foreign control.
 - c. Eliminated the Navy and Air Force, and reduced the Army to a force of 100,000.
 - d. Admission of war guilt.
 - e. Extensive reparations.
 2. Depression of the early 1930's.
- B. Hitler rose to power within the framework of the Weimar Republic, not by attacking its institutions.
- C. Subjugation of the Army.
1. Soldier's Oath of 1934 swore obedience to Adolf Hitler as leader of the German people and commander in chief of the armed forces.
 2. Dismissal of Field Marshal von Blomberg and General von Fritsch in 1938 and subsequent erection of the High Command of the Armed Forces (Oberkommando der Wehrmacht, or OKW), with Hitler

as its head. Hitler now personally commands the armed forces.

D. German military development.

1. October 1933 - Withdrawal from the League of Nations and Disarmament Conference. Construction of Air Force begins.
2. By October 1934, the size of the army had increased to 240,000 men. Rearmament of the army was not limited to the heretofore traditional weapons types.
 - a. Development of armor and the mechanization of the army were vigorously pursued.
 - b. These armor assets were assigned to completely new units - armor (Panzer) divisions - that were distinct from the other arms of the service.
 - c. These new units were designed to combine speed, weight, and numbers in order to penetrate the enemy's lines and destroy communications.
3. March 1935 - Hitler introduces compulsory military service.
4. July 1936 - Civil War in Spain.
 - a. In November, Germany provides the 4,500-man Condor Legion to General Franco.
 - b. In addition to the aviation elements, the Legion includes armor, transportation, and intelligence units containing weapons and equipment to be tested in this "dress rehearsal."
 - c. German dive-bombing tactics and techniques are refined, resulting in a Stuka "mystique," and the myth of invincibility develops.

E. Remilitarization of the Rhineland, March 1936, in violation of the Versailles and Locarno treaties.

1. Failure of French and British to act resulted more from timorousness than impotence.
 2. Fearing a French response, the German generals counseled against this operation. Its success solidified Hitler's ascendancy over his generals.
- F. 11 March 1938 - German forces enter Austria unopposed, resulting in that country's annexation to Germany.
1. England and France again do nothing.
 2. Germany's strategic position, particularly relative to Czechoslovakia, is improved.
- G. Czechoslovakia - A nation born from the peace settlement of World War I.
1. A heterogonous population including some 3 million Germans, which served as a convenient pretext for Hitler's aggression.
 2. Czechoslovakia had an alliance with France, but Great Britain refused to make any commitment. France proved to be unwilling to honor its commitment without British support.
 3. Anglo-French appeasement policy reaches its zenith with the Munich Conference - 29 September 1938. Hitler was given large portions of Czechoslovakia, and plebiscites were to be conducted in other areas to finally determine the frontiers.
 4. March 1938 - Hitler completes his "bloodless" conquest of Czechoslovakia.
- H. 23 August 1938 - Nonaggression pact between Germany and the Soviet Union.
1. Germany could now proceed against Poland without having to concern itself about the Soviet Union.
 2. Similarly, should England and France go to war over Poland, the pact assured Germany of a conflict on only one front.

- I. 1 September 1938 - German troops invade Poland.
 - 1. England and France, although they did declare war, took no offensive action despite France's specific treaty commitment to conduct offensive operations should Poland be attacked.
 - 2. The French overestimated German capabilities, and generally demonstrated the same indecisive and timid attitude they had been displaying since the remilitarization of the Rhineland.
 - 3. After the fall of Poland, the war in the west was distinguished only by its inactivity for six months.
 - a. Anglo-French forces were content to remain on the defensive.
 - b. A combination of events delayed the German attack.
 - c. This period was referred to as the "Phoney War" in the west and the "Sitzkrieg" (Sitting War) in Germany.

- J. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 26

HOURS: 1

TITLE: World War II in Europe and the Atlantic

I. Learning Objectives

- A. The student will know and explain the rapid victory by Germany in Western Europe.
- B. The student will comprehend the reasons for Germany's failure to subjugate England in 1940.
- C. The student will know and discuss German naval strategy, with emphasis on the Battle of the Atlantic.
- D. The student will comprehend and evaluate German military weaknesses as exemplified in the Battle of Stalingrad.
- E. The student will comprehend and compare American and British motives in the decision-making for the North African and Italian campaigns.
- F. The student will know the Anglo-American strategic bombing offensive.

II. References and Texts

A. Instructor references

- 1. Encyclopedia of Military History, pp. 1014-1100
- 2. The Art of War in the Western World, pp. 508-595
- 3. Men in Arms, pp. 295-330
- 4. The American Way of War, pp. 312-359
- 5. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 508-595

2. Men in Arms, pp. 295-330

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options
 1. Lecture
 2. Lecture and discussion
- B. Procedural and student activity options: Read and study assignment.

V. Presentation

- A. German victory in the west.
 1. Britain and France declare war on Germany after Germans invade Poland 1 September 1939.
 2. Blitzkrieg is born in Poland.
 3. French man the Maginot Line.
 4. Denmark and Norway invaded 9 April 1940.
 5. Germans take Belgium and Holland 10 May 1940.
 6. Germans attack France through Ardennes.
 7. Evacuation of Dunkirk 26 May - 3 June 1940.
 8. Paris evacuated 11 June 1940.
 9. Petain returns to power and immediately signs armistice. France falls 25 June 1940.
 10. French and Polish industrial area located close to German border.
 11. Allies had no mobile armored divisions.

12. Allied doctrine and training based on 1918 trench warfare doctrine.
- B. Battle of Britain.
1. Germany not prepared for seaborne operations.
 - a. Lacking in amphibious equipment.
 - b. No amphibious doctrine.
 - c. Air and local sea power belonged to Britain.
 2. Operation Sea-Lion.
 - a. German air war of attrition against RAF.
 - b. Germans lacked heavy bombers and hampered by limited range of its fighters.
 - c. Goering commanded German Air Force.
 - d. Air war contained five phases.
 - e. Britain's key to victory was her use of radar and radio area coverage.
 - f. Incorrect air doctrine cost Germany the Battle of Britain.
- C. German naval strategy.
1. Hitler lacked appreciation of sea power.
 2. German submarine force small and designed for short-medium range operation.
 3. German surface fleet totally lacking at outset of war.
 4. British seriously short of escorts for convoy duty in beginning.
 5. Discuss the five phases of the Battle of the Atlantic.

D. Battle of Stalingrad.

1. City of Stalingrad located on Volga River; 500,000 inhabitants.
2. German Sixth Army faces Russian Sixty-Second Army.
3. Hitler's goal was to cut off Volga River as a supply route and shut down Stalingrad's industrial output - not to defeat the Russian Army.
4. Second week of September, Battle of Stalingrad begins.
5. Germans are overextended in Russia. German generals plead with Hitler to withdraw. Pleas were ignored.
6. Germans attempt frontal assault on city; repulsed with heavy losses.
7. Germans ordered to reduce city by artillery fire; turn city into a rubble heap, which aids Russian artillery and restricts German armor/air arm.
8. Volga served as an economic artery, but Hitler insisted Stalingrad be taken. House-to-house fighting ensues.
9. November 19th, Russians surround 22 German divisions in vicinity of Stalingrad.
10. Germans not prepared for winter campaign.
11. Germans sacrifice Sixth Army as Battle of Stalingrad ends 31 January.
12. Germans lost Stalingrad because:
 - a. Hitler's insistence on seizing territory rather than destroying Russian armies.
 - b. German's overextended lines and exposed southern flank.
 - c. Hitler's failure to retract Sixth Army while there was still time.

E. North Africa and Italy Campaigns.

1. Churchill and Roosevelt established Allied cooperation.
2. British and American staffs combined for invasion planning of North Africa.
3. Operation Torch (invasion of North Africa) designed to pave way for invasion of Europe via Italy, and also to aid Russia.
4. Allies wanted to knock Italy out of the war as quickly as possible and to bring air might against Germany.
5. Washington Agreement 1941. America committed to defeating Germany first.
6. Discuss the following:
 - a. Washington meeting 1941.
 - b. London meeting 1942.
 - c. Washington meeting 1942.
 - d. Casablanca meeting 1943.
 - e. Washington meeting 1943.
 - f. Quebec meeting 1943.
 - g. Cairo/Teheran meeting 1943.
 - h. Quebec meeting 1944.
 - i. Malta meeting 1945.
 - j. Yalta meeting 1943.
 - k. Potsdam meeting 1945.
7. Churchill convinces Roosevelt that invasion of North Africa is feasible due to locale being out of range of Luftwaffe.

8. Eisenhower selected as Commander-in-Chief of North African Campaign.
9. 8 November 1942, allies land in North Africa.
10. Vichy French cease fighting 11 November.
11. Allies determine to attack Italy, the weakest of the Axis Powers. This would open up Allied supply line to Far East, draw off German troops on Russian front, obtain airfields near Foggia, and encourage Turkey to enter war on side of allies.
12. Sicily invaded 10 July 1943.
13. Allies reach Italy 3 September 1943.

F. Strategic bombing.

1. Initially, British strategic bombing lacking because:
 - a. Poor night navigational equipment.
 - b. Poor target-finding equipment.
 - c. Inaccurate bombing.
 - d. Inefficient bombs.
 - e. British bombers no match for German fighters.
 - f. Lack of long-range capability.
2. British bombing improves because of:
 - a. Heavier bombers.
 - b. Larger bombs.
 - c. Improved target priorities.
 - d. Radar-equipped "pathfinder" aircraft utilized to mark targets.
3. American strategic daylight bombing success was

restricted in the early part of the war due to weather and enemy fighter opposition. The key rested in the development of long-range fighter cover.

4. P-51 Mustang becomes premier long-range fighter.
5. Royal Air Force and United States Army Air Force were not able to bring sufficient strength against German Luftwaffe, industries, fuel, and transportation systems until the last year of war.
6. Airborne radar and bomb aiming greatly increased effectiveness of strategic bombing.

G. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 27

HOURS: 1

TITLE: Post-World War II Military Development

I. Learning Objectives

- A. The student will comprehend the origins of the Cold War and the emergence of the United States as the dominant military power.
- B. The student will know and trace the evolution of the National Security Act of 1947.
- C. The student will comprehend and assess the impact of potential nuclear proliferation on American defense policy.
- D. The student will comprehend and explain the origins of the Truman Doctrine and the National Security Council document NSC-68, "U.S. Objectives and Programs for National Security," of 14 Apr 50.

II. References and Texts

A. Instructor references

- 1. Men in Arms, pp. 331-354
- 2. The American Way of War, pp. 363-381
- 3. NSC-68, "U.S. Objectives and Programs for National Security" (Available online at: <http://www.fas.org/irp/offdocs/nsc-hst/nsc-68.htm>.) (optional)

B. Student texts

- 1. Men in Arms, pp. 331-354
- 2. The American Way of War, pp. 363-381

III. Instructional Aids

A. Chalkboard/whiteboard

- B. Map
- IV. Suggested Methods and Procedures
- A. Method options: Lecture and discussion
 - B. Procedural and student activity options: Study assignment
- V. Presentation
- A. Discuss the origins of the Cold War.
 - 1. Soviet-American estrangement over Russian expansion into Eastern Europe.
 - 2. Emergence of two superpowers and the decline of Great Britain and France in the post-war era.
 - 3. The Berlin Blockade.
 - 4. NATO and the Warsaw Pact.
 - B. Trace the evolution of the National Security Act of 1947.
 - 1. What each armed service wanted.
 - 2. Navy and Marine Corps Air - air power or sea power?
 - C. Assess the impact of the atomic revolution on military strategy.
 - 1. Negates the use of combatants to fight wars.
 - 2. Doctrine of deterrence.
 - 3. American emphasis on the manned bomber.
 - D. Explain the origin of the Truman Doctrine.
 - 1. International communism as a threat - Greece.
 - 2. New role of the U.S. as the sole defender of democracy.

- E. Discuss the origins and importance of NSC-68.
 - 1. Soviet Union as both a military and ideological threat.
 - 2. Perceptions of the next war.
 - 3. Authors of NSC-68 concluded it was necessary to build up American and Allied military strength to right the power balance.
 - a. Initial reaction was largely negative due to the increased military expenditures.
 - b. The Korean War saves NSC-68 from oblivion, and it becomes the foundation of American strategy.
- F. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 28

HOURS: 1

TITLE: The Korean Conflict

I. Learning Objectives

- A. The student will comprehend and explain the proposition that preparation for nuclear war left the United States unprepared to deter a limited war.
- B. The student will know and describe the United Nations' response to the invasion of South Korea in terms of the perceived monolithic nature of communism.
- C. The student will comprehend and evaluate the Inchon Landing as a deterrent to military stalemate in Korea.
- D. The student will comprehend the significance of the Truman-MacArthur controversy.

II. References and Texts

A. Instructor references

- 1. The Evolution of Weapons and Warfare, Ch. 28, pp. 277-281
- 2. Men in Arms, pp. 346-348
- 3. The American Way of War, pp. 382-398

B. Student texts

- 1. Men in Arms, pp. 346-348
- 2. The American Way of War, pp. 382-398

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options: Lecture and discussion
- B. Procedural and student activity options: Study assignment.

V. Presentation

- A. Explain how reliance on air power and preparation for nuclear war left the U.S. unable to respond effectively to a limited war.
 - 1. Level of preparedness - U.S. forces.
 - 2. Availability of ground forces.
 - 3. Limitations of non-nuclear air power.
- B. Describe the response of the United Nations to the Korean Conflict.
 - 1. Background to the conflict - a divided Korea.
 - 2. Monolithic nature of the communist threat.
 - 3. Historical lessons affecting decision-making (Munich 1938, "loss" of China, etc.).
 - 4. Multilateral military response.
- C. Evaluate the Inchon Landing.
 - 1. MacArthur's experiences in World War II - envelopment by amphibious means not unusual.
 - 2. Perception that atomic weapons made large-scale amphibious operations impractical.
 - 3. Conduct of the operation/forces used (Army commander).
 - 4. Effect on the tactical situation in Korea.
- D. Discuss the Truman-MacArthur controversy.
 - 1. MacArthur's history of irreverence for higher authority - political power, hero image.

2. Repeated instances of policy differences with Truman - public announcement of disagreements.
3. MacArthur's "no win" attitude of defeatism; demand for authority to use nuclear weapons and authority to strike targets in Manchuria.
4. Who establishes policy?

E. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 29

HOURS: 1

TITLE: Wars of National Liberation

I. Learning Objectives

- A. The student will comprehend and compare/contrast the terms "nationalism," "anticolonialism" and "communism" in the context of the wars of liberation from 1945-1961.
- B. The student will know and explain the steps in classical guerrilla warfare as defined by Mao Tse-tung.
- C. The student will comprehend and assess the impact of the Communist takeover in China.
- D. The student will comprehend and explain the British successes in the "Malayan Emergency" and evaluate attempts to apply lessons learned to subsequent situations.
- E. The student will comprehend and explain American response to the Cuban Revolution, with emphasis on the "Bay of Pigs Operation."

II. References and Texts

- A. Instructor references
 - 1. Men in Arms, pp. 364-365
 - 2. "Victory in Malaya", Marine Corps Gazette, 1963, Vol. 47, Nos. 1, 2, and 3 (optional)
 - 3. Mao Tse-tung on Revolution and War (optional)
- B. Student texts: None

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Map

IV. Suggested Methods and Procedures

- A. Method options: Lecture and discussion
- B. Procedural and student activity options: Study assignment

V. Presentation

- A. Assess the impact of the Communist victory in China.
 - 1. American support for China since the turn of the century.
 - 2. World War II support for Chiang Kai-shek.
 - 3. Anticommunism, the Cold War, McCarthyism.
 - 4. Failure to comprehend the nature of a war of national liberation.
- B. Explain British successes in the Malayan emergency.
 - 1. Background to the conflict.
 - 2. Nature of the insurgency and the British response.
 - 3. Emphasize why the conflict was containable; compare briefly to Vietnam.
- C. Define nationalism, anticolonialism, and communism in the context of the period 1945-1961.
 - 1. Nationalism.
 - 2. Anticolonialism.
 - 3. Communism.
 - 4. Emphasize obfuscation with regard to using these terms; note overlapping of meanings.
- D. Discuss the American response to the Cuban Revolution.
 - 1. Background - the U.S. and Castro.

2. Soviet perceptions of John F. Kennedy.
 3. Planning of the Bay of Pigs operation and why it failed.
 4. Effect of the failure on Kennedy's foreign policy.
- E. Explain the steps in classical guerrilla warfare as defined by Mao Tse-tung.
1. Guerrilla warfare is the weapon of the militarily weak and is designed to harass, confuse, and disrupt the enemy's lines of communication.
 2. Tenets of guerrilla warfare:
 - a. The enemy advances, the guerilla retreats.
 - b. The enemy camps, the guerilla harasses.
 - c. The enemy tires, the guerilla attacks.
 - d. The enemy retreats, the guerilla pursues.
 3. Once the guerilla gains military superiority, the warfare becomes conventional.
- F. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 30

HOURS: 1

TITLE: Vietnam

I. Learning Objectives

- A. The student will know and trace the development of the revolutionary environment and anticolonialism under French rule.
- B. The student will comprehend the voluntary limitation of the American military effort in the Indochina Conflict.
- C. The student will know and review the anticommunist military effort from the landing at DaNang in 1965 to the end of 1967.
- D. The student will comprehend and contrast the military realities of the Tet offensive with its popular American perception and media coverage.
- E. The student will comprehend and explain the need for and implementation of a policy of Vietnamization.
- F. The student will comprehend and compare American and French objectives in Vietnam in 1954 and 1972, respectively, by contrasting the Geneva and Paris Agreements.

II. References and Texts

- A. Instructor references
 - 1. Encyclopedia of Military History, pp. 1321-1333
 - 2. Summons of the Trumpet, pp. 1-266 (optional)
 - 3. Instructor Resource Manual (optional)
- B. Student texts: None

III. Instructional Aids

- A. Chalkboard/whiteboard
 - B. Map
- IV. Suggested Methods and Procedures
- A. Method options: Lecture and discussion
 - B. Procedural and student activity options: Study assignment
- V. Presentation
- A. Trace the development of the revolutionary environment and anticolonialism under French rule.
 - 1. Origins of French rule.
 - 2. Absence of civil liberties - development of a revolutionary mentality.
 - 3. Denial of participation in the economic mainstream (restricts development of a middle class, capitalist perspective).
 - 4. Persistent anticolonialism; origins of the Viet Minh.
 - B. Discuss the reasons for the voluntary American limitation of the war.
 - 1. Concern for Soviet and Chinese involvement.
 - 2. Belief in monolithic communism and fears of other communist-inspired insurgencies elsewhere.
 - 3. Ill-defined goals and failure to unite Americans for U.S. policy in Vietnam.
 - C. Review the events in Vietnam, 1965-1967.
 - 1. Decision to send in ground troops in March 1965.
 - 2. The counterinsurgency nature of the war - frustrations.
 - 3. Major operations - Review successes and failures.

4. American optimism by the end of 1966.
- D. Review the Tet Offensive.
1. Course of the offensive and its failure militarily.
 2. The offensive as a political success.
 3. Impact of media coverage, especially television reporting.
 4. Questioning of Americans as to the morality and practicality of U.S. involvement.
- E. Explain the course of American withdrawal.
1. Vietnamization.
 2. North Vietnamese attempt to manipulate the 1972 U.S. presidential election.
 3. "Rolling Thunder" - Objectives of the war changed. (Note: "Rolling Thunder" was the operational name for the new strategy that was also described as "bombing them back to the peace table.")
- F. Compare American and French motives for reaching a peace agreement.
1. French motives in 1954.
 2. American perceptions in 1972.
 3. A lasting peace in either case?
- G. Briefly review the events leading to the fall of the South Vietnamese government.
- H. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 31

HOURS: 1

TITLE: Conflicts In the Middle East

I. Learning Objectives

- A. The student will know and trace the evolution of the Arab-Israeli conflicts.
- B. The student will comprehend and then assess superpower influence in the Mid-East.
- C. The student will know and review the October War, with emphasis on the impact of modern weaponry.

II. References and Texts

A. Instructor references

- 1. The Art of War in the Western World, pp. 602-609
- 2. Men in Arms, pp. 349-351, 390-399
- 3. "The Arabs and Israel in Perspective," Marine Corps Gazette, Vol. 58, No. 1, 2, and 6, 1974 (optional)
- 4. Instructor Resource Manual (optional)

B. Student texts

- 1. The Art of War in the Western World, pp. 602-609
- 2. Men in Arms, pp. 349-351, 390-399

III. Instructional Aid: Chalkboard/whiteboard

IV. Suggested Methods and Procedures

A. Method options

- 1. Lecture
- 2. Lecture and discussion

3. Guided discussion

- B. Procedural and student activity options: Read and study assignment.

V. Presentation

- A. The Balfour Declaration - England would work to facilitate the establishment of a national home for the Jews in Palestine. Date of declaration: 9 November 1917.
- B. Friction predictably developed between the Jewish immigrants and the Arab inhabitants of Palestine.
1. Arab revolt in 1939.
 2. England made concessions to the Arabs in order to retain their friendship during Second World War, to include restricting immigration.
- C. After the war, English efforts to limit Jewish immigration into Palestine met with vehement and often violent resistance. Before the end of 1945, an underground Jewish rebellion rose up against the British High Commissioner for Palestine.
- D. 14 May 1948: Declaration of Independence that proclaimed the state of Israel and final departure of British High Commissioner for Palestine.
- E. 15 May 1948: Israel at war with its Arab neighbors.
- F. The 1948 war resulted in an Israeli victory and precipitated the problem of the Palestinian refugees.
- G. "Superpower" influence in the Middle East:
1. Both the United States and the Soviet Union were quick to recognize the new state of Israel in 1948.
 2. 1955: Arms agreement between Egypt and the Soviet Union.
 3. 1956: France and Great Britain assist Israel in

winning the second Arab-Israeli War.

- a. By March 1957, after considerable prodding from the United States and the United Nations, Israel withdrew from the territory it had conquered.
 - b. By July 1957, the Soviet Union was rearming both Egypt and Syria.
4. Russian aid to Nasser and American support of Israel enhanced the armed forces of the respective nations and resulted in the Middle East becoming an area of potential confrontation between the superpowers.
 5. On 5 June 1967, Israeli pilots manning American and British aircraft successfully attacked Egyptian, Syrian, Iraqi, and Jordanian airfields, initiating the Six Day War.
 - a. The war resulted in an overwhelming Israeli victory.
 - b. On this occasion, Israel did not respond to pressure to return the conquered territory.
 6. September 1970: Death of Nasser, who was succeeded by Anwar Sadat.
 - a. Sadat makes overtures to the West.
 - b. July 1972: Most Soviet advisors and technicians are expelled from Egypt, principally because the Soviet Union was not providing the desired offensive weapons.
 - c. After October 1972, limited Soviet arms continued to flow to Egypt.
 7. For the first time, and perhaps the only time, the United States and the Soviet Union acted in concert to help terminate hostilities in the October War, although both "superpowers" resupplied their respective sides during the conflict.

8. 1979: President Sadat and Premier Begin sign Egyptian-Israeli peace treaty at White House.

H. The October (Yom Kipper) War.

1. An unprecedented degree of cooperation between the Arab States was attained.
 - a. The Egyptian and Syrian attacks were carefully coordinated.
 - b. Iraq sent troops; Lebanon mobilized; Saudi Arabia, Libya, and the Persian Gulf states provided arms.
 - c. Israel taken by surprise.
2. Unlike 1967, the Syrian and Egyptian surface-to-air missiles took a heavy toll on Israeli aircraft.
3. The dominance of the great Israeli tank formations was broken by Egyptian infantry use of Soviet anti-tank guided missiles and rocket-propelled grenades.
 - a. Large numbers of Israeli tanks were destroyed by these weapons.
 - b. The indication was that the infantryman could still be a decisive factor on the contemporary electronic battlefield.

I. Summary.

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 32

HOURS: 1

TITLE: Terrorism

I. Learning Objectives

- A. The student will know and describe current collective security arrangements.
- B. The student will know and then summarize the proliferation of terrorism and its use as a political and military method of warfare.
- C. The student will know/list the nations of the world capable of nuclear warfare.
- D. The student will know/discuss the possibility of nuclear terrorism.

II. References and Texts

- A. Instructor reference: Men in Arms, pp. 335-399
- B. Student texts
 - 1. Men in Arms, pp. 335-399
 - 2. Readings from current periodicals

III. Instructional Aids

- A. Chalkboard/whiteboard
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector
- D. Map

IV. Suggested Methods and Procedures

- A. Method options
 - 1. Lecture

2. Lecture and discussion
 3. Guided discussion
- B. Procedural and student activity options: Involve the students in discussions about terrorism and nuclear warfare.
- V. Presentation
- A. U.S. collective security arrangements.
1. NATO - emphasize and relate to Soviet/CIS threat.
 2. OAS.
 3. Various bilateral agreements.
- B. Spectra of nuclear warfare.
1. Who is capable now? (U.S., CIS, China, Great Britain, etc.)
 2. Who could have nuclear weapons soon (2-3 years)? (Israel, India, Pakistan, South Africa, Iraq, North Korea)
 3. What nations have the potential (5-6 years)? (Egypt, Argentina, Brazil, Taiwan, South Korea, Mexico, Iran)
- C. Terrorism.
1. Increasingly widespread form of politico-military warfare. (Cite recent examples.)
 2. Nuclear terrorism - holding entire nations hostage.
- D. Summary

**NAVAL RESERVE OFFICERS TRAINING CORPS
EVOLUTION OF WARFARE**

LESSON 33

HOURS: 1

TITLE: The Gulf War (Desert Storm)

I. Learning Objectives

- A. The student will comprehend and be able to discuss the background and justification used by Hussein for the invasion of Kuwait.
- B. The student will comprehend and be able to discuss the strategy and operational and tactical concerns of the coalition forces in Operation Desert Storm.
- C. The student will comprehend and be able to identify the combat "firsts" utilized in Operation Desert Storm.

III. References and Texts

A. Instructor references

- 1. "A Perspective on Desert Storm," by Col J. J. Edson, USMC (Ret), *Marine Corps Gazette*, Vol. 75, No. 6, June 1992, pp. 25-27 (optional)
- 2. Desert Victory: The War for Kuwait (optional)
- 3. "Desert Storm Stirs Up," by R. R. Keene, *Leatherneck Magazine*, Vol. LXXIV, No. 3, March 1991, pp. 23-25 (optional)
- 4. "Maneuver Warfare and the Operational Art," by LtCol G. I. Wilson, USMC, *Marine Corps Gazette*, Vol. 75, No. 6, June 1991 (optional)

B. Student texts: None

III. Instructional Aids

- A. Map
- B. Instructor-prepared PowerPoint slides or transparencies
- C. Computer/projection system or overhead projector

IV. Suggested Methods and Procedures

A. Method options

1. Lecture
2. Lecture and discussion

B. Procedural and student activity options: Encourage the students to take notes and engage in classroom discussion. Have students identify areas of importance on a wall-mounted map.

V. Presentation

A. State rationale Hussein used to justify invasion.

1. Historical claim to area – “a line in the sand.”
2. Relationship with OPEC.
3. “Stealing” of Iraqi oil by Kuwait.

B. Discuss Iraqi economy and Iranian war losses.

C. Discuss what Hussein and Iraq had to gain by annexation of Kuwait.

D. Operation Desert Shield – 7 August 1990.

1. U.S. forces arrive in Saudi Arabia.
2. USMC Maritime pre-positioning.
3. Historic presence of U.S. Navy in the region.
4. United Nations economic sanctions.
5. Hussein efforts at involving Palestinian problem.
6. Attempts at peaceful resolution.

E. Operation Desert Storm – 16 January 1991.

1. U.N. forces involved.

2. Air attacks - 100,000 Allied sorties in 6 weeks.
 3. Targets.
 4. Artillery raids.
 5. Intelligence effort.
 6. Deception.
- F. Operation Desert Sting - 29 January 1991.
- G. Ground War - 24 February 1991.
1. Air supremacy.
 2. Assault-combat ratio and order of battle.
 3. Results in 100 hours.
 4. Amphibious demonstration.
 5. Effect on environment.
- H. Combat "firsts."
1. Harrier strikes.
 2. Coordination between aircraft and armor.
 3. Media - interviews with Hussein.
 4. PAO.
- I. Conclusions and summary.