

CURRICULUM EVOLUTION AT AIR COMMAND AND STAFF COLLEGE
IN THE POST-COLD WAR ERA

A Dissertation

by

WILLIAM ROBERT DONOVAN II

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

December 2010

Major Subject: Curriculum and Instruction

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ABSTRACT

Curriculum Evolution at Air Command and Staff College
in the Post-Cold War Era. (December 2010)

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This qualitative study used a historical research method to eliminate the gap in the historical knowledge of Air Command and Staff College (ACSC) curriculum evolution in the post-Cold War era. This study is the only known analysis of the forces that influenced the ACSC curriculum and the rationale behind curricular change at ACSC in the post-Cold War era from the publication of the Skelton Report to the present. Data for this study were gathered through personal interviews with past and present members of the ACSC faculty and leadership, and review of published and unpublished historical ACSC curriculum documents.

Research for this study revealed that the ACSC curriculum was continually in flux during this time period. At no time did the ACSC curriculum remain exactly the same as the previous academic year. The curriculum was responsive to external and internal influences. External influences were the Skelton Report, the Chairman of the Joint Chiefs of Staff, the Department of Defense, the Air University Commander, and world events. Internal influences include the ACSC Commandant and the ACSC faculty.

The most significant and radical changes to the ACSC curriculum originated with those individuals or groups of individuals in positions of authority over military education institutions, primarily the Skelton Panel, Chiefs of Staff of the Air Force, and ACSC Commandants. Many minor changes were made to the ACSC curriculum during this time. Significant curricular changes made were not lasting changes. New leadership at times eliminated all or large parts of the curriculum they inherited because of personal preference. The ACSC curriculum is therefore subject to potential cyclical curricular change coinciding with changes in military leadership, which averages every two years.

This study concludes that the ACSC curriculum changed often, sometimes significantly, in the post Cold War era. The frequent curricular change frustrated many faculty members and led to periods of turmoil within ACSC. ACSC is not likely to realize a period of curriculum stability until the Air Force places limits on the scope of curricular change its leaders are allowed to make at ACSC without approval and considers assigning professional educators to leadership roles in its Professional Military Education institutions. This study recommends that the Air Force consider placing a system of checks and balances on the ability of ACSC Commandants to reinvent the curriculum and placing professional educators in the positions of Air University Commander and ACSC Commandant in order to slow the rate of curricular change and bring a level of stability to the ACSC curriculum.

DEDICATION

To my mother and father, whose encouragement and unwavering belief in me have enabled me to succeed.

ACKNOWLEDGEMENTS

I would like to thank my committee chair, Dr. Lynn M. Burlbaw, for his undying patience in answering a seemingly endless number of questions, for his expert guidance of this study, and for willingly taking the time to impart but a fraction of his immense knowledge about the history of education to me. I also thank the members of my committee, Dr. Joseph Cerami, Dr. Dominique Chlup, and Dr. Larry Kelly, for their help and encouragement, as well as for putting up with numerous delays and schedule changes.

My thanks also go to my friends and colleagues at Air Command and Staff College for giving me the opportunity to pursue doctoral studies. Though I cannot list everyone at Air Command and Staff College who has played a part in my academic journey, I would be remiss if I did not specifically mention Dr. Lewis Griffith, Dr. Jim Forsyth, and Dr. Rich Muller for their expert advice and for willingly answering my requests for assistance.

I thank my mother and father, brother and sister for always believing in me and for providing lots of love, encouragement, support, and prayers throughout the years. Finally, I thank my children, Grace and Will, for their undying love and for remaining strong through difficult times.

NOMENCLATURE

ACSC	Air Command and Staff College
AU	Air University
AY	Academic Year
AWC	Air War College
CSAF	Chief of Staff of the Air Force
DoD	Department of Defense
PME	Professional Military Education

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CHAPTER I

INTRODUCTION

In November 1987, the Panel on Military Education, a congressional panel chaired by Congressman Ike Skelton (D-MO) to review the Department of Defense implementation of the education provisions of the Department of Defense Reorganization Act of 1986, also known as the Goldwater-Nichols Act, was formed. By convening this Panel, which became known as the Skelton Panel, the United States Congress was recognizing the vital role of Professional Military Education (PME) in national security. According to the Report, “Creation of the Panel signifies recognition by the Congress that rigorous, high-quality professional military education (PME) is vital to the national security. It is an investment in the future military leadership for war and peace.”¹ In April 1989, the Skelton Panel published its report, which was critical of the PME system in the United States. The Skelton Report, as this report was called, criticized PME institutions for lack of rigor and intellectual content and recommended significant changes in the education of military officers, particularly those attending mid-level and senior-level schools. The Department of Defense then mandated that PME institutions implement the Skelton Report recommendations.

This dissertation follows the style of *History of Education Quarterly*.

¹ House Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, 1989, 11.

Seven months after the release of the Skelton Report, in November, 1989, the Berlin Wall was knocked down, followed months later by the peaceful reunification of Germany, signaling an end to the Cold War and the doctrine of containment that had shaped United States military organization and strategy for over forty years. Over the next few years, the United States military, facing an unfamiliar international security environment with the absence of its former Soviet Union adversary, began reevaluating its traditional roles and missions. David Jeremiah observed,

The security architecture of the Cold War and the doctrine of containment are fading away. But without a formal mechanism to redraw disputed international borders, we seem to be in for a prolonged period of regional conflict. Challenges will proliferate as the world population grows, ethnic and religious antagonisms are unleashed by the end of communism and political and military institutions undergo change. Who will be our adversaries and how can the armed forces prepare for the warfare of the future? Moreover, how can we plan sensibly in the face of declining budgets and technological developments? What should be scrapped, what must be procured, and how can rivers of information be reduced to usable products and directed where they are needed? Looking ahead like the great military visionaries of the past, and with the benefit of sound analysis, we can begin to discern trends that have import for our national interests and the joint capabilities which the services will need to defend them.²

How did the military education system change as a result of the Skelton Report? How did PME change to meet the subsequent challenges of the new international security environment of the post-Cold War era? An answer to these questions is what underlies the research reported in this dissertation.

Modern military leaders have great intellectual demands placed upon them.

Jeffrey McCausland states, “The modern military leader must have something of the

² David E. Jeremiah, “What’s Ahead for the Armed Forces?,” *Joint Force Quarterly*, Summer 1993, no. 1: 25.

anthropologist, police officer, and diplomat. The need, therefore, is for the broadly—one might even say, the liberally—educated officer, whose hallmark is not the dogged clinging to eternal verities of military doctrine, but a versatility and self-awareness that are acquired in the schoolhouse no less than in the field.”³ This intellectual development is the goal of PME institutions in the United States. This study will examine one PME institution, the Air Command and Staff College (ACSC).

ACSC is the United States Air Force’s intermediate-level PME institution located at Maxwell Air Force Base, Alabama. The annual ACSC student body consists of approximately 600 students and is not limited to only Air Force officers. ACSC educates mid-career officers from all military services, Department of Defense civilians, and international officers in the operational employment of air and space forces.

ACSC’s roots date back to 1920 with the establishment of the Air Service School at Langley Field, Virginia, for officers assigned to the nascent air arm of the United States Army. The Air Service became the Air Corps in 1926, and the school name was changed to the Air Corps Tactical School. The Air Corps Tactical School moved to Maxwell Air Force Base in Montgomery, Alabama in 1931, and served as the intellectual center of military aviation for the United States until the school closed with the outbreak of World War II. Following World War II, the Air Corps Tactical School was reopened as the Air Command and Staff School and was placed under the supervision of Air University (AU), an umbrella organization created to manage the

³ Jeffrey D. McCausland, “Educating Leaders in an Age of Uncertainty—The Future of Military War Colleges.” Research study for the Smith Richardson Foundation, Dickinson College, Carlisle, PA, December 15, 2005: v.

educational needs of the newly-independent United States Air Force. In 1962, the school was renamed Air Command and Staff College, as it remains today. ACSC has undergone numerous structural and organizational changes in its history and today awards graduate degrees accredited through the Southern Association of Colleges and Schools.

The institutional history of ACSC as a PME school has been documented in historical time increments. ACSC, as with all Air Force organizations, writes an annual history report documenting significant events from the previous year. These annual history reports represent a chronological archive of ACSC, and serve as annual snapshots of the school and its operation. However, the reports are not written as a progressive analysis and synthesis that builds on the previous year of ACSC history or its curriculum evolution.

Short school histories were written to mark the twentieth and twenty-fifth anniversaries of ACSC in 1966 and 1971 respectively for the Air University Office of History.⁴ Brief histories of ACSC with a curricular focus are captured in two papers written in 1987 and 1988 that cover the school's first 40 years.⁵ Lastly, two Air Force Lieutenant Colonels, Richard Davis and Frank Donnini, briefly traced the development of Professional Military Education in the Air Force from its inception after World War II

⁴ Marvin I. Cohen and Richard H. Jackson, Captain, USAF, "History of the Air Command and Staff College, 1946-1966" (working paper, Twentieth Anniversary Command Edition, Office of History, Headquarters Air University, 1966).

⁵ James A. Harrold, "A Historical Analysis of Basic Air Force Doctrine Education Within the United States Air Force Air Command and Staff College, 1947-1987" (master's thesis, Air Force Institute of Technology, 1987); James D. Tatum, "Historical Perspective of Air Command and Staff College Curriculum, 1946-1987" (working paper, Office of History, Headquarters Air University, Maxwell Air Force Base, Alabama, 1988).

through the 1980s, including an overview of the historical development of ACSC and its curriculum.⁶

Moreover, some histories of PME institutions concentrate on exploring the factors leading to the institution's founding and largely focus on the development of organizational structure. In histories of the Army War College, curriculum is covered in broad terms with little in-depth analysis of curriculum evolution.⁷ Likewise, histories of the Naval War College and the Army Command and General Staff College focus on the founding of the institution and evolving organizational structures instead of curriculum.⁸ Robert Gest made the same observation in his doctoral dissertation in which he traced the curriculum evolution of the Industrial College of the Armed Forces (ICAF), a senior-level PME institution. Gest stated, "Most histories of military colleges have sought to chronicle the all-inclusive institutional development: programs, procedures, and organizational structure. Thus, for the most part, they have failed to deal specifically with the variety of agents who acted on the curriculum to give it form and structure."⁹

⁶ Richard L. Davis and Frank Donnini, *Professional Military Education for Air Force Officers: Comments and Criticisms* (Maxwell Air Force Base, AL: Air University Press, 1991).

⁷ Harry P. Ball, *Of Responsible Command: A History of the U.S. Army War College* (Carlisle Barracks, PA: Alumni Association of the U.S. Army War College, 1984); George S. Pappas, *Prudens Futuri: The U.S. Army War College, 1901-1967* (Carlisle Barracks, PA: The Alumni Association of the U.S. Army War College, 1967).

⁸ Ronald Spector, *Professors of War: The Naval War College and the Development of the Naval Profession* (Newport, RI: Naval War College Press, 1977); Timothy K. Nenninger, *The Leavenworth Schools and the Old Army: Education, Professionalism, and the Officer Corps of the United States Army, 1881-1918* (Westport, CT: Greenwood Press, 1978).

⁹ Robert Gest III, "The evolution of the curriculum of the Industrial College of the Armed Forces, 1924-1988: A search for rigor" (doctoral dissertation, Virginia Polytechnic Institute and State University, 1990), 4.

Statement of the Problem

There is a significant gap in the historical knowledge of ACSC curriculum evolution because the post-Cold War era has not been fully analyzed. None of the existing literature on ACSC offers an exploration of how and why ACSC curriculum has evolved from the publication of the Skelton Report and the end of the Cold War to the present. The problem therefore, is a lack of historical analysis of ACSC curriculum, particularly in the post-Cold War era.

The purpose of this study is to chronicle the changes that occurred in the ACSC curriculum between the years 1990 and 2006. The study begins with the year 1990 and concludes in 2006. The year 1990 was chosen as a beginning date for two reasons. First, the year 1990 is a significant year in PME history as a result of the publication of the Skelton Report. The Skelton Report was published in November 1989 and was critical of PME curriculum across all the service schools, particularly the Air Force schools. The Skelton Report recommended far-reaching changes to transform the entire PME system.

Second, 1990 marks the end of the Cold War with the peaceful reunification of Germany. With the end of the Cold War and subsequent demise of the Soviet Union, United States military forces no longer were facing a single, peer competitor threat that had defined the international security environment for the previous forty years. The United States military now faced an uncertain international security environment which forced a reevaluation of military organization, roles and missions, including the focus of Professional Military Education. The year 2006 was chosen as an end date because

changes in the top echelons of Air Force leadership took place during the year with a new Air Force Chief of Staff, a new Air University Commander, and a new ACSC Commandant.

Research Questions

This study fills a historical gap in Professional Military Education literature by addressing this central question:

How has the curriculum at ACSC evolved since the publication of the Skelton Report and the end of the Cold War?

The following supporting questions provide focus to the study and construct a framework for understanding the influences that have shaped the ACSC curriculum in the post-Cold War era.

1. What were the external and internal influences on the curriculum?
2. How were external and internal influences manifested in the curriculum?
3. What factors facilitate or impede curricular change relative to external and internal influences?

External influences include the recommendations of official Boards and Commissions, influential military and civilian personnel not assigned to ACSC, and domestic or global social, economic, and political events. The input of students and faculty of ACSC, the educational philosophy of ACSC leadership, and technological changes related to pedagogy and practice, classified as internal influences, will also be explored to determine what, if any, impact they had on the curriculum.

Significance of the Study

Curriculum planners need a solid understanding of the past in order to have a clear sense of direction and avoid counterproductive activities. O.L. Davis states,

I contend that historical studies of curriculum should help us to understand the antecedents of the present course of study and of our professional field. Possessing understanding, we may explore contemporary justifications, analyze new proposals, and, informed, invent more appropriate, more consistent, more valid curriculum.¹⁰

Therefore, a historical awareness of how and why curriculum evolved as it did informs development of current and future curricula. In planning curriculum, educational institutions determine the knowledge they feel is important enough to impart to their students based on a sense of what is best for society.

As Gest points out, this is especially important for PME institutions because the American public has a vested interest in how well its military officers are educated due to the far-reaching consequences that could result from a cadre of senior military leaders unprepared to successfully cope with today's volatile international security environment.¹¹ Thus, this study will add to the existing knowledge of curriculum history at ACSC, and provide understanding of past curricular decisions that can inform future curricular decisions at ACSC.

Examining the historical evolution of curriculum at ACSC since the end of the Cold War will provide understanding of how the curriculum has changed to meet the recommendations of the Skelton Report and meet the challenges presented by the post-

¹⁰ O.L. Davis, Jr., "The Nature and Boundaries of Curriculum History: A Contribution to Dialogue over a Yearbook and its Review," *Curriculum Inquiry* 7, no. 2 (1977): 157.

¹¹ Robert Gest III, "The evolution of the curriculum of the Industrial College of the Armed Forces, 1924-1988: A search for rigor" (doctoral dissertation, Virginia Polytechnic Institute and State University, 1990).

Cold War international security environment. Because the security of the United States depends largely upon the preparedness of its military leadership, it is incumbent upon the civilian leadership of the United States to periodically review the effectiveness of PME curriculum in preparing its military leaders for current and future security challenges. This study will contribute to that review.

Definition of Terms

Certain terms used in this study are common in the military vernacular, but are not well known to most civilians. These terms are defined as follows to assist the reader in placing these terms in their proper context.

AIR COMMAND AND STAFF COLLEGE (ACSC): Located at Maxwell Air Force Base in Montgomery, Alabama, Air Command and Staff College is the Air Force's intermediate-level PME institution that instructs mid-career officers in the operational employment of air and space power. The school academic year currently is 10-months long, conducted from August to June each year. ACSC is accredited through the Southern Association of Colleges and Schools to award graduates a master's degree in Military Operational Art and Science.

AIR UNIVERSITY (AU): Located at Maxwell Air Force Base in Montgomery, Alabama, Air University was established in 1946 as a umbrella headquarters organization to oversee the Air Force's PME school system, which today includes the Air and Space Basic Course, Squadron Officer School, Air Command and Staff College, and Air War College (all for commissioned officers), and various PME schools for enlisted personnel as well.

CHIEF OF STAFF: The senior military commander of the United States Air Force or United States Army. The senior military commander of the United States Navy is called the Chief of Naval Operations and the senior military commander of the United States Marine Corps is called the Commandant of the Marine Corps. The position of Chief of Staff carries four-star general rank.

COMMANDANT: The senior military commander of Air Command and Staff College. The person occupying the position of Commandant is usually a Brigadier General (one-star general) or a senior Colonel waiting for promotion to Brigadier General.

INTERMEDIATE-LEVEL PME: This PME level is the second level in a four-level hierarchical PME system, which is made up of primary, intermediate, senior, and flag officer (general officer) levels.

JOINT: Two or more military service departments working together in a particular activity, operation, or organization.

MID-LEVEL CAREER OFFICERS: Commissioned officers with between twelve and fourteen years of service who expect to remain in the service for a minimum twenty-year career. Generally, these officers carry the rank of major.

Limitations and Delimitations

This study contains limitations and delimitations. This study is limited by:

1. The availability of documents related to ACSC's curriculum in the period under study. Some documents may be classified and unavailable, or no longer exist.
2. Data gathered through personal interviews. Individuals with the experiences and insight sought may be incapacitated, have passed away, or otherwise not be available for

an interview. In addition, some interviewees may be reluctant to share everything they know if the knowledge they share could reflect negatively upon ACSC or those personnel assigned, past or present, to ACSC.

The delimitations of this study include the following:

1. ACSC is the only PME institution examined in this study. No other PME institution within the Air Force or other military service departments is considered outside of background context.
2. This study examines only the resident curriculum of ACSC, and excludes the curriculum of ACSC's distance learning program.
3. This study will not analyze ACSC's curriculum evaluation process for internal validity. ACSC survey's its students and faculty during each academic year for feedback regarding all facets of the ACSC experience, including its curriculum. In addition, ACSC survey's the superior officers of its graduates two years after graduation to receive feedback on how well ACSC prepared its graduates to perform in their new positions. This study will consider ACSC's curriculum evaluation process only in the context of how feedback impacted curricular decisions.

CHAPTER II

REVIEW OF LITERATURE

Three areas of literature were reviewed for this study. The first section presents the relevant literature on military education. The second section is devoted to the review of literature written about curriculum theory and history and the third section is a review of adult education literature. Together, these sections help formulate the conceptual framework of this study.

Military Education

Well prepared leaders are the heart of United States military capability—and will continue to be the most critical element in the military’s ability to navigate the changes inherent in today’s volatile international security environment. Success in war depends as much on intellectual superiority as it does on numerical or technological superiority. The United States military therefore, places great value on refining the intellectual capabilities of its officer corps through PME.

The importance of PME to the United States cannot be overstated. In fact, creation of a Congressional Panel on Military Education in 1987 and the release of its report in 1989 signify recognition by the United States Congress of the vital role of PME to national security. According to the Report, “Creation of the Panel signifies recognition by the Congress that rigorous, high-quality professional military education (PME) is vital to the national security. It is an investment in the future military

leadership for war and peace.”¹² In creating the Panel, Hon. Les Aspin, Chairman of the House Armed Services Committee, sought to review the Department of Defense’s plans for implementing the joint education dictates of the 1986 Goldwater-Nichols Act that reorganized the Department of Defense with the objective of strengthening the joint elements of the military. In addition, the Panel was to “assess the ability of the current Department of Defense military education system to develop professional military strategists, joint war fighters, and tacticians.”¹³ The Skelton Report acknowledged that senior United States military officers must be able to think strategically and contribute to the development and execution of military and national security strategy, and that the PME system is a key contributor to strategic thinking.¹⁴

PME is an investment in future military capability. The critical role of PME is to prepare officers to meet the increasingly complex challenges in sustaining the global leadership of the United States and to cope with revolutionary changes in the military profession.¹⁵ An analysis of the skills required of senior military officers was put forth in 1957 by John Masland and Laurence Radway, who argue that Professional Military Education prepares military officers for the policy roles they relate:

It is obviously not enough for the armed forces to provide good soldiers, sailors, and airman, and the leaders necessary to command them in battle. Today, many of these leaders are called upon to work closely with foreign affairs experts, industrial managers, scientists, labor leaders, and educators. They participate in the drafting and promotion of legislation, in the preparation of a national budget, and in the determination of the American position on a wide variety of foreign

¹² House Committee on Armed Services, *Report of the Panel on Military Education*, 100th Cong., 1st sess., 1989, 11.

¹³ *Ibid.*, v.

¹⁴ *Ibid.*

¹⁵ Center for Strategic and International Studies, *Professional Military Education: An Asset for Peace and Progress* (Washington, D.C.: Center for Strategic and International Studies, 1997).

policy issues. They are required to understand, to communicate with, and to evaluate the judgment of political leaders, officials of other executive agencies, and countless specialists; they must make sound judgments themselves on matters which affect a wide variety of civilian concerns. They are called upon to evaluate the motivations and capabilities of foreign nations and to estimate the effects of American action or inaction upon these nations. And above all, the new role of military leaders requires of them a heightened awareness of the principles of our democratic society.¹⁶

Certain competencies and traits are necessary for senior officers to possess if they are to effectively wield the United States' military instrument of national power to achieve national objectives. These include a solid knowledge of the politico-military context in which United States and allied forces are employed, a thorough knowledge of the ways and means of proper force employment, and the ability to foster a warrior spirit (esprit de corps) which inculcates an adherence to a code of ethics and sense of community which distinguishes the profession of arms from other occupations.¹⁷ Also, senior officers must learn to think critically, recognize the limits on resources and subsequent impacts these limits have on operations, and understand the role of diplomacy and economics in development of national security strategy; they must become war fighters and strategists.¹⁸ In addition, a broad military education provides the important qualities of independent thought, mature judgment, analytical skills, and self-reliance that have been present in great military commanders throughout history.¹⁹

¹⁶ John Masland and Laurence Radway, *Soldiers and Scholars: Military Education and National Policy* (Princeton, NJ: Princeton University Press, 1957), vii.

¹⁷ Gwyn Harries-Jenkins, *The Education and Training of Military Elites*, in *The Educating of Armies* 13-38 (Michael Stephens ed., 1989).

¹⁸ Judith Hicks Stiehm, *The U.S. Army War College: Military Education in a Democracy* (Philadelphia, PA: Temple University Press, 2002).

¹⁹ T.G. Otte, *Educating Bellona: Carl von Clausewitz and Military Education*, in *Military Education: Past, Present, and Future* 13-33 (Gregory Kennedy and Keith Neilson ed., 2002).

The ability to employ the high-tech weaponry of the twenty-first century is critical for senior military commanders today. The United States invests enormous amounts of money for advanced weapons technologies; therefore, senior military commanders need to understand the tactical and strategic effects the use of these technologies can produce. Congressman Ike Skelton (D-MO) reminds us that these new technologies are useless unless they are employed by military leaders who know how to use them effectively on the battlefield through an understanding of the art of warfare, which is a key component of PME.²⁰

The Department of Defense publishes a dictionary of military and associated terms in order to standardize the terminology used by all Department of Defense components. This dictionary, Joint Publication 1-02, defines military education as “the systematic instruction of individuals in subjects that will enhance their knowledge of the science and art of war.”²¹ This is a very broad definition. A more specific definition is given in Instruction 1800.01B, *Officer Professional Military Education Policy*, published by the Joint Chiefs of Staff. PME is defined as educational programs designed to produce:

Graduates prepared to operate at appropriate levels of war in a joint environment and capable of generating quality tactical, operational and strategic thought from a joint perspective; Critical thinkers who view military affairs in the broadest context and are capable of identifying and evaluating likely changes and associated responses affecting the employment of U.S. military forces; Senior officers who can develop and execute national military strategists that effectively

²⁰ Ike Skelton, “Beyond Iraq” (closing address, Dwight D. Eisenhower National Security Conference, Washington, D.C., September 28, 2005).

²¹ Chairman of the Joint Chiefs of Staff, “DoD Dictionary of Military and Associated Terms” (Washington, D.C.: U.S. Government Printing Office, 2007), 336.

employ the armed forces in concert with other instruments of national power to achieve the goals of national security strategy and policy.²²

Although very specific, this definition of military education by the Joint Chiefs of Staff is lengthy and of limited utility in academic writing.

More concise definitions of military education have been put forth in scholarly work. Military education has been defined as “how society, specifically Western Europe and the United States, has prepared their military leaders to deal with war.”²³ In addition, military education has been defined as an “educational system used by the armed forces to develop officers capable of coping with the issues of national security.”²⁴ Each of the definitions of military education put forth is essentially stating that military education prepares officers to lead military forces in war.

In the military context, education is not the same as training. Military education, like civilian academe, is a broad concept. Education seeks to develop individual intellect and thought processes that can be applied to multiple circumstances. Education cultivates wisdom and judgment which can be applied to any set of circumstances or situations.²⁵ Thus, education cultivates independent thinking. According to both Kenneth Lawson and Carol Reardon, education is thus designed to create independent, critical thinkers who have mastered a theoretical body of knowledge.²⁶

²² Chairman of the Joint Chiefs of Staff, “Officer Professional Military Education Policy” A-A-4 (Washington, D.C.: U.S. Government Printing Office, 2004).

²³ John B. Hattendorf, *The Conundrum of Military Education in Historical Perspective* in *Military Education: Past, Present, and Future*, 10 (Gregory Kennedy and Keith Neilson ed., 2002).

²⁴ Masland and Radway, 15.

²⁵ Masland and Radway; Cynthia A. Watson, *Military Education: A Reference Handbook* (Westport, CT: Praeger, 2007).

²⁶ Kenneth Lawson, *The Concepts of ‘Training’ and ‘Education’ in a Military Context* in *The Educating of Armies*, 1-12 (Michael Stephens ed., 1989); Carol Reardon, *Soldiers and Scholars: The U.S. Army and the Uses of Military History, 1865-1920* (Lawrence, KS: University of Kansas Press, 1990).

Military training seeks the mastering of specific skills to accomplish a particular task that can be repetitively performed, such as firing a rifle or repairing a vehicle. The concept of training is thus narrower, identifying instruction oriented toward a particular specialty and designed to impart a particular technical skill.²⁷ Moreover, training methods involve the demonstration of correct and incorrect ways of accomplishing a task, with a clear distinction being made between right and wrong methods. Training is planned, coordinated, and executed in a comprehensive manner, and embraces established rituals, patterns, and behaviors. Training methods change with the development of new techniques and equipment, thus, training requires retraining and practice.²⁸

A central tenet of training is that it involves learning with a specific purpose. A trained person has a role to fill, with an emphasis on performance in relation to the purposes which justify the training. For example, a pilot is trained to fly fighter aircraft, but the training purpose is for the pilot to fly fighter aircraft in combat. Training is job oriented; to be trained is to learn to do something specific.²⁹

The concepts of military education and training may be different, but they are interrelated. In today's technologically advanced military, training of military members is only effective if the trainee is adequately educated. Trainees must be literate and possess critical thinking and interpretative skills in order to adapt to unpredictable and fast-moving changes on the modern battlefield. According to authors Steve Kime and

²⁷ Masland and Radway, 1957; Watson, 2007.

²⁸ Lawson, 1989; Harries-Jenkins, 1989.

²⁹ Lawson, 1989.

Clinton Anderson, in order to be properly trained to support military missions, a person must also be educated in addition to specifically trained.³⁰ In short, the military trains for certainty, and educates for uncertainty.

Professional Military Education, as a professional military endeavor, is a product of the nineteenth century. Prior to the nineteenth century, emphasis was placed on the practical issues of warfare that involved training for specific skills and indoctrination for cooperative group effort in battle. Preparation for war through training was the key element for military leaders.³¹

In ancient Greece, war was an exercise in physical strength and courage, and military commanders acquired their qualifications through experience. No formal schools for senior commanders existed; advancement came through experience and proven success.³² The Roman system for selecting and training its military commanders resembled that of the Greek city-states, with the exception that politico-military careers were highly structured. Although Roman soldiers and centurions were battle-hardened professionals well versed in combat experience, Roman prefects and tribunes (senior commanders) were political appointees who often had little or no military experience. Thus, from antiquity, throughout the Middle Ages, and up to the nineteenth century, war was not thought of as an affair that could be mastered through study. Rather, war was

³⁰ Steve F. Kime and Clinton L. Anderson, "Education vs. Training: A Military Perspective" (working paper, Service Members Opportunity Colleges, Washington, D.C., 1997).

³¹ Samuel P. Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: The Belknap Press of Harvard University Press, 1957); Michael D. Stephens, *Conclusion: The Educating of Armies* in *The Educating of Armies* (Michael Stephens, ed., 1989); Martin Van Creveld, *The Training of Officers: From Military Professionalism to Irrelevance* (New York: The Free Press, 1990).

³² Van Creveld, 1990.

considered a rigorous physical contest which emphasized courage, training, and experience.³³

Throughout most of history, armies were composed of illiterates, and the soldiers served part-time. Technical changes, such as the introduction of gunpowder and firearms, tended to undermine peasant levies.³⁴ Arming those who were illiterate with technologically advanced weaponry (in time period context) was not always the best course of action. A.C. White illustrates this point by recalling that in 1643, Charles I attempted to invade Scotland and discovered that less than two hundred of his five thousand men could even fire a musket.³⁵ The use of gunpowder and artillery cannons represents the introduction of broad scientific knowledge into warfare. The study of ballistics and with it, the study of mathematics, geometry, and physics became important to design instruments to measure the inclination of gun barrels and calculate distances to targets. The practical aspects of gunpowder, artillery, and subsequent changes in fortification design brought about concern for theoretical issues and the need to look beyond training to broader education in mathematics was recognized.³⁶

The emergence of Professional Military Education has its roots in the rise of the military as a professional organization in Western society. Prior to 1800, professional officer corps' did not exist. Of course, officers had led armies and navies prior to 1800, but these officers were not professionals; they were either mercenaries or aristocrats motivated by profit or honor and adventure respectively. Mercenary officers were the

³³ Ibid.

³⁴ Stephens, 1989.

³⁵ A.C. White, *The Story of Army Education, 1643-1963* (London: Harrap, 1963).

³⁶ Hattendorf, 2002.

dominant type of officers from the end of feudalism through the latter half of the seventeenth century. Aristocratic amateurs replaced mercenary officers as a result of national monarchs who consolidated power and recognized the need for permanent military forces to protect their rule. Aristocratic officers were the last dominant type of pre-professional officer in Western society.³⁷

Two types of preliminary military schools were established in Europe during the latter half of the eighteenth century. The first type was only open to aristocrats of noble birth. These schools included the French Ecole Militaire founded in 1751, the Prussian Ritter Akademie founded in 1765 by Frederick the Great, and a naval academy established by the English government in 1729. Military subjects had only a minor role in their curriculum because of the aristocratic belief that courage and honor were the only prerequisites for military command. The Ecole Militaire was designed specifically to subsidize the French nobility rather than to improve the army. Frederick the Great's Akademie trained nobles for diplomatic and military service; sons of nobility entered the Prussian army at around age 14, and received scant training before assuming command. England's naval academy was of similar poor quality, and the English army had no preliminary training school at all.³⁸

The second type of preliminary school formed in the eighteenth century was technical schools established to train officers for service in artillery and engineering. The state of military science at this time was still very primitive; nonetheless, the artillery

³⁷ Huntington, 1957; Van Creveld, 1990.

³⁸ Ibid; William E. Simons, ed., *Professional Military Education in the United States: A Historical Dictionary* (Westport, CT: Greenwood Press, 2000).

and engineer branches were the only branches that promoted intellectual exercise. Prussia established an engineering school in 1706, and England established The Royal Military Academy for artillery and engineers in 1741. The French established an engineering school at Mezieres in 1749. The educational quality of these schools varied widely, and these schools did not question the theory that aristocratic officers possessed inherited qualities that qualified them for command. However, these technical schools and the noble academies were as close to military education as Western society would get in the eighteenth century. Military schools to prepare officers for higher command and staff positions did not yet exist.³⁹

Credit for originating the professional officer goes to Prussia. After the defeat of the Prussian military by Napoleon Bonaparte of France at Jena in 1806, sweeping military reforms led by Gerhard Von Scharnhorst and the Prussian Military Commission were instituted. These reforms included the establishment of institutions and ideals that ultimately became the model upon which virtually all other officer corps were eventually patterned. Moreover, these reforms mark a distinct break with the eighteenth century and are considered the beginnings of the military profession in Western society.⁴⁰

Prussia's humiliating defeat at the hands of Napoleon in 1806 convinced Prussian leaders that its eighteenth century style military was no longer sufficient for national defense. Thus, Prussian reforms included the abolition of class restriction on entry into the officer corps, a General Staff system, and a system of educational and examination

³⁹ Ibid.

⁴⁰ Huntington, 1957; Peter Paret, *Yorck and the Era of Professional Reform, 1807-1815* (Princeton, NJ: Princeton University Press, 1966); Dennis E. Showalter, *No Officer Rather than a Bad Officer: Officer Selection and Education in the Prussian/German Army, 1715-1945* in *Military Education: Past, Present, and Future*, 35-61 (Gregory C. Kennedy and Keith Neilson eds., 2002).

requirements as a condition of promotion. The education and examination requirements were designed to instill a basic level of competence in all officers. In addition, officer pay was raised to reduce reliance on outside income.⁴¹

In 1810, Scharnhorst founded the Kriegsakademie (War Academy) in Berlin as a military university in which officers studied the science of war. Subjects included general topics such as mathematics, physics, and chemistry along with French and German language. Military subjects included strategy, tactics, artillery, and military geography.⁴² The science of war had expanded greatly with the emergence of Napoleon Bonaparte and the armies he fielded, and thus required study. Armies and navies were much larger and were complex because they contained many diverse specialties. A specialist was needed to coordinate these diverse elements successfully during war.⁴³

A new theory emerged to address this new state of warfare. Karl von Clausewitz, a Prussian officer and confidant of Scharnhorst, formulated this theory in his famous book *Vom Kriege* (On War) which was published posthumously in 1832. A basic element of Clausewitz's theory is the dual nature of war. War is both an autonomous science with its own methods and goals, and a science that is subordinate to politics. Clausewitz emphasized the importance of education, refinement of leadership skills, and development of mature judgment. Clausewitz in effect introduced intellectual rigor into the study of war as he tried to get to the essence of Napoleonic warfare.⁴⁴

⁴¹ Ibid.

⁴² Simons, 2000; Showalter, 2002.

⁴³ Huntington, 1957.

⁴⁴ Otte, 2002.

The efficacy of Prussian reforms was demonstrated in the Franco-Prussian War fought in 1870-71. The Prussian military soundly defeated French forces, which prompted the French to explore advanced military education like the Prussians had done after their earlier defeat by Napoleon. The French had opened new preliminary military schools after the French Revolution. These included the Ecole Polytechnique, an artillery and engineering school in 1794; the Special Military School for cavalry and infantry in 1803, and a Naval School in 1827. Instruction at these schools was almost exclusively scientific and technical. Not until the Ecole Militaire Superieure was founded in 1878 did France establish a true war academy with military education at a much higher level than prior to 1870.⁴⁵

In the United States, Professional Military Education developed slower than in Europe. Prior to the Civil War in 1861, military education in the United States was confined to the Military Academy at West Point and the Naval Academy at Annapolis. These schools provided pre-commissioning officer education, which, combined with follow-on training and experience, was considered sufficient to prepare military leaders for war. However, after the Civil War, there was a growing realization among United States officers that warfare had grown so complex that additional study in strategy and warfare was required above that gained at the academies and through experience.⁴⁶

The industrial revolution of the nineteenth century increased the scale of warfare as well as provided the necessary resources to provide professional education

⁴⁵ Huntington, 1957; Simons, 2000.

⁴⁶ Masland and Radway, 1957; Allan R. Millett and Peter Maslowski, *For the Common Defense: A Military History of the United States of America* (New York: The Free Press, 1994).

and training to military members.⁴⁷ For example, the introduction of rifled weapons in the form of new artillery cannons with increased range and accuracy as well as repeating rifles required new infantry tactics on the battlefield. In addition, the expansion of railroads following the Civil War and new communications technology enabled large numbers of troops and supplies to be moved quickly to and from the battlefield, forcing a re-evaluation of deployment planning and execution of military strategy. Thus, Army officers began to see the need for more thorough preparation for command.⁴⁸

Reform-minded officers who led the effort for advanced military education in the United States were William Tecumseh Sherman, Emory Upton, and Stephen B. Luce. General William Tecumseh Sherman served as Commanding General of the Army from 1869 – 1883, and was thus in a position to effect changes. In 1875, Sherman sent Brigadier General Emory Upton on a tour of military organizations in Europe and Asia and to report what could be learned from them, especially in the area of military schools. Upton returned in the fall of 1876 and subsequently wrote two books, *The Armies of Asia and Europe* and *The Military Policy of the United States*. Upton used these books to push for Army reforms. Upton's proposed reforms included establishing a general staff and a system for educating officers patterned after those he visited in Europe, especially Germany. Upton concluded that the traditional United States policy of a citizen/soldier

⁴⁷ Stephens, 1989.

⁴⁸ Nenninger, 1978.

model was no longer sufficient for national defense and that the United States should develop and rely on a professional military force.⁴⁹

Although Emory Upton died in 1881, his writings remained influential in the Army's reform efforts. General Sherman ordered the establishment of a School of Application for Infantry and Cavalry at Fort Leavenworth, Kansas in 1881. Although the Army had established technical schools for the Artillery and Engineer branches, the School of Application for Infantry and Cavalry was the first real attempt at military education above the pre-commissioning level in the United States. Initially, the school taught junior officers small unit tactics, but new instructors Captains Eben Swift and Arthur Wagner moved the curriculum toward a more analytical approach to learning and the school stressed instruction in the science and practice of war.⁵⁰ The School of Application for Infantry and Cavalry underwent several organizational and name changes over the years and is today known as the United States Army Command and General Staff College.

In 1884, just a few years after the United States Army established a School of Application for Infantry and Cavalry, the United States Navy established its Naval War College at Newport, Rhode Island. Navy Commander Stephen B. Luce, a Civil War veteran and leading advocate for the professionalization of the United States Navy, firmly believed in the scientific nature of warfare. Luce believed warfare was a science, and therefore, could be taught and learned. Luce was an admirer of the military colleges

⁴⁹ Richard Brown, "General Emory Upton—The Army's Mahan," *Military Affairs* 17, no. 3 (1953): 125-131; Stephen Ambrose, "Emory Upton and the Armies of Asia and Europe," *Military Affairs* 28, no. 1 (Spring 1964): 27-32; Nenninger, 1978; Millett and Maslowski, 1994.

⁵⁰ Elvid Hunt, *Fort Leavenworth, 1827-1927* (Fort Leavenworth, KS: The General Service School Press, 1926); Nenninger, 1989.

in Europe for their systemic study of the art of war and military history and he was convinced United States naval officers would benefit from similar study. Thus, Luce worked for the establishment of a Naval War College where naval officers would become educated specialists in the conduct of war.⁵¹

Luce succeeded in convincing Secretary of the Navy William Chandler to establish the Naval War College in 1884. Initially, curriculum at the Naval War College consisted of lectures on military tactics and strategy, international law, and military history. Practical exercises were later added, and the curriculum gradually grew more robust with the addition of war games and war planning under the leadership of Commander Alfred Thayer Mahan as Commandant of the Naval War College. War games and war planning helped give the war college a forward-looking focus toward the nature of future warfare. Mahan's 1890 publication of his seminal work, *The Influence of Sea Power Upon History*, garnered him international acclaim and helped increase the reputation of the Naval War College.⁵²

Both the School of Application for Infantry and Cavalry and the Naval War College were closed at the outset of the Spanish-American War in 1898 due to increased demands for manpower to fight the war. The Naval War College reopened in 1900, but the School of Application for Infantry and Cavalry remained closed until 1902 when it was reopened as part of the larger reforms that were instituted in the Army by Secretary of War Elihu Root. These larger reforms consisted of a comprehensive educational

⁵¹ Albert Gleaves, *Life and Letters of Rear Admiral Stephen B. Luce* (New York: The Knickerbocker Press, 1925); Spector, 1977.

⁵² *Ibid.*

system designed to educate Army officers at specific stages as their careers progressed, increase in the size of the Army, and the creation of an Army General Staff.⁵³

Secretary Root's reforms were far-reaching for the Army, and were an outgrowth of the United States experience in the Spanish-American War. Root explained his rationale for reform in his annual report for 1901, and is quoted as follows:

In the reorganization of the enlarged army, about 1,000 officers have been added from the volunteer force, so that more than one-third of all the officers of the army have been without any opportunity whatever for the systematic study of the science of war. On the other hand, the rapid advance of military science, changes of tactics required by the changes in weapons, our own experience in the difficulty of working out problems of transportation, supply, and hygiene, the wide range of responsibilities which we have seen devolving upon officers charged with the civil government of occupied territory, the delicate relations which constantly arise between military and civil authority, the manifest necessity that the soldier, above all others, should be familiar with the history and imbued with the spirit of our institutions, all indicate the great importance of thorough and broad education for military officers. I cannot speak too highly of the work done in our service schools for a number of years before the war with Spain. It was intelligent, devoted and effective, and produced a high standard of individual excellence, which has been demonstrated by many officers in the active service of the past four years. There was, however, no general system of education.⁵⁴

Schools comprising the general system of education Root established included post technical schools for individual branches such as artillery and engineering, the General Service and Staff College at Fort Leavenworth (renamed from the Infantry and Cavalry School) and the Army War College at the apex.⁵⁵ The General Service and Staff College became two schools: the Army School of the Line, and the Army Staff College. Only the

⁵³ Hunt, 1926; Spector, 1977; Nenninger, 1978.

⁵⁴ Secretary of War Elihu Root, quoted in Ira Reeves, *Military Education in the United States* (Burlington, VT: Free Press, 1914), 209.

⁵⁵ Pappas, 1967; Nenninger, 1978; Ball, 1984.

best graduates of the post schools attended the School of the Line, and only the best graduates of the School of the Line went on to the Army Staff College.

Curriculum at the Army Staff College was designed to bridge the gap between the tacticians of the School of the Line and the strategists of the Army War College. Instruction included staff duties, original research in military history and strategy, lectures in naval warfare, geography, logistics, and practical studies through visits to Civil War battlefields. Staff College students also prepared and evaluated tactical problems for School of the Line students.⁵⁶

Root envisioned the Army War College as an adjunct body of the newly created Army General Staff, with curriculum consisting of staff duties, the science of war, and the application of military science to national defense. Students in the first Army War College class reported in 1904. Captain John J. Pershing, who would later command the American Expeditionary Force in World War I, was a member of the first Army War College class. War College students solved practical military problems and presented solutions to the General Staff. In addition, students received instruction in war planning, conducted war games, and attended lectures and discussions on current military events and weapons developments. Curriculum at the Army War College gradually shifted away from an emphasis on war planning to an emphasis on conducting military operations.⁵⁷

The entrance of the United States into World War I in 1917 again forced the closure of the Naval War College and the schools in the Army's educational system, the

⁵⁶ Reeves, 1914; Nenninger, 1978.

⁵⁷ Pappas, 1967; Nenninger, 1978; Ball, 1984; Stiehm, 2002.

same as during the Spanish-American War. Each school reopened after the war. Any doubt that may have existed concerning whether or not the military schools in the United States were producing the caliber of officers needed to fight and win the nation's wars was erased with the wartime performance of Navy and Army graduates of their respective service's educational programs. Both the Army and Navy had faced mobilization, planning, command and control, and staff work on an unprecedented scale during the war. Graduates of the Naval War College, as well as graduates of the Army Staff College and Army War College were well placed in command and staff positions to effect solutions to these difficult problems, thus enhancing the reputation of the nascent military education system in the United States.⁵⁸

The interwar years between World War I and World War II were a boon for expansion of Professional Military Education in the United States. In the lean budgetary years between the wars, military procurement and modernization funds were scarce, especially during the Great Depression years of the 1930s. Thus, with little money to spend on new weapons systems, the services emphasized education of their officer corps.⁵⁹ Three new military education institutions were established during the interwar period: the Army Industrial College, the Marine Corps Field Officer Course, and the Air Service School.

In 1924, the Army Industrial College was established as a response to efficiency problems with military and industrial mobilization during World War I. Output of industrial mobilization fell far short of expectations. For example, only one anti-aircraft

⁵⁸ Ibid.

⁵⁹ Masland and Radway, 1957; Millett and Maslowski, 1994.

gun was manufactured prior to the armistice, and none of the 25,000 tanks ordered by the War Department arrived in Europe before war's end. Only as the war ended did the industrial programs designed to build a bridge of ships and planes to Europe begin to show produce results.⁶⁰

Although the school's name suggests it is an Army school, students attending the Army Industrial College included officers of the Navy, Army, and Marine Corps, as well as government civilians. By 1932, fully 25% of the student body was non-Army personnel. Curriculum at the Army Industrial College emphasized the procurement of military supplies, provision for material mobilization, and industrial organization needs during wartime. The Army Industrial College was the first joint military education school in the United States, and is today known as the Industrial College of the Armed Forces.⁶¹

Recognizing the success of the Army school system, the Marine Corps established the Marine Corps Field Officer's Course at Quantico, Virginia in 1920 to prepare Marine officers for the complexity of the modern battlefield. Initially, the curriculum modeled the Army schools and emphasized the conduct of land operations and battles. A curricular shift away from an Army-style focus to an emphasis on amphibious operations in conjunction with the Navy took place in 1933. This shift was a move by Marine Corps leadership to orient Marine education toward the primary

⁶⁰ James L. Abrahamson, *The American Home Front: Revolutionary War, Civil War, World War I, World War II* (Washington, D.C.: National Defense University Press, 1983); Gest, 1988; John W. Yaeger, "The Origins of Joint Professional Military Education," *Joint Force Quarterly* 37, (2005): 74-82.

⁶¹ Gest, 1988; Francis W. A'Hearn, "The Industrial College of the Armed Forces: Contextual Analysis of an Evolving Mission, 1924-1994," (doctoral dissertation, Virginia Polytechnic Institute and State University, 1997); Yaeger, 2005.

mission of the Marine Corps as part of the Navy Department, which was to employ Marine expeditionary forces for overseas base duties with the active Navy fleet.⁶²

The Air Service School was established at Langley Field, Virginia in 1920 as a professional school for Air Service officers in recognition of the fact aviation had reached equal status with other Army branches such as cavalry, artillery, and infantry. The purpose of the school was to educate air officers in the employment of airpower in war. The school name was changed to Air Corps Tactical School in 1926 when the Air Service became the Air Corps, and the school moved to Maxwell Field, Alabama in 1931 to take advantage of better flying weather.⁶³

Air Corps Tactical School curriculum stressed the command of units in the air, tactical and bombardment aviation, anti-aircraft defense, communication, staff duties and annual aerial maneuvers. Most importantly, a theoretical atmosphere that went beyond evidence and capabilities of existing military aircraft, permeated the staff, and in turn, the students of the Air Corps Tactical School. Within this atmosphere of virtually pure theory, innovation flourished and the doctrine of high-altitude, precision daylight bombardment against an enemy's vital industrial centers was developed. During World War II, it was this bombardment doctrine that played out in the skies over Europe and Japan.⁶⁴

⁶² Donald F. Bittner, "Curriculum Evolution at Marine Corps Command and Staff College, 1920-1988," (occasional paper, History and Museums Division, Headquarters, United States Marine Corps, 1988).

⁶³ James C. Shelburne, "Factors Leading to the Establishment of Air University," (doctoral dissertation, University of Chicago, 1953); Robert T. Finney, *History of the Air Corps Tactical School, 1920-1940* (Washington, D.C.: Center for Air Force History, 1992. First Printed in 1955).

⁶⁴ Shelburne, 1953; Finney, 1992; Richard R. Muller, "From ACTS to Afghanistan and Beyond: The United States Air Force Teaches its History," (occasional paper, International Commission on Military History, Norfolk, Virginia, August 16, 2002.)

Emphasis on military education during the interwar years paid handsome dividends during World War II. Major Henry (Hap) Arnold, military aviation pioneer and future commander of the Army Air Corps, was a member of the first graduating class of the Army Industrial College. Major Dwight Eisenhower, future Allied Supreme Commander in Europe, graduated from both the Army War College and Army Industrial College and served on the faculty of the Army Industrial College. Almost all of the Marine Corps commanders at or above the regimental level were either graduates or faculty of the Marine Corps Field Officer's Course. In addition, of the 320 Army Air Force general officers on active duty at the end of World War II, 261 were graduates of the Air Corps Tactical School.⁶⁵ A 1997 Center for Strategic and International Studies report argued that one of the few things the United States did right militarily during the disarmament years of the 1920s and 1930s was to enhance its military educational institutions.⁶⁶

Wartime need for officers during World War II was too great to allow for continued operation of military education schools. Thus, like during the Spanish-American War and World War I, all military education schools were closed until after the war. However, World War II was the last time military education schools in the United States were completely closed at the outbreak of hostilities. For future conflicts in Korea and Vietnam, military schools remained open as before or shortened their academic year.

⁶⁵ Mark R. Grandstaff, *To Make the Men for the Next Crisis: The USAF Air War College and the Education of Senior Military Leaders, 1945-93*, in *Military Education: Past, Present, and Future*, 129-148 (Gregory C. Kennedy and Keith Neilson eds., 2002); Yaeger, 2005.

⁶⁶ Center for Strategic and International Studies, 1997.

The nature of military operations during World War II convinced military leaders that the United States needed officers educated in joint operations. To meet this need, the Army-Navy Staff College was created in 1943 as a five-month course for officers destined for joint duty. The focus of the school was on planning, coordinating, and executing operations together with multiple services. Students of the Army-Navy Staff College included Allied officers from Britain, Australia, and Canada as well as United States officers.⁶⁷ Following World War II, military education in the United States underwent another transformation.

Within a year of the end of World War II, the United States made significant changes to its military education system. The Army-Navy Staff College was renamed the Armed Forces Staff College and its mission was to teach the integrated employment of air, land, and sea forces at the operational level of war. The Army Industrial College was renamed the Industrial College of the Armed Forces, with its curriculum still focused on mobilization and defense resource management. The National War College was created with its mission to teach grand strategy and the employment of national resources to implement grand strategy. These three schools were placed under the direct supervision of the Joint Chiefs of Staff.⁶⁸

In addition, Air University was founded in 1946 as an umbrella organization resembling a civilian university system. Air University encompassed a newly created Air War College and the Air Command and Staff School (name changed to Air Command

⁶⁷ Thomas A. Keaney, *The War Colleges and Joint Education in the United States*, in *Military Education: Past, Present, and Future*, 149-165 (Gregory C. Kennedy and Keith Neilson, eds., 2002).

⁶⁸ *Ibid*; Yaeger, 2005.

Staff College in 1962), a new school created in place of the previous Air Corps Tactical School, which was not reopened. Air University and its schools became part of the Air Force after the Army Air Corps became an independent Air Force in 1947. Air University was designed to provide continuing professional education for Air Force officers as they progressed through their careers.⁶⁹ The military education system put in place after World War II is largely the system in place today.

Air Force PME

At its inception, Air University was used by the Air Force as a center for the development and dissemination of USAF doctrine.⁷⁰ Experience in World War II led to the ideas of strategic bombing and air superiority through control of the air being institutionalized as Air Force doctrine. Thus, effective employment of air power was the central focus of Air Force doctrine publications during the Cold War.⁷¹ This doctrinal thinking was reflected in the ACSC curriculum for much of the Cold War.

From its inception in 1946 to the start of the Korean War in 1950, curriculum at ACSC was focused toward preparing officers for command duty as well as staff work on Wing Headquarters and higher staffs. Students received instruction in tactical and strategic air operations, air defense, logistics, intelligence, new aircraft developments, and military management (staff work). The curriculum also included annual field trips to

⁶⁹ Shelburne, 1953; Billy J. Tolson, "A History of Air University," (doctoral dissertation, University of Oklahoma, 1983); Davis and Donnini, 1991.

⁷⁰ Tolson, 1983.

⁷¹ Robert F. Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force, Volume II: 1961-1984* (Maxwell Air Force Base, AL: Air University Press, 1989).

tour various military installations, including Army and Navy bases in order to view other service capabilities.⁷²

United States entry into the Korean War in 1950 prompted a reduction in the length of ACSC's course of instruction and student body enrollment. The five-month course was reduced to three and one-half months, and student enrollment dropped by 25 percent. At the same time, the Air Force closed its Special Staff School, and transferred its academic courses to ACSC. ACSC entered a specialist phase in its curriculum, which now included a squadron officer course, a field officers course, and special staff courses in logistics, comptroller, judge advocate, intelligence, academic instructor, and special weapons. Officers qualified for a particular specialty, such as comptroller, enrolled in that course and were excused from the field officer's course. The specialized courses were removed from ACSC in 1954, the academic year was lengthened to nine and one-half months, and enrollment was back to pre-Korean War levels.⁷³

From the mid-1950s to the early 1960s, the ACSC curriculum was split into two phases. Phase one focused on fundamentals of advanced command and staff duties to prepare officers for duty as commanders and as part of a headquarters staff. Phase two emphasized applying the principles learned in phase one to hypothetical command and staff problems and employment of air forces in support of national policy matters. Instruction was also given in military doctrine and technological developments, and field trips remained a central feature of the school.⁷⁴ A reorganization of the curriculum took

⁷² Burke, 1971; Davis and Donnini, 1991.

⁷³ Cohen and Jackson, 1966; Burke, 1971.

⁷⁴ Burke, 1971.

place in 1963, and the academic portion of the program contained three broad subject areas. These included military employment, which included basic Air Force doctrine about the use of air power, military management, and international conflict, which focused on international security problems and strategy relative to the Communist Bloc and the free world.⁷⁵

With direct United States involvement in Vietnam beginning in 1964-65, enrollment at Air University schools again declined. Not until 1971-72 would class enrollment reach pre-Vietnam War levels.⁷⁶ The three subject area curriculum structure implemented in 1963 remained in place at ACSC during the war, with additional topics added or deleted each year as the faculty refined the curriculum. For example, the 1967 curriculum contained a 39-hour war game which allowed students to analyze and apply current weapon systems in a simulated combat environment. In 1969, independent study accounted for 26 percent of the curriculum, research accounted for 12 percent, and elective courses accounted for 4 percent of the curriculum. In 1970, a study of the problems of race relations was introduced, including a panel discussion between black officers and their white counterparts.⁷⁷ These changes not only represent the evolving educational philosophy of Air University, but recognition of changes in the larger American society.

In the mid-1970s, after the United States withdrew from Vietnam, the ACSC curriculum began to emphasize leadership and management aimed at improving the

⁷⁵ Cohen and Jackson, 1966; Burke, 1971; Harrold, 1987.

⁷⁶ Wesley P. Newton and Jerome A. Ennels, "Air University Recovers from Vietnam and Regains Respect," *Airpower Journal* 11, no.4 (1997): 60-68.

⁷⁷ Tatom, 1988; Davis and Donnini, 1991.

managerial skills of mid-career officers. The curriculum was aligned into four main areas: communication and research, command and management, aerospace policy and planning, and military employment, which included instruction in military doctrine. Other subject areas included independent study and research, electives, and commandant's options.⁷⁸

In the 1980s, ACSC curriculum remained focused toward leadership and management, but also began a gradual shift toward its previous war fighting emphasis. The curriculum included instruction in warfare studies, force employment, strategy, and air force and military doctrine in addition to command, leadership, and resource management.⁷⁹ This new curricular shift can be seen in the change in course hours devoted to war fighting subjects. Total hours devoted to warfare studies increased from 269 in 1978 to 359 in 1988; low-intensity conflict hours increased from 30 hours in 1978 to 52 hours in 1988; and the study of military history increased from 4 hours in 1978 to 77 hours in 1988.⁸⁰

Air Force PME became deeply institutionalized during the Cold War. As the preceding paragraphs show, the curriculum gradually grew broader in scope and reflected the tenets of basic Air Force doctrine leading up to the end of the Cold War.⁸¹ The quality of Air Force PME was assessed and reassessed in a number of studies. Between 1946 and 1987, over 120 assessments of the Air Force PME system were made

⁷⁸ Harrold, 1987; Davis and Donnini, 1991.

⁷⁹ Davis and Donnini, 1991.

⁸⁰ Tatom, 1988.

⁸¹ Harrold, 1987.

by various study groups, ranging from minor references to comprehensive analyses.⁸² However, none of these assessments had as profound an impact on the future of military education in the Air Force as the Skelton Report.

The United States Congress established a Panel on Military Education in 1987, chaired by Representative Ike Skelton, (D-MO). The Panel became known as the Skelton Panel. The Skelton Panel was formed to consider ways to implement the provisions of the Defense Reorganization Act of 1986, commonly known as the Goldwater-Nichols Act, into military education, and to assess the ability of the entire military education system to “develop military thinkers, planners, and strategists.”⁸³

The Goldwater-Nichols Act mandated the creation of joint specialty officers in the United States military. Goldwater-Nichols came about in response to a growing perception that the armed forces were not performing as well as they should. Vietnam, the failed Iranian hostage rescue attempt in 1980, joint coordination problems in the 1983 Grenada invasion, and the 1983 terrorist attack on the Marine barracks in Beirut prompted Congress to seek defense reforms. The Goldwater-Nichols Act strengthened the Joint Chiefs of Staff, clarified combatant command authority, and created a new category of military officer called joint specialists.⁸⁴ Title IV, Joint Officer Personnel Policy, is the Goldwater-Nichols Act provision that impacted military education by calling for emphasis in joint war fighting in military education.

⁸² Davis and Donnini, 1991.

⁸³ House Committee on Armed Services, 1989, 11.

⁸⁴ Amy B. Zegert, *Flawed by Design: The Evolution of the CIA, JCS, and NSC* (Stanford, CA: Stanford University Press, 1999).

The Skelton Report recommended a two-phase Joint Specialty Officer education process. Phase one joint education would take place at the service intermediate-level command and staff colleges, such as ACSC. Curriculum would emphasize the capabilities and limitations, doctrine, organization, and command and control of the forces of all services as well as joint force planning and the role of service commands as part of a joint unified command. Thus, ACSC curriculum would be required to include instruction on Army, Navy, and Marine capabilities in addition to Air Force capabilities and the additional joint education requirements. Phase two joint education would take place at the Joint Forces Staff College after graduation from a service intermediate-level command and staff college and concentrate on the integrated employment of joint forces. Graduates of both phases of joint education would then become Joint Specialty Officers.⁸⁵ The Skelton Panel also commented on the quality of military education at each school in the PME system. The Panel was critical of military education schools across the board, primarily for a lack of curricular focus and rigor. Air Command and Staff College received especially stiff criticism, stating that the school had “a reputation for poor quality and lack of focus.”⁸⁶ The ACSC mission statement was criticized as too broad and vague, which gave the commandant and faculty little guidance in developing curriculum. Over half of the curriculum was devoted to primarily staff and communications skills, which caused the Panel to “question whether the Air Force has thought through the purpose of its intermediate school.”⁸⁷

⁸⁵ House Committee on Armed Services, 1989.

⁸⁶ Ibid, 187.

⁸⁷ Ibid.

The Skelton Panel further noted that ACSC had failed to impart the Air Force purpose for existing to its students, which was unfortunate since many officers will not progress to the Air War College. In addition, the Panel ranked ACSC behind its Army and Marine Corps counterparts in imparting its service doctrine to students, stating ACSC was “missing a magnificent opportunity to teach the use of air power in the full range of possible contingencies from the tactical to the strategic levels.”⁸⁸ Finally, ACSC was criticized for manning the preponderance of its faculty with majors recruited from graduating classes, stating “they have little or no more experience than their students and are, in general, not subject matter experts. Consequently, their teaching abilities are limited to facilitating discussion, and they may be only a day ahead of their students.”⁸⁹

The Skelton Report lists 85 specific recommendations for the United States Professional Military Education system as a whole. Thirty-six of these recommendations applied to Air University, 31 of which applied to Air Command and Staff College. Thus, as the forty-year Cold War was ending in 1989, Air Command and Staff College had to face its past and embrace a future of change mandated by Congress while contemplating the impact of a new and uncertain international security environment ushered in by the end of the Cold War. This is the context and point in time in which this study begins.

Curriculum Theory and History

Because this study is a historical investigation of a curriculum, literature addressing curriculum theory and curriculum history can help the reader comprehend the

⁸⁸ Ibid, 188.

⁸⁹ Ibid.

concept and importance of curriculum. A myriad of definitional variations for the word “curriculum” can be found throughout the literature on curriculum topics. Arno Bellack defines curriculum as “a planned program of teaching and learning”⁹⁰ and C.R. Stroughton defines curriculum as “all organized activities under the auspices of the school.”⁹¹ George Beauchamp argued that the term “curriculum” can be used in three ways. First, curriculum is a “written document depicting the scope and arrangement of the projected educational program for a school.”⁹² Curriculum can also be a “system within which decisions are made about what the curriculum will be, how it will be implemented, and how it will be evaluated.”⁹³ Finally, curriculum can be considered a “field of study” in which professional educators consider curricular issues.⁹⁴ This study defines curriculum as a set of courses or course content that is offered at a school. It is a specific learning program that is determined by an authoritative body.

Theory is a body of beliefs, assumptions, and propositions that are used to explain a series of events or phenomena. Curriculum theory then is a way of describing the educational philosophies behind approaches to development and delivery of curriculum. George Beauchamp situates curriculum theory within educational theory, which accounts for all components of education, including instructional theories, counseling theories, evaluation theories, and curriculum theories.⁹⁵ Ralph Tyler stated

⁹⁰ Arno A. Bellack, “History of Curriculum Thought and Practice,” *Review of Educational Research* 39, no.3, June 1969, 284.

⁹¹ C.R. Stroughton, “*Models and Theory of Curriculum*” in *Issues in Curriculum Theory*, 19-32 (C.R. Stroughton ed., 1981), 21.

⁹² George A. Beauchamp, *Curriculum Theory*, 4th ed., (Itasca, IL: F.E. Peacock Publishers, Inc., 1981), 7.

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Beauchamp, 1981.

that the basis for curriculum theory is the nature of knowledge, the nature of society, the nature of the learner, and the nature of learning.⁹⁶ William Pinar argues that in curriculum theory, theory identifies and describes variables and their relationships to each other in a curriculum.⁹⁷ According to C.R. Stroughton, curriculum theory comes about as a result of “attempts to segmentize and develop relationships between segments of the school curriculum.”⁹⁸ Thus, curriculum theory provides a guiding framework for curriculum development and research.

Curriculum theory and practice can be approached in many ways. Four common approaches to curriculum theory and practice are curriculum as knowledge to be transmitted, curriculum as a product, curriculum as a process, and curriculum as praxis. Curriculum is commonly associated with a syllabus, which is a statement of the contents of a particular course that lists or explains the subject areas that will be examined during the course. An approach to curriculum that focuses exclusively on syllabi is most likely concerned strictly with course content and the process by which this content is transmitted to students. In this sense, curriculum is a body of knowledge; it is subject matter content to be transmitted via the most effective methods that can be devised.⁹⁹

Curriculum as a product is using curriculum as an attempt to achieve particular educational ends in students. Educational objectives are established, a curricular plan is composed and applied, and then the outcomes, or products, are measured. Rather than

⁹⁶ Ralph W. Tyler, *Basic Principles of Curriculum and Instruction* (Chicago, IL: University of Chicago Press, 1950).

⁹⁷ William Pinar, *Curriculum Theorizing: The Reconceptualists* (Berkeley, CA: McCutchan Publishing Corp., 1975).

⁹⁸ Stroughton, 1981, 21.

⁹⁹ Geva M. Blenkin, Gwyn Edwards, and A.V. Kelly, *Change and the Curricula* (London: Paul Chapman, 1992), 23.

how the curriculum itself is thought about, the emphasis is on curricular objectives.

According to Franklin Bobbitt, one of the earliest curriculum scholars,

Education that prepares for life is one that prepares definitely and adequately for specific [life] activities. This requires only that one go out into the world of affairs and discover the particulars of which their affairs consist. These will show the abilities, attitudes, habits, appreciations and forms of knowledge that men need. These will be the objectives of the curriculum.¹⁰⁰

Bobbitt proposed five steps for developing curriculum: analysis of human experience, job analysis, deriving objectives, selecting objectives, and planning in detail.¹⁰¹ This approach to curriculum focuses on what people need to know in order to work and live.

Ralph Tyler also advocated this approach to curriculum. Tyler put forth four questions on which to base curriculum:

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained?¹⁰²

For Tyler, the real purpose of education was not for teachers to perform certain activities, but rather to bring about significant changes in the behavior of students. The formulation of behavioral objectives is central. One appeal of this curriculum approach is that it is systematic and can be highly organized. Curriculum can be designed outside of the confines of the school, educators apply the programs designed, and are then judged on the products of their actions.

¹⁰⁰ Franklin Bobbitt, *The Curriculum* (Boston, MA: Houghton Mifflin, 1918), 42.

¹⁰¹ Bobbitt, 1918.

¹⁰² Tyler, 1950, 1.

Curriculum as process views curriculum as the interaction of educators, students, and knowledge rather than curriculum as a physical entity. Curriculum is activities which take place in the classroom, and what teachers do to prepare and evaluate. Lawrence Stenhouse put forth a process model by arguing that curriculum is an “attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice.”¹⁰³ Stenhouse likened curriculum to a cooking recipe:

A curriculum, like the recipe for a dish, is first imagined as a possibility, then the subject of experiment. The recipe offered publicly is in a sense a report on the experiment. Similarly, a curriculum should be grounded in practice. It is an attempt to describe the work observed in classrooms that it is adequately communicated to teachers and others. Finally, within limits, a recipe can be varied according to taste. So can a curriculum.¹⁰⁴

Curriculum as process is a way for educators to think about their work as constant interaction and make judgments through continual evaluation of the process.

Praxis is the process by which a theory or idea is practiced or realized, or informed and committed action. Shirley Grundy writes that curriculum as praxis is the interaction of action and reflection.¹⁰⁵ Teachers enter classrooms with an understanding of their role and encourage conversations with and between students. Out of this interaction comes informed and committed action. Teachers then continually evaluate the process and what they see as outcomes. According to Grundy, “Curriculum is not simply a set of plans to be implemented, but rather is constituted through an active

¹⁰³ Lawrence Stenhouse, *An Introduction to Curriculum Research and Development* (London: Heineman, 1975), 4.

¹⁰⁴ *Ibid.*, 4-5.

¹⁰⁵ Shirley Grundy, *Curriculum: product or praxis?* (New York: Taylor and Francis, 1987).

process in which planning, acting, and evaluating are all reciprocally related and integrated into the process.”¹⁰⁶ At the center is informed, committed action, or praxis.

Practitioners of curriculum history seek to understand why ideas about a curriculum or its particular areas are established and subsequently flourish or fail. In addition, curriculum historians seek to understand the changes that occur over time within a curriculum or particular curriculum subject area.

Herbert Kliebard and Barry Franklin, in their essay “The Course of the Course of Study: History of Curriculum” define curriculum history as:

Scholarly attempts to chronicle, interpret, and ultimately understand the processes whereby social groups over time, select, organize, and distribute knowledge and belief through educational institutions.¹⁰⁷

Indeed, the importance of curriculum history lies in its ability to inform current practice.

Laurel Tanner states “curriculum history is more than useful; it is essential for improving the character of curriculum reform efforts.”¹⁰⁸ In addition, George Willis states curriculum scholars have recognized “the value—and, in fact, the necessity—of historical understanding for informing the on-going educational task of creating curricula in practice.”¹⁰⁹ Curriculum developers can use knowledge of the historical evolution of key ideas in the curriculum as a tool for solving curricular problems.

¹⁰⁶ Ibid, 105.

¹⁰⁷ Herbert M. Kliebard and Barry M. Franklin, *The Course of the Course of Study: History of Curriculum in Historical Inquiry in Education: A Research Agenda*, 138-157 (John Hardin Best, ed., Washington, D.C.: American Educational Research Association, 1983), 138.

¹⁰⁸ Laurel N. Tanner, “Curriculum History as Usable Knowledge,” *Curriculum Inquiry* 12, no.4 (1982), 410.

¹⁰⁹ George Willis and others, eds., *The American Curriculum: A Documentary History* (Westport, CT: Greenwood Press, 1993), xi.

This particular study focuses on influences that determine how curriculum is shaped over time. Possible reasons why curriculum changes or is resistant to change are numerous. Daniel Tanner and Laurel Tanner devote an entire chapter in their book on curriculum development to conflicting educational theories as an influence on school curriculum and another chapter to society, knowledge, and the learner as influential to school curriculum.¹¹⁰ Kliebard and Franklin list other reasons curriculum either changes or remains static:

They [reasons] include, of course, social change, potent elites, the legal structure, the weight of tradition, economic considerations, the organizational structure of schools, changes in the size and nature of the school population, the energy and dedication of individuals and interest groups, intellectual movements, general demographic factors, political upheaval, significant changes in certain social institutions, and even, here and there, a powerful idea.¹¹¹

Moreover, Kliebard, in his book *The Struggle for the American Curriculum, 1893-1958* looked at curricular changes in American schools and concluded that curriculum reflects the forces of groups or individuals with competing interests. Kliebard showed the “evolution of the modern American curriculum could be interpreted in terms of the interplay among predominant interest groups that saw in the course of study the vehicle for the expression of their ideas and the accomplishment of their purposes.”¹¹² In his concluding chapter, Kliebard stated that curriculum is indeed a “contested terrain for values that an important social institution would pass to the next generation.”¹¹³

¹¹⁰ Daniel Tanner and Laurel Tanner, *Curriculum Development: Theory into Practice*, 2nd Ed. (New York: Macmillan Publishing Co., Inc., 1980).

¹¹¹ Kliebard and Franklin, 1983, 139.

¹¹² Herbert M. Kliebard, *The Struggle for the American Curriculum, 1893-1958* (New York: Teachers College Press, 1986), xi.

¹¹³ *Ibid*, 288.

A theme emerges in the curriculum history literature in which the authors seek to understand the persons and events that influenced the emergence or disappearance of specific curricular content. Thus, the study of curriculum history is relevant to this study to understand how the curriculum at ACSC evolved after the publication of the Skelton Report and the end of the Cold War and the forces that acted to shape the curriculum.

Adult Education

Students attending PME schools are adults. Therefore, a review of literature on adult education is appropriate for this study. The teaching of adults is not a new concept, yet it was not until the twentieth century that the differences between the way children and adults learn began to garner serious scholarship. Eduard Lindeman laid the foundation for the study of adult education in his 1926 book, *The Meaning of Adult Education*. Lindeman wrote, “In conventional education the student is required to adjust himself to an established curriculum; in adult education the curriculum is built around the student’s needs and interests.”¹¹⁴ Lindeman stated that the setting for adult education constituted of:

Small groups of aspiring adults who desire to keep their minds fresh and vigorous, who begin to learn by confronting pertinent situations, who dig down into the reservoirs of their experience before resorting to texts and secondary facts, who are led in the discussion by teachers who are also searchers after wisdom and not oracles: this constitutes the setting for adult education.¹¹⁵

Lindeman further wrote that in adult education, student experience counts just as much as teacher knowledge and that the role of the teacher is to “engage in a process of

¹¹⁴ Eduard C. Lindeman, *The Meaning of Adult Education* (New York: New Republic, 1926), 8.

¹¹⁵ *Ibid*, 10.

mutual inquiry with them [students] rather than to transmit his or her knowledge to them and then evaluate their conformity to it.”¹¹⁶ Lindeman’s writings became the starting point for additional scholarship in the area of adult education.

Malcolm Knowles is known as the father of the adult learning theory called Andragogy. Andragogy is perhaps the best known effort to understand adults as learners and define the field of adult education apart from other areas of education. Andragogy is the art and science of helping adults learn, and focuses on the adult learner and their life experiences. Knowles put forth the following assumptions about adult learners:

1. As a person matures his or her self-concept moves from that of a dependent personality toward one of a self-directing human being.
2. An adult accumulates a growing reservoir of experience, which is a rich resource for learning.
3. The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.
4. There is a change in time perspective as people mature—from future applications of knowledge to immediacy of application. Thus, an adult is more problem centered than subject centered in learning.
5. The most potent motivations are internal rather than external.
6. Adults need to know why they need to learn something.¹¹⁷

Knowles expounded on Lindeman’s thoughts by writing that the richest resource in adult learning is the learner himself. Thus, the “emphasis in adult education is on experiential techniques—techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods instead of transmittal techniques.”¹¹⁸ For Knowles, these assumptions were the necessary foundation for designing educational programs for adults.

¹¹⁶ Ibid, 166.

¹¹⁷ Malcolm Knowles, *The adult learner: a neglected species*, 3rd ed., (Houston, TX: Gulf, 1984), 12.

¹¹⁸ Malcolm Knowles, *The modern practice of adult education: From pedagogy to andragogy*, 2nd ed., (New York: Cambridge Books, 1980), 66.

Learning as a process is concerned with what happens when learning takes place, and explanations of what happens when learning takes place are called learning theories. Many explanations and theories of how adults learn exist. In their book, *Learning in Adulthood*, Sharon Merriam, Rosemary Caffarella, and Lisa Baumgartner explore five traditional learning theory orientations. Newer, emerging theories of adult learning are also explored in their text. Each of the traditional learning perspectives presents different assumptions about learning: behaviorist, humanist, cognitivist, social cognitive, and constructivist.¹¹⁹ Because each of these theories are based on different assumptions about learning, the curriculum development strategies that a school or individual chooses to employ to enhance adult learning will depend on one's orientation. According to the authors, "Instructors and learning developers can use this review of major learning theories to identify their own theory of learning and discover the strategies for facilitating learning that are most congruent with their theory."¹²⁰ While Merriam, Caffarella, and Baumgartner's text explores newer, emerging adult learning theories the five traditional theories of adult learning are the most relevant for my study. Each of these five learning theories will be briefly explored.

Adherents of the behaviorist learning theory define learning as a change in behavior. The focus is on a learner's overt behavior, which is a response to some stimulus. Pauline Grippin and Sean Peters outline three assumptions that behaviorists hold to be true. First, observable behavior, rather than internal thought processes is the

¹¹⁹ Sharon B. Merriam, Rosemary S. Caffarella and Lisa M. Baumgartner, *Learning in Adulthood*, 3rd ed. (San Francisco, CA: Jossey-Bass, 2007).

¹²⁰ Ibid, 294.

focus. Learning takes place through a change in behavior. Second, behavior is shaped by the learner's environment. What is learned is not determined by the individual learner, but rather by the elements of the learning environment. Lastly, the learning process is explained by contiguity, or how close in time two events must be for a bond to be formed, and reinforcement.¹²¹

According to Merriam, Caffarella, and Baumgartner, in adult education, “behaviorism is the philosophy that most underlies adult career and technical education and human resource development.”¹²² Adult career and technical education goals focus on identifying the skills needed to perform successfully in a given occupation, teaching those skills, and then requiring a certain standard of performance in the practice of those skills. The role of the teacher then is to “design an environment that elicits desired behavior toward meeting these goals and to extinguish undesirable behavior.”¹²³ Teachers arrange the learning environment so that the desired behavior will occur and is reinforced.

In contrast to behaviorist learning theory is humanist learning theory, which emphasizes human nature and human potential. Humanists consider learning from the “perspective of the human potential for growth.”¹²⁴ The humanist learning theory posits that perceptions are rooted in experience and learners have the freedom and responsibility to become what one is capable of becoming. According to Merriam, Caffarella, and Baumgartner, these tenets “underlie much of adult learning theory that

¹²¹ Pauline Grippin and Sean Peters, *Learning Theory and Learning Outcomes* (Lanham, MD: University Press of America, 1984).

¹²² Merriam, Caffarella, and Baumgartner, 2007, 281.

¹²³ Ibid.

¹²⁴ Ibid.

stresses the self-directedness of adults and the value of experience in the learning process.”¹²⁵

In humanist learning theory, the motivation to learn comes from the adult learner himself or herself. The goal of adult education then becomes meeting the needs of the adult learner and emphasizing the adult learner fulfilling his or her potential and becoming self-actualized. According to Merriam, Caffarella, and Baumgartner, in humanist theory, “learning involves more than cognitive processes and overt behavior. It’s a function of motivation and involves choice and responsibility. Self-directed learning is grounded in humanist orientation.”¹²⁶ Self-actualization is the primary goal, and the role of the teacher is to bring this about.

Cognitivists are interested in how the mind interprets stimuli in the environment and how information is processed, stored, and retrieved. Two key assumptions underlie the cognitivist learning theory. According to Margaret Gredler, these two assumptions are “the memory system is an active organized processor of information” and “prior knowledge plays an important role in learning.”¹²⁷ The mind reorganizes experience in order to make sense of stimuli from the environment.

Learning, thus, is a cognitive phenomenon. Learners reach a solution after pondering a problem. According to Merriam, Caffarella, and Baumgartner, “the learner thinks about all the ingredients necessary to solve a problem and puts them together

¹²⁵ Ibid, 282.

¹²⁶ Ibid, 294.

¹²⁷ Margaret Gredler, *Learning and Instruction: Theory into practice*, 3rd ed., (Englewood Cliffs, NJ: Prentice Hall, 1997), 144.

cognitively first one way and then another until the problem is solved.”¹²⁸ This emphasis on the individual learner’s mental processes rather than on the learner’s environment is characteristic of cognitivist learning theory. The control of the learning process rests with the individual who has control over his or her internal mental processes. The major concern of this learning theory is how aging affects an adult’s internal mental ability to process and retrieve information.

Social cognitive learning theory posits that people learn through observing others in a social setting. Dale Schunk wrote,

Social cognitive learning theory highlights the idea that much human learning occurs in a social environment. By observing others, people acquire knowledge, rules, skills, strategies, beliefs, and attitudes. Individuals also learn about the usefulness and appropriateness of behaviors by observing models and the consequences of modeled behaviors, and they act in accordance with their beliefs concerning the expected outcomes of actions.¹²⁹

People learn about the appropriateness of their behaviors and associated consequences through observing others in one’s immediate environment. Learning takes place through the interaction of the person, the environment, and the behavior. According to Merriam, Caffarella, and Baumgartner, “Social learning theories contribute to adult learning by highlighting the importance of social context and the processes of modeling and mentoring.”¹³⁰ The role of the teacher then is to model and guide the desired behavior.

Finally, constructivist learning theory posits that learners construct their own knowledge through their experiences. Adults learn through the process of making sense from their experience and constructing meaning from that experience. In this sense,

¹²⁸ Merriam, Caffarella, and Baumgartner, 2007, 285.

¹²⁹ Dale H. Schunk, *Learning theories: An educational perspective* (Englewood, NJ: Prentice Hall, 1996), 102.

¹³⁰ Merriam, Caffarella, and Baumgartner, 2007, 297.

learning is an active, not passive endeavor. It is self-directed learning and reflective practice. Phillip Candy writes, “The constructivist view of learning is particularly compatible with the notion of self-direction, since it emphasizes the combined characteristics of active inquiry, independence, and individuality in a learning task.”¹³¹ The role of the teacher in constructivist learning theory is to facilitate meaning through the cognitive processes of the learner.

The process of learning is a complex topic. There are many theories that seek to explain how adults learn, and the preceding discussion of behaviorist, humanist, cognitivist, social cognitivist, and constructivist theories are but a few. However, these five learning theories help provide both a vocabulary and a conceptual framework through which we can look for solutions to problems in adult education. The theories do not give solutions, but they do focus attention to the variables that aid in finding solutions.

¹³¹ Philip C. Candy, *Self-direction for lifelong learning* (San Francisco, CA: Jossey-Bass, 1991), 278.

CHAPTER III

METHODS

Qualitative research methods were the best choice for this particular study.

Sharon Merriam defines the characteristics of qualitative research, which include the researcher assuming the role of data collection and analysis instrument in order to engage in inductive research.¹³² Furthermore, Corrine Glesne explains that qualitative research methods are used whenever a researcher seeks to understand “social phenomena from the perspectives of those involved,” and to place issues in their proper social, political, or cultural context.¹³³ In order to gain an understanding of ACSC curriculum from the perspective of those who experienced the curricular changes, data collection and analysis needs to be conducted by the researcher. Thus, qualitative research methods were the best methodological choice for this study.

Specifically, this study used a historical research design method. In their book on education research, Meredith Gall and Walter Borg define the historical research method as it relates to education as “a process of systematically searching for data to answer questions about a past phenomenon for the purpose of gaining a better understanding of present institutions, practices, trends, and issues in education.”¹³⁴ Researchers engaged in historical research collect and analyze data, and then interpret the data while

¹³² Sharon B. Merriam, *Qualitative Research and Case Study Application in Education* (San Francisco, CA: Jossey-Bass, 1998).

¹³³ Corrine Glesne, *Becoming Qualitative Researchers: An Introduction*, 3rd ed. (Boston, MA: Pearson, 2006), 4.

¹³⁴ Meredith D. Gall, Walter R. Borg, and Joyce P. Gall, *Educational Research: An Introduction*, 6th ed. (White Plains, NY: Longman, 1996), 644.

considering the specific context in which the data emerged. The historical research method was chosen for this study because this study sought to systematically gather and analyze data to answer the research questions posed earlier on how the curriculum at ACSC evolved over a specific period of time.

Sources of Data

Three sources of data were used for this study. The first source is a group of people, consisting of past and present members of Air Command and Staff College who once held or currently hold positions of leadership through which they had or have insight into curricular decisions. The second source of data is published material, which consists primarily of Air Command and Staff College course catalogs, unit history reports and curriculum planning documents that contain useful information such as school mission statements, course offerings, and instructional methodology. Other materials include official Department of Defense and Air University regulations and guidance pertaining to professional military education, official board and commission reports, and relevant journal and news articles. The final source of data is unpublished material, which includes internal Air University and Air Command and Staff College memos, reports, briefings and documents, as well as any personal files kept by members of Air Command and Staff College that were made available to the researcher.

Data Collection

Datum was collected via two methods: (1) review of published and unpublished material and (2) personal interviews. Documents were collected, reviewed, and

photocopied where permissible. Where document photocopying was not permitted, documents were read and notes taken. Key members (past and present) of Air Command and Staff College such as commandants, deans, department directors, and course directors were interviewed. In person, one-on-one interviews were conducted whenever possible, with telephone interviews conducted when in person interviews were not possible. With permission, audiotapes were used to record interviews.

A semi-structured interview format was used to gather data for this study because respondents each had specific but unique experiences with the ACSC curriculum. Thus, more open-ended and fewer highly structured interview questions were the most appropriate for this study. According to Merriam, in a semi-structured interview

Either all of the questions are more flexibly worded, or the interview is a mix of more and less structured questions. Usually, specific information is desired from all the respondents, in which case there is a highly structured section to the interview. But the largest part of the interview is guided by a list of questions or issues to be explored...this format allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic.¹³⁵

The interview guide constructed for this study is appended at Appendix A.

Prior to the conduct of interviews, permission to speak with members of Air Command and Staff College was acquired from the Air Force and the Commandant of Air Command and Staff College. Institutional Review Board guidelines were followed to protect human subjects, which included explaining all potential risks and benefits up front, and informing human subjects of their right to withdraw their participation in the study at any time as well as their right to keep their identities confidential.

¹³⁵ Merriam, 1998, 74.

Treatment of Data

Data collected was stored in the home of the researcher with access limited to the researcher in accordance with Institutional Review Board guidelines. Once collected, interviews were transcribed verbatim by the researcher. Transcripts were analyzed using the constant comparative method, an inductive (moving from specific to broad) data analysis procedure. Although the constant comparative method is usually associated with grounded theory research design, the constant comparative method of data analysis is applicable across all qualitative research designs. Merriam states, “Because the basic strategy of the constant comparative method is compatible with the inductive, concept-building orientation of all qualitative research, the constant comparative method of data analysis has been adopted by many researchers who are not seeking to build substantive theory.”¹³⁶

As its name implies, the constant comparative method compares particular incidents from an interview transcript with another incident in either the same set of data or in a different set of data. According to Merriam, these comparisons then lead the researcher to form categories which are then compared to each other. Thus, “comparisons are constantly made within and between levels of conceptualization” in order to formulate meaning from the data.¹³⁷ Furthermore, data was organized chronologically and thematically to facilitate identification of evolving curricula and the curriculum influences which emerged, as well as to identify common themes that emerged over time.

¹³⁶ Ibid, 159.

¹³⁷ Ibid.

The findings of the study are presented as a narrative discussion. John Creswell states narrative discussions have no set form, can vary widely, and are often used in qualitative research to describe events in their context as well as present chronological experiences.¹³⁸ In addition, Creswell states, “Qualitative research is interpretive research, and you will need to make sense of the findings.”¹³⁹ The findings of this study were interpreted in order to draw some larger meaning about the curriculum evolution at ACSC during the time period studied.

Accuracy and credibility of the findings of this study are of paramount importance. This study used peer examination, a method used to verify internal validity, to ensure accuracy and credibility. Internal validity seeks to ensure that the findings of a study capture what is really there, and peer examination enlists the help of colleagues to review and comment on findings presented by the researcher.¹⁴⁰ In this study, colleagues of the researcher were enlisted to review the findings, verify that the evidence collected supports the findings presented and that the results and interpretations drawn are in fact plausible.

Timeline of Completion

Data collection for this study was conducted January – September 2007. Following data collection, data analysis and writing of findings were conducted from September to December 2007, and a completed draft of the study was turned in to the

¹³⁸ John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, 2nd ed. (Upper Saddle River, NJ: Pearson, 2005).

¹³⁹ *Ibid*, 251.

¹⁴⁰ Merriam, 1998.

dissertation committee in September 2008. The oral dissertation defense took place in October 2008, and content and format revisions were mandated by the committee before the dissertation was cleared for turn-in to the university Thesis Office.

Immediately after the dissertation defense, the researcher was ordered to Iraq on a one year military deployment. Upon return from military deployment in November 2009, content and format edits previously identified by the committee were undertaken and a one-year extension was granted to the researcher to meet university requirements for dissertation completion after a successful oral defense. The final dissertation was turned in to the university Thesis Office by the October 22, 2010 deadline in order to meet university requirements for graduation in December 2010.

CHAPTER IV

A NEW DAWN: ACSC AT THE END OF THE COLD WAR

Context

The timeframe 1989 – 1992 represents the beginning of a new era in Professional Military Education (PME) overall and especially, for Air Command and Staff College. The convergence of several events in the latter half of the 1980s had significant impact on the overall PME system and PME curriculum. These events were the passage of the Goldwater-Nichols Defense Reorganization Act of 1986, the published report in April, 1989 (known as the Skelton Report), from the House Panel on Professional Military Education, formed in 1987 to review the implementation of the Department of Defense (DoD) provisions of the Goldwater Nichols Act, and the end of the Cold War, which was ushered in by the fall of the Berlin wall in November, 1989.

PME had remained largely static for much of the 40-year Cold War period, with little change occurring in PME structure and mostly a minor tweaking of curriculum. By time the decade of the 1980s was giving way to the 1990s, the combined educational dictates of the Goldwater-Nichols Act and the recommendations of the Skelton Report, as well as the uncertain international security environment brought on by the end of the Cold War clearly signaled that a new era in Professional Military Education was starting to emerge.

The Goldwater-Nichols Act was not born out of thin air. Justification for the Act had been building for some time. Recognition by members of Congress, senior

military leaders, and the general public that United States military forces had not been performing as well as they had during World War II was growing in the wake of experiences in Korea and Vietnam, the failed Iranian hostage rescue attempt of 1980, and the 1983 invasion of Grenada. The loss of American lives, especially during the highly publicized failed Iranian hostage rescue attempt, was a stark reminder that the United States was losing some of its military prestige in the eyes of the press, the Congress, the American public, and the world.¹⁴¹ During a Senate address in 1985, Senator Barry Goldwater, co-sponsor of the Goldwater-Nichols Defense Reorganization Act, pointed to the difficulty of the Joint Chiefs of Staff (JCS) to provide timely and useful military advice to civilian authorities, poor military performance in joint operations, confusing command and control relationships, and an inefficient Joint Chiefs' organization. Senator Goldwater stated, "It is broke, and we need to fix it."¹⁴²

President Reagan signed the DoD Reorganization Act of 1986 into public law on October 1, 1986. By enacting this legislation, Congress stated its intent was:

To improve the military advice provided to the President, the National Security Council, and the Secretary of Defense;

To reorganize the Department of Defense and strengthen civilian authority in the Department;

To place clear responsibility on the commanders of the unified and specified combatant commands for the accomplishment of missions assigned to those commands;

¹⁴¹ Amy B. Zegert, *Flawed by Design: The Evolution of the CIA, JCS, and NSC* (Stanford, CA: Stanford University Press, 1999), 140-143.

¹⁴² Senator Goldwater of Arizona, Chairman of the Senate Armed Services Committee, speaking for Congressional oversight of national defense on October 3, 1985, to the Senate, 98th Cong., 1st sess., *Congressional Record*.

Ensure that the authority of the commanders of the unified and specified combatant commands is fully commensurate with the responsibility of those commanders for the accomplishment of missions assigned to their commands;

To increase attention to the formulation of strategy and to contingency planning;

To improve joint officer management policies;

To provide for more efficient use of defense resources;

To enhance the effectiveness of military operations and improve the management and administration of the Department of Defense.¹⁴³

By passing the Goldwater-Nichols Defense Reorganization Act, Congress served notice that it expected the Department of Defense to embrace the idea of joint operations as the standard for future United States military action. Independent military departments acting autonomously during military operations were clearly no longer acceptable.

Title IV of the new law signaled a new direction for PME in the United States; a shift away from traditional service dominance in PME toward more joint-focused institutions. Title IV mandated that the Department of Defense orient its PME system toward joint education and revise the way officer career paths and promotions were managed. For the first time, Congress was dictating curricular focus in United States PME schools. No longer would the Department of Defense be able to completely determine what was taught within their PME schools. Congress reasoned that by instilling a requirement for joint education in United States PME schools, it could inculcate a joint mindset within the officer corps and thus produce senior officers knowledgeable about and comfortable with planning and executing joint military operations. The provisions of Title IV are listed in Appendix D of this study.

¹⁴³ Public Law 99-433

The idea of jointness was not a new concept in the military. Military officers recognized that the provisions of Title IV required a new way of managing officer careers. Army Colonel Don Snider observed:

The joint officer personnel provisions of the new law create a historic departure for officer development and management in our armed forces. Congress has finally overcome the unfortunate spectre of 'The Man on Horseback', and has now legislated the foundations necessary for a joint staff of the armed forces, one that can be educated, trained, and promoted over time to insure its progression, continuity, and freedom of action from undue influence from the services.¹⁴⁴

Lieutenant General Thomas Hickey, Air Force Deputy Chief of Staff for Personnel (1986 – 1991) stated, “The Air Force has embraced jointness as an integral part of its mission and [Air Force officers] should be ready to work with their Army, Navy, and Marine Corps counterparts.”¹⁴⁵ In order to implement the military education portion of the Goldwater-Nichols Act, Congress formed a panel to study the current state of military education in the United States and recommend courses of action.

The Skelton Panel

On November 13, 1987, Congressman Les Aspin, (D-WI), Chairman of the House Committee on Armed Services, appointed a Panel on Military Education of the Committee on Armed Services with Congressman Ike Skelton (D-MO) as the panel chairman. This panel became known as the Skelton Panel. The Skelton Panel was given a two-fold mission by Congressman Aspin. First, the panel was to “review Department of Defense plans for implementing the joint professional military education requirements

¹⁴⁴Don M. Snider, Colonel, USA, "DOD Reorganization: Part I, New Imperatives", *Parameters*, (September, 1987), 95-96.

¹⁴⁵ John Ginovsky, “Officer Patterns Being Transformed,” *Air Force Times* 4, (July 18, 1988): 4.

of the Goldwater-Nichols Act with a view toward assuring that this education provides the proper linkage between the Service component officer and the competent joint officer.”¹⁴⁶ Second, the panel was to “assess the ability of the current Department of Defense military education system to develop professional military strategists, joint war fighters and tacticians.”¹⁴⁷

The Skelton Panel held formal hearings between December 2, 1987 and September 22, 1988 with representatives from the ten exiting intermediate and senior military education schools for field grade and senior officers in the Department of Defense, as well as the Capstone course for newly-appointed general and flag rank officers. In addition, the Skelton Panel visited the campus of each school to conduct further research and interview faculty, staff, and students. The schools in the DoD military education system investigated by the Skelton Panel included the National War College, the Armed Services Staff College, the Industrial College of the Armed Forces, the Army War College, the Army Command and General Staff College, the Naval War College, the College of Naval Command and Staff, the Marine Corps Staff College, the Air War College, and the Air Command and Staff College. The Skelton Panel issued its findings in a 206-page report to Congress published on April 21, 1989; this report became known as the Skelton Report.

The Skelton Report sent shockwaves through much of the military education system due to its pointed criticism of the PME system as a whole and its far-reaching

¹⁴⁶ Letter from Congressman Les Aspin to Congressman Ike Skelton, November 13, 1987. Reprinted in House Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, report prepared by Ike Skelton, 101st Cong., 1st sess., 1989, Committee Print 4, (v).

¹⁴⁷ *Ibid.*

recommendations. Although the Skelton Report described the DoD military education system as “sound” overall, the Report made it clear there was plenty of room for improvement. The Skelton Report criticized the existing PME framework for a lack of focus stating, “The current focus of each [PME] level is not explicit and clear. The results in the current system are a lack of concentration on what should be the primary focus, a diffusion of efforts, and unnecessary redundancy.”¹⁴⁸ The Report went on to state, “The panel believes a framework that has distinct primary teaching objectives and that integrates the PME schools into a coherent system should be developed and implemented.”¹⁴⁹ Overall, the Skelton Report made 36 recommendations directed at either the entire PME system or specific schools. Nine recommendations were listed as key recommendations in the Report’s Executive Summary. These recommendations are listed in Appendix B of this study.

The Air Force, especially the Air Command and Staff College, was the recipient of some of the Skelton Report’s harshest criticism. The faculty at Air University schools was compared to the faculties of the other Service PME schools, and the Skelton Report found that Air University’s faculty was “not generally of the same caliber as other service schools.”¹⁵⁰ This conclusion was based on a recognition that Air University had over time gained a reputation that had suffered in comparison with other PME schools. The Skelton Report stated,

According to former officials interviewed by the panel, the reputation of the Air University has always suffered in comparison with most of the other PME

¹⁴⁸ House Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, 21.

¹⁴⁹ *Ibid.*

¹⁵⁰ *Ibid.*, 186.

schools. That reputation, whether fair or not, may cause officers to believe that Air University schools are second-rate and explains their clear bias toward being assigned to another PME school. The reputation becomes self-filling for both the student body and faculty—there is no “magnet” to attract the best to the Air University.¹⁵¹

Concerning the Air War College, the Skelton Report criticized the Air War College’s mission statement as “broad and vague and gives the commandant and faculty little direction in developing the curriculum. The broad mission statement may explain the high percentage of hours in the curriculum that do not contribute to the war fighting education of the students.”¹⁵² In addition, the Skelton Report chided the Air War College for a lack of rigor in its curriculum. The Report stated, “The panel’s curriculum review indicated that roughly 60 percent of the core program is passive learning. This is far higher than other senior colleges and would seem to indicate less rigor than at other schools.”¹⁵³

The Skelton Report’s harshest criticism of Air University and its schools was directed toward the Air Command and Staff College. Like the Air War College, Air Command and Staff College was criticized for a broad and vague mission statement. The Report stated, “Its lack of precision supports comments heard from several officials who have visited or lectured at ACSC that the Air Force has issued no clear, detailed mission statement for the intermediate-level course. The course has a reputation for poor quality and lack of focus.”¹⁵⁴ The curriculum at ACSC received very pointed criticism from the Skelton Panel, and is worth quoting at length:

¹⁵¹ Ibid.

¹⁵² Ibid, 187.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

In the panel's estimate, roughly one-third of the ACSC curriculum is devoted to joint matters, about 10 percent to strictly Air Force operational matters, and over half to a profusion of other subjects, primarily staff and communication skills. This diffusion of focus causes the panel to question whether the Air Force has thought through the purpose of its intermediate school. The emphasis clearly is not on war fighting and supporting. This failure to impart the Air Force *raison d'être* is doubly unfortunate because, as the Commandant reminded the panel, for many officers this will be the last PME of their careers. Unlike the Army and Marine Corps intermediate colleges, the Air Command and Staff College devotes little time to Air Force doctrine. Because the Air Force responsibility for doctrine development is now assigned to the Center for Aerospace Research, Doctrine, and Education (CADRE) at Maxwell, the school may be missing a magnificent opportunity to teach the use of air power in the full range of possible contingencies from the tactical to the strategic levels.¹⁵⁵

Air Command and Staff College was praised in the Skelton Report for the quality of its students, but the quality of its faculty was called into question. The Report stated,

The preponderance of faculty members are majors recruited from the graduating class and function as "seminar leaders." They have little or no more experience than their students and are, in general, not subject matter experts. Consequently, their teaching abilities are limited to facilitating discussion of each lesson, and they may be only a day or so ahead of their students. The panel believes that the Air Force will have to institute significant changes in faculty recruitment and assignment policies at ACSC to make it as productive as other service schools.¹⁵⁶

This criticism of Air University schools did not go unanswered. Officials at Air University took exception to the Skelton Report's characterization of Air University schools as havens of passive learning which lack intellectual rigor. At the core of Air University's disagreement with the Skelton Report was a difference of opinion as to what constituted passive learning. The Skelton Report defined passive education as lectures, films, and symposiums that do not require a direct response from students. Congressman Skelton said, "To have such a disproportionate amount of lectures and

¹⁵⁵ Ibid, 187-188.

¹⁵⁶ Ibid, 188.

films and passive type education I think defeats the purpose of a thinking military leader that you want...passive education does not challenge a student that much.”¹⁵⁷

Lieutenant General Ralph E. Havens, then Commander of Air University, said, “I’d say that when we have (the commander in chief of Strategic Air Command) General John Chain here and he gives a pitch for about 50 minutes, followed by another 50 minutes of questions and answers on any subject they want, followed by random participation in seminar, followed by a working lunch, that is more than passive education.”¹⁵⁸ The Commandant of Air War College, Major General David C. Reed, agreed with General Havens and stated, “We’re going to be reducing the number of hours our students spend in the auditorium listening to lectures... (But) if you’ve seen the student officers sitting there listening to the chief of staff of the Air Force laying out his perspective on the Air Force, I would suggest that they are all fully engaged in that.”¹⁵⁹ At Air Command and Staff College, lectures were seen as the substance from which academic rigor was created in the seminar room. After an ACSC lecture, students were split into seminars of 13 or 14 students. Major Johnny R. Jones, an ACSC instructor said, “That [a seminar] is where we discuss, tear apart, put together and find out what did this guy really tell us, what is its applicability to the Air Force, to the Army, to the Navy, and to joint operations.”¹⁶⁰

¹⁵⁷ Congressman Ike Skelton, quoted in John Ginovsky, “Making the Most of Air U: AF Counters Criticism of its Officer Schools”, *Air Force Times*, (September 18, 1989): 12.

¹⁵⁸ John Ginovsky, “Making the Most of Air U: AF Counters Criticism of its Officer Schools”, *Air Force Times*, (September 18, 1989): 12-16.

¹⁵⁹ *Ibid*, 12.

¹⁶⁰ *Ibid*, 13.

The Skelton Report defined the notion of academic rigor as consisting of a challenging curriculum, student accountability for mastering the curriculum, and establishing standards by which student performance is measured. Air University was faulted by the Skelton Report for not having enough academic rigors at its schools. Again, Air University officials defended their programs. Colonel Jerry Sailors, Vice Commandant of Air Command and Staff College said, “If you take just a general broad definition that (rigor) is how hard are they working, are they actually projecting, are they actually having to use their brain, are they having to analyze...I think we’ve made some long strides in that area. We are requiring them to analyze. We are requiring more outside work than we had before.”¹⁶¹ Glen Spivey, Educational Advisor at Air Command and Staff College agreed with Colonel Sailors, stating, “If they [students] have had to do some things to cause them to think, projecting themselves into situations, scenarios, to reflect on what they are studying, to me that is rigorous.”¹⁶²

Congressman Skelton pointed out that students at ACSC told a very different story about academic rigor than the ACSC leadership. According to Skelton, “When we got rid of the colonels and generals out of the room, the comments that these majors [students] made to us—‘This is a snap.’ Another fellow said, ‘I could get through here without cracking a book.’”¹⁶³ Spivey indicated that for the first time, ACSC students were being required to read two books, specifically *The American Way of War* by Russell Weigley, and *The Air Campaign* by John A. Warden III. The weekly reading

¹⁶¹ Ibid, 14.

¹⁶² Ibid.

¹⁶³ Ibid, 15.

load for ACSC students amounted to about 230 pages a week. Congressman Skelton countered, “Do they have to read 700 pages a week like at the Naval War College?”¹⁶⁴ Air University officials cautioned that considering page count totals in isolation is a misleading practice. An unnamed Air University spokesman said, “Other schools may assign more reading, but they also provide scheduled preparation time in lieu of classroom contact time...Air Force students spend more time in the classroom each week than students at other schools.”¹⁶⁵

Another measure that ACSC pointed out it was taking to inject academic rigor into its program was an increased emphasis on war gaming and combat scenario study. ACSC instructor Major Joe Zahrobky said, “We take real world expertise from a this-is-the-way-it-is-today briefing, down here in the lecture hall. We take that data, coupled with other information from readings and from outside sources, apply it to a whole new situation, to bring them up to a higher level of understanding by actually having to take tools and manipulate them in whole new situations.”¹⁶⁶ Congressman Skelton acknowledged that Air University was taking steps to improve its curricula, stating, “I applaud them on some of these advances. I’m not totally negative about it. I think they are making strides.”¹⁶⁷ General Havens admitted that Air University would have to agree to disagree with Congressman Skelton and the Skelton Report on the issues of passive education and academic rigor, stating, “There isn’t a magic formula for rigor. Part of it is

¹⁶⁴ Ibid.

¹⁶⁵ Ibid.

¹⁶⁶ Ibid, 16.

¹⁶⁷ Ibid.

simply perception.”¹⁶⁸ In the end, despite its disagreements with the Skelton Report criticisms, Air University and its schools had no choice but to embrace the Skelton Report and press forward with efforts to implement the Report’s recommendations.

In total, the Skelton Report made 85 specific recommendations for improving PME in the United States, which were summarized as 9 key recommendations in the executive summary of the Report. Of the 85 specific recommendations made by the Skelton Report, 36 applied to Air University. Thirty-one of the 36 recommendations applicable to Air University applied directly to Air Command and Staff College, including 4 of the Report’s 9 key recommendations. The Skelton Report’s 9 key recommendations are listed in Appendix B of this study. The 36 Skelton Report recommendations applicable to Air University are listed in Appendix C of this study, and the 31 recommendations impacting ACSC are flagged with an asterisk. To understand the Skelton Report criticisms of ACSC, this study reviewed the ACSC curriculum for Academic Year (AY) 1988, which was the curriculum in place at the time of the Skelton Panel’s visit to Air University in March 1988.

ACSC Curriculum in 1988

ACSC’s Mission Statement for AY 1988 read, “To enhance the professional knowledge, skills, and perspectives of mid-career officers for increased leadership roles in command and staff positions.”¹⁶⁹ This is the mission statement labeled as broad,

¹⁶⁸ Ibid.

¹⁶⁹ *History of the Air Command and Staff College, 1 July 1987 – 30 June 1988*, Volume I, p. 2, K239.07C, July 1987 – June 1988, IRIS No. in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

vague, and unclear in the Skelton Report. The AY 1988 ACSC curriculum consisted of 864 total hours of academic instruction, which was divided among five curriculum divisions: Command, Leadership, and Combat Support; Staff Communications and Research; National Security Affairs; Warfare Studies; and Space Operations. Included in the academic instruction was a 48-academic hour electives program that enabled students to pursue more in-depth study in areas of particular interest. United States officers attended three 16-hour elective courses during the course of the academic year, and each foreign officer attended two elective courses. The curriculum for AY 1988 is shown in Table 1 on the following page, and the elective courses offered that year are listed in Table 2.

Two key initiatives with significant impact for the ACSC curriculum were being planned when the Skelton Panel members visited Air University March 17-18, 1988. First, a new 250-academic hour joint education curriculum was being developed for inclusion in the ACSC curriculum to comply with the Title IV educational mandates of

Table 1. ACSC AY 1988 Curriculum Summary

<i>Core Curriculum</i>	Sem	<i>Academic Hours</i>	
		Lecture	Total
Area I: Staff Communication and Research	61	10	71
Advanced Staff Communications and Applications	52	10	62
Staff Research Program	9	0	9
Area II: Command, Leadership, and Combat Support	70.5	109.5	180
Leadership Studies	41.5	50.5	92
Leadership Symposium	0	8	8
Combat Support	29	51	80
Area III: National Security Affairs	55	70.5	125.5
US National Security Policy	13.5	20.5	34
USSR and Europe	11.5	18	29.5
Latin America	8.5	11.25	19.75
Asia, Africa, and Middle East	11.5	20.75	32.25
The Crisis Game	10	0	10
Area IV: Warfare Studies	155.5	203.5	359
Thinking About War (Theory, History, Doctrine, and Strategy)	29.5	47.5	77
Low-Intensity Conflict	16	36	52
Theater Warfare	73	83	156
Nuclear Warfare	37	37	74
Area V: Space Operations	11	29.5	40.5
Other Academic Instruction	48	40	88
Electives	48	0	48
Commandant's Special Lectures	0	40	40
Total—Academic Hours	401	463	864

Source: *Air University Catalog: 1987 – 88*, (Maxwell Air Force Base, AL: Air University Press, 1987), 44-45.

Table 2. ACSC AY 1988 Elective Courses

American Civil War	Intelligence Community
Arabic Language	Instructional System Development
Arab-Israeli Conflict	Introduction to Data Base Management Systems
Army Functional Area 54 Qualification	Introduction to Desktop Computers
Army Overview	Introduction to Islamic Political World View
Contemporary Africa	Introduction to Word Processing
Creative Thinking	Joint Middle East Exercise
Dealing with Death in the Military Community	Latin America—US relations
Development of the Soviet Military Establishment	Media Relations for Staff Officers
East Asia and US Security	Next Assignment—Air Staff
Effective Staff Briefing	Nuclear Weapons and Issues
Effective Writing	The People's Republic of China
Electronic Combat	Personal Financial Planning and Management
Evolution of Nuclear Strategy	Sources of the Soviet Mind-Set
Executive Fitness	Soviet Foreign Policy
German Language	Spanish Language
System Acquisition Issues	Update on Army Issues, Parts I and II
US and Soviet Navies	Vietnam War
USAF Roles and Missions: Then and Now	War and Morality: Ethics and the Military Profession

Source: *Air University Catalog: 1987 – 88*, (Maxwell Air Force Base, AL: Air University Press, 1987), 43-44.

the Goldwater-Nichols Defense Reorganization Act of 1986. Secondly, the entire ACSC curriculum was being reworked in anticipation of implementing an Air University decision that would shorten the ACSC academic year from 40 weeks to 24 weeks beginning with AY 1990. These initiatives, combined with minor curricular changes, put the ACSC curriculum in a state of flux by time the Skelton Panel visited ACSC.

A New Joint Curriculum

The Goldwater-Nichols Defense Reorganization Act directed the Chairman of the Joint Chiefs of Staff to develop new policies and procedures for educating and training members of the armed forces in joint matters, especially for a new cadre of joint specialty officers. To qualify for joint specialty officer status, officers were required to complete a joint education program and a joint duty assignment. Moreover, the law required 50 percent of all officers serving in joint duty assignments to be either joint specialty officers or joint specialty officer nominees. One hundred percent of 1,000 joint duty positions identified as “critical joint assignments” had to be filled by qualified joint specialty officers.¹⁷⁰ Responding to these dictates, the Chairman formed a Senior Military Schools Review Board in October 1986 to study military education and appointed retired Air Force General Russell Dougherty, former Commander-in-Chief of Strategic Air Command, to lead the Board. The Board consisted of three other retired general and flag officers and became known as the Dougherty Board.

¹⁷⁰ Background Paper on Joint PME Status/Issues, HQ AU/XPOS, April 20, 1988 in *History of Air University, 1 January – 31 December 1988*, Volume III, Part I, p.II-72, K239.01 V.3 Part I, January – December 1988, IRIS No. in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

The Dougherty Board reviewed several aspects of military education, including curriculum content, length, and standards; faculty qualifications; lecture topics and speakers; student selection and evaluation; and graduate follow-on assignments. The Board submitted its final report to the Chairman of the Joint Chiefs of Staff on 7 May 1987. The Board recommended that the Chairman of the Joint Chiefs of Staff develop joint education curriculum standards among the intermediate and senior level PME schools without losing the essential service orientation of each school and accredit the schools for joint education through a periodic accreditation process to validate joint curriculum currency and ensure compliance. In addition, the Board recommended establishment of a division within the Joint Staff to provide liaison between the service colleges and the Chairman of the Joint Chiefs of Staff.¹⁷¹ The Chairman tasked Air Force Lieutenant General Bradley Hosmer, President of National Defense University, to develop the educational program and standards recommended by the Dougherty Board to prepare officers for joint duty assignments. The Chairman however decided not to accredit all graduates of the individual service intermediate and senior level schools as joint PME qualified because he believed Congress would perceive that the Department of Defense were turning the service schools into joint schools at the expense of service-specific education.¹⁷²

The joint educational program development effort was led by NDU, but was developed in consultation with each service school commandant. In August 1987, NDU

¹⁷¹ Senior Military Schools Review Board Report (Dougherty Board), Washington, D.C.: Government Printing Office, 1987.

¹⁷² Background Paper on Joint PME Status/Issues, HQ AU/XPOS, April 20, 1988, 2.

forwarded their proposed Joint Specialty Program to the Air War College and Air Command and Staff College commandants for comments and suggestions. Both commandants were united in their belief that the Joint Specialty Program needed to be developed and implemented by a joint qualified faculty; that the Joint Specialty Program should not be restricted to only a select portion of the student body; and that the earliest dates that the Joint Specialty Program could be implemented at Air University was during Academic Year 1990.¹⁷³ Under the National Defense University's proposed Joint Specialty Program which was forwarded to the Chairman of the Joint Chiefs of Staff on 28 September 1987, producing officers qualified for nomination as Joint Specialty Officers through senior level schools required a 110-hour joint curriculum; a faculty mix of air, ground, and sea force officers, 75% of which should be senior service school graduates and more than 50% of military faculty should have joint experience; and each student seminar should contain a minimum of 15% representation from each military department. NDU's proposed program for intermediate level schools required between 235 and 275 hours of joint curriculum with faculty and student mixes identical to that of senior level schools.¹⁷⁴

The Chairman approved in principle NDU's proposed joint education program standards and curriculum of 28 September 1987 as the basis to be used by all service schools to qualify officers as Joint Specialty Officer nominees. Each service was then tasked to use the NDU standards and curriculum to develop distinct "joint track" programs that could be implemented as pilot programs in their military education

¹⁷³ Ibid, 2.

¹⁷⁴ Ibid, 3.

colleges in 1988 for the Academic Year 1989. Only those PME students identified for future joint duty assignments would be given the joint track curriculum. Additionally, an accreditation process called the JCS Process of Accreditation for Joint Education (PAJE) was established to ensure each service's pilot program met the intent of the approved joint education standards.¹⁷⁵

Air University's pilot program proposal was forwarded to the Air Staff on 16 December 1987 and included requirements for additional faculty and student support from the other services. Air University's proposal included the assumptions that (a) both Air War College and ACSC would receive required additional resources, (b) the Air Force Military Personnel Center would identify joint track students before class begins, and (c) all sister service students would be enrolled in the joint track program. The Air Force Military Personnel Center indicated that Air University would need to produce between 70 and 215 Joint Specialty Officer nominees annually, depending upon the final joint duty requirements from the Department of Defense and the Air Force's portion of those final requirements.¹⁷⁶

ACSC's pilot program for joint education curriculum totaled 240 hours of instruction across five major areas. Approximately 144 ACSC students (78 Air Force, 44 Army, and 22 Navy and Marine students) were slated to receive instruction in Organizational and Command Relationships, Joint Command, Control, Communications and Intelligence, The Operational Level of War, Defense Planning Systems, and Joint Staff Operations. In addition, joint track students were required to develop an

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

operational plan and employ joint forces in response to a computer-generated scenario.¹⁷⁷ ACSC's pilot program called for the formation of 11 joint seminars consisting of 13 students each in which joint curriculum not covered in ACSC's existing core curriculum would be taught. Seventy-one percent, or 170 total curricular hours of ACSC's pilot program were not previously covered in the core curriculum.¹⁷⁸ Additional requirements for ACSC's pilot program included 9 sea service students, 3 Army and 5 sea service faculty members to replace the loss of Air Force faculty transferred to sister service colleges, and 5 joint-qualified Air Force faculty.¹⁷⁹

On 15 January 1988, the Air Force submitted Air University's pilot programs to an Initial Certification Group (ICG) chartered by the Chairman of the Joint Chiefs of Staff. The ICG was formed to review and assess all senior and intermediate college pilot programs and included representatives from all services. The ICG was tasked to recommend for certification those programs which had a high probability of being accredited through the PAJE.¹⁸⁰ The ICG met periodically throughout the spring and early summer of 1988 to ensure the service pilot programs were meeting the joint education standards approved by the CJCS and resolve problems and issues that could delay implementation of the pilot programs for AY 1989. By May 1988, Air

¹⁷⁷ Letter from Lieutenant General Truman Spangrud, AU/CC, to General Larry D. Welch, Chief of Staff of the USAF, 3 June 1988, in *History of Air University, 1 January – 31 December 1988*, Volume III, Part I, p.II-72, K239.01 V.3 Part I, January – December 1988, IRIS No. in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

¹⁷⁸ Background Paper on Joint PME Status/Issues, HQ AU/XPOS, April 20, 1988, 4.

¹⁷⁹ *Ibid.*, 4.

¹⁸⁰ JCS Initial Certification Group Report on Program for Joint Education Pilot Program, Academic Year 1988-1989, 11 August 1988, in *History of the Air Command and Staff College, 1 July 1987 – 30 June 1988*, Volume III, p. SD-86, K239.07C V.3, July 1987 – June 1988, IRIS No. 01098948 in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

University's pilot programs had been recommended for certification by the ICG.¹⁸¹ Approximately 144 joint-track students at ACSC were slated to receive 250 hours of joint instruction, which included 25 hours of instruction in Joint Organization and Command Relationships, 25 hours in Joint Command, Control, Communications, and Intelligence, 45 hours in Joint Forces and the Operational Level of War, 95 hours in Defense Planning Systems, and 60 hours in Joint Staff Operations. The joint curriculum culminated with a Tunisia-based joint war game hosted by the U.S. Air Force War Gaming Center, also located at Maxwell Air Force Base.¹⁸² All ACSC students received 70 hours of joint war fighting instruction in the core curriculum, but the 180-hour increase in joint instruction would only be taught to those students designated as joint-track students. Moreover, joint-track students would have longer class days and more homework than the other students. Table 3 below depicts the curriculum given to Joint Specialty Track students during AY 1989.

¹⁸¹ Letter from Colonel R. Dean DeLongchamp, Director of Education Operations for Air University, to Lieutenant General Truman Spangrud, AU/CC, 20 May 1988, in *History of Air University, 1 January – 31 December 1988*, Volume III, Part I, p.II-72, K239.01 V.3 Part I, January – December 1988, IRIS No. in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

¹⁸² Talking Paper on ACSC Resident Curriculum Changes for AY89, in *History of the Air Command and Staff College, 1 July 1987 – 30 June 1988*, Volume III, p. SD-85.

Table 3. ACSC AY 1989 Joint Specialty Track Curriculum

<i>Courses</i>	<i>Academic Hours</i>		
	New Hours	Core Hours	
Organizational and Command Relationships	19	6	
Joint Command, Control, Communications and Intelligence	16	9	
Joint Forces and Operational Level of War	-	45	
Defense Planning	85	10	
Joint Staff Operations	50	-	
Total—Academic Hours	170	70	240

Source: *Air University Course Catalog: 1988 – 89*, (Maxwell Air Force Base, AL: Air University Press, 1988), 54.

24-Week Curriculum Proposal

The second major curricular initiative being planned at ACSC at the time of the Skelton Panel hearings was transitioning ACSC from its 40-week academic year to a 24-week academic year scheduled to begin during Academic Year 1990. Reducing the ACSC academic year was not without precedent. ACSC was reduced from its then 9-month academic year to a 22-week program in 1948 during the Berlin Airlift. Later, during the Korean War, ACSC was again reduced, this time down to a 15-week course, until 1954 when ACSC returned to its original 9-month program. Since the end of the Korean War, shortening the ACSC academic year had twice been considered. The first consideration came in 1961 when an Air University committee was formed to study the feasibility of splitting ACSC into two short courses per year in the interest of doubling the number of annual ACSC graduates. In 1974, reducing ACSC was again considered

when Lieutenant General Felix M. Rogers, Air University commander at the time, decided to shorten ACSC to 22-weeks long for Academic Year 1977. General Roger's decision was overturned by his replacement, Lieutenant General Raymond B. Furlong, before the shortened ACSC program could be implemented. In both of these cases, the ultimate decision to remain with the by then 10-month ACSC program was based on the belief that a shorter ACSC program would be lacking in content, would create more problems than it would solve, and its graduates would likely be of inferior quality than graduates of the 10-month program.¹⁸³

Reducing the ACSC program again came into consideration in 1987 when then Air University commander Lieutenant General Truman Spangrud again opened the issue. General Spangrud and then Air Force Chief of Staff General Larry D. Welch believed that reducing the ACSC program from 40 to 24 weeks beginning in AY 1990 would benefit the Air Force by increasing the number of ACSC graduates, eliminating what they saw as too much time being devoted to subjects covered in the curriculum, and allowing select ACSC graduates to attend a one year follow-on course being developed to focus on strategic studies. The strategic studies follow-on course for select ACSC graduates being developed at this time became the School of Advanced Airpower Studies, today known as the School of Advanced Air and Space Studies.

Resistance to the new ACSC reduction proposal was stiff. A group of former Air Force senior officers expressed their sentiments on the proposal in a letter to Senator

¹⁸³ *History of the Air University, 1 January – 31 December 1988*, Volume I, pp. 56-57, KC239.01 V.1 Part I, January – December 1988, IRIS No. in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

Sam Nunn in April 1988. The letter stated Lieutenant General Spangrud had reopened the issue “against the recommendations of his staff and the conclusions of all previous studies on the subject” and that General Spangrud’s motivation was his “desire to increase resident attendance opportunity from 20 to 30 percent, even though the USAF has not established that goal. The staff’s effort to explain that the marginal gain in attendance opportunity was a poor trade-off for the long term educational losses went unheeded.”¹⁸⁴ The annual Air University Board of Visitors that reviewed the ACSC program in 1988 also expressed concern about the pending ACSC course reduction. In its report to the Air University commander, the Board of Visitors stated, “Changes in the 40-week program can be easily justified, but the proposed move to a 24-week program appears unduly arbitrary, and it may well produce an abbreviated curriculum.”¹⁸⁵

To accommodate the reduction in program length, ACSC curriculum developers designed a new streamlined curriculum for AY 1990, which revolved around adapting the AY 1989 curriculum. The 24-week curriculum retained approximately 62 percent of the AY 1989 core curriculum, which represented a net reduction of 316 hours of instruction. Specifically, the 24-week curriculum was accomplished by (1) eliminating redundancy in student lectures, seminars, and readings; (2) reducing or eliminating subjects concerning strategic studies and shifting the curricular focus towards thinking about war at the operational level; (3) tasking students with situations and issues that emphasize out-of-class analysis and problem solving individually and in groups, using

¹⁸⁴ Quoted in *History of the Air University, 1 January – 31 December 1988*, Volume I, p. 57.

¹⁸⁵ Minutes and Report of the Chairman, Air University Board of Visitors, 10 – 13 April 1988, p.12, in *History of the Air Command and Staff College, 1 July 1987 – 30 June 1988*, Volume III, p. SD-87.

knowledge gained in class; and (4) streamlining individual core curriculum lessons and more efficient class scheduling. The integration of the joint curriculum requirements for the joint-track students was also part of the 24-week program.

In addition to planning the integration of joint education curriculum and a new 24-week curriculum, ACSC was in the midst of instituting minor changes at the time of the Skelton Panel visit. ACSC's Command, Leadership, and Combat Support Division was renamed for AY 1988 from AY 1987 when the division was called the Command, Leadership, and Resource Management Division. The curricular focus of the Resource Management phase was on financial management (federal budgeting process from formulation to execution), acquisition cycle processes, and logistics (including combat support doctrine, international logistics, and the relationship of logistics to strategy). The Combat Support phase still contained instruction in financial management, acquisition, and logistics; however more emphasis was placed on the funding, equipping, and sustaining of military forces. The renaming of the Resource Management phase of the division to Combat Support, came about to "more appropriately reflect the division's responsibilities" and to incorporate guidance from the Air Force Chief of Staff to "concentrate on more war fighting" in the ACSC curriculum.¹⁸⁶

Another division name change was made at ACSC in 1988 for AY 1989. The Staff Communications and Research Division became the Staff Communications and Analysis Division as a result of changes mandated by Brigadier General Frank E. Willis, then Commandant of ACSC. General Willis decided to eliminate for AY 1989 ACSC's

¹⁸⁶ *History of the Air Command and Staff College, 1 July 1987 – 30 June 1988*, Volume I, p. 26.

sponsored research project requirement each student accomplished. Students wrote one 25-page, single-spaced paper in which they were required to write convincing arguments and defend a position on an issue of importance to the Department of Defense. To replace this requirement, General Willis decided students would write three Professional Issue Papers (PIPs) of 5 – 15 double-spaced pages in length each. In addition, six additional in-class writing assignments were added that focused on traditional action officer staff memos and other official correspondence. Topics for the PIPs complemented the existing curriculum and were supplied to the students by the ACSC faculty, subject to General Willis's approval. General Willis retained the opportunity for students, on a strictly voluntary basis, to conduct Department of Defense sponsored research if they so desired.¹⁸⁷

General Willis based his decision to alter student writing requirements on three factors. First, feedback from students and graduates consistently ranked research and writing requirements as the least enjoyable aspect of ACSC. Second, the DoD-sponsored research program required a 500 – 800 hour annual work load on faculty members which could be better utilized by faculty to develop and implement the new joint education curriculum. Finally, the impending transition to a 24-week academic year required eliminating and reducing core curriculum requirements.¹⁸⁸ Thus, when the Skelton Panel visited ACSC in March 1988, its members were confronted with a school significantly engaged in developing a joint education curriculum to meet the Title IV requirements of the Goldwater-Nichols Act, developing and preparing to implement a major curriculum

¹⁸⁷ Ibid, 29.

¹⁸⁸ Ibid.

reduction from 40 to 24 weeks long, as well as instituting other changes impacting the core curriculum.

The Department of Defense's effort to implement a joint education curriculum and accredit PME schools to produce Joint Specialty Officer nominees garnered the attention of Congress while the Skelton Panel was still in the midst of its hearings. Congress was concerned that the Department of Defense was making long-term changes to joint education and accreditation. In a letter to Secretary of Defense Frank C. Carlucci, the U.S. House of Representatives Committee on Armed Services cautioned the Department of Defense on joint education. The letter, signed by six members of the House Committee on Armed Services, including Congressman Ike Skelton, stated,

We understand the interim need for a joint track and support conducting it in academic year 1988 – 89 as a pilot program. Second, on other (non-JSO) PME, we applaud the enhancement of education in joint matters in the Service colleges. Third, we still oppose accrediting entire Service colleges as joint schools until a more thorough analysis of the implications of such a decision and the alternatives, has been completed.¹⁸⁹

The letter suggested the Department of Defense delay long-term decisions until after the results of the PME review being conducted by the Skelton Panel and reiterated that the Goldwater-Nichols Act “did not contemplate converting the Service military education colleges into joint schools.”¹⁹⁰ Based on this letter, the Department of Defense did not make permanent changes but did press forward with its plan to implement joint education pilot programs in AY 1989, but only as an interim solution and did not accredit any entire PME college for joint education. Thus, all graduates of PME colleges

¹⁸⁹ Letter from U.S. House of Representatives Committee on Armed Services to Frank C. Carlucci, Secretary of Defense, 20 June 1988, in *History of Air University, 1 January – 31 December 1988*, Volume III, Part I, p.II-87.

¹⁹⁰ Ibid.

were not accredited as joint nominees; only graduates of joint-track curriculums were accredited.

Criticism of the 24-Week Curriculum Proposal

The Skelton Panel expressed serious concern about ACSC's plan to shorten its program from 40 to 24 weeks during its hearings. During the testimony of General Larry D. Welch, Chief of Staff of the Air Force, the Skelton Panel requested the following questions be submitted and answered for the record:

The Air Force intends to conduct ACSC twice annually. This will reduce the course length from 40 weeks to 24 weeks. If the NDU joint curriculum is taught in the 24 week course as part of the "joint track" what will prevent the essence of ACSC from being significantly altered? Isn't there a body of "Air Force knowledge—doctrine, philosophy, etc." that won't be taught as a result? Will ACSC be able to accomplish its mission?¹⁹¹

The Air Force responded with the following answer:

Yes, the character of ACSC will be changed with the introduction of two classes a year, especially if there is a continuing requirement to provide a joint track. However, reducing the ACSC course has driven a reevaluation of our philosophy for intermediate PME. In addition to a greater emphasis on "war fighting" and a somewhat lesser focus on the "staff" areas, there is an opportunity to incorporate additional joint aspects of war fighting into the course. To accomplish this we plan integration of JSO certifiable instruction, meeting NDU requirements, into the core curriculum received by all ACSC students beginning the summer of 1989.

Further, careful selection of lesson material and integration of joint issues should not significantly diminish the body of Air Force knowledge essential to the intermediate level officer. Joint requirements will not detract from ACSC's ability to accomplish its mission and continue to produce effective and professional officers. There is no doubt, however, that a continuing requirement to cover all the stringent NDU curriculum, stressing detailed training aspects of the Joint Operations Planning System (JOPS), places an increased burden on our planning for the new ACSC program. A follow-on course for JSO candidates to

¹⁹¹ House Committee on Armed Services: *Hearings before the Panel on Military Education*, 100th Cong., 1st and 2nd sess., 1988, 1119-1120.

cover these training details would alleviate this burden and ensure ACSC can retain the essence of airpower necessary for the credibility of Air Force officers selected for joint duty.¹⁹²

Despite its concern during the hearings, the Skelton Panel did not specifically address ACSC's proposed 24-week program in its Report. The Report made only a casual reference to the 24-week ACSC initiative in the context of the proposed one year follow-on course to ACSC. The Report stated, "The panel encourages the Air Force to establish this course in the near future. It also hopes that the course may help the Air Force recognize there is useful material to be studied in a year-long Air Command and Staff College course."¹⁹³

After the Skelton Report was published however, the 24-week ACSC initiative remained a sticking point with Congressman Skelton. Congressman Skelton struck a deal with Air Force Chief of Staff General Larry Welch to delay implementation of the proposed 24-week ACSC program by one year from AY 1989 to AY 1990 to allow more time for Skelton to better understand the Air Force position on the initiative.¹⁹⁴ In June 1989, shortly after publication of the Skelton Report, Congressman Skelton suggested a curricular focus for ACSC to Lieutenant General Ralph Havens, then Commander of Air University that hinted strongly that Skelton did not support a 24-week curriculum at ACSC. Congressman Skelton's proposed curriculum focused on Air Force and Joint Resource Management, Military History and Theory, Airpower in Joint Operations, Joint

¹⁹² Ibid.

¹⁹³ House Committee on Armed Services, *Report of the Panel on Military Education of the One Hundredth Congress*, 188.

¹⁹⁴ Talking Paper on Status of Two Classes Per Year at ACSC, 13 July 1989, in personal files of Mr. Glen Spivey, Director of Educational Services, Air Command and Staff College.

Force Planning, Joint and Combined Operations, an Electives Program, and Research.¹⁹⁵ In his letter, Congressman Skelton told Lieutenant General Havens, “You will probably need 12 months to do this properly. However, if you work the students hard you could probably get it done in 10 months.”¹⁹⁶ That same month, Congressman Skelton sent a letter to Congressman Les Aspin, Chairman of the House Armed Services Committee informing him that Skelton intended to introduce legislation “requiring all intermediate and senior level war colleges to be a minimum of 10 months duration.”¹⁹⁷

Congressman Skelton’s reiterated his concern about ACSC’s 24-week initiative in a September 1989 Air Force Times report. In the report, Skelton said, “The service (Air Force) should focus less on the quantity of officers who attend ACSC and more on the quality of their education...instead of sending more people to ACSC in the shortened course, more should be required to take it through correspondence and seminar.”¹⁹⁸ Furthermore, Congressman Skelton expressed to the Air Force his concern “that a shorter ACSC course would not meet the requirements for Phase I PME” and that “students in a shorter ACSC course would be at a disadvantage with students in a 10-month ISS course.”¹⁹⁹

Congressman Skelton was joined by the Air University Board of Visitors in expressing concern about ACSC’s reduced curriculum plan. During their annual meeting

¹⁹⁵ Letter from Congressman Ike Skelton to Lieutenant General Ralph E. Havens, 23 June 1989, in personal files of Mr. Glen Spivey.

¹⁹⁶ Ibid.

¹⁹⁷ *History of the Air University, 1 January 1989 – 31 December 1990*, Volume III, pp. II-6, KC239.01 V.III Part 1, 1 January 1989 – 31 December 1990, IRIS No. 01115085 in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

¹⁹⁸ John Ginovsky, “Air Command and Staff College length at issue,” *Air Force Times* 6, (September 18, 1989): 18.

¹⁹⁹ Bullet Background Paper on The Skelton Panel, 17 November 1989, in personal files of Mr. Glen Spivey.

at Air University in April 1989, the Board of Visitors noted that any benefits resulting from the new 24-week ACSC program would not outweigh the benefits of the 40-week course. First, the Board noted the 24-week program could encourage students not to bring their families with them, thereby resulting in family separations which negatively impact quality of life for students as well as impacting the traditional social interchange present in the 40-week program. The Board of Visitors also felt that additional efforts should be made in the 24-week program to reserve time for students to reflect and think. Some Board members even felt that the academic pace of the longer ACSC program prevented student burnout and mental fatigue while the shorter course would likely cause student fatigue.²⁰⁰

The Board of Visitor's most pointed criticism of ACSC's 24-week curriculum was directed at the reduction in elective courses. Under the 24-week program, time allotted for elective courses would diminish, negatively impacting the broadening effect of the electives on the students. The Board noted, "In a time when the dangers of a major world conflict seem to be receding in the direction of more diverse and subtle international competition, it strikes many as short-sighted to have national security aspects of the course cut back."²⁰¹

The Air Force finally succumbed to the growing chorus of objections to the 24-week ACSC initiative. Congressman Skelton subsequently withdrew his legislative amendment to the Defense Authorization Act for Fiscal Year 1990 which would have

²⁰⁰ *History of the Air University, 1 January 1989 – 31 December 1990*, Volume I, pp. 18-19, KC239.01 V.1 Part I, 1 January 1989 – 31 December 1990, IRIS No. 01115085 in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

²⁰¹ *Ibid*, 19.

established a 10-month statutory duration for PME schools.²⁰² However, due primarily to Congressman Skelton's and the Board of Visitor's concerns, the Air Force indefinitely postponed implementation of the ACSC 24-week initiative.²⁰³ The initiative has not been raised again.

Incorporation of Skelton Report Recommendations

Academic Year 1989-1990 was the first full academic year for which ACSC had the opportunity to include the Skelton Panel recommendations into its curriculum. The Skelton Report criticized ACSC for a lack of war fighting focus in its curriculum. For AY 1990, ACSC focused its curriculum more toward war fighting at the operational level of war, increased its Professional Reading Program requirement for students, and incorporated Phase I of the Program for Joint Professional Military Education (PJE) into its core curriculum. The separate Joint Specialty Track curriculum was deleted for AY 1990; all graduates of ACSC, beginning with the class of AY 1990, received credit for Phase I Joint Education. Phase II of Joint Education was taught at the Armed Forces Staff College (Today known as the Joint Forces Staff College) in Norfolk, Virginia.

In emphasizing war fighting in its AY 1990 curriculum, ACSC curriculum planners made four significant curricular changes from years past. First, how-to lessons on basic Air Force written staff communications were eliminated in favor of assigning students briefings and papers tied directly to the Warfare Studies curriculum. Second, ACSC eliminated redundancy in basic leadership concepts which are also presented at

²⁰² Talking Paper on Status of Two Classes Per Year at ACSC, 13 July 1989.

²⁰³ *History of the Air University, 1 January 1989 – 31 December 1990*, Volume I, p xxv.

Squadron Officer School in favor of a focus on leadership in command positions. Third, the Warfare Studies curricular area was increased by 113 hours over AY 1989 and included a clearly defined war fighting focus; Sixty percent of the ACSC curriculum was now in the Warfare Studies area. Warfare Studies now included a more thorough study of doctrine, Low-Intensity Conflict scenarios and campaign planning addressing a low intensity threat, addition of a computer war game with a Central European scenario, addition of a rapid deployment exercise featuring a Middle Eastern scenario, and addition of an in-depth study and analysis of an operational level campaign. Moreover, Warfare Studies for AY 1990 increased study of joint force employment through incorporation of joint concepts and principles from the AY 1989 Joint Specialty Track curriculum, and added an operational naval scenario to complement its existing operational land scenario. ACSC's increased staff of sister service faculty were also tasked to write and teach joint operational concepts.²⁰⁴

Another significant change in the Air Force PME system as a result of the Skelton Report was the establishment of the School of Advanced Airpower Studies (SAAS) at Maxwell Air Force Base, Alabama. The U.S. Army had established its School of Advanced Military Studies (SAMS) in June 1983 at Fort Leavenworth, Kansas to provide select Army officers with a one-year advanced education in military operational art and science, and the Skelton Panel was impressed with this effort by the Army to create strategic thinkers. The Skelton Panel encouraged the Air Force to create a similar

²⁰⁴ *History of the Air University, 1 January 1989 – 31 December 1990*, Volume III, pp. II-23, KC239.01 V.III, 1 January 1989 – 31 December 1990, IRIS No. 01115085 in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

course, which was in fact being planned by the Air Force at the time the Skelton Report was published in 1989. Thus, in 1990, the Air Force created SAAS and placed the new school under the jurisdiction of ACSC. SAAS was established as a similar concept to the Army's SAMS. SAAS became a ten-month follow-on course to ACSC for select ACSC graduates with a curriculum focused on military history, theory, and doctrine with an emphasis on airpower. The Air Force planned for approximately 25 students to attend the course annually with the first class beginning in the summer of 1991.²⁰⁵

In 1990, Congressman Skelton asked the United States General Accounting Office (GAO) to examine the efforts of PME schools to implement Panel recommendations from its April 1989 report. The GAO completed its review of ACSC implementation efforts in December 1990, and found that 30 of the 31 Skelton Panel recommendations applicable to ACSC had been implemented or partially implemented. Nine recommendations were partially implemented while 21 recommendations were fully implemented.²⁰⁶ The lone recommendation not implemented was the recommended use of officer efficiency reports instead of training reports to document student academic accomplishments. ACSC had always used training reports to document student performance, and felt its use of training reports was as effective as officer efficiency reports would be, especially since the training reports became part of an officer's

²⁰⁵ *History of the Air University, 1 January 1989 – 31 December 1990*, Volume I, p 69.

²⁰⁶ U.S. General Accounting Office, *Briefing Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives: Air Force Status of Recommendations on Officers' Professional Military Education*, GAO No. NSIAD-91-122BR, Washington, DC: March, 1991.

permanent record. Therefore, ACSC decided not to implement this particular recommendation.²⁰⁷

Six of the 9 partially implemented recommendations dealt with the ACSC faculty, two dealt with students and one partially implemented recommendation concerned active versus passive instruction and the use of student letter grades. For Academic Year 1990-91, ACSC had planned for 65% of its curriculum to be taught using active learning methods, which it defines as time spent studying, researching, writing, and seminar activity, a 14% increase over the 51% active learning methodology noted in the Panel Report.²⁰⁸ In addition, ACSC officials decided to keep its current practice of evaluating student performance and not to implement the part of the Panel's recommendation that suggested the use of letter grades in evaluating student performance because ACSC emphasized operational competence, which they felt was not necessarily captured through letter grades. ACSC kept the following practice of grading student performance:

Superior: Students who exceed the expectations for satisfactory completion of course materials.

Professionally competent/average: Students who satisfactorily meet pre-established criteria for satisfactory comprehension of certain course materials.

Referral/failed: Students who failed to meet criteria established for professionally competence.²⁰⁹

The six partially implemented faculty recommendations concerned faculty teaching Strategy, the mix of military faculty on staff, the percent of military faculty

²⁰⁷ Ibid, 40.

²⁰⁸ Ibid, 37.

²⁰⁹ Ibid.

mix, a faculty development program, faculty-student ratios, and a faculty exchange program with the Air Force Academy. The Panel recommended that faculty teaching Strategy courses include retired three and four-star generals whose experience can contribute significantly to teaching national military and national security strategy. No retired three and four-star generals are permanent members of the ACSC faculty; such officers are invited to ACSC as guest lecturers for specific topics and ACSC elected to continue this practice.²¹⁰

The Panel recommendations concerning the mix of military faculty and percent of military faculty mix are very similar and related. The Panel recommended that faculty representation from each military department at each PME school be “eventually substantially higher than today” and then quantified its ideal military faculty mix as 10% faculty representation from each of the two non-host military departments in a separate recommendation.²¹¹ The reason these Panel recommendations were only partially implemented by ACSC can be traced to the May 1990 implementation of a new military education policy by the Chairman of the Joint Chiefs of Staff. This new military education policy was codified in the Military Education Policy Document (MEPD), a comprehensive document that established policies for coordinating military education for members of the armed forces, with an emphasis on Joint PME. The MEPD also established guidelines for student and faculty mix and ratios, teaching methods,

²¹⁰ Ibid, 16.

²¹¹ *Report of the Panel on Military Education of the One Hundredth Congress*, 82.

curriculum, and accreditation.²¹² ACSC had 5% of its faculty represented by U.S. Army officers and 6% of its faculty represented by U.S. Navy officers for AY 1990-91. These faculty mix percentages were below the Panel's recommended 10% sister service faculty mix, but in line with the MEPD's recommendation of a combined 10% faculty mix from other services. ACSC chose to keep its sister service faculty mix percentages in line with the MEPD.²¹³

The Report recommended the services develop programs to qualify their military faculty members and ensure they are prepared to teach. In the same recommendation, the Panel opposed the practice of retaining service school graduates as faculty members for the following year. ACSC prepared its military faculty members to teach through a faculty development program that included an orientation course and a month-long assignment to Air University's Academic Instructor School (AIS) at Maxwell Air Force Base, Alabama. AIS prepared new military faculty through practical instruction in realistic classroom environments. Additionally, ACSC used weekly faculty development meetings to bring together faculty instructors and curriculum developers to discuss lesson objectives and optimal teaching strategies. However, ACSC decided to keep its practice of retaining 10 – 15% of its graduates each year for faculty duty because the practice “provides for the maximum production of personnel resources and diligent

²¹² *History of the Air Command and Staff College, 1 July 1989 – 30 June 1990*, Volume I, p 54, KC239.07C V.1, 1 July 1989 – 30 June 1990, IRIS No. 01115466 in the USAF Collection, Air Force Historical Research Agency, Maxwell Air Force Base, AL.

²¹³ *Briefing Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives: Air Force Status of Recommendations on Officers' Professional Military Education*, p 18.

expenditures of scarce funds.”²¹⁴ In addition, ACSC officials stated that its graduates are usually experts in their career fields and “exhibit a concern and enthusiasm in faculty positions unlike the more senior faculty members brought in from other assignments.”²¹⁵

Student and faculty ratios were recommended to be in the range of 3 or 4 to 1, low enough to “allow time for faculty development programs, research, and writing.”²¹⁶ When the Panel visited ACSC in March 1988, the ACSC student/faculty ratio was 4.7 to 1. The ratio was reduced by Academic Year 1990-91 to 4.4 to 1 due to the arrival of additional U.S. Army and Navy faculty members. The GAO report noted that with the planned addition of five civilian faculty members for Academic Year 1991-92, ACSC will be able to lower its student/faculty ratio to meet the Panel recommendation.²¹⁷

The final partially implemented recommendation dealing with faculty concerned the recommendation that the services study the feasibility of using faculty members from service academies on an exchange basis to help improve their PME school faculties. At the time of the GAO report, ACSC had one Air Force Academy faculty member enrolled as a student. This former Air Force Academy faculty member was earmarked to remain at ACSC as a faculty member following graduation in Academic Year 1991-92. However, the exchange was only one way as there was no ACSC faculty member teaching at the Air Force Academy due to personnel shortages at ACSC.²¹⁸

²¹⁴ Ibid, 29.

²¹⁵ Ibid.

²¹⁶ *Report of the Panel on Military Education of the One Hundredth Congress*, 168.

²¹⁷ *Briefing Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives: Air Force Status of Recommendations on Officers' Professional Military Education*, p 34.

²¹⁸ Ibid, 35.

The partially implemented recommendations concerning student mix and percentage of student mix are, like that of faculty, similar and related. The Panel recommended representation from each military department in the student body of PME schools and in a separate recommendation, set a representation goal of one officer from each of the two non-host military departments per student seminar by Academic Year 1990-91 and two officers per seminar by Academic Year 1995-96.²¹⁹ For Academic Year 1990-91, ACSC had one U.S. Army student in each seminar, but did not have at least one U.S. Navy/Marine Corps officer in each student seminar. ACSC planned to have one officer each from the U.S. Army and the U.S. Navy/Marine Corps in each seminar for Academic Year 1992-93.²²⁰

Summary

Events during the latter half of the 1980s signaled a new era for PME in the United States. The passage of the Goldwater-Nichols Defense Reorganization Act of 1986, the published report in 1989 of the House Panel on Professional Military Education, and the end of the Cold War in 1989 had significant impact on PME in the United States. Almost no area of PME was left untouched by these events; school structure, curricular focus, teaching methodology, length of academic year, faculty and student issues were all impacted. One of the more heavily impacted schools was the Air Command and Staff College, one of the PME schools that are part of the Air Force's Air University.

²¹⁹ *Report of the Panel on Military Education of the One Hundredth Congress*, 128.

²²⁰ *Briefing Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives: Air Force Status of Recommendations on Officers' Professional Military Education*, p 25.

The Goldwater-Nichols Act came about in response to failed U.S. military operations such as the Vietnam War, the Iranian hostage rescue attempt, and the U.S. Marine bombing in Lebanon. The Act made legislative changes to the function of the Chairman of the Joint Chiefs of Staff and strengthened the ability of the armed services to work together by mandating joint operations, joint education and joint assignments for senior military officers. The Act also created requirements for a Joint Specialty Officer, specially trained and educated in joint matters. Title IV of Goldwater-Nichols forced the Department of Defense to focus its PME system toward joint education and revise the management of officer career paths and promotions. For the first time ever, Congress was dictating curricular focus in United States PME schools.

The Department of Defense began to focus the curriculum of its PME schools toward joint education in the wake of the Goldwater-Nichols Act. PME schools including ACSC implemented a Joint Specialty Track curriculum for a percentage of the student body in order to fulfill the new joint education requirements. The Joint Specialty Track curriculum was short-lived however, due to the recommendations of the House Panel on Military Education.

Congress chartered the House Panel on Military Education in 1987, known as the Skelton Panel after its Chairman, Congressman Ike Skelton, to ensure the mandates of GNA Title IV were implemented and to assess the ability of the U.S. PME system to develop strategic-minded senior officers. The Panel released its report in April 1989 and sent shockwaves through the PME system. The Report pointed out shortcomings in curricular focus, teaching methodology, faculty and student qualifications, and academic

rigor. The Report was critical of all PME schools, but was especially critical of ACSC. In fact, the Panel questioned whether or not the Air Force had thought through the purpose of ACSC. In all, the Panel made 85 specific recommendations to improve the state of PME in the United States. Air University and ACSC officials defended the state of ACSC and other Air Force schools in the wake of the Skelton Report, but also embraced the Panel's recommendations. By December 1990, ACSC had implemented or partially implemented 30 of the Panel's 31 recommendations that applied directly to ACSC.

In addition to the Goldwater-Nichols Act and the Skelton Report, ACSC was busy with minor in-house curriculum changes as well as planning an initiative to reduce the length of its course from 40 to 24 weeks in order to double the number of in-residence graduates annually. After much planning, debate, and criticism, especially criticism from Congressman Ike Skelton, the Air Force indefinitely delayed implementation of its 24-week ACSC curriculum.

The years 1989 – 1992 were marked with significant activity for ACSC. Curricular changes and other initiatives initiated by both internal and external influences kept ACSC faculty and curriculum developers extremely busy. By Academic Year 1991-92, ACSC's curriculum was heavily focused toward war fighting, was more rigorous than in years past, and was certified for Phase I of Joint Professional Military Education. As the decade of the 1990s got underway and with the tumultuous last 4 years behind them, officials at ACSC looked ahead to a period of hopeful curricular stability. What they did not yet know was that changes at ACSC were only just beginning. Colonel John

Warden, who would become arguably the most reform-minded Commandant at ACSC, was on his way to assume the position of ACSC Commandant.

CHAPTER V

THE WARDEN REVOLUTION

The years 1992 – 1995 mark a period of extraordinary change in the history of Air Command and Staff College due to the efforts of Commandant John A. Warden III. Colonel John Warden arrived at Maxwell Air Force Base in August 1992 to assume the position of Commandant of ACSC following a long and successful career as a pilot and commander. When Colonel Warden left ACSC and retired from the Air Force in June 1995, ACSC barely resembled the organization it was before he arrived. Virtually no aspect of ACSC was left untouched.

Colonel Warden moved the curriculum from lecture-based to book and seminar-based and from a fragmented to an integrated curriculum. Warden also significantly altered ACSC's organizational structure to facilitate implementation of his curriculum vision. Colonel Warden's procedural changes included taking the curriculum development process out of the hands of curriculum developers and putting it in the hands of the instructors who would teach the curriculum as well as instituting an open curriculum planning concept for the entire faculty. Additionally, Warden wholeheartedly embraced emerging technology. He was the first ACSC Commandant to issue state-of-the-art laptop computers to all students, link the curriculum with emerging technology, and implement a building-wide computer network. Colonel Warden also tackled facility issues, upgrading existing auditoriums and conference rooms. Even today, officials at

ACSC still refer to Colonel Warden's tenure as Commandant as "The Warden Revolution."²²¹

A Preview of John Warden

Colonel Warden's military biography is impressive. John A. Warden III graduated from the Air Force Academy in June 1965, receiving his commission as a second lieutenant. Warden received his pilot wings in 1966 and subsequently flew 266 combat missions during the Vietnam War in the F-4 fighter and OV-10 Forward Air Control aircraft. Warden's Air Force career after Vietnam spanned nearly three decades and included tours in Italy, Spain, Germany, and the United States. Warden served in a variety of high-profile positions, including Assistant Executive Officer to the Air Force Chief of Staff (1979 – 1981), Commander of a Tactical Fighter Wing (1987 – 1988), Deputy Director for Strategy, Doctrine, and War fighting for Air Force Headquarters at the Pentagon (1988 – 1991), and Special Assistant to the Vice President of the United States (1991 – 1992). Warden also graduated from the National War College and earned a Master's Degree in Political Science from Texas Tech University.

Colonel Warden is perhaps best known for his lead role in formulating the coalition air strategy for the Gulf War in 1991. Colonel Warden had been serving as the Air Force Deputy Director for Strategy, Doctrine, and War fighting at the Pentagon for two years when Iraq invaded Kuwait in August 1990. In this position, Colonel Warden and his staff were uniquely poised to play a pivotal role in formulating the air war

²²¹ The title "Warden Revolution" is a term commonly used to describe the years Colonel Warden was Commandant by faculty at ACSC who either served during Colonel Warden's tenure or are familiar with Colonel Warden's work.

strategy against Iraq. Warden and his staff devised Instant Thunder, the codename Warden gave the air campaign plan ultimately used against Iraqi forces in Kuwait and Iraq. Warden, a Vietnam War veteran, came up with the name Instant Thunder to distinguish his plan from Rolling Thunder, the failed aerial bombardment plan the U.S. used against North Vietnam during the Vietnam War. Instant Thunder was designed to expel Iraqi military forces from Kuwait through sustained strategic air attacks specifically targeting the sources of Iraqi national power. Although Instant Thunder underwent many alterations between its initial draft and final form, Warden's concept remained the centerpiece of the strategic air campaign that was executed during the Gulf War.²²²

Warden conceptualized the enemy as a system, graphically depicted in his Five Rings model shown in Figure 1.

²²² John Andreas Olson, *John Warden and the Renaissance of American Air Power*, (Washington D.C.: Potomac Books, Inc., 2007).

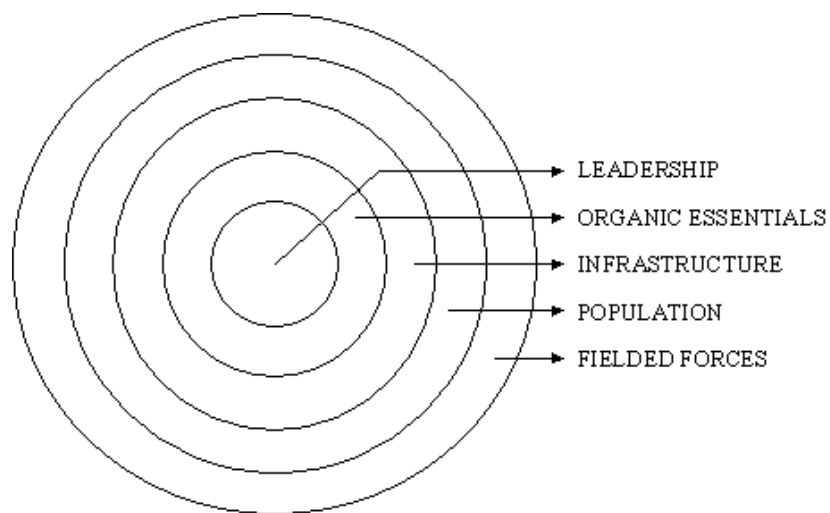


Figure 1. Five Rings Model.

Source: Image taken from John A. Warden III, Col, USAF, "The Enemy as a System," *Airpower Journal* 9, no. 1 (1995): 40-55.

In the model, each ring represents one of the enemy's centers of gravity, which are the elements that are most influential for stable and successful operation of the system as a whole. Leadership is the enemy's government or head of state; Organic Essentials are those materials and processes required for leadership to function; Infrastructure refers to the underlying framework of a country, such as roads and communication networks; Population is the people of a country and fielded forces are the armed forces of a country. The idea is to attack each of the rings to paralyze their forces, an objective also known as physical paralysis. Warden believed total paralysis of an enemy would result by engaging as many rings as possible, with special emphasis on taking out the center ring, which is the enemy's leadership. Warden explained his Five Rings model as follows:

The five rings diagram gives us several key insights. First, it shows us that we are dealing with an interdependent system. That is, each ring has a relationship with all of the others and all play some role. Seeing the enemy as a system gives us enormous advantages over those who see him merely as an army or air force, or worse yet, as some quantity of tanks or airplanes or ships or drug pushers without ever understanding what it is that allows these tanks or ships to operate and for what purpose.

Second, it gives us some idea of the relative importance of each entity contained within a given ring. For example, the head of a drug cartel (the leadership ring) has the power to change the cartel considerably whereas the street soldier (in the fielded military forces ring) assigned the job of protecting a pusher in a back alley can have virtually no effect on the cartel as a whole.

Third, it portrays rather graphically an ancient truth about war: our objective is always to convince the enemy to do what we want him to do. The person or entity with the power to agree to change is the leader in the middle. Thus, directly or indirectly, all of our energies in war should be focused on changing the mind of the leadership.

Fourth, our rings clearly show that the military is a shield or spear for the whole system, not the essence of the system. Given a choice, even in something so simple as personal combat, we certainly wouldn't make destruction of our enemy's shield our end game. *Contrary to Clausewitz, destruction of the enemy military is not the essence of war; the essence of war is convincing the enemy to accept your position, and fighting his military forces is at best a means to an end and at worst a total waste of time and energy.* (Warden's emphasis).

Fifth, and last, the rings give us the concept of working from the inside to the to taking a strategic rather than a tactical approach to winning wars.²²³

Critics of Warden's ideas pointed out that describing an enemy state in terms of the five rings of leadership, organic essentials, infrastructure, population, and fielded forces is obvious and therefore offers nothing new or profound. They also pointed out that Warden's template would not work against non-state actors and may even be inappropriate for some future peer competitor. In addition, critics argued there was no way to prove causality between the five rings since obviously each ring would be

²²³ Ibid, 49.

attacked simultaneously. Others decried Warden's five rings as the type of mechanistic thinking that would inadequately prepare officers for needed critical thinking ability.²²⁴ Warden's plan was not without controversy and his unapologetic advocacy of his ideas won him some enemies among some of the Air Force's top leadership. Tactical Air Command leadership, wedded to a doctrine of close air support to U.S. ground forces, was particularly not impressed with Warden or his strategic air campaign plan and was quick to point out flaws in his plan.²²⁵

Warden was undeterred by criticism and vigorously advocated his ideas, which may have cost him a lead role in finalizing the Gulf War air plan. During the final weeks of planning leading up to the start of the air campaign portion of Operation Desert Storm, Colonel Warden was working in the Pentagon while some members of his staff were assigned to the theater of operations to oversee the final draft of the coalition air plan. Despite this professional slight, Warden was somewhat vindicated by the success of the Gulf War air campaign. In the month-long air campaign which served as a prelude to the 100-hour ground war, coalition air forces inflicted crippling damage to Iraqi forces, which undoubtedly saved lives and established air power as the decisive factor in the coalition's victory over Iraq.²²⁶ General Colin Powell, Chairman of the Joint Chiefs of Staff during the Gulf War, wrote the following about Colonel Warden's air plan:

The Air Force staff quickly came up with an air campaign, the brainchild of Colonel John Warden, a brilliant, brash fighter pilot and a leading Air Force intellectual on the use of airpower... Warden's original plan would undergo

²²⁴ Richard Szafranski, Col, USAF, "The Problems with Bees and Bombs," *Airpower Journal* 9, no.4 (1995):

²²⁵ Phillip S. Meilinger, Col, USAF (Ret.) Forward to *John Warden and the Renaissance of American Air Power*, x.

²²⁶ *Ibid.*

numerous modifications...but his original concept remained the heart of the Desert Storm air war.²²⁷

After the Gulf War, Colonel Warden was not promoted to Brigadier General, although he was eligible. Warden was made Special Assistant to Vice President Dan Quayle for one year following the Gulf War, but again was not promoted. In the summer of 1992, Colonel Warden was assigned to Maxwell Air Force Base to be the new Commandant of Air Command and Staff College, a position that has traditionally been reserved for Brigadier Generals or Colonels who have been promoted to Brigadier General but have not yet pinned on their new rank. By posting Colonel Warden to the position of ACSC Commandant, the Air Force appeared to recognize Warden's value by charging one of the Air Force's leading air power theorists with educating the next generation of Air Force senior leaders. However, Colonel Warden was not promoted during his entire three year tenure at ACSC. When he retired in 1995, Colonel Warden became the first Commandant of ACSC since 1958 to not be a general officer.

Commandant of ACSC

Despite being overlooked for promotion, Colonel Warden accepted his assignment as ACSC Commandant with zeal. Warden brought an unofficial mandate from General Michael Carnes, Vice Chief of Staff of the Air Force with him to Maxwell. Warden recalled that General Carnes told him to fix ACSC because he believed that ACSC was broken and was not producing the caliber of officers the Air Force needed in the post-Cold War era. Moreover, General Carnes felt Graduates of ACSC did not

²²⁷ Colin L. Powell, *My American Journey*, (New York: Random House, Inc., 1995).

possess the knowledge or the ability to think that the Air Force needed, due primarily to a curriculum that was largely irrelevant to the emerging post-Cold War world.²²⁸ For Warden's part, he felt the Air Force was still thinking too tactically and not functioning at a strategic level; his goal was to push airpower in a strategic direction and he saw PME as a key piece of the answer. Specifically, Warden wanted officers to understand the strategic effects of airpower capability, which he felt was especially relevant on the heels of the decisive role strategic air power played in the Gulf War victory.²²⁹ Thus, Warden knew significant changes needed to be made at ACSC, and these changes needed to be implemented right away since he did not know how much time he would have as Commandant. If history was any judge, Warden would not have a lot of time because none of the four Commandants who preceded Warden had stayed at ACSC longer than one year.

Colonel Warden found plenty about ACSC he wanted to change upon his arrival. Right away Warden did not like the curriculum or the curriculum development process. Warden felt ACSC's curriculum was too heavily focused on Russia and the Cold War, lacked rigor, and overall was irrelevant because of the perception he shared with General Carnes that ACSC graduates were not prepared to assume positions of higher responsibility.²³⁰ Warden did not like the fact that seminar instructors did not develop the curriculum nor teach it to students. Warden had inherited a faculty that was assigned either as curriculum developers or seminar instructors. Curriculum developers built the

²²⁸ Interview with John A. Warden III, Colonel, USAF (Ret.), September 14, 2007.

²²⁹ Ibid.

²³⁰ Ibid.

ACSC curriculum in isolation, independent from faculty assigned as seminar instructors, and seminar instructors in reality functioned more as homeroom monitors as opposed to instructors. That is, seminar instructors were handed a curriculum with lesson plans developed strictly by the curriculum developers, brought those lessons into the seminar, and then assigned a student to teach each lesson. Students were then given time to prepare their lesson for presentation to the seminar. The faculty instructor simply facilitated the student-presented lesson by ensuring the seminar stayed on task and then grading the students on how well they presented the lesson.²³¹

One of Colonel Warden's first acts as Commandant was to restructure the faculty organization. Colonel Warden assembled the entire faculty and told them, "This becomes a real school, which means it's going to have a real faculty, and it's going to have a real curriculum. Teachers will teach and students will be students."²³² Thus, Colonel Warden disbanded the existing Directorate of Curriculum and put the curriculum development process in the hands of the instructors who would teach the students. No longer would curriculum developers hand off a curriculum to other instructors to bring into seminar. Now, every faculty member was expected to participate in both curriculum development and teaching. In addition, Colonel Warden decreed that students would no longer present lessons in seminar. Rather, students would spend their time reading, studying, and learning while teaching became the responsibility of instructors. This change challenged faculty members to greatly expand their teaching

²³¹ Interview with Budd A. Jones, ACSC Director of Joint Education, September 13, 2007. Mr. Jones has worked at Air Command and Staff College in Joint Education matters since 1992.

²³² Ibid.

capability because Colonel Warden wanted true, high caliber teachers in ACSC classrooms.²³³ From that time on, being a member of the ACSC faculty meant you were expected to teach the curriculum you helped develop.

A high priority for Colonel Warden was building a world class faculty. He accelerated existing plans to hire more civilian Ph.D.'s onto the faculty and instituted an Advanced Academic Degree (AAD) program to create military faculty with Ph.D.'s. In partnership with the Air Force Institute of Technology (AFIT), ACSC began to select military faculty members to attend civilian university institutions for a three-year tour to acquire doctoral degrees in subjects such as military history, political science, international relations, computer technology, and education. Upon completion of the doctoral degree, officers would return to ACSC as teaching faculty. Colonel Warden would not enjoy the fruits of this program during his tenure due to the time required to get the degree. However, he viewed the program as a long-term investment to increase the quality of the ACSC faculty in line with the Skelton Report recommendation to improve the quality of PME faculty by increasing the number of faculty with doctoral degrees.²³⁴

Organizational Changes

Colonel Warden instituted a major change by significantly altering the ACSC organizational structure he inherited in 1992 (Figure 2). The new organizational structure (Figure 3) went into effect in late spring 1993 after the class of AY 1993

²³³ Interview with John A. Warden III, September 2007.

²³⁴ Ibid.

graduated. Course instructors and curriculum developers were combined under the Dean of Education and Faculty, and administrative management of students, including ACSC's personnel and support functions, were combined under the Dean of Students and Support. The Directorate of Curriculum was disbanded, and three distinct teaching departments were then established under the Dean of Education and Faculty: Command and Strategic Structures Department (DEA), the War and Theater Level Studies Department (DEB), and the War Theory and Campaign Studies Department (DEC). Each department had responsibility for teaching three courses, and together, these nine courses made up ACSC's core curriculum.²³⁵

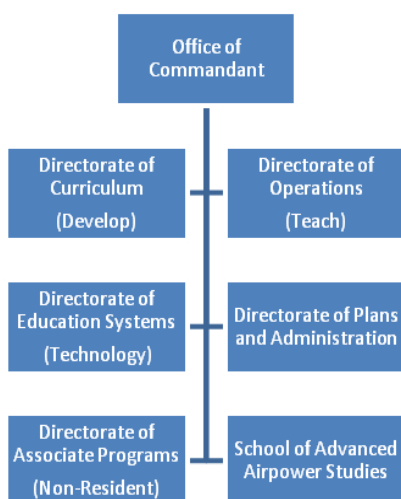


Figure 2. 1992 ACSC Organizational Chart.

Source: *History of the Air Command and Staff College, 1 July 1992-30 June 1993*, Volume I, IRIS no. 01115478 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL., 14.

²³⁵ *History of the Air Command and Staff College, 1 July 1993-30 June 1943*, Volume I, IRIS no. 01115478 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

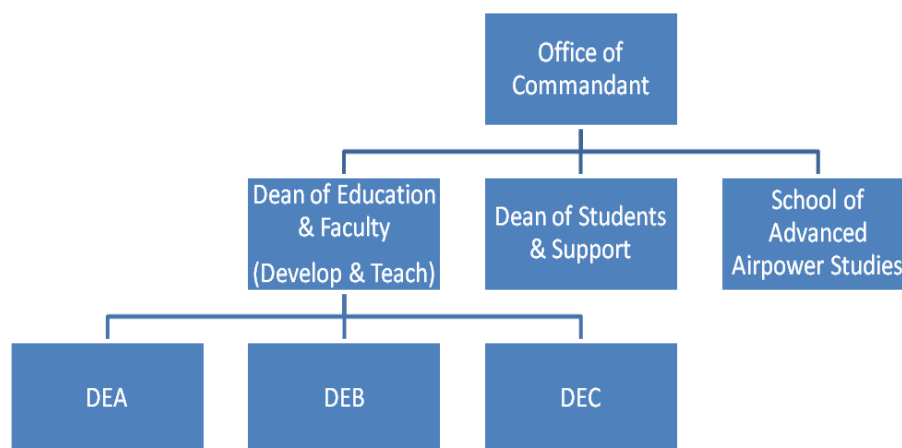


Figure 3. 1993 ACSC Organizational Chart.

Source: *History of the Air Command and Staff College, 1 July 1992-30 June 1993*, Volume I, IRIS no. 01115478 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL., 15.

Under the 1992 organizational structure, the Dean of the Curriculum Directorate managed ACSC's curriculum development personnel spread across three divisions: Command, Communications and Combat Support; National Security Affairs; and Warfare Studies. The Dean of Curriculum was responsible for the creation and coordination of all resident academic programs in direct support of ACSC's academic goals. Faculty members assigned to ACSC as seminar instructors were aligned under the Dean of Operations in the Directorate of Operations. The Dean of Operations was responsible for daily management of activities pertaining to students and seminar instructors, including academic scheduling, evaluation, and the International Officer Program as well as the Spouse Enrichment Program.²³⁶ The new ACSC organizational structure consisted of only three branches below the Commandant instead of six.

²³⁶ Ibid.

Curriculum development and instruction was now combined under one organization. For the first time, curriculum would be developed by those who were assigned to teach it. ACSC Associate Programs was also aligned under the Dean of Education & Faculty, while the Dean of Students and Support absorbed the old Directorates of Education Systems and Plans and Administration. The School of Advance Airpower Studies remained unchanged.

Procedural Changes

Not only did Colonel Warden put the curriculum development process in the hands of teachers, he changed the curriculum development process itself. Warden characterized the curriculum development process as stove-piped when he became Commandant. That is, he felt there was no systematic approach to curriculum development and the individual curricular pieces were not integrated together into an overall curriculum focus. Those faculty members who developed Military History curriculum for example, were concerned only with Military History, and could not explain how their Military History curriculum helped shape an overall curricular focus. Warden believed this stovepipe approach to curriculum development helped create “fiefdoms” within ACSC, which resulted in a fragmented curriculum consisting of individual curricular pieces that may or may not relate to or complement one another. What Colonel Warden wanted was a systematic approach to curriculum development that eliminated fiefdoms and resulted in an integrated and focused curriculum.²³⁷

²³⁷ Interview with John A. Warden III, September 2007.

Colonel Warden's systematic curriculum development methodology began with an all-encompassing, unifying idea and then working backwards so all individual curricular pieces fit into the overall curricular vision. For the duration of Colonel Warden's tenure at ACSC, a strategic Air Campaign would serve as the overall vision that provided the needed curricular focus. This overall curricular vision came from Colonel Warden himself.²³⁸ The success of the air war during Operation Desert Storm had convinced Colonel Warden that future U.S. military leaders needed to be well versed in the planning and execution of a modern strategic air campaign. Thus, planning and executing a strategic air campaign became the centerpiece of Colonel Warden's curricular vision.

Colonel Warden made sure all faculty members were familiar with the new curricular focus. He wanted a faculty that knew the curriculum, its purpose, and how all individual curricular pieces fit together to complement one another. Warden believed it was critical to have a faculty able to think strategically about the ACSC curriculum and its purpose based on his overall vision. Thus, through a concept he called Open Curriculum Planning, Warden periodically assembled the entire faculty in the auditorium and facilitated a discussion on the current state of the curriculum, focusing on "how the faculty thinks the curriculum is going and where we need to go from here."²³⁹

Warden used open planning sessions to garner buy-in from the faculty for his curricular initiatives. At times, open planning sessions were contentious, especially if

²³⁸ Interview with Dr. Jim Forsyth, Colonel, USAF (Ret), September 12, 2007. Dr. Forsyth is the former ACSC Dean of Education and Curriculum. He came to ACSC in 1996 as an instructor is presently serves as the Leadership, Command, and Communications Studies Department Chair at Air Command and Staff College, Maxwell Air Force Base, AL.

²³⁹ Ibid.

some faculty members were not convinced of the value of new ideas. During his interview, Dr. Rich Muller recalled an instance during a session in which someone loudly cried out, “Sir, why are we doing this?!”²⁴⁰ This type of reaction, however, was exactly what Colonel Warden wanted. He used comments and questions from the faculty during open planning sessions as a springboard to debate and discuss the philosophical issues surrounding the current and proposed curriculum. In these large group meetings with assembled faculty, it was impractical to attempt to undertake the smaller tasks associated with curriculum development, such as syllabus design or selection of readings. The details of the curriculum were ironed out in smaller group meetings.

Although Warden hoped for faculty buy-in for his ideas, some remained skeptical. Dr. Muller recounted that faculty members who were intrigued with Warden’s curricular ideas eagerly participated in the smaller group meetings that were held to hammer out the details associated with developing and implementing the new curriculum, while those who remained skeptical adopted a “wait-and-see” attitude. In addition, Dr. Muller mentioned that there was some faculty who felt marginalized because they disagreed with Warden’s ideas and were not on the forefront of implementing new curriculum. These faculty members continued to perform their duties, but they kept out of the limelight. In any case, those faculty members who wished to be involved with the new curriculum taking shape had ample opportunity to do so.²⁴¹

²⁴⁰ Interview with Dr. Richard R. Muller, former instructor, Department Chair, and Dean of Education at Air Command and Staff College, 6 August 2008. Dr. Muller joined ACSC in 1991 as one of the first civilian Ph.D.’s hired in response to the Skelton Report recommendations. He is currently Professor of Military History at the School of Advanced Air and Space Studies at Maxwell Air Force Base, AL.

²⁴¹ Ibid.

Need for Curricular Change

Colonel Warden completely reinvented the ACSC curriculum. He and General Carnes believed that because the Cold War was now over, the ACSC curriculum needed to be re- thought. Neither men believed the current curriculum could simply be tweaked into relevance; the curriculum would need to be completely revamped.²⁴² Thus, Colonel Warden was determined to create a curriculum relevant for future senior military officers and inject significant rigor into that curriculum. However, the timing of his arrival in August 1992, only a few weeks prior to the start of Academic Year 1993, made it impossible to start a new class of students with a completely new curriculum. Warden therefore began his first academic year as ACSC Commandant implementing a curriculum he did not like. Warden determined to do away with the existing curriculum as quickly as he could, and wasted no time in starting planning for Academic Year 1994. In fact, Warden signaled an end to the current curriculum during his introductory briefings with the faculty. Rather than listening to traditional welcome briefings given to new ACSC Commandants, Warden assembled his faculty, reviewed the existing curriculum, explained what he believed was wrong and what he saw as the solution.²⁴³

The curriculum for Academic Year 1993 (Table 4) that Colonel Warden inherited contained a total of 938 hours spread across three core curricular areas, electives, and special programs. The three core curricular areas included Command, Communications, and Combat Support; National Security Affairs; and Warfare Studies. The first curricular area was designed to give students the tools and techniques required

²⁴² Interview with John A. Warden III, September 2007.

²⁴³ Ibid.

to be an effective squadron commander through development of team building and problem solving skills. National Security Affairs was designed to impart an understanding of the complex environment in which military professionals operate, including national security policies and objectives. The third and largest curricular area, Warfare Studies, examined the levels of conflict from low intensity conflict through strategic nuclear war. During this block of study, students were expected to comprehend the unique nature of war through an examination of military theory, airpower theory, and military history.

Table 4. ACSC AY 1993 Curriculum Summary

<i>Core Curriculum</i>	<i>Academic Hours</i>		
	Seminar	Lecture	Total
Area I: Command, Communication, Combat Support	126.75	67.25	194
Phase 1: Profession of Arms	16	12.25	28.25
Phase 2: Staff Communications	26.5	5.5	32
Phase 3: Quality Concepts	6	4	10
Phase 4: Combat Support	53.50	24.75	78.25
Phase 5: Command	24.75	20.75	45.5
Area II: National Security Affairs	68.5	45.25	113.75
Phase 1: US National Security Policy	12.25	7	19.25
Phase 2: Regional Studies: CIS	7	10.75	17.75
Phase 3: Regional Studies: Europe	14.25	3.5	17.75
Phase 4: Regional Studies: Latin America & Africa	14.5	11.5	26
Phase 5: Regional Studies: Middle East & Asia	20.5	12.5	33
Area III: Warfare Studies	322.75	149.25	472
Phase 1: Military History & Doctrine	61.25	31	92.25
Phase 2: Low Intensity Conflict	28.25	24	52.25
Phase 3: Theater Warfare	162	62.25	224.25
Phase 4: Strategic Nuclear Warfare	45	13	58
Phase 5: Space	26.25	19	45.25
Electives (Non-Graded)			48
Evaluation (Counted in phase hours)			23.5
<i>Special Programs</i>			
Commandant's Specials (Guest Speakers)			40
Commandant's Wellness Program			7.25
Orientation			7
Intelligence Briefings			6
Athletics			24
Ceremonies			10
Administrative & Conference Time			16
Total			938

Source: *Air Command and Staff College AY 1993 Curriculum Compendium*, in the official files of Air Command and Staff College, Maxwell Air Force Base, AL., 3.

Overall, the curriculum used a building block approach to broaden students' Air Force perspective with an emphasis on war fighting and related areas. Students began the academic year with an introduction to staff communications, command studies, and national security affairs, which was designed to establish a solid foundation of knowledge on which warfare studies would follow through the end of the year. In addition to the core curriculum, three 16-hour elective courses were offered to allow students the opportunity to pursue areas of interest in greater depth.²⁴⁴ The AY 1993 curriculum was virtually the same curriculum that had been presented to students in AY 1991 and AY 1992. Minor curricular modification occurred in National Security Affairs; Regional Studies were previously grouped together as USSR/Europe and the Developing World, but were then split into the separate areas of CIS, Europe, Latin America and Africa, and Middle East and Asia. Otherwise the curriculum had remained intact for the previous three years.²⁴⁵

During his interview, Colonel Warden stated that he viewed the AY 1993 curriculum as too focused on Cold War issues and out of touch with current strategic thinking on air power.²⁴⁶ He challenged his faculty to think strategically about the curriculum and its purpose. His challenge to his faculty was, "How could we better

²⁴⁴ *Air Command and Staff College AY 1993 Curriculum Compendium*, in the official files of ACSC Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

²⁴⁵ *Air Command and Staff College AY 1991 Curriculum Compendium, Air Command and Staff College AY 1992 Curriculum Compendium, and Air Command and Staff College AY 1993 Curriculum Compendium*, in the official files of ACSC Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

²⁴⁶ Interview with John A. Warden III, September 2007. The Cold War was characterized by military (especially nuclear), political, and social tension between the United States and its allies and the Soviet Union and its allies. Colonel Warden believed that the ACSC curriculum in 1993 was still too much in line with Cold War thinking due to the Regional Studies focus on Russia and Europe, and instruction in nuclear and theater warfare. Moreover, Warden believed far too many seminar lessons in the core courses, primarily Theater Warfare, were trying to solve problems related to defeating the former Soviet Union.

challenge students to deepen their knowledge of operational art in the aerospace domain? Could the core curriculum be enhanced to better address campaign planning skills? Could electives be more focused on campaign planning and executed with more vigor? Could students take a different curriculum entirely?”²⁴⁷ With these questions as a starting point, planning for a revamped ACSC curriculum got underway early in the fall of 1992.

Planning a New Curriculum

Although Colonel Warden’s plans and ideas were met with skepticism and indifference from some of the faculty, a small yet determined group of four faculty members emerged to spearhead the development and implementation of Warden’s new curricular initiative. This group was led by Lt Col Larry Weaver, a graduate of ACSC who quickly climbed the faculty ranks to become Dean of Education and Faculty. Lt Col Weaver was joined by Dr. Richard Muller, a military historian and one of the first three civilian Ph.D.’s hired by ACSC as a result of the Skelton Report’s recommendation to bring more civilian expertise to PME schools, Earl Tilford, a retired Air Force Lieutenant Colonel and military historian, and Lt Col Albert Mitchum. The group extended an open invitation to the rest of the faculty to join them in embracing the opportunity to work real change in the ACSC curriculum, but not everyone did. Some faculty members appreciated what the core group was trying to do and joined the

²⁴⁷ Unpublished briefing slides “Air Command and Staff College: AY 93 Faculty Challenge,” in personal files of Dr. Glen Spivey.

planning effort while some faculty viewed Lt Col Weaver's group a dangerous and elitist "cabal" upsetting a relatively quiet life at ACSC.²⁴⁸

The group met often during the fall of 1992, and met regularly with Colonel Warden for updates and direction. Their goal was to create a more integrated and coherent curriculum aimed at improving the campaign planning skills of students.²⁴⁹ By early October 1992, a new curriculum outline began to emerge in the form of an Air Campaign Course. Colonel Warden was so impressed with the proposed Air Campaign Course and the speed with which the faculty had produced it that he decided to press for a test implementation of the Air Campaign Course in January 1993 after the Christmas holiday break. Many of the faculty was dumbfounded at Warden's goal for a January 1993 implementation, and even the core group was taken back at such ambitious thinking. Nevertheless, Warden pressed ahead with his plan.²⁵⁰

The Air Campaign Course initiative was briefed to the Air University Commander on 15 October 1992. Upon approval from the Air University Commander to implement the test initiative, a final detailed course outline was developed and briefed to the ACSC students on 26 October 1992. The month of November 1992 was spent finalizing the curriculum, assigning faculty instructors to present the new curriculum, and identifying the students who would take the course which was scheduled to begin on 4 January 1993.²⁵¹

²⁴⁸ Interview with John A. Warden III, September 2007; Interview with Dr. Richard Muller, August 2008.

²⁴⁹ Ibid.

²⁵⁰ Ibid.

²⁵¹ Briefing slides "Air Command and Staff College: AY 93 Faculty Challenge"

The Air Campaign Course comprised three instructional blocks and a directed research project totaling 81.5 hours over 12 weeks. The blocks included Air Campaign Planning Process (15 hours), Contextual Elements (32 hours), and Operational Art (31.5 hours). Three hours were set aside for end-of-course evaluation. Five objectives were established for the new course:

1. Comprehend the “Revolution in Warfare”
2. Comprehend Operational Art in the Aerospace Domain
3. Comprehend the Synergistic Contributions of Airpower to Theater Campaign Plans
4. Apply Operational Art in the Aerospace Domain
5. Analyze Examples of Operational Art in all Domains²⁵²

Students began the new course with the Air Campaign Planning Process block, garnering a conceptual framework for a more detailed examination of planning elements. Students were taken through various iterations of what the campaign planning process is and what it should look like. In addition, students examined the nature of revolution in warfare through a case study of the recent Gulf War experience. Next, the Contextual Factors block explored the relevance and significance of various inputs into the campaign planning process, including political, cultural, social, historical, and geographical factors. Students used case studies of past military campaigns to explore the significance of these factors to the planning process. The Operational Art block of instruction delved into the significance of military inputs into the campaign planning process as well as the application of the campaign planning process to non-lethal campaigns. The course ended

²⁵² Briefing slides “Air Command and Staff College: AY 93 Faculty Challenge”

with an application exercise in which students applied what they had learned in designing an actual air campaign plan.²⁵³

Colonel Warden insisted that the Air Campaign Course be about more than just air power. Therefore, the course was an eclectic course, offering an opportunity to think about more than simply putting together an air campaign plan. Warden's idea was not to teach students the art of air campaigning, but rather to teach students a "grasp of strategy from a process standpoint" so students would understand what was involved in creating an overall strategy for war, and then know how to apply air power at the operational level of war against applicable enemy centers of gravity in support of strategic objectives.²⁵⁴

Colonel Warden decided to allow students to volunteer to enroll in the Air Campaign Course rather than make it mandatory for everyone. Volunteering students were made aware of the increased workload they would face the last half of the academic year. Some students refused to volunteer for the new course thinking it would require too much additional study time and thus hurt their chances to earn a distinguished graduate award. Other students were reluctant to volunteer for the new course unless they were guaranteed the benefit of enhanced career opportunities. In his interview, Warden recalled that despite some uncertainty among the student body, "over 100 students out of a class of 580 volunteered to enroll in the new course."²⁵⁵

Students not enrolling in the Air Campaign Course saw no change in their

²⁵³ Ibid.

²⁵⁴ Interview with John A. Warden III, September 2007.

²⁵⁵ Interview with John A. Warden III, September 2007.

academic schedule as they remained with the normal curriculum through graduation. The volunteer students were excused from a portion of the normal curriculum. Faculty members met to determine which elements of the curriculum would be required for all students, particularly those lessons meeting joint education requirements, and which lessons the volunteer students could be excused from. The Air Campaign Course was then scheduled around the lessons deemed mandatory for all students, and volunteer students were excused from lessons deemed not mandatory for all students during the second half of the year. Volunteer students were made aware that they were signing up for a much heavier academic workload than the students opting not to take the new course. In addition to basic coursework in the Air Campaign Course, more responsibility was placed on the volunteer students to read, study, and participate in discussions regarding contemporary strategic thought, all of which required several hours of daily preparation.²⁵⁶

By the end of the first month of the course, Colonel Warden felt the course was accomplishing what he wanted it to, and that this test run proved that the Air Campaign Course was good enough for the entire ACSC student body. Therefore, he directed that planning begin to revamp the entire ACSC curriculum for AY 1994 using the strategic concepts of the Air Campaign Course as the unifying curricular idea from which the new curriculum would be built.²⁵⁷

²⁵⁶ Ibid.

²⁵⁷ Ibid.

New Curriculum Implementation

Implementation of the Air Campaign Course as a pilot program at ACSC coincided with the annual review of Air University's programs and policies by the Air University Board of Visitors (BOV). The BOV's visit to ACSC represented a unique opportunity for an unbiased examination and critique of the new ACSC curricular initiative during its initial trial. BOV personnel talked at length with Colonel Warden, faculty members, and a sample of the student population from both the normal core curriculum and the Air Campaign Course curriculum. The BOV presented its comments and recommendations to Lieutenant General Jay W. Kelly, Air University Commander, on April 30, 1993.

In its report to the Lieutenant General Kelly, the BOV had both positive and cautionary comments concerning the new initiatives at ACSC. The BOV said, "We, the committee, applaud the initiative, think the time to try it is now, and raised what we hope are useful, supportive questions. This change is very demanding on students and faculty, and its success is not a foregone conclusion."²⁵⁸ Feedback from students and faculty to BOV members was positive. The BOV noted,

In discussions with faculty and students alike, the new curriculum was almost universally applauded. It was seen as a move that would put ACSC at the graduate school level and, importantly, challenge and treat the students as graduate students. Students and faculty approached the new curriculum with open eyes.²⁵⁹

²⁵⁸ *Report of the Air University Board of Visitors, 18-21 April 1993*, Volume 49, 1993, in the Muir S. Fairchild Research Information Center, Maxwell Air Force Base, AL, 5.

²⁵⁹ *Ibid*, 6.

Faculty members voiced their approval for their new role in teaching the curriculum they helped develop. The BOV report noted that faculty members “liked the idea of becoming more expert in selected subject areas” and “welcomed being more in a teaching role rather than constantly watching and evaluating students.”²⁶⁰ Lastly, the BOV underscored three challenges they believed ACSC would face as it further refined its new curriculum. The first was to ensure that a sense of jointness is created and sustained throughout the campaign planning model, taking care to ensure that the land and sea service components were given the opportunity to inject their views and contributions. Secondly, the BOV cautioned that evaluation methods for the new curricular model must be perceived as comprehensive and fair. The third challenge dealt with slower students. The BOV noted that the new curriculum was fast-paced and fraught with ample opportunities for some students to be left “hopelessly behind.” To prevent this occurrence, the BOV recommended ACSC describe the curriculum up front to students and suggest preparation such as computer literacy, and then carefully track student progress to determine if any students were becoming overwhelmed.²⁶¹

The BOV report was well received by Air University and ACSC. Colonel Warden and his core faculty group were satisfied that the Air Campaign Course pilot program demonstrated that this was the curricular direction they needed to pursue to make the ACSC curriculum more relevant and rigorous. The new curriculum had survived its experimentation phase and was now the centerpiece of a completely new curriculum which took final shape during the summer of 1993. In the wake of the

²⁶⁰ Ibid.

²⁶¹ Ibid, 7.

successful Air Campaign Course and to launch the curriculum planning effort for the final AY 1994 curriculum, Colonel Warden convened an open planning session with his faculty to ensure everyone understood the key considerations which were at the root of such a significant curricular change.

Colonel Warden did not base his curricular ideas on any formal educational or curriculum theory. Warden recalled that educational and curriculum theories or models were not part of any curriculum discussions with the faculty or his superiors. He recognized that ACSC was teaching adults, but did not consciously attempt to develop curriculum in the context of any formal educational theoretical setting²⁶². Instead, Warden talked about the future world environment, technology in the learning process, and the dominance of air power. He told his faculty and staff that ACSC graduates will serve in one of the most revolutionary periods in history based on current geopolitical realities and the military technical revolution demonstrated during the Gulf War. Even the rate that the world is changing is accelerating. Success in the future demands mental agility and top-down thinking versus bottom-up thinking, and students needed to be able to think like an architect as opposed to a bricklayer. Warden stressed that there is not enough time to teach all the basic knowledge students need to know, so his faculty must synthesize and integrate knowledge at a higher level and then teach at that level. In addition, technology had progressed significantly and that ACSC needs to do better to utilize technology when teaching students. Warden relayed his belief that air power promised to be the dominant military force in the foreseeable future, but its successful

²⁶² Interview with John A. Warden III, September 2007.

application must be carefully considered. Thinking about air power capabilities should be approached from the strategic level through the operational level then down to the tactical level. Students needed to be able to think about “food bombs” as easily as they think about “iron bombs,” and must understand that every bomb dropped has political as well as military implications.²⁶³ Most of the faculty supported Warden’s efforts. Even if they had reservations about Warden’s ideas, a lot of the faculty was glad to be a part of raising the bar academically and making ACSC more rigorous.²⁶⁴

Changes for AY 1994 included a new and rigorous student reading list, a laptop computer for each student, shorter class day for students, and a re-vamped curriculum (Table 5). The strategic concepts of the initial Air Campaign Course were integrated and woven throughout all courses. A lot of thought and hard work went into developing this new curriculum. During faculty development sessions in preparation to teach the new curriculum, ACSC instructors Lt Col Albert Mitchum and Dr. Lewis Ware presented the following rationale for the new curriculum to the faculty:

²⁶³ *History of the Air Command and Staff College, 1 July 1993 – 30 June 1994*, Volume I, IRIS no. 01115478 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

²⁶⁴ Interview with Dr. Richard Muller, August 2008.

Table 5. ACSC AY 1994 Curriculum Summary

<i>Curriculum</i>	<i>Lecture</i>	<i>Seminar</i>	<i>Academic Hours</i>
Overview	4.25	7.75	12
Professional Skills	6.25	41.75	48
War, Conflict, and Military Objectives	10	14	24
Military Theory	30.5	24	54.5
Strategic Structures	36.50	43.75	80.25
Operational Structures	54.5	46	100.5
Campaign Concepts	17	30.5	47.5
Air Campaign	15	89	104
Campaign Termination	8.5	12	20.5
Campaign 2000+	24	15	39
Wargames		80	80
Total Academic Hours			610.25

Source: *Air Command and Staff College AY94 Curriculum Plan*, in the official files of Air Command and Staff College, Maxwell Air Force Base, AL., 5.

Like an inverted pyramid, this new curriculum will begin with large conceptual issues of politico-military operations and ends in practical case studies. In these case studies, students will apply their knowledge and practice application of air power to carefully selected case studies at the operational level.

The new curriculum has been conceived as a whole. Care has been taken to integrate the instructional blocks. As the curriculum progresses, the students should experience an intellectual flow of ideas and at any point be able to relate their current studies to any other concept previously covered in the course. The past division of the curriculum into discrete segments of study with arbitrary boundaries will be removed in favor of a yearlong continuum. Instructors will assist the students by performing multiple functions throughout the course in accordance with their expertise.²⁶⁵

Each course was designed to build on the knowledge gained in the previous course. In Professional Skills, students gained a broad background in the skills needed to be a successful commander, the tools to succeed in developing a quality culture in Air

²⁶⁵ P. Mason Carpenter and George T. McClain, "Air Command and Staff College Air Campaign Course: The Air Corps Tactical School Reborn?," *Airpower Journal* 7, no. 3 (1993): 50.

Force organizations, communication skills such as official writing and public speaking, basic computer literacy skills, and joint doctrine. In Military Theory, students were exposed to classical military theory from Sun Tzu to Clausewitz to the rise of modern warfare. During War, Conflict, and Military Objectives, students studied the motives and causes of war, objectives of war, various actors and levels of conflict. The Strategic Structures block explored a nation's instruments of power, strategy analysis, Warden's Five Rings model, and center-of-gravity analysis. The Operational Structures block focused on analyzing a military force, its center-of-gravity, and developing military objectives. Included in this block was a study of current and future military threats. The Campaign 200+ course took a long look into the future and challenged students to consider what kind of force would be needed to build a campaign in the 21st century. The Air Campaign block taught students to apply operational art in the aerospace domain through the use of air and space power in support of national and military objectives. Finally, the Campaign Termination course helped students understand the concepts of war and campaign termination and the military's role in the transition to peace. Woven throughout these courses were various computer-generated war games and exercises designed to provide students with a broad array of scenarios to practice the ideas and concepts learned.²⁶⁶

The new curriculum contained over 300 fewer hours than the previous year's curriculum. This reduction in contact hours was a deliberate action by Colonel Warden in order to reduce the amount of time students were in class each day and allow more

²⁶⁶ *History of the Air Command and Staff College, 1 July 1993 – 30 June 1994, Volume I.*

time for reading and studying. Under the new curriculum, students would spend an average of 3 to 4 hours in class rather than the traditional 6 to 7 hours. The resulting time was to be spent reading and studying; in short, students were to spend their time being students. Students would need the extra time to successfully navigate Warden's new reading list.

A 100-book reading list was instituted for AY 1994, a 400% increase in required reading over the previous year.²⁶⁷ In prior years, the reading load for ACSC students had been light. The amount of required reading had been increased after the publication of the Skelton Report, but the reading load was still not very rigorous.²⁶⁸ In fact, when Dr. Richard Muller, a military historian and one of the first civilian Ph.D.'s hired at ACSC, joined the faculty in 1991, he was aghast at the lack of required academic reading. Muller began requiring his students to read *The Patterns of War since the Eighteenth Century* by Larry Addington in order to "at least have them [students] read a real book."²⁶⁹ Colonel Warden was determined that ACSC students complete a rigorous reading program in military and aviation literary works while at school. Books were selected via a committee of faculty who met with Warden to propose books and discuss their merits. Colonel Warden reserved final authority over the list, but generally approved books recommended by faculty members.²⁷⁰ Additionally, students were able to keep the entire set of books issued to them to add to or start their own professional

²⁶⁷ Ibid.

²⁶⁸ Interview with Dr. Richard Muller, August 2008.

²⁶⁹ Ibid.

²⁷⁰ Ibid.

reading library. Faculty members also received a copy of each book. The reading list for AY 1994 is listed in Appendix B of this study.

In order to accommodate faculty and students in the new shortened academic day, Colonel Warden instituted a two-mix student system. In the two-mix student system, approximately half the student body attended class during the morning hours, and the other half of the student body attended class during afternoon hours. While not in class, whether it was morning or afternoon, students were expected to spend their time reading, studying, and preparing for seminar discussions. This split system of class attendance is still in use today.

Colonel Warden firmly believed in the educational utility of emerging technology. Thus, technology played a central role in the changes sweeping ACSC during Warden's tenure as Commandant. Colonel Warden had the entire ACSC building wired for a computer network. All computers in the building were able to access this network. Beginning with the class of AY 1994, every student at ACSC was issued a personal laptop computer upon arrival. Warden believed that if today's officers were compared with cavalry officers of old, the laptop computer would be their saber.²⁷¹ Seminar rooms were also equipped with new computers. While in seminar, students and faculty had access to the ACSC computer network. Students were able to access many of the administrative functions associated with the curriculum, including class schedules, lesson plans, e-mail, and a new Electronic Bulletin Board used as a communication tool

²⁷¹ Interview with John A. Warden III, September 2007.

for students and faculty. Auditoriums and conference rooms were also equipped with computers.²⁷²

Colonel Warden needed a significant influx of money above and beyond ACSC's normal budgetary allocation in order to fund his technological building upgrades and providing each student with 100 books and a laptop computer. Fortunately for Warden, he had high-level support in the Pentagon. Air Force Vice Chief of Staff General Carnes provided \$395,000 to ACSC for the initial book buy and an additional \$4,000,000 for the initial technology purchase. This money was in addition to the \$1,827,281 distribution of funds ACSC received for its normal operations.²⁷³ General Carnes was an avid supporter of Colonel Warden's new initiatives at ACSC. General Carnes visited ACSC several times during Colonel Warden's tenure to get a first-hand look at the progress being made and was generally pleased with what he saw.²⁷⁴

Another part of Colonel Warden's efforts to move ACSC forward included changing the school's mission statement. Ironically, ACSC adopted a new mission statement just three months before Colonel Warden's arrival as Commandant which read, "To produce officers who understand the profession of arms, the requisites of command, the nature of war, and the application of aerospace power at the theater level of war."²⁷⁵ Colonel Warden changed the school's mission statement to read, "To educate mid-career officers to develop, advance, and apply air and space power in peace and

²⁷² *History of the Air Command and Staff College, 1 July 1993 – 30 June 1994*, Volume I.

²⁷³ *Ibid.*

²⁷⁴ Interview with John A. Warden III, September 2007; Interview with Dr. Richard Muller, August 2008.

²⁷⁵ *History of the Air Command and Staff College, 1 July 1991 – 30 June 1992*, Volume I, IRIS no. 01115473 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

war.”²⁷⁶ Colonel Warden felt this new mission statement more accurately reflected the new direction of ACSC.²⁷⁷

Feedback from students and faculty during AY 1994 was mostly positive concerning the new curriculum. Colonel Warden was pleased with the new curriculum and recognized that his faculty had worked extremely hard to develop and implement an entirely new curriculum in a very short period of time. Thus he decided to give students in the class of AY 1995 the exact same curriculum as AY 1994. This gave the faculty time to catch their breath and make minor adjustments and refinements to the new curriculum, including updating the student required reading list and building new case studies around current world events. The reading list for AY 1995 was updated to include 104 books, which is shown in Appendix 6 of this study. The major critique of the new curriculum came from Air University officials who found shortfalls in the subject area of Command stating,

The lack of emphasis on command and leadership and introduction of subject material that provided little comprehension improvement with an underlying quasi-subliminal philosophy that technology was the solution to leadership problems. This caused the subject of Command to be relegated to the back burner and usurped by other activities.²⁷⁸

Despite such critique, Colonel Warden felt the new curriculum gave students more than adequate exposure to the concept of command and pressed ahead with minor curricular refinements.²⁷⁹

²⁷⁶ *History of the Air Command and Staff College, 1 July 1993 – 30 June 1994*, Volume I.

²⁷⁷ Interview with John A. Warden III, September 2007.

²⁷⁸ *History of the Air Command and Staff College, 1 July 1994 – 30 June 1995*, Volume I, K239.07C, IRIS no. 01121217 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

²⁷⁹ Interview with John A. Warden III, September 2007.

Warden saw the changes taking place at ACSC as a renaissance of the old Air Corps Tactical School (ACTS). In the inter-war years between World War I and World War II, the ACTS was at the forefront of emerging airpower theory and provided the blueprint for strategic bombing that the U.S. and its allies used to defeat Germany and Japan during World War II. Colonel Warden had a long-held belief that there was no good reason Air University could not once again be on the forefront of ground-breaking work in airpower theory like during the heyday of ACTS. He believed his Air Campaign course curricular model was doing important work in the field of airpower theory by providing a laboratory for strategic and innovative thought from some of the brightest minds in the Air Force and sister services.²⁸⁰ Several of the faculty agreed with Colonel Warden's assessment and were proud to see ACSC raising the academic bar.²⁸¹

Other Curricular Influence

The years 1993 and 1994 were eventful ones for the U.S. military involved in military operations other than war (MOOTW) in Somalia, Haiti, and the Persian Gulf. The United States was learning some hard lessons in the area of peacekeeping with the Black Hawk helicopter shoot-down and ensuing battle in Mogadishu, Somalia and the accidental shoot-down of a helicopter by Air Force fighter jets patrolling the skies over Iraq. In July 1994, the Chairman of the Joint Chiefs of Staff directed the services to take action to "apply the lessons learned" in recent peacekeeping operations.²⁸²

²⁸⁰ Ibid.

²⁸¹ Interview with Dr. Richard Muller, August 2008.

²⁸² *History of the Air University, 1 January 1993 – 31 December 1996*, Volume I, K239.01, IRIS no. 01128551 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL, vi.

Air University in turn directed its schools to include lessons in peacekeeping operations in their curriculum for AY 1995. All Air University schools included some form of MOOTW and peacekeeping in their curriculum, each developing their own level of instruction. ACSC revised some existing lesson plans and implemented new ones where appropriate to explore MOOTW, including using the Black Hawk incident in Somalia as a case study.²⁸³

Colonel Warden's Departure

The Warden Revolution at ACSC officially came to an end on August 8, 1995. On that day, Colonel Warden turned command of ACSC over to Brigadier General-select John W. Brooks and then retired from active duty with over 30 years of service. Air Force Chief of Staff General Ronald R. Fogelman traveled from Washington D.C. to Maxwell Air Force Base to preside over Colonel Warden's retirement ceremony. Colonel Warden was awarded the Air Force Distinguished Service Medal for his service to the United States as a commander, air campaign architect for the Gulf War, and visionary educator.²⁸⁴

Summary

In the span of three years, ACSC experienced some of the most profound changes to its educational program since the school's 1946 inception. Colonel John A. Warden III became ACSC Commandant in August 1992, and when he retired in 1995, ACSC hardly resembled the organization he inherited. Colonel Warden completely

²⁸³ Ibid.

²⁸⁴ *History of the Air Command and Staff College, 1 July 1994 – 30 June 1995*, Volume I.

changed the school's processes, procedures, organizational structure and academic curriculum. Warden's influence on ACSC is remarkable, and his tenure as Commandant is still known today as the Warden Revolution.

ACSC was entering a new era when Colonel Warden arrived. The scathing criticism of PME institutions, especially ACSC, from the 1989 Skelton Report led to new requirements for joint education and a reevaluation of educational programs. ACSC had made some progress in injecting more rigors into its curriculum, modestly increased its required reading, and had successfully met the new joint education requirements as outlined in the Skelton Report. However, ACSC was still far from the rigorous and robust PME institution envisioned by the Skelton Report. There was a sense among some of the Air Force's top leadership that ACSC had not fully embraced the curricular significance of the recent Gulf War, demise of the Soviet Union and end of the Cold War. Clearly, ACSC was at a crossroads.

Warden was an ideal choice for ACSC Commandant at this pivotal time. ACSC needed a leader who could re-establish ACSC as a premier PME institution and guide the school through the uncertainty of the emerging post-Cold War world. Warden, a strategic thinker and recent architect of the Gulf War air campaign plan, brought innovative ideas and a tireless work ethic with him to ACSC. Within weeks of his arrival, Warden had outlined his plan to reform all aspects of ACSC.

Virtually no area of ACSC was left untouched. Warden moved the curriculum from heavily lecture-based, non-integrated blocks of instruction to a heavily book and seminar-based, horizontally integrated curriculum built around the problem-solving

methodology of a theater campaign at the operational level of war. All joint education requirements were met or exceeded. He changed ACSC's organizational structure to reflect his new curriculum strategies by combining curriculum development and course instructors under a new Dean of Education and combined all administrative management of students, personnel, and support functions under a new Dean of Students and Support. Curriculum development and course instruction were no longer separate entities; now faculty who developed curriculum would teach that same curriculum. Students no longer had a role in seminar instruction; students' only responsibility was to learn.

Warden restructured the class day; students now spent 3-4 hours in class either in the morning or afternoon and the rest of the day studying and reading books from a rigorous list of 100+ books which students kept as part of their professional reading library. Emerging technology was a centerpiece of Warden's effort. ACSC was completely wired with a new computer network and all students were issued laptop computers to access the computer network while in seminar. Many curricular functions were placed on the network including class schedules, lesson plans, e-mail, and a new Electronic Bulletin Board. Computer capability was also placed in conference rooms and auditoriums.

Colonel Warden initiated programs to create a world-class faculty. He instituted an open planning concept to involve all faculty members in thinking strategically about and having a voice in the curriculum. By getting everyone involved in curriculum development, those more skilled in curriculum planning or subject matter could teach the others, resulting in better trained curriculum instructors more comprehensively prepared

in the subject material. In addition, a program was initiated in partnership with the Air Force Institute of Technology (AFIT) in which select military faculty members were sent to civilian institutions of higher learning for doctorate degrees and then brought back to ACSC to teach. More civilians with Ph.D.'s were hired as well.

The scope and speed of Warden's changes caused significant turmoil for faculty and students. The Warden Revolution was a very turbulent period with respect to curriculum development, leadership, and administration. In a very short period, ACSC had undergone dramatic and substantial change, some of which are still in effect today. Faculty and students responded well and worked harder than they ever had before. Feedback regarding his changes was mostly positive, and Colonel Warden retired after three years as Commandant satisfied that ACSC was back on track.

Normally, retiring Colonels in the Air Force do not receive the level of honor afforded Colonel Warden when he retired. Having the Chief of Staff preside over a retirement ceremony is almost always reserved for general officers. The fact that General Fogelman made a special effort to preside over Colonel Warden's retirement ceremony is a clear signal John Warden was no ordinary Colonel. Warden's legacy at ACSC is legendary. In the span of three years, ACSC had come out of the shadows of the Skelton Report criticism and was a premier PME institution on the forefront of current airpower thought and discussion.

CHAPTER VI

AN ERA OF EVOLUTIONARY CHANGE

ACSC entered the post-Warden era in need of a breather. The magnitude and rate of change during Warden's tenure had taken a toll on the faculty, and they looked forward to a time of relative stability.²⁸⁵ For the first five years after Colonel Warden retired, improvements in all facets of ACSC continued, but the magnitude and pace of change slowed considerably. Between 1996 and 2001, ACSC was led by four different Commandants: Brigadier General John W. Brooks (1995-1996); Brigadier General Jerry M. Drennan (1996-1998); Brigadier General John W. Rosa (1998-2000); and Brigadier General John T. Sheridan (2000-2002). However none of these officers instituted changes as revolutionary as Warden had made. This is not to say the Commandants during this period did nothing; rather, the changes to ACSC incorporated during this period were more measured and their implementation smoother. This period is characterized by gradual, continuous refinement that brought maturity to ACSC's curriculum, organizational structure, and processes. Dr. Richard Muller, who served in the positions of Department Chair, Vice Dean for Academic Affairs and Dean of Education and Curriculum during this period, referred to this period of ACSC history as "years of evolution, not revolution."²⁸⁶

During this period, ACSC introduced a structured system of curriculum development, methodically realigned its organizational structure, further refined its

²⁸⁵ Interview with Mr. Budd Jones, September 2007.

²⁸⁶ Interview with Dr. Richard Muller, August 2008.

curriculum and academic structure, and received approval to grant master's degrees to its graduates. World events and directives from Air University and the Department of Defense continued to influence curricular refinement and technological curriculum applications expanded exponentially. The curriculum continued to rest on an extensive reading program and an active, participatory learning environment. The timeframe 1996 – 2001 is significant for its evolutionary changes and improvements to ACSC that resulted in a maturing of its development procedures, organizational structure, curriculum content, and academic structure.

Procedural Changes

After Colonel Warden's departure, new curriculum development procedures were instituted. The new procedures were designed to put more structure into the curriculum process, ensure integration of all parts of the curriculum, and reduce redundancy among the courses. One of the first of Colonel Warden's initiatives to end was open curriculum planning sessions. The faculty no longer gathered in the auditorium with the Commandant to hammer out curriculum content. A side effect of this change was that course content began to drift, i.e., specific course content was not confined to one course.

With little oversight from the Commandant or the Dean, course directors felt free to break out of the strict curricular guidelines that were present under Colonel Warden. Thus, course directors built course content as they saw fit, and with no formal curriculum approval process in place, students often were presented the same subject matter in different courses. According to Dr. Muller, "In the absence of a Commandant

who was as interested in the curriculum, or a Dean who was fired up about curricular matters, the course content began to drift. Some of the courses began to get into each other's lane."²⁸⁷ By getting into each other's lane, Dr. Muller was referring to separate courses covering the same topics. Dr. Muller recalled that topics that were considered particularly interesting or "fun to teach" started being "poached by earlier courses, making the later courses look like summer reruns."²⁸⁸ For example, several separate course directors may all decide to incorporate a case study of Linebacker II, the strategic bombing campaign of North Vietnam by the United States in 1972, in their course. Students thus study Linebacker II during multiple courses, and the course that is offered later in the year appears unoriginal and no different than previous courses in the eyes of students. In this case, Linebacker II is the course content, and it "drifted" across several courses in the curriculum. No formal procedure existed through which the entire curriculum was vetted in order to prevent this type of curriculum drifting from occurring.

To combat this curricular drifting, Colonel Tommy D. Dickson, Dean of Education and Curriculum, instituted a curriculum advisory committee called the Core Curriculum Review Committee (CCRC) during Academic Year 1996-1997²⁸⁹. The CCRC implementation was spearheaded by Lieutenant Colonel Jim Forsyth and Dr. Rich Muller, who were serving as Chairs of the Command and Strategic Structures Department (DEA) and the War Theory and Campaign Studies Department (DEC)

²⁸⁷ Ibid.

²⁸⁸ Ibid.

²⁸⁹ *History of the Air Command and Staff College, 1 July 1996 – 30 June 1997*, Volume I, K239.07C v.1, IRIS no. 01121221 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

respectively. Lieutenant Colonel Forsyth arrived in 1996, becoming one of the first active duty military instructors at ACSC to hold a Ph.D. He had served as an instructor at the Air Force Academy, was a seasoned educator, and held a doctorate in International Relations. Lieutenant Colonel Forsyth proved instrumental in shaping ACSC curriculum and processes in the years after his arrival.

During his interview, Forsyth recalled, that, upon his arrival to ACSC, his assessment of the curriculum was, “We have a lot of courses that are doing the same thing. We are teaching aspects of Warden’s Five Rings of the Air Campaign Planning Model in at least three different courses.”²⁹⁰ In the fall of 1996, Lieutenant Colonel Forsyth and Dr. Rich Muller began to meet regularly for lunch and discuss the state of the curriculum. During one of these lunch meetings, Forsyth recalled, he told Dr. Muller, “You know, what we need is a way to institutionalize this [curriculum planning] stuff.”²⁹¹ Forsyth and Muller began to meet with Lieutenant Colonel Mark Brown, Department Chair for DEB, and the Dean Colonel Dickson to discuss formalizing the curriculum development process. From this beginning, the CCRC process was born.

Prior to the CCRC initiative, curriculum planning was decentralized. The Dean of Education talked with course directors and department chairs on matters related to the curriculum, but it was an ad hoc system. Course directors made course proposals directly to the Dean of Education, and other course directors and department chairs were often unaware of what their counterparts were doing.²⁹² The CCRC centralized the curriculum

²⁹⁰ Interview with Dr. Jim Forsyth, September 2007.

²⁹¹ Ibid.

²⁹² Interview with Dr. Kevin Holzimmer, September 2007. Dr. Holzimmer is a former ACSC instructor and course director. He currently serves as ACSC Vice Dean for Academic Affairs.

planning and development process for ACSC by allowing the Dean and all department chairs visibility into the entire curriculum so course content could be de-conflicted, redundancy eliminated, and curriculum delivery methods reviewed. In addition, the CCRC ensured mandatory external guidance was incorporated into the curriculum as well as provided strategic guidance to facilitate future curriculum development.²⁹³ Members of the CCRC included the Dean of Education, the Vice Dean for Academic Affairs, Department Chairs, and course directors. Course directors built their courses based on guidance received, and then presented their course plan to the CCRC, who in turn approved or dictated changes to the course. Once approved, the CCRC presented the curriculum to the Commandant for final approval.

ACSC officially codified the CCRC as its “primary mechanism for recommending changes to the content and structure of the resident curriculum” and to accomplish six tasks:

Sets strategic objectives and lays out guidance regarding how each course contributes to the total ACSC curriculum.

Makes broad recommendations on overall curriculum direction, scope, and content, as well as more specific recommendations concerning each course’s scope, content, readings, instructional methodology, and technology materials.

Reviews lesson by lesson proposals developed by the course directors as well as extensive supporting documentation, to include student critiques.

Develops guidance which is then communicated to the course directors who then revise their proposals.

Reviews final proposals, which then proceed to the Dean of Education (DE) and Commandant (CC) for approval. The department chair and course director then proceed with the development and execution of the course.

²⁹³ *History of the Air Command and Staff College, 1 July 1995 – 30 June 1996, Volume I.*

Is accountable to the DE and through the DE to the ACSC senior leadership.²⁹⁴ During 2004, the CCRC was renamed the Educational Program Committee (EPC), and today is known as the Corporate Council (CC). Although its name changed, its function did not: de-conflict course content, reduce curricular redundancy, and ensure the curriculum contained mandatory guidance. While ACSC formalized curriculum planning, Air University formalized its method of providing curricular guidance to its schools by establishment of the Air University Continuum of Education and Strategic Guidance (CESG).

Air University Continuum of Education

In January 1997, Lieutenant General Joseph J. Redden, Air University Commander, met with his senior leaders to map the future course of Air University. At this meeting, Air University leadership determined that one of its most important tasks was to develop a continuum of education that integrated curriculum across all Air University schools. Lieutenant General Redden chartered a planning committee called the Continuum of Education Group to explore a start-to-finish, i.e., from the time of commissioning through retirement, approach to educational development for Air Force personnel that would “provide students [of Air University schools] with the right information at the right time in their careers.”²⁹⁵ The group examined how Air University schools taught their curriculum and how that curriculum was integrated

²⁹⁴ *Air Command and Staff College AY 1998 Curriculum Plan*, 10, in the official files of the Office of the Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

²⁹⁵ *History of the Air University, 1 January 1999 – 31 December 1999* Volume I, K239.01 v.1, IRIS no. 011 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

throughout an officer's career. The group sought to determine if the military education an officer received was at the appropriate stage in his or her career and whether that education was directed toward an appropriate goal. The group produced the Air University Continuum of Education Strategic Guidance (CESG). The goal of the continuum was integrate curriculum implementation across all Air University schools and to ensure an officer received the appropriate military education at the appropriate stage of his or her career.

Air University defined the continuum as “a set of courses and programs all officers are expected to take as they progress through a career.”²⁹⁶ The courses and programs represented in the continuum were tailored to the different levels of PME and designed to reduce redundancy in the courses officers were taught as they progressed in their careers through Air University schools (Figure 4). The continuum “linked levels of learning and breadth and depth of core curriculum content so each course, school, or program builds on the knowledge gained at the previous level.”²⁹⁷ Air University dictated core curriculum areas its schools must address through the CESG, and the schools then built curriculum in that core area tailored to their own level of emphasis. For example, ACSC emphasized the operational level of war for the core areas while AWC emphasized the strategic level of war.

Implementing the CESG took two years because Air University understood the implications such an initiative would have on the future of Air Force PME. Thus, General Redding ensured the Continuum of Education Group was not rushed into rash

²⁹⁶ Ibid, 124.

²⁹⁷ Ibid.

decisions. In his charter to the Continuum of Education Group, General Redden wrote, “Establishing the Continuum of Education is vitally important to Air University’s future and will take maximum time and effort.”²⁹⁸ The Air University Board of Visitors (BOV) fully supported the initiative. The BOV called the CESG concept “an excellent step in improving PME” because they believed “there is a lack of continuity and cohesiveness with the professional military education provided officers even though discrete components are outstanding.”²⁹⁹

The BOV also recognized that the CESG concept was a work in progress and that “as this concept is introduced, it will be important to stress the need for senior leadership commitment.”³⁰⁰ The BOV believed Air University would derive corollary benefits from establishment of the CESG, especially the encouraging of a more effective use of assigned faculty. The BOV noted,

Organizing the college curricula to support the five core areas of the continuum means opportunities and benefits for use of specific faculty skills across college boundaries will become more visible. Air University should energetically seek and exploit such opportunities, which can lead, we believe, to substantial improvements in quality of education, opportunity for faculty development, and the appeal of Air University to potential faculty under recruitment.³⁰¹

²⁹⁸ Ibid.

²⁹⁹ *Report of the Air University Board of Visitors, 19-22 April 1998*, Volume 54, 1998, in the Muir S. Fairchild Research Information Center, Maxwell Air Force Base, AL., 16

³⁰⁰ Ibid, 39.

³⁰¹ *Report of the Air University Board of Visitors, 18-21 April 1999*, Volume 55, 1999, in the Muir S. Fairchild Research Information Center, Maxwell Air Force Base, AL., 24.

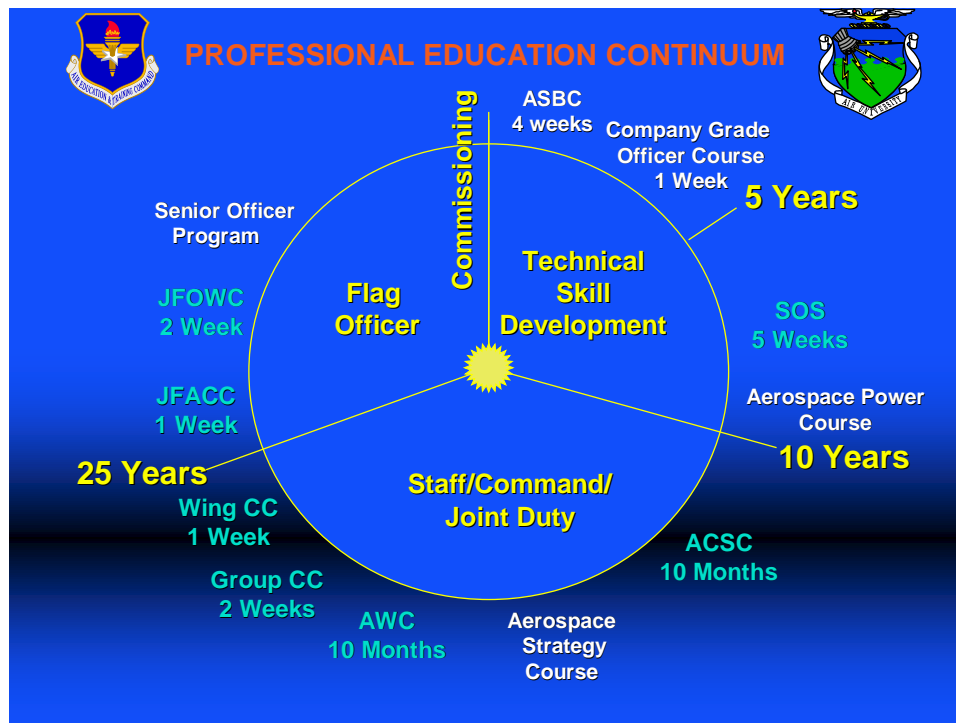


Figure 4. AU Continuum of Education.

Source: *Air University Command Board of Advisors Meeting* briefing, October 1999, Slide 2, in the personal files of Dr. Jim Forsyth, Chair of the Department of Leadership, Command and Communication Studies, Air Command and Staff College, Maxwell Air Force Base, AL.

Five core curriculum areas were established for each Air University school:

Profession of Arms, Military Studies, International Security Studies, Communications Studies, and Leadership and Management Studies. These five core areas were selected due to their applicability to an officer's career from the time of accession into the Air Force through attendance at Air War College and into Flag Officer ranks. Moreover, Air University believed these were the five core learning areas critical for the intellectual growth of Air Force officers over the course of their careers. The CESG concept was

geared toward how the identified core curriculum areas were integrated throughout an officer's career, specifically seeking to ensure the PME an officer received was at the appropriate time and was building toward an appropriate goal.³⁰² The Continuum of Education area contained the five core curricular areas for Air University schools along with supporting areas of curricular content, and the Strategic Guidance area explained how each school was supposed to address the curricular areas, i.e., to what level each school should teach the core areas. For example, ACSC might teach international security studies at the comprehension level, while Air War College teaches the same curricular area at the analysis level. The CESG was published in the fall of 1999 and became a significant curricular influence for all Air University schools.³⁰³ ACSC now had to ensure its curriculum lined up with the guidance laid out in the CESG.

Air University did not establish a minimum or maximum time interval for revision and re-publication of the CESG. The first edition of the CESG was published in 1999, and the first revised edition was published in 2003. According to Dr. Dorothy Reed, Chief of Academic Affairs for Air University, the 2003 CESG is still in effect today (2008) pending completion of on-going revisions. A revised CESG is scheduled to be published in 2009.³⁰⁴ Moreover, the five core curricular areas have remained unchanged during revisions to the CESG. The only curricular areas that have been revised or are planned to be revised are those areas that support the five core curricular areas. Dr. Reed referenced two examples of core curriculum supporting areas that have

³⁰² Ibid, 125.

³⁰³ *History of the Air University, 1 January 1999 – 31 December 1999.*

³⁰⁴ Phone interview with Dr. Dorothy Reed, Chief Academic Officer for Air University, September 2008. Dr. Reed is responsible for the administration and maintenance of the Air University Continuum of Education and Strategic Guidance.

undergone revision in the past or will do so in the future: Ethics and Nuclear Arms. She indicated that emphasis on Ethics on and off duty for military officers' waxes and wanes with changes in senior Air University and Air Force leadership. While one senior officer, such as the Chief of Staff, may dictate a strong emphasis on Ethics in PME, another Chief of Staff may de-emphasize Ethics in favor of emphasizing a different area. Dr. Reed also indicated that emphasis on Nuclear Arms in PME is becoming much more acute due to the well-publicized mistakes made by the Air Force in 2007 and again in 2008 regarding shipments of nuclear equipment³⁰⁵, and the planned 2009 edition of the CESG will reflect this emphasis.³⁰⁶

Curriculum Changes

Brigadier General (select) John W. Brooks assumed command of ACSC from Colonel Warden. Rather than begin his tenure with revolutionary curricular ideas like Warden had, Brooks kept the basic curriculum structure put in place by Warden and emphasized areas he felt needed to be reenergized. Dr. Muller recalled a comment General Brooks made soon after he took over at ACSC, "There's a lot of broken glass around here and everyone is scrambling to try to catch up to us."³⁰⁷ This comment indicates that although General Brooks felt Warden's curriculum could use some adjustment, he believed the changes made during Warden's tenure had been good for

³⁰⁵ The Air Force flew nuclear-tipped cruise missiles on a B-52 bomber from North Dakota to Louisiana without anyone's knowledge in August 2007, a mistake that could have had disastrous consequences. Then in March 2008, the Air Force mistakenly shipped parts for nuclear warhead missiles to Taiwan. These two nuclear-weapons involved mistakes were highly publicized and significantly embarrassed the Air Force. See Mark Thompson, "Nuclear Fallout at the Air Force," *Time*, June 5, 2008.

³⁰⁶ Phone interview with Dr. Dorothy Reed, September 2008.

³⁰⁷ *Ibid.*

ACSC. In fact, Warden's transformation of ACSC had garnered ACSC the Air University's General Muir S. Fairchild Educational Achievement Award and the Air Force Organizational Excellence Award in both 1994 and 1995.³⁰⁸ General Brooks recognized that he was inheriting an ACSC that had reached new heights in scholastic standards after a lengthy period of mediocrity, and he was careful not to throw the curriculum out and start over.

General Brooks however, believed there was room for continued curricular adjustment. Specifically, General Brooks felt although students studied operational leadership traits of historical leaders such as Douglas MacArthur and George Kenney more than they did previously, the Air Campaign Course had displaced formal leadership courses to the detriment of the students.³⁰⁹ Thus, he reinstated leadership and command topics as separate courses in the curriculum during his one year tenure as ACSC Commandant. According to the ACSC official history report for 1995-1996, formal leadership and command topics had been virtually eliminated from the ACSC curriculum during Colonel Warden's tenure.³¹⁰ Warden designed his curriculum so that students had to use leadership and command concepts to successfully complete the courses. Thus, although leadership and command was not a formal course in Warden's

³⁰⁸ The General Muir S. Fairchild Educational Achievement Award was first established in 1964 and is awarded annually by Air University to individuals, groups of individuals, or entire units for "the most significant contribution to AU education or Air Force education in general. It is intended to stimulate and reward creative and outstanding achievement in military education." See Air University Instruction 36-2313, *Air University-Conducted Education Awards Program*, 25 May 2006, 3. The Air Force Organizational Excellence Award was first established in 1969 and "recognizes acts or services that place the unit's performance significantly above that of other units of similar composition and mission responsibility." See Air Force Instruction 36-2803, *Air Force Awards and Decorations Program*, 15 June 2001, 23.

³⁰⁹ Olson, *John Warden and the Renaissance of American Air Power*.

³¹⁰ *History of the Air Command and Staff College, 1 July 1995 – 30 June 1996*, Volume I, K239.07C v.1, IRIS no. 01121218 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

Air Campaign-based curriculum, students were still learning how to lead and command.³¹¹ The AY 1994 and 1995 curriculum contained a course called Professional Skills which contained some leadership concepts, but this course also included instruction in Quality concepts and computer skills and did not concentrate solely on leadership and command. However, for AY 1996, Colonel Warden did, in fact, plan to reinstitute a formal Command and Leadership course concentrating solely on command and leadership principles³¹²

Leadership and command as a formal course reentered the curriculum in AY 1996 as an effort to “reverse a perceived shortfall in command and leadership education noted in previous years” by Air University.³¹³ The course consisted of 69 hours, was designed around a central theme called the “learning leader concept” and was taught in two sequential blocks of instruction: a Leadership block and a Command block. The learning leader concept theorized that each individual student uniquely learns and applies leadership concepts. Thus, students were encouraged to find solutions to leadership problems through a juxtaposition of Air Force core values and their own leadership philosophy. The Leadership course block taught students to look for the attributes and competencies that make effective leaders in given situations and students were given tools that can make leaders more effective. The Command course then focused on recognizing and resolving common, day-to-day issues that commanders face

³¹¹ Interview with John A. Warden III, September 2007.

³¹² *Air Command and Staff College AY 1996 Curriculum Plan*, in the official files of the Office of the Dean of Education, Air Command and Staff College, Maxwell Air Force Base, AL.

³¹³ *Ibid*, 1.

in the military environment using principles learned earlier during the Leadership block of instruction.

To stimulate leadership topic discussions in addition to those in the formal courses, General Brooks introduced the *Commandant's Leadership Speaker Series* in which senior military leaders were brought to ACSC once a month as guest speakers to share key leadership insights with students. After a senior leader's presentation to the entire student body, senior officer mentors from nearby Air War College visited ACSC seminars to discuss the leadership topic addressed by the guest speaker. Students were encouraged to use this seminar time to share their thoughts on the guest speaker's leadership topic with each other and seek insight from their AWC mentor who likely had previously served as a squadron commander and thus could share their personal leadership experience.³¹⁴

Another new leadership-based initiative for AY 1996 was the introduction of a student leadership journal. Students were required to keep a leadership journal during the academic year in which they recorded both positive and negative experiences encountered during their time at ACSC that affected their learning in the area of leadership. At the end of the school year, students used this journal to reflect on what they gained from their experience at ACSC and to share their personal leadership philosophy with their fellow students. The goal of this initiative was to demonstrate to students that leadership cannot be completely taught in the course of a single school year. Instead, the art of leadership is a continual journey that requires significant thought

³¹⁴ *History of the Air Command and Staff College, 1 July 1995 – 30 June 1996.*

and reflection.³¹⁵ Formally reemphasizing leadership and command concepts was the key curricular refinement made during General Brook's short stay at ACSC.

The curriculum and course flow put in place by Colonel Warden remained stable each year from AY 1996 through AY 1999. The curriculum began with an overview of big picture objectives, and then moved through theory, strategic analysis, operational analysis, campaign planning, and conflict resolution. Students began their year of studies exploring the larger conceptual issues of war and conflict and ended the year with a practical application exercise. Minor updates and changes to the curriculum continued to be instituted over this four-year period, but Warden's curriculum largely remained.³¹⁶

One noticeable change was the re-naming of two of Warden's courses. AY 1996's Air Campaign Exercise Simulation (ACES) course was renamed Joint Warrior in AY 1997. With ACSC scheduled for a Process of Accreditation for Joint Education (PAJE) inspection in 1997, this course name change reflected ACSC's emphasis on joint education. Joint Warrior was held in the Air Force War Gaming Institute near ACSC at Air University and remained part of the curriculum every year until AY 1999. Also, the Campaign 2025+ course was renamed Force 2025+ for AY 1997 to more accurately reflect the fact that future conflicts for the United States would be fought with an emphasis on a combined force.³¹⁷ Most importantly, the post-Warden ACSC curriculum remained heavily book and technology-based. Students saw no decrease in their rigorous

³¹⁵ Ibid.

³¹⁶ *Air Command and Staff College AY 1997 Curriculum Plan; Air Command and Staff College AY 1998 Curriculum Plan; Air Command and Staff College AY 1999 Curriculum Plan*, in the official files of the Office of the Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

³¹⁷ Ibid.

required reading load or reliance on computer technology in the years after Warden left; ACSC did not revert back to its former low level of academic rigor.

A new technology-based curriculum initiative created during AY 1997 was a 10-day combined ACSC and AWC exercise called Tandem Challenge. Implemented in AY 1998, Tandem Challenge replaced Joint Warrior in the ACSC curriculum and became the capstone application exercise for both ACSC and AWC. The intent of Tandem Challenge was to afford students of ACSC and AWC the opportunity to work together to solve problems associated with a national-level scenario; ACSC students focused on the operational level of war while AWC students operated at the strategic level. The course description for Tandem Challenge read,

Tandem Challenge (TC), the capstone exercise of the AWC and ACSC academic years, provides a framework for the students to apply the concepts and principles taught at AWC and ACSC in a scenario that spans the strategic and operational levels of war. TC emphasizes the themes of leadership, doctrine, strategy, political-military affairs, joint and multinational warfare, aerospace power, and technology. Through role play at the National Command Authorities, Chairman of the Joint Chiefs of Staff, and war-fighting Commander-In-Chief levels, AWC and ACSC students evaluate the national security process and actively apply various political-military concepts in a complex, wartime simulation.³¹⁸

On the surface, implementing Tandem Challenge appeared a good idea. With AWC and ACSC housed in buildings separated by only 100 yards, combining both student bodies in a joint exercise appeared a good use of available resources, especially as technology evolved to enable such a venture. Feedback from the first Tandem Challenge exercise was positive. ACSC recorded in its official history report from June 1998:

³¹⁸ *History of the Air Command and Staff College, 1 July 1997 – 30 June 1998*, Volume I, 7, KC239.07C v.1, IRIS no. 01128943 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

The initial effort to combine the capstone war games of AWC and ACSC was a huge success. Although some minor problems are expected in any first-time endeavor, the exercise did an excellent job of accomplishing the learning objectives of both schools. ACSC students served as members of a CINC's planning staff under the leadership of a CINC from Air War College. The two near simultaneous major theaters of war impressed upon the students the difficulties of planning and executing operational forces in a situation where you may not get all of the resources necessary to accomplish the mission.³¹⁹

However, by the second year of implementation, significant problems with Tandem

Challenge emerged. ACSC's history report from June 1999 was not so positive:

“Tandem Challenge was a continuing curriculum challenge. It was the year's lowest rated course. Improving this joint exercise is one of the Commandant and the Dean of Education's priorities.”³²⁰ Efforts to improve the exercise did not succeed. Tandem Challenge was last held during AY 2001, and was eliminated from the ACSC and AWC curriculum for AY 2002. During his interview, Dr. Kevin Holzimmer, a civilian historian who joined the ACSC faculty in 1999, remarked, “Tandem Challenge died from barriers between AWC and ACSC. ACSC students felt that AWC students viewed them as free labor while AWC students believed ACSC students got tactical too quickly.”³²¹

The barriers referenced by Dr. Holzimmer are both real and perceived. The real barriers are the 100-yard geographical separation between AWC and ACSC as well as the military rank structure difference; ACSC students are majors while AWC students are lieutenant colonels and colonels. The perceived barriers are dependent on an individual's experience and on which side of the ACSC – AWC fence they are sitting.

³¹⁹ Ibid.

³²⁰ *History of the Air Command and Staff College, 1 July 1998 – 30 June 1999*, Volume I, 7.

³²¹ Interview with Dr. Kevin Holzimmer, September 2007.

Commonly-heard labels for AWC and ACSC around the academic circle at Air University are “House of Lords” for AWC and “House of Commons” for ACSC, a reference to the structure of the British Parliament. These labels fuel the perception of many ACSC students that AWC students view themselves as above them (not just in rank) and the AWC belief that ACSC students are there to serve them.³²² In any case, whether real or perceived, problems between the ACSC and AWC students during Tandem Challenge execution certainly contributed to the demise of the exercise. No official documentation could be found that formally explains why Tandem Challenge was cancelled.

After remaining virtually unchanged for the previous four years, the ACSC curriculum was completely redesigned for AY 2000. The basic idea of curriculum flow moving from theory to practice remained a central tenet of the new curriculum. ACSC did not decide to change its curriculum because the curriculum was broken; the curriculum was redesigned for several reasons. First, ACSC needed to comply with the guidance in the Air University CESC. Also, ACSC had 17 civilian Ph.D.s on faculty; the largest number of faculty with doctoral degrees ACSC had ever had on staff at one time. Thus, the faculty perceived they had enough academic expertise to take the curriculum to a higher academic level.³²³ According to Dr. Muller, “And to be honest, we had a stronger faculty in 1999, so we were able to go even further [with the curriculum].”³²⁴ In

³²² From the personal experience of the author during his time as an ACSC student and instructor from 2002 – 2005.

³²³ Interview with Dr. Richard Muller, August 2008.

³²⁴ Interview with Dr. Richard Muller, August 2008.

addition, the effort to gain authority to grant master's degrees to ACSC graduates was a motivating factor (This topic is covered later in this chapter).

In conjunction with its curriculum redesign, ACSC published an Educational Philosophy for the first time in its AY 2000 Curriculum:

At ACSC, we believe that the best way to learn is through an ACTIVE and COLLABORATIVE environment that facilitates knowledge, comprehension, and application of ideas. Our curriculum and learning environment challenges students and faculty to CONSTRUCT MEANING, THINK REFLECTIVELY, and DEVELOP INTERNALLY while experimenting with a wide range of concepts, issues, and possibilities (Emphasis original).³²⁵

This philosophy reflected ACSC's intent to elevate its curriculum and teaching to higher levels of rigor and academic standards. Three new courses were developed for AY 2000: National and International Security Studies, Nature of War, and Military Studies. The foundation for each course was lessons from the AY 1999 curriculum (Table 6); however each course required significant additional development. The AY 2000 curriculum is shown in Table 7. Course directors for the new courses each possessed a Ph.D. and completed an intensive curriculum design in the summer of 1999.³²⁶ The remainder of the AY2000 curriculum contained elements from AY 1999, but also underwent significant revision, particularly in the areas of research and electives.

³²⁵ *Air Command and Staff College AY 2000 Curriculum Plan.*

³²⁶ *History of the Air Command and Staff College, 1 July 1998 – 30 June 1999, Volume I, 7, KC239.07C v.1, IRIS no. 01128944 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.*

Table 6. ACSC AY 1999 Curriculum Summary

Course Title	Academic Contact Hours
Orientation Course	33
Leadership and Command—Phase I	21
Leadership and Command—Phase II	42
War & Conflict	18
War Theory	48.5
Strategic Environment	41.9
Operational Forces	78.5
Conflict Resolution	27
Joint Operations & Campaign Planning	71.5
Air and Space Operations	45
Leadership and Command—Phase III	45
Tandem Challenge	49
Force 2025+	37.9
Gathering of Eagles	12
Total Academic Contact Hours	589.3

Source: *Air Command and Staff College AY 1999 Curriculum Plan*, in the official files of Air Command and Staff College, Maxwell Air Force Base, AL., 5.

Table 7. ACSC AY 2000 Curriculum Summary

Course Title	Academic Contact Hours
Orientation Course	32
Leadership and Command—Phase I	25
Leadership and Command—Phase II	46
National & International Security Studies	45
Nature of War	45
Military Studies	45
Operational Forces	60
Aerospace Operations	60
Joint Operations & Campaign Planning	60
Leadership and Command---Phase III	26
Tandem Challenge	40
Future Capabilities and Concepts	30
Research and Electives	45
Gathering of Eagles	12
Total Academic Contact Hours	586
Total Semester Hours	

Source: *Air Command and Staff College AY 2000 Curriculum Plan*, in the official files of Air Command and Staff College, Maxwell Air Force Base, AL., 6.

This new curriculum was built with the new curricular guidance in the Air University Continuum of Education and Strategic Guidance document in mind and vetted through the CCRC process. The Nature of War course was built to line up with the Profession of Arms CESG area and the Military Studies and National and International Security Studies courses were built to mirror the Military Studies and National and International Security Studies areas of the CESG. The existing Leadership and Command courses at ACSC lined up well with the requirements of both the Communications Studies area and the Leadership and Management Studies area of the CESG. Forward-thinking faculty members sought to create a new curricular structure through which to deliver the new curriculum product.

Organizational Adjustments

ACSC made adjustments to the organizational and curricular structure put in place during Colonel Warden's tenure in order to more effectively deliver the new curriculum. Dr. Muller recalled that the three teaching departments established under Colonel Warden each contained three academic courses that "were not academically or operationally connected to each other."³²⁷ Therefore, he teamed with Lieutenant Colonel Jim Forsyth and a few other faculty members in 1998 to consider how to improve the teaching department structure left by Warden. The result was a plan to fine-tune the teaching departments, realign faculty members based on expertise and move the academic year to a two-semester structure. Dr. Muller was well-placed to effect such

³²⁷ Interview with Dr. Richard Muller, August 2008.

change; he became Vice Dean for Academic Affairs in June 1998 and served as Dean of Education from January 2000 – June 2001.

The group began with Warden's curriculum structure as their starting point. Dr. Muller recalled that he and his group took a hard look at the curriculum as a whole and

...saw an opportunity to go one step beyond the Warden structure. Under Warden, the three departments ran three courses each, largely determined by the calendar. We thought it was time to create departments that taught similar subject matter. Under Warden for example, different departments taught International Relations and History, even though the expertise you'd want to teach these subjects was the same.³²⁸

Thus, a new departmental outline was drafted according to subject matter and faculty expertise. The new structure still contained three teaching departments, but their names were changed to reflect their new areas of emphasis. The new departments were the Department of Leadership and Aerospace Power Studies (DEP), the Department of International and Military Studies (DEI), and the Department of Joint Warfare Studies (DEW). The intent was for each department to teach courses with specific, related content and assign faculty with specific expertise to those departments. For example, DEI contained the courses with theoretical underpinnings in history and international relations. Thus, faculty members with Ph.D.s or other expertise in history, political science, and international relations were assigned to DEI. Likewise, faculty members with experience and expertise in joint military matters were assigned to DEW and faculty with command and key leadership experience were assigned to DEP.³²⁹

³²⁸ Ibid.

³²⁹ Ibid.

The organizational structure within the Office of the Dean of Education and Curriculum also changed for AY 2000 to reflect the creation of the new teaching departments (Figure 5).

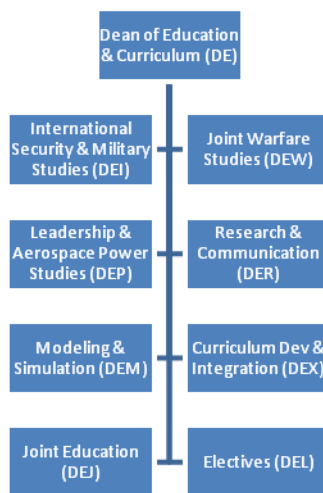


Figure 5. DE AY 2000 Organization Chart

Source: *Air Command and Staff College AY 00 Curriculum Briefing*, slide 5. In the official files of Air Command and Staff College, Maxwell Air Force Base, AL.

For AY 2001, DEP and DER were combined into a single department called the Department of Leadership, Command and Communication Studies (DEC) (Figure 6).

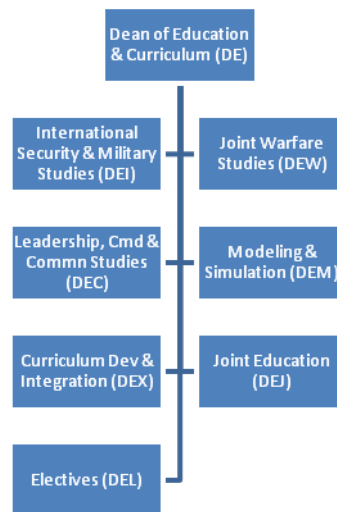


Figure 6. DE AY 2001 Organization Chart

Source: *Air Command and Staff College AY 01 Curriculum Briefing*, slide 6. In the official files of Air Command and Staff College, Maxwell Air Force Base, AL.

With these new departments, the curriculum was then structured around a two-semester academic year. This two-semester academic year contained the theoretical foundations of the curriculum during the fall semester, and the operational aspects of the curriculum in the spring semester. The students moved seamlessly from theory to practice during the course of the academic year. This new structure was implemented in Academic Year 2000 (Figure 4). Dr. Muller recalled that “it just made good academic sense to gather subject matter and expertise together in the same department. Now we had disciplinary connectivity in the departments and the curriculum.”³³⁰

³³⁰ Interview with Dr. Richard Muller, August 2008.

The curriculum content for AY 2001 was virtually unchanged from AY 2000 (Figure 7); however the AY 2001 curriculum chart (Figure 8) reflects the departmental teaching responsibility changes from AY 2000.



 AY00 Resident Curriculum  <i>Master of Military Operational Art & Science Degree</i> 33 Semester Hours									
Semester I: International Security and Military Studies				Semester II: The Profession of Arms					
L & C Phase 1	National & International Security Studies	Nature Of War	Military Studies	Op Forces	Aero-Space Ops	Joint Ops	L & C Phase 3	Tandem Challenge	Future Capabilities
1.5 sem hours	3 sem hours	3 sem hours	3 sem hours	4 sem hours	4 sem hours	4 sem hours	1.5 sem hours	1 sem hour	2 sem hours
DEP	DEI	DEI	DEI	DEW	DEP	DEW	DEP	DEW	DEP
Communication Studies 1 sem hour DER				Electives & Research (Communication Studies) 3 sem hours DEL & DER					
Leadership & Command Phase 2 and CLSS 2 sem hours DEP									

Figure 7. ACSC AY 2000 Curriculum Structure.

Source: *Air Command and Staff College AY 00 Curriculum Briefing*, slide 9. In the official files of Air Command and Staff College, Maxwell Air Force Base, AL.

Two Semester Teaching Strategy AY01										
31 Semester Hours										
(Changes Denoted In Green)										
Semester I: International Security and Military Studies					Semester II: The Profession of Arms					
L & C Phase 1	National & International Security Studies	Nature Of War	Military Studies	Op Forces	Aero-Space Ops	Joint Ops	L & C Phase 3	Tandem Challenge	GOE	
1.5 sem hours	3 sem hours	3 sem hours	3 sem hours	3 sem hours	4 sem hours	3 sem hours	1.5 sem hours	1 sem hour		
DEC	DEI	DEI	DEI	DEW	DEW	DEW	DEC	DEW		
Communication Studies 3 sem hours DEC				Electives & Research (Communication Studies) 3 sem hours ELECTIVES / DEC						
Leadership & Command Phase 2 and CLSS 2 sem hours DEC										

Figure 8: ACSC AY 2001 Curriculum Structure.

Source: *Air Command and Staff College AY 00 Curriculum Briefing*, slide 10. In the official files of Air Command and Staff College, Maxwell Air Force Base, AL.

Feedback on ACSC's new curriculum structure was positive. The 1999 Air University Board of Visitors reviewed the departmental structure and the curriculum content of the new two-semester curriculum structure at ACSC and reported favorably on their findings. In their report to the Air University Commander, the BOV noted,

The AY 00 Departmental Structure is consistent with continuum of education strategic guidance, which identifies the five core areas of PME study and articulates core objectives at the intermediate (ACSC) level in each area. The BOV believes this structure provides effective organization of human resources to accomplish the proposed curriculum in accord with the CESG. The proposed

curriculum for AY 00 is consistent with COE [continuum of education] strategic guidance and its content is appropriately divided between semesters.³³¹

Faculty members put in many hours of hard work to be ready to execute the new curriculum design for AY 2000. Some faculty members called the first semester of this new academic year structure, taught by faculty members from the Department of International Security and Military Studies (DEI), the “Fall Classic” as a light-hearted baseball reference. In Major League Baseball, the annual World Series championship is played during the fall month of October, and is commonly known as the Fall Classic. Today (2008), the first semester is still commonly called the Fall Classic. Dr. Muller fondly recalled that some faculty members referred to DEI as “Murderer’s Row,” a reference to the nickname of the famous and powerful New York Yankees baseball team that won the 1927 World Series.³³²

Dr. Muller also recalled that there were plenty of skeptics in ACSC who doubted that the new two-semester academic structure could be successfully executed. This doubt stemmed from the fact that the two-semester structure required a very heavy teaching load for DEI in the fall and a very heavy teaching load for DEW in the spring; never before had a single teaching department had such a heavy teaching load compressed into finite semesters.³³³ Muller said, “Many individuals (including my predecessor as Dean) believed the Fall Classic and the spring operational semester would be impossible to execute—and we did it.”³³⁴ Dr. Muller went on to explain one of his most memorable

³³¹ *Report of the Air University Board of Visitors, 18-21 April 1999, 28.*

³³² Interview with Dr. Richard Muller, August 2008.

³³³ *Ibid.*

³³⁴ *Ibid.*

moments at ACSC. He said, “One moment I’ll never forget: December 1999, raising a glass with Jim Forsyth at the Christmas party after the completion of DEI’s first-ever Fall Classic, and saying, ‘We did it!’”³³⁵

Dr. Muller, Lt Col Forsyth, and the other faculty members who worked diligently on the new structure may have had doubters, but they also had a powerful ally in Brigadier General John W. Rosa, Jr., the ACSC Commandant. General Rosa, not a professional educator himself, however recognized the ability of those on his faculty, such as Dr. Muller and Lt Col Forsyth who were professional educators, to conceptualize curriculum and develop a sound organizational structure through which to deliver the curriculum. Thus, General Rosa gave Muller and Forsyth the authority to effect such change. When asked if any Commandants after Colonel Warden stand out as particularly influential in curricular change, Dr. Muller responded, “I give high marks to Brigadier General Rosa—not because he was “hands-on” about curriculum, but because he respected his professional educators and let us take care of the academics while he provided superb leadership.”³³⁶

Degree-Granting and Accreditation

Air University decided to seek degree-granting authority and accreditation for their PME programs. In 1997, Air University schools were the only PME schools in the Department of Defense not granting graduate degrees to their officers. Embarrassed by this situation, the Air University Commander, Lieutenant General Redden, approved a

³³⁵ Ibid.

³³⁶ Ibid.

plan to seek degree-granting authority for its schools.³³⁷ If approved, ACSC could award a Master of Operational Art and Science degree to graduates of its in-resident program. To prepare for the approval process, ACSC completed, in 1998, a self-study for the United States Department of Education (DoE). After the DoE review of the self-study, ACSC received a three-day visit in September 1998 from the National Advisory Committee on Institutional Quality and Integrity (NACIQI), the on-site review representatives of the DoE.³³⁸

The NACIQI attended a series of briefings, lectures, and seminars during the execution of the War Theory course for AY 1999. ACSC received a favorable response from members of the NACIQI, who recommended that the United States Secretary of Education approve ACSC's request to grant master's degrees to its graduates beginning with the class of AY 2000.³³⁹ The Secretary of Education approved the request and forwarded the action to the United States Congress for approval. Approval was granted when President Bill Clinton signed the National Defense Authorization Act into law on 5 October 1999. This act gave the Air University Commander authority to confer the Master of Military Operational Art and Science degree to in-resident ACSC graduates as well as the Master of Strategic Studies degree to in-resident graduates of AWC beginning with the class of AY 2000. However, because authority to grant degrees was

³³⁷ *History of Air University, 1 January 1999 – 31 January 1999*, Volume I.

³³⁸ *History of the Air Command and Staff College, 1 July 1997 – 30 June 1998*, Volume I.

³³⁹ *History of the Air Command and Staff College, 1 July 1998 – 30 June 1999*, Volume I.

awarded in 1999, Air University was allowed to retroactively confer degrees to class of AY 1999 graduates as well.³⁴⁰

Degree-granting authority for Air University was a big step in elevating the academic credibility of Air University schools and their curriculum since use of the word “college” in civilian institutions normally denotes a degree-granting institution. Soon after degree-granting authority was granted, Air University began the process to apply for candidacy status for accreditation through the Southern Association of Colleges and Schools (SACS). The BOV commended this move by Air University, stating that “Regional accreditation for Air University as an institution through SACS would put the ‘University’ back in Air University.”³⁴¹ Regional accreditation was awarded to Air University in 2004 (Covered later in this study).

Curricular Influence of World Events

World events with military significance continued to be integrated into the ACSC curriculum. Events such as the 1996 terrorist bombing of Khobar Towers in Saudi Arabia and Operation Deliberate Force, the NATO-led air campaign in Kosovo, and the bombing of the United States Embassy in Nairobi, Kenya, were discussed and analyzed through the use of case studies, formal lectures, or seminar discussions. During his interview, Dr. Matthew Schwonek, a member of the ACSC faculty since 1996, indicated that recent world events with military significance usually come into the curriculum via individual instructors. He indicated that many times, the exact manner of how an event is

³⁴⁰ *History of the Air University, 1 January 1999 – 31 December 1999*, Volume I, K239.01, v.1, IRIS no. 01128553 in the Air Force Historical Research Agency, Maxwell Air Force Base, AL.

³⁴¹ *Report of the Air University Board of Visitors, 18-21 April 1999*, 10.

covered in seminar is a function of instructor personality and teaching ability, but most all faculty members seek to stay abreast of current events. Dr. Schwonek said, “The faculty is always on a quest to update lessons from current events and to illustrate lessons with the latest operations.”³⁴² In addition, classified briefings on recent world events were periodically given to United States students; international students are not allowed to attend classified briefings.

Summary

The Warden Revolution brought ACSC out of the shadow of the Skelton Report and into the forefront of academic rigor and progressive air power thought. By 2001, ACSC graduates were receiving a Master’s Degree in Military Operational Art and Science. ACSC processes, curriculum, and structure reached a new level of maturity during the five-year period between the end of the Warden Revolution and 2001 through methodical, evolutionary improvements that, combined with technological upgrades, improvements in the quality of ACSC faculty, and far-reaching initiatives from Air University, helped firmly establish ACSC as a leader in Professional Military Education.

The pace of change during this time was significantly slower than during the Warden years; however, ACSC continually marched forward with significant improvements. Curriculum development was now centralized via a Core Curriculum Review Committee that maintained visibility over all facets of the curriculum. By de-conflicting curricular content in each course and facilitating integration of the entire

³⁴² Interview with Dr. Matthew Schwonek, September 2007. Dr. Schwonek, a military historian, joined the ACSC faculty in 1996. He has served as a course director numerous times.

curriculum, ACSC students would no longer be exposed to the same topic in multiple courses. The Commandant now had a formal instead of an ad hoc mechanism through which to control curriculum development.

The newly-established Air University Continuum of Education and Strategic Guidance eliminated the lack of continuity in the PME courses Air Force officers completed over the course of their career. The CESG established and organized five distinct curricular content learning areas that Air University believed were critical for the intellectual growth of its officers: Profession of Arms, Military Studies, International Security Studies, Communication Studies, and Leadership and Management Studies. Air University schools, including ACSC, incorporated the CESG learning area objectives into their curriculum. Significantly, the CESG integrated the core curriculum areas across PME throughout an officer's career, ensuring an officer received the right PME at the right time.

The ACSC curriculum matured significantly after the Warden Revolution. To begin, formal Leadership and Command courses were added back to the curriculum in AY 1996 to reverse what some believed was a shortfall in the Warden curriculum. The Air Campaign Exercise Simulation and Campaign 2025+ war game courses were renamed to Joint Warrior and Force 2025+ to better reflect their curricular content and focus. Another technological-based war game course named Tandem Challenge was established as a combined AWC – ACSC student effort. Tandem Challenge was held annually for four years but was eliminated after 2001 due to apparent problems between AWC and ACSC students that could not be overcome. The cancellation of Tandem

Challenge demonstrates that although Air University had made significant progress in many areas since the Skelton Report, it still had significant problems that needed addressing.

After the re-institution of Leadership and Command courses in AY 1996, the curriculum remained stable until AY 2000 when ACSC redesigned its curriculum and academic structure. The impetus for the redesign was the improved quality of the ACSC faculty, the new CESG requirements, and the effort to acquire authority to grant master's degrees to students. Three new courses were built: National and International Security Studies, Nature of War, and Military Studies. Parts of the Warden curriculum remained, but were spread among the new courses. Other parts of the Warden curriculum remained in the rest of the ACSC curriculum.

The curriculum content of the new courses was designed at a very high academic standard because ACSC had the expertise to do so. The quality of faculty had improved greatly over this time. The number of civilians with Ph.D.'s increased by over 500 percent since the 1989 Skelton Report and the Faculty Preparation Program instituted by Colonel Warden began to bear fruit as the first military officers with Ph.D.s began returning to ACSC. ACSC was able to elevate the curriculum to new levels of academic rigor in 1999 due to the higher quality of the faculty at that time.

The three new courses were built to coincide with the core areas of the CESG, and were even named after the core areas. ACSC's pre-existing Leadership and Command courses lined up well with the other core areas of the CESG and thus required little rework. Additionally, Air University's effort to gain authority to grant master's

degrees to graduates spurred curricular redesign in order to meet the academic standards required for degree-granting authority.

In order to execute and deliver the new curriculum for AY 2000, ACSC reworked its organizational and academic structure. A new departmental structure was designed according to subject matter and faculty expertise. Each department now taught specific, related content and faculty members with Ph.D.s or other expertise in those areas were assigned to those departments. ACSC still maintained three teaching departments, but DEA, DEB, and DEC became International Security and Military Studies (DEI), Leadership, Command, and Communication Studies (DEC), and Joint Warfare Studies (DEW).

A new two-semester academic year structure was instituted to facilitate delivery of the new courses and the new teaching departments. Students still were taken from theory to practice over the course of the year. The fall semester contained the theoretical foundations of the ACSC curriculum and was known as the Fall Classic. The spring semester contained the operational aspects of the curriculum and students finished the year with practical application exercises made possible by ACSC's use of emerging technology during this time.

ACSC's mission statement was also changed as a reflection of how far ACSC had come since the Skelton Report and even the Warden years. The new mission statement acknowledged the vastly improved quality of its faculty by adding the words "world-class team." In addition, the new mission statement demonstrated the seriousness

with which ACSC took its role in conducting joint education to produce officers capable to lead joint forces.

The vast majority of credit for moving ACSC from the Warden years to the point it had a centralized curriculum development process, an academically sound teaching department structure and two-semester curricular structure, a highly academically rigorous curriculum, and degree-granting authority belongs to Dr. Richard Muller and Colonel Jim Forsyth. Both of these men insist that any success ACSC or they personally have enjoyed is the result of a team effort, and not due to their individual efforts. However, both men are seasoned educators who teamed together and emerged as the intellectual leaders of ACSC at a time when intellectual leadership was needed to bring ACSC firmly into the forefront of PME leadership. The fact that they succeeded, often in the face of detractors and doubters, is a testament to their dedication and fortitude. As ACSC prepared for AY 2002, it was clear that processes, structure, and curriculum had matured, and mediocrity had been left behind.

CHAPTER VII

BEYOND SEPTEMBER 11, 2001

September 11, 2001 is a date that marks another turning point for Professional Military Education. On that date, terrorists turned United States commercial airliners into missiles and flew them into the World Trade Center towers and the Pentagon. Over 3,000 people were killed that day in the deadliest terrorist attacks on United States soil in history. This date is a turning point for military education; not for immediate effects but rather for the long-term implications the attacks had on PME curriculum.

ACSC was beginning to find its curricular rhythm in the fall of 2001. On September 11, 2001, AY 2002 had been in motion for little more than a month and represented the third consecutive year that ACSC had executed its 2-semester academic structure. The Core Curriculum Review Committee process was institutionalized and ACSC's core curriculum had been aligned under the Air University's Continuum of Education and Strategic Guidance since 1999. The core courses taught in the three main teaching departments underwent annual modifications, but contained essentially the same subject content. None of this changed on September 12, 2001. However, as time passed and the United States began military operations in Afghanistan, Iraq and elsewhere across the globe in support of a Global War on Terror (GWOT), curriculum changes began to be pushed to ACSC from external sources.

Immediate Impact of September 11, 2001

The terrorist attacks of September 11, 2001 stunned the entire United States. People spent days, weeks, even months trying to come to terms with what had just happened. At Air University, faculty and students were just as shocked as the rest of the world. On September 12, 2001, Air University Commander Lieutenant General Donald A. Lamontagne ordered a halt to the normal curriculum so faculty and students could talk about the event. Emotions ran high and opinions became very pointed at times, especially with international officers. According to Dr. Jim Forsyth, the day was not a success. Forsyth recalled, “When 9-11 happened, we did that special day on September the 12th, which was an utter disaster. That was directly from the AU Commander. We had a special day. We were going to stop the curriculum and talk about the event, which, I guess, was appropriate looking back, but it didn’t go well.”³⁴³ ACSC resumed its normal operating curriculum the next day.

The ACSC curriculum did not change overnight because of the September 11th attacks. However, there were those who felt the attacks had voided the entire curriculum. During his interview, Dr. Rich Muller remembered, “The immediate impact of 9-11 was that the faculty had to stamp down calls to redo the entire curriculum.”³⁴⁴ Calls to radically change curriculum in the wake of an event on the scale of the September 11, 2001 attacks is nothing new. Stakeholders in school curriculum typically call for change in the wake of a crisis or significant event. For example, stakeholders in United States public school education called for significant change to public school curriculum

³⁴³ Interview with Dr. Jim Forsyth, September 2007.

³⁴⁴ Interview with Dr. Rich Muller, September 2007.

nationwide in the aftermath of Russia's 1957 launch of a satellite they called Sputnik. Calls for emphasis on mathematics, engineering, and science to keep from falling far behind Communist Russia were soon heard around the nation. Similarly, stakeholders in PME were soon calling for renewed focus on subjects such as terrorism.

The curriculum in place during the fall of 2001 was the AY 2002 curriculum (Figure 9), which closely mirrored the AY 2001 curriculum, although some courses did change. The last course in the Fall Classis was renamed from Military Studies to Airpower Studies due to its concentration on the air arm of the military. A National Planning Systems course was added to the second semester, which covered national-level decision making and planning processes, and the joint Air War College-ACSC war game called Tandem Challenge was replaced by a new Aerospace Exercise.

As curriculum planning for AY 2003 got underway, it was clear that lessons related to the September 11, 2001 attacks would be incorporated into the curriculum. However, the scope of the changes was manageable. The core areas of the Air University Continuum of Education and Strategic Guidance did not change, and the core curriculum for ACSC remained virtually the same for AY 2003 (Figure 10). Changes related to the 9-11 attacks originated from the faculty through new lessons within a core course. For example, in the National and International Security Studies course, the security issues of terrorism, failed states, and globalization were taught and each included discussions on the 9-11 attacks. In the Nature of War course, radical Islamism was a lesson in the topic

area of Wars of Religion. Additionally, an elective course was added called Islam and Islamism: Radical Political Religion, Ideology, and the State.³⁴⁵



AY02 Resident Curriculum



Semester 1: International Security & Military Studies				Semester 2: The Profession of Arms						
L & C Phase 1	National & International Security Studies	Nature Of War	Airpower Studies	Nat'l Plng Sys	Joint Forces	Joint Camp Plng	Aero-space Ops	L & C Phase 3	Aero-Space Ex	GOE
1.5 sem hours	3 sem hours	3 sem hours	3 sem hours	1.5 sem hours	3 sem hours	2.5 sem hours	4 sem hours	1.5 sem hours	1 sem hour	
DEC	DEI	DEI	DEI	DEW	DEW	DEW	DEW	DEC	DEW	
	Electives and Research 3 sem hours DEC									
	Leadership and Communication Studies Phase 2 5 sem hours DEC									

32 Semester Hours

Figure 9. ACSC AY 2002 Curriculum.

Source: PowerPoint Briefing, "Program Review Board 2002," January 18, 2002, slide 4 in the personal files of Dr. Jim Forsyth, Department Chair for Department of Leadership, Command, and Communication Studies, Air Command and Staff College, Maxwell Air Force Base, AL.

³⁴⁵ PowerPoint Briefing, "Program Review Board 2002," January 18, 2002, in the personal files of Dr. Jim Forsyth, Department Chair for Department of Leadership, Command, and Communication Studies, Air Command and Staff College, Maxwell Air Force Base, AL., Slides 6-22.



AY03 Resident Curriculum

Air Command and Staff College



Aug

Jan

Jun

Semester 1: International Security & Military Studies				Semester 2: The Profession of Arms					
LCC 1 2 sem hours DEC	National & International Security Studies 3 sem hours DEI	Nature Of War 3 sem hours DEI	Airpower Studies 3 sem hours DEI	Air & Space Ops 4 sem hours DEW	Joint Force Employment 3 sem hours DEW	Joint Campaign Planning 4 sem hours DEW	LCC Course 3 2 sem hours DEC	Air & Space Exercise 1 sem hours DEW	GOE
			Research and Electives 3 sem hours DEC						
			Leadership, Command and Comm Studies Course 2 4 sem hours DEC						

32 Semester Hours

Figure 10. ACSC AY 2003 Curriculum.

Source: PowerPoint Briefing, "Air Command and Staff College AETC/IG Visit," April 22, 2003, in the personal files of Dr. Jim Forsyth, Slide 4.

No significant curriculum changes were forced on ACSC in the aftermath of the 9-11 attacks, despite calls for changes. Changes that were incorporated for AY 2003 came from the ACSC faculty, who are astute enough to know when such curricular modifications are needed. Dr. Forsyth stated, "People on the outside don't understand how serious people on the inside are taking their jobs. No one needed to tell me when I

was Dean that terrorism was something important after 9-11, but I got a lot of people telling me this, as if this was something I couldn't figure out on my own."³⁴⁶ What Colonel Forsyth and the rest of ACSC did not know as AY 2003 began, was that significant changes to the ACSC curriculum were being planned by Air Force leadership that ACSC would not be able to resist. By time curriculum planning for AY 2004 got underway, a new Air Force initiative called Force Development would dictate significant curriculum changes to ACSC.

Force Development Education

In November 2002, Air Force senior leadership announced it was overhauling how it develops its officers, news that had significant impact on Air Force PME. In an interview with the Air Force Times newspaper, Brigadier General Richard S. Hassan, director of the Air Force Senior Leadership Office (AFSLMO), stated the new force development initiative had two goals: "To produce generals and colonels with broader operational and strategic perspectives than current personnel policies may allow; and to better meet the expectations of officers, who often feel the personnel system operates at odds with their career aspirations."³⁴⁷ To accomplish these goals, the Air Force decided to make changes to the existing officer promotion system and the officer assignment system. Regarding the promotion system, "information on education and training will be reported to promotion boards in new ways, reflecting the new focus on development,"

³⁴⁶ Interview with Dr. Jim Forsyth, September 2007.

³⁴⁷ Gordon Trowbridge, "Shooting for the stars or not: A new program aims to overhaul the Air Force leadership culture, letting officers choose their own destiny," November 11, 2002.

and the assignment system would be rebuilt “to give individuals more input and to stress career development as the top priority.”³⁴⁸

Assignments would be now be geared toward broadening the experience of officers who aspire to obtain senior command positions, and to give officers who do not aspire to senior level rank the opportunity to avoid the broadening assignments that would remove them from their functional specialty. This new assignment emphasis was in line with Air Force Chief of Staff General John Jumper and Secretary of the Air Force James G. Roche’s goal of eliminating career-building as an exercise in “box-checking,” or officers taking assignments they believe they must in order to compete for promotion, even if those assignments do not build better officers. In short, Secretary Roche and General Jumper wanted to change the Air Force culture.³⁴⁹

If the new force development initiative succeeded in changing the Air Force culture, the new officer culture would “develop colonels and generals with a broader understanding of operations and strategy by systematically exposing them to aspects of the force outside their specialty. At the same time, the Air Force would place greater value on officers who choose to remain in their specialty—pilots who want to fly for example—who often suffer in the military’s up-or-out system.”³⁵⁰ Thus, officers could now expect to greater opportunities to broaden outside their functional specialty while who choose to remain in their functional specialty would be viewed as important assets to the Air Force rather than as officers to simply be phased out of the service.

³⁴⁸ Ibid.

³⁴⁹ Ibid.

³⁵⁰ Ibid.

Force Development sought to tie military education and training closer to an officer's career development than in the past. According to Brigadier General Hassan,

For example, to become competent as a pilot, there is a standard set of functional experiences the pilot must go through. We understand that pretty well. I call that 'occupational competence.' The other piece of the equation is what education and training opportunities we offer. Our terminology is that they are the 'enduring competencies.' So the key is how to tie all of that together in a way that makes sense.³⁵¹

Force Development entailed a redirection of the Air Force's approach to Professional Military Education. General Jumper signaled in the Chief of Staff's November 2002 *Sight Picture* that change was coming. The *Sight Picture* stated the Air Force had transitioned from a Cold War structure to an Air Expeditionary Force structure, and therefore would transform "the way we train, educate, promote, and assign" Air Force personnel.³⁵²

General Jumper focused on ACSC to begin this transformation in PME. He focused the initial efforts of Force Development at the intermediate level of PME since officers at this level have become functional area experts but still have time to broaden their expertise before reaching general officer rank. General Jumper decided to restructure the ACSC academic year into three distinct academic modules. In a December 2002 policy letter, General Jumper stated,

Many officers, upon leaving Air Command and Staff College, have been thrust into assignments for which they have no training. They arrive at their new assignments uncomfortable because they are unable to fully contribute to their new teams. To remedy this, the Air Force will add a module of training in the ACSC curriculum tailored to the assignment each individual will be receiving. It

³⁵¹ Bruce D. Callender, "Curtain Up on Force Development," *Air Force Magazine*, Vol. 86, No. 2, February 2003.

³⁵² General John Jumper, Chief of Staff of the Air Force, "Chief's Sight Picture", November 6, 2002, 2.

will give these officers the familiarization needed for their follow-on assignments.”³⁵³

Brigadier General Hassan explained the new modular structure as follows:

Module 1 will be called Leadership and Joint Development and focus on things we hold dear such as doctrine, strategy, and leadership principles. Everybody would take part so they’re all grounded in the same thing.

Module 2 will focus on the operational art of war. ACSC is the intermediate level of PME and its there that individuals should shift their focus from the tactical to the operational and staff issues. It helps the individual transition beyond the wing level.

Module 3 is the really unique part of the new approach. The training will be related to what I call a satellite group of occupational skills. For example, a fighter pilot generally will concentrate on one of five occupational areas: acquisition, plans and programs, politico-military, space, and a sort of super-operations area. Whichever skill the pilot chooses will be the deciding factor in the pilot’s next duty assignment. In the past, the Air Force simply would project a post-ACSC assignment based on whatever job might be open. Module 3, in effect, will help prepare an individual for his or her next duty assignment.³⁵⁴

Restructuring ACSC as a modular institution benefited the Air Expeditionary culture the Air Force was creating. The world events of the late 1990s and early 2000s such as Operation Allied Force in Kosovo, Operation Enduring Freedom in Afghanistan, and the Global War on Terror, was the impetus for the Air Force transitioning to an expeditionary culture. As the U.S. military drew down its force structure and reduced its overseas footprint, Air Force personnel were grouped together to form certain skill sets and placed into deployment rotation “buckets” which would then deploy at established time intervals in support of U.S. operations. Modular military education complemented the expeditionary culture because courses would be grouped in distinct, flexible

³⁵³ Air Force Policy Letter, Air Force Policy Letter Digest, December 2002, 2.

³⁵⁴ Callender, “Curtain Up on Force Development,”

packages of learning. In his article about Force Development, Colonel Jon A. Kimminau wrote that these modular learning packages would “free the system of either sequential or haphazard requirements for delivering PME to those who need it. The additional benefits of modularity are that learning can then be given in any order, and possibly in any combination, to include focused modules intended only for smaller groups of officers.”³⁵⁵ Moreover, the timing of attendance at ACSC could be more flexible in a modular structure since students could enter the program at the start of any module of learning.

General Jumper’s restructuring plan sent shockwaves through ACSC and reopened the debate regarding the proper place for education versus training. Professional educators at Air University questioned whether ACSC was the proper place for the Module 3 functional-area training courses. Many felt that ACSC, a degree-granting educational institution in the midst of seeking regional accreditation for its academic program, was no place for training courses. Rather, training courses should be conducted outside of educational institutions such as ACSC in a true training environment.³⁵⁶ Nevertheless, General Jumper went ahead with his restructuring plan, therefore ACSC began planning for the modular implementation in late November 2002.

ACSC was directed to plan for execution of the new modular curriculum in AY 2004, scheduled to begin in August 2003 (Figure 11). This gave ACSC only 9 months to create the Module 3 courses from the ground up. However, ACSC was not alone in this

³⁵⁵ Jon A. Kimminau, Colonel, USAF, “One Challenge of Force Development: Developmental Education and PME,” *Air & Space Power Journal*, August 2004.

³⁵⁶ Interview with Dr. Jim Forsyth, September 2007; Interview with Dr. Charles Costanzo, September 2007; Interview with Dr. Glen Spivey, September 2007.

ambitious endeavor. The Air Force Senior Leaders Management Office was intimately involved in establishing the new Module 3 courses alongside ACSC planners. In fact, it was AFSLMO who determined the 8 functional-area courses that comprised the Module 3 curriculum; it was ACSC's responsibility to then build and execute the course content.³⁵⁷

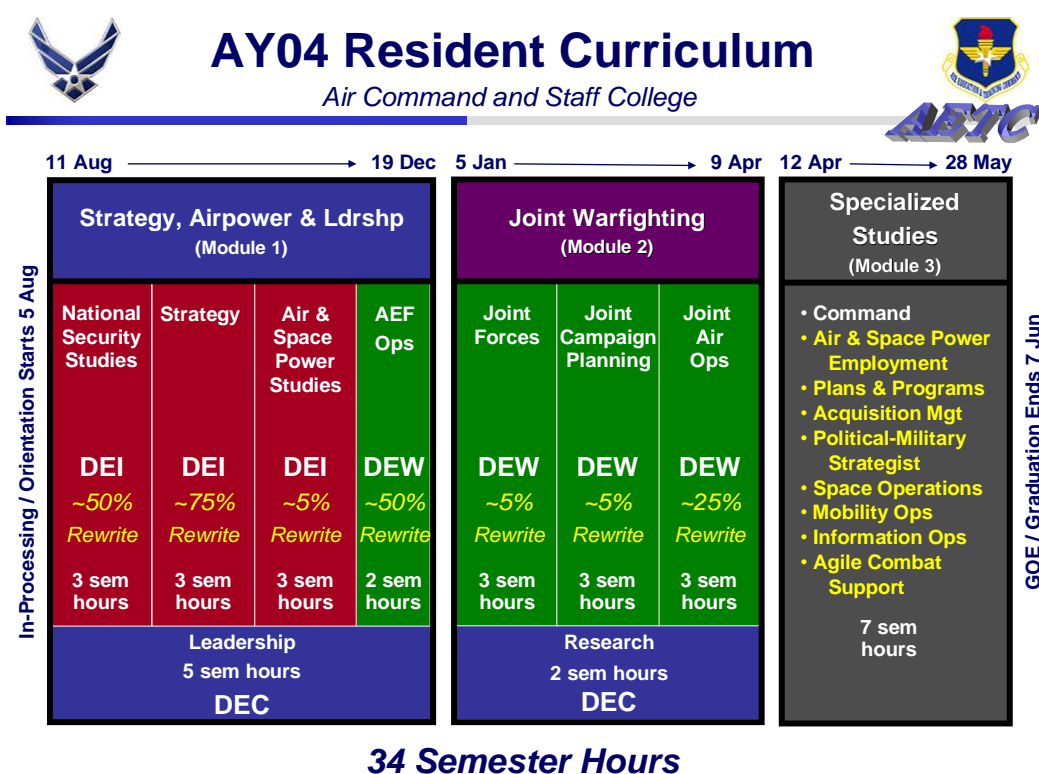


Figure 11. ACSC AY 2004 Curriculum.

Source: PowerPoint Briefing, "Air Command and Staff College AETC/IG Visit," April 22, 2003, in the personal files of Dr. Jim Forsyth, Slide 5.

³⁵⁷ Interview with Dr. Charles Costanzo, September 2007.

ACSC revised more than 50 percent of its annual program to accommodate the new modular structure. During his interview, Colonel Forsyth explained that no part of the existing core curriculum was eliminated to make room for Specialized Studies. He recalled, “Essentially, we just shifted everything to the left and got through it quicker to allow for two weeks of Command Course and three weeks of Specialized Studies at the end of the year. It was really tough on the students because it was five days a week. But we didn’t drop anything.”³⁵⁸ The faculty worked extremely hard to incorporate the new curriculum on time. In fact, faculty members building an entirely new curriculum for the following academic year while still executing the current curriculum is reminiscent of the early days of the Warden Revolution. According to Brigadier General Ronald Ladnier, ACSC Commandant at the time, “Our faculty did a Herculean job of pulling this together between last November and this past August, especially while still fully executing the previous curriculum.”³⁵⁹ Additionally, because the modules were independent of each other, ACSC instituted a modular school calendar which allowed officers to enter the program in either August or January and graduate in either June or December. This new calendar flexibility was designed to better accommodate the deployment rotations of air and space expeditionary forces.³⁶⁰

Module 3 courses were called Specialized Studies as a reflection of the specialized functional area of each course. Eight courses were designed as functional

³⁵⁸ Interview with Dr. Jim Forsyth, September 2007.

³⁵⁹ Mike Paoli, Major, USAF, “ACSC Launches Force Development Curriculum,” 1, Air Education and Training Command News Service, November 25, 2003.

³⁶⁰ Ibid.

area courses, and a ninth course was added called Tailored Specialized Studies, a course for international students. U.S. students were assigned to functional courses.

The Specialized Studies course description for its inaugural year of AY 2004 read,

The Specialized Studies Program provides students with career broadening education tailored to meet the US Air Force's force development goals. This educational opportunity covers a broad spectrum of functional areas and operational disciplines. Students are assigned to study areas based on the developmental pattern established for them by either their service, agency, or by an appropriate US Air Force development team. The following is a list of AY04 specialized study areas:

Air and Space Power Employment
 Acquisition Management
 Space Operations
 Political-Military Strategist
 Agile Combat Support
 Mobility Operations
 Information Operations
 Plans and Programs
 Tailored Specialized Studies³⁶¹

Additional funding and faculty members were needed to execute the Module 3 courses. Instructors for the functional area courses needed to be functional area experts; therefore ACSC received additional funding as well as authorization for an additional 24 faculty members, each which was an expert in one of the functional areas, to report to ACSC in the summer of 2003.³⁶² To build course content, the course directors for each of the 8 Specialized Studies courses coordinated closely with their functional area counterparts out in the greater Air Force. Course directors wanted to make sure that their

³⁶¹ *Air University Catalog, Academic Year 2003-2004*, 58.

³⁶² PowerPoint briefing, "Dean's Guidance AY 04," January 9, 2003, in the personal files of Dr. Jim Forsyth, Slide 9.

course content accurately reflected current thinking and initiatives in the areas students would encounter in their next assignments.

Field trips were an integral part of each Specialized Studies course. Students in each Specialized Studies course took a 1-2 week field trip for a first-hand orientation in elements of their study area. For example, students in the Space Operations course toured space vehicle launch facilities at Vandenberg Air Force Base, California and Headquarters United States Space Command in Colorado Springs, Colorado. International students in the Tailored Specialized Studies course toured famous sites in the United States, such as New York City, to receive a fuller glimpse of American society.³⁶³

Students were vectored into one of the eight Specialized Studies courses by their individual assignment development teams at the Air Force Personnel Center (AFPC), not by ACSC. Each course contained between 60 and 70 students, who had little to no say in which course they were assigned. A student's career field assignment team decided which Specialized Studies course matched the most likely career broadening assignment for the students in that career field, and then directed the student to that course through the ACSC staff. AFPC then tracked which Specialized Studies course an officer took to aid in determining the officer's future assignments.³⁶⁴ Sister-service students in the Army, Navy, and Marine Corps were assigned to a Specialized Studies course by their respective service representatives.

³⁶³ "ACSC Launches Force Development Curriculum," 3.

³⁶⁴ *Ibid.*

The inaugural Specialized Studies execution was successful, but not without problems. Most of the negative feedback from students pertained to the course of assignment process and location of field trips. Course content feedback was generally positive, but some students felt course content mirrored some lessons in the core curriculum too closely.³⁶⁵ The same Specialized Studies courses were again executed for AY 2005 and AY 2006 with minor updates to course content and field trip dynamics, but essentially Specialized Studies did not change. The only notable change was the renaming of the course Political-Military Strategist to Political-Military Affairs for AY 2005 and renaming Specialized Studies to Developmental Studies for AY 2006 to more accurately reflect the intent of Force Development.

Developmental Studies did not survive past AY 2006. During AY 2007 curriculum planning, Developmental Studies was eliminated from the ACSC curriculum due to a lack of funding. During his interview, Dr. Glen Spivey indicated that General Michael T. Moseley, the new Chief of Staff of the Air Force who replaced General Jumper in 2005, did not place as high a priority on Developmental Studies as did his predecessor. Thus, as the war in Iraq continued to grow more expensive and the Air Force budget continued to be constrained, Developmental Studies was eliminated, along with the authorization for additional faculty.³⁶⁶

³⁶⁵ PowerPoint briefing, "AY 04 Specialized Studies End-of-Course Briefing," June 14, 2004, Slide 54, in the personal files of Dr. Jim Forsyth.

³⁶⁶ Interview with Dr. Glen Spivey, September 2007.

Other Curriculum Initiatives

In addition to ordering the inclusion of Specialized Studies into the AY 2004 ACSC curriculum, General Jumper mandated that ACSC include a course on strategy and a course on air expeditionary force operations in its core curriculum. In his interview, Dr. Holzzimmer recalled that the inclusion of the Strategy and Air Expeditionary Force courses taught as part of Module 1 during the AY 2004 curriculum was due to the wishes of General Jumper. The concept of strategy is nothing new to ACSC; many courses throughout the years have addressed strategy in varying contexts and degrees. However, General Jumper wanted an entire course devoted to the topic because he felt strategy was not fully understood among the officer corps. In addition, with the Air Force transitioning to an expeditionary culture, General Jumper wanted a course on Air Expeditionary Operations. Thus, ACSC rewrote 75 percent of the AY 2003 Nature of War course to create the Strategy course and rewrote 50 percent of the AY 2003 Air and Space Operations course to create the Air Expeditionary Force course for AY 2004.³⁶⁷

Regional Accreditation

Air University was granted authority by Congress in 1999 to confer master's degrees on graduates of ACSC and AWC. Beginning with graduates of AY 2000, ACSC graduates earned a Master of Military Operational Art and Science degree. Air University immediately began the process to seek regional accreditation of its degree-granting authority from the Southern Association of Colleges and Schools (SACS),

³⁶⁷ Interview with Dr. Kevin Holzzimmer, September 2007.

which began a 5-year accreditation study of ACSC. The SACS accreditation team visited Air University and ACSC on several occasions during this time and ACSC completed a comprehensive self-study in 2003 as part of the accreditation effort. In June 2004, Air University was officially accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate and master's degrees effective at the beginning of the 2004 calendar year.³⁶⁸ Thus, ACSC graduates, beginning with the class of AY 2004, now received regionally accredited Master of Military Operational Art and Science degrees. Likewise, Air War College graduates received accredited Master of Strategic Studies degrees.

The Fullhart Era

Brigadier General Randall W. Fullhart served as Commandant of ACSC from October 2004 to June 2006. General Fullhart brought with him to ACSC a firm belief in critical thinking, leadership and management principles and a strong desire to make these principles a central part of the ACSC curriculum. In addition, Fullhart strongly believed in the professional development of the faculty and sought opportunities to immerse faculty members in various training and development programs. Because he arrived in October 2004, Brigadier General Fullhart inherited the AY 2005 curriculum already in progress (Figure 12). Thus, he was not able to institute his own curricular ideas until the start of AY 2006. However, Fullhart immediately began to inject his ideas

³⁶⁸ *Air University Catalog: Academic Year 2004-2005.*

into the curriculum planning effort for AY 2006 as well as institute his own faculty development and training ideas after he arrived.³⁶⁹

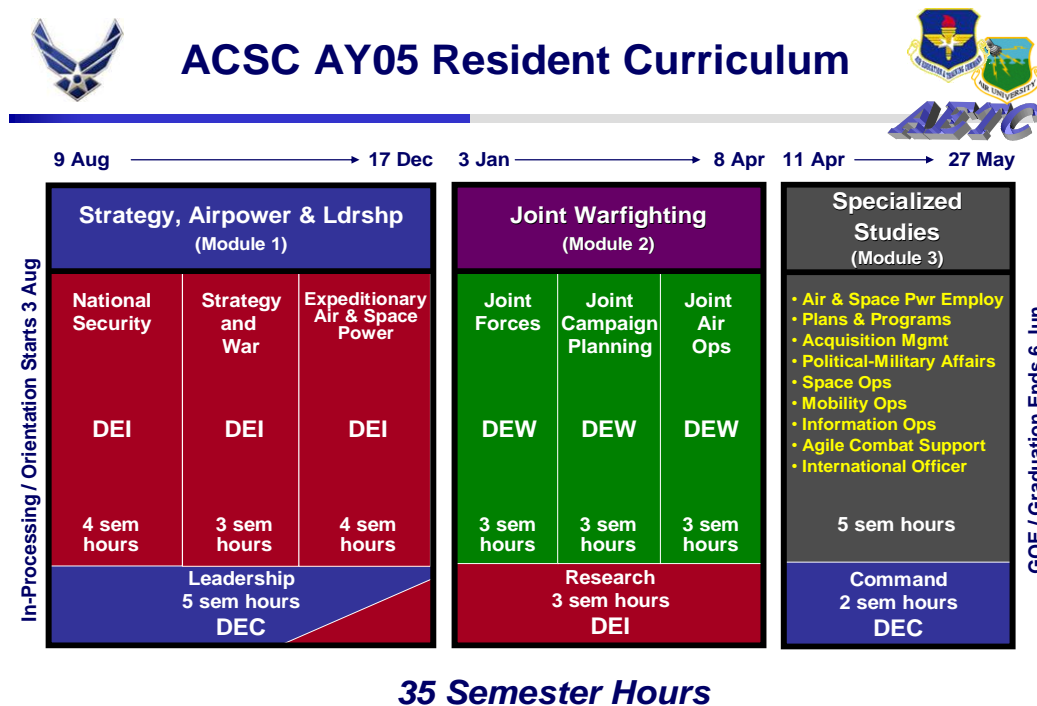


Figure 12. ACSC AY 2005 Curriculum.
 Source: PowerPoint Briefing, “AY 05 Curriculum,” July 12, 2004, slide 4 in the personal files of Dr. Jim Forsyth, Department Chair for Department of Leadership, Command, and Communication Studies, Air Command and Staff College, Maxwell Air Force Base, AL.

³⁶⁹ Personal experience and observations of the author as a member of the ACSC faculty during the first 9 months of Brigadier General Fullhart’s tenure as Commandant.

One of Brigadier General Fullhart's first acts as Commandant was to change the ACSC mission statement. When he arrived, the mission statement read,

A world-class team educating mid-career officers to lead in developing, employing, commanding, and supporting air and space power across the spectrum of service, joint, and combined operations.³⁷⁰

Fullhart believed ACSC should articulate not only its mission, but also its vision for the future. Subsequently, he created an official ACSC vision statement to accompany its mission statement. Fullhart also believed ACSC had a mission to its students and a separate mission to its faculty. Therefore, he split the ACSC mission statement into an area addressing students and an area addressing faculty, and incorporated a vision statement, both of which clearly reflect Fullhart's emphasis on leadership and developing critical thinking skills:

ACSC Mission:

To our Students...

Inspire critically thinking Airmen to lead Air & Space forces in Joint/Combined operations.

To our faculty and staff...

Provide an intellectually stimulating environment that attracts, develops, and rewards the finest team of educator-leaders possible.

ACSC Vision:

To forge relationships with mid-career officers and civilians that promote...
 ...life-long learning,
 ...sustained military education,
 ...and continuing professional development.³⁷¹

³⁷⁰ *Air University Catalog: Academic Year 2004-2005*, 51, in the Muir S. Fairchild Research Information Center, Maxwell Air Force Base, AL.

³⁷¹ *Air Command and Staff College Curriculum Plan for the Academic Year 2005-2006*, 6, in the official files of the Office of the Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

Fullhart injected formal Commandant Guidance into the ACSC Curriculum Plan for AY 2006 in which he articulated the emphasis areas and issues he wanted addressed during AY 2006 (Figure 13). He established the theme for his tenure as “Developing Instructor-Leaders and Thinkers.”³⁷² To thus guide ACSC, Fullhart established three Areas of Emphasis: Critical Thinking, Leadership, and Expanded Educational Opportunities, and four Issues: Forging Relationships to Maintain Currency and Relevance, Promoting an Expeditionary Mindset, Faculty Manning and Development, and Facility Modernization and Expansion.³⁷³

In addition to his own ideas, Brigadier General Fullhart was careful to include external guidance laid out in the Continuum of Education and Strategic Guidance. For AY 2006, the CESG had new guidance in several areas from senior leaders to support the core CESG learning areas. The new guidance included emphasizing cultural awareness of coalition allies and enemies, understanding the evolving role of special

³⁷² Ibid, 9.

³⁷³ Ibid, 10.

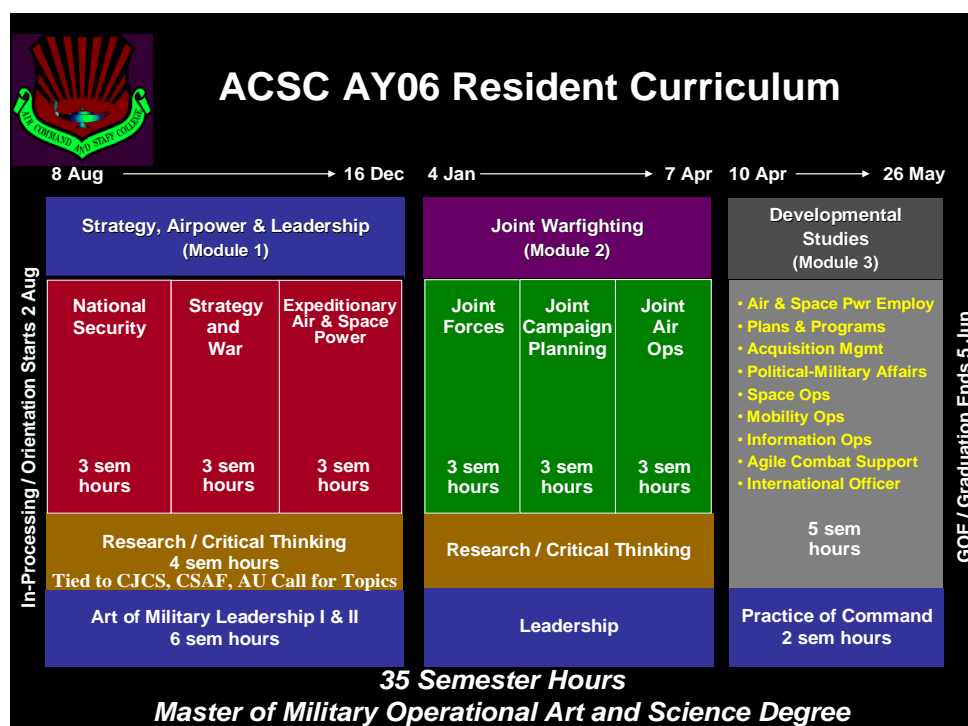


Figure 13. ACSC AY 2006 Curriculum.

Source: PowerPoint Briefing, “ACSC Program Review,” April 2005, Slide 15, in the official files of Air Command and Staff College, Maxwell Air Force Base, AL.

operations forces, understanding of the role of space in the future of national security, and stressing the areas graduates will be working in during the next five years of their careers.³⁷⁴ Each of these areas was covered by lessons interspersed throughout the curriculum.

Brigadier General Fullhart’s own curricular ideas were primarily thrust into the formal Leadership courses, the Practice of Command course, and Research courses. However, Fullhart emphasized several unifying themes across all the teaching departments and courses: Leading Airmen, Thinking Critically; The Importance of

³⁷⁴ Ibid, 3.

Context; Operational Art; Joint and Service Doctrine; Transformation and the Future; and Lifelong Professional Development.³⁷⁵ The Art of Military Leadership I focused on leader development and leader-follower interaction; The Art of Military Leadership II focused on how that leader-follower interaction ensures mission accomplishment. The Practice of Command course was designed to further enhance a student's understanding of leadership principles by stressing the importance of developing the mindset of a commander appropriate for an expeditionary force. Critical research and analysis was stressed in the Research courses. Students were required to enroll in one of a number of research seminars that complemented the ACSC core curriculum. Each student was required to produce a scholarly research paper under the direction of a subject matter expert.³⁷⁶ Fullhart believed that leadership, command, and critical thinking were the glue that held the entire curriculum together, as depicted in a graphic he personally built (Figure 14) to represent his vision.

³⁷⁵ Air University Catalog: Academic Year 2005-2006.

³⁷⁶ Ibid.

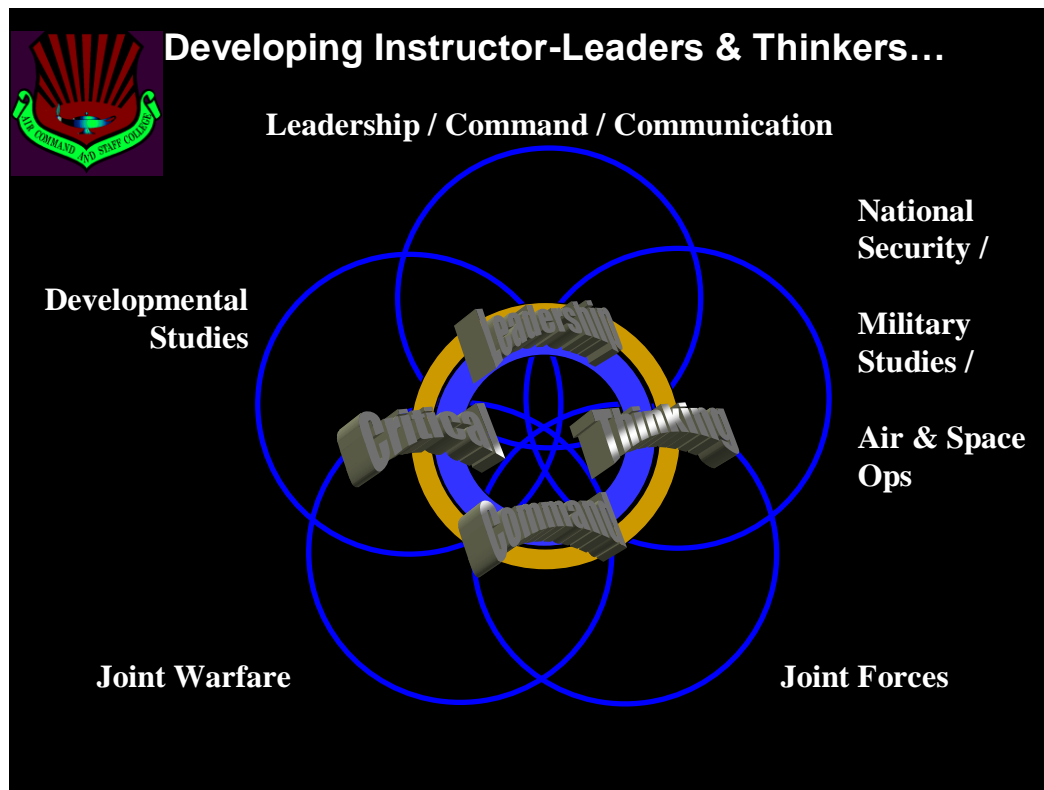


Figure 14. Brigadier General Fullhart's Curriculum Vision

Source: PowerPoint Briefing, "ACSC Program Review," April 2005, Slide 6, in the official files of the Office of the Dean of Education and Curriculum, Air Command and Staff College, Maxwell Air Force Base, AL.

Additional curricular initiatives during Brigadier General Fullhart's tenure included a new Homeland Defense Exercise called Silent Fury and a joint exercise with students from the U.S. Army Command and General Staff College. Silent Fury contained multiple scenarios that involved coordination with regional mayors and various state emergency management offices. The joint exercise with the Army Command and General Staff College was an opportunity to war game the operational interface between a theater Combined Forces Air Component Commander (CFACC) and

a Combined Forces Land Component Commander (CFLCC) with senior mentor involvement from the Air Force and Army.³⁷⁷

Brigadier General Fullhart took a special interest in exposing faculty members to formal leadership and management lessons. One example is during the Christmas 2004 season; Fullhart assembled the entire faculty body in the ACSC auditorium and showed the 1946 movie *It's a Wonderful Life*. At the end of the movie, he played a video of Frances Hesselbein, former CEO of The Girl Scouts of the USA and Founding President of the Drucker Foundation, discussing the leadership traits of the movie's main character, George Bailey, played by Jimmy Stewart. Brigadier General Fullhart then provided closing comments before dismissing the faculty. Days later, Fullhart personally delivered to each faculty member a copy of the book, *Hesselbein on Leadership*, by Frances Hesselbein. In the front of the book, Fullhart had written, "Small book...Big ideas!"³⁷⁸ Fullhart had only been Commandant for approximately 6 weeks, and his actions were a clear signal of what the faculty could expect.

Brigadier General Fullhart utilized several initiatives to develop the faculty into Instructor-Leaders. One of the most significant efforts Fullhart introduced to develop Instructor-Leaders was sending faculty members to civilian leadership training programs. Within the first eight months of Fullhart's tenure, he had sent 12 faculty members to the Goldratt Institute for training in critical thinking, where they learned "core problem identification, conflict resolution, and solution generation and

³⁷⁷ Ibid, Slides 10-11.

³⁷⁸ Personal experience and observation of the author.

implementation.”³⁷⁹ Fullhart’s intent was for the faculty to return to ACSC and incorporate such training into seminar instruction. Fullhart also approved 7 civilian faculty members up to 90-days of research leave each in order to begin or complete personal research projects in their field of specialization. In addition, Brigadier General Fullhart encouraged and often funded faculty members to attend and or present papers at professional conferences in their area of specialization.³⁸⁰ Fullhart believed so strongly in the formal principles of leadership that he selected a military member of the faculty in 2005 to pursue a Ph.D. in Leadership as part of ACSC’s Advanced Academic Degree Program. This is significant because out of a total of 40 military faculty members selected for the program since its 1995 inception, this was the first and only time that Leadership has been chosen as the academic discipline for a Ph.D. candidate.³⁸¹

Brigadier General Fullhart was a controversial Commandant. Few faculty members fully embraced his leadership-centric curriculum or faculty development initiatives. In fact, Fullhart had a tenuous relationship with many members of the faculty for much of his tenure. Some seasoned civilian faculty members even left ACSC out of frustration with Fullhart’s initiatives.³⁸² One faculty member, who wished to remain anonymous, made some scathing comments in reference to what Brigadier General Fullhart was doing at ACSC and are worth quoting at length. Although these are the comments of a single faculty member, they illustrate the tension that characterized Fullhart’s relationship with the faculty:

³⁷⁹ “ACSC Program Review,” Slide 36.

³⁸⁰ Ibid, Slide 37.

³⁸¹ “ACSC Program Review,” Slide 35.

³⁸² Personal experience and observation of the author.

In the past year, the ideas about leadership presented at ACSC have taken the form of inspirational talks more suited to the pulpit than to the lectern and at a level of discourse more appropriate to senior airmen than to officers and civilian academics. These ideas are juvenile simplisms offered up as irrefutable truths which may be discussed and examined but which are also, by definition, dogmas and therefore not subject to rational disproof. Under such conditions, is it really leadership that we are talking about? Or is it that the study of leadership, more than any other subject, simply lends itself to the pretensions of guruship?

The growth we should be interested in at ACSC is intellectual. It is not an issue which required additional leadership programs based on pseudo-scientific methodological or theoretical assumptions. Any subject of study in our curriculum, if properly designed and taught well by qualified academics, can 'grow' people by providing them, within the limits of their individual intellectual capacity, and opportunity to think critically, to define problems, to bring these problems to resolution, to convince others of the value of analysis and to encourage them to follow a specified course of action. That is a worthy target to aim for. And we have already worked out its vector. There is nothing, other than the speciousness of what our superiors deign to call leadership studies, which should keep us from executing this mission.³⁸³

During his interview, Mr. Budd Jones was asked if any Commandants stand out as being as radical as John Warden, to which he replied,

Perhaps the one that tried to make the biggest change was the one that just left [Brigadier General Fullhart], who to be honest with you, put a great deal of management theory into the curriculum, over by the way, the objections of some of the faculty who felt that was too much. Indeed, it needed to be scaled back a bit. Now, General Fullhart was also a big believer in engaging ACSC with the larger Air Force population. He started the squadron commander's on-line page that they can go to. He was a big supporter of accrediting non-resident master's degrees and stuff like that. From a perspective, he was probably the second-most active Commandant in that arena behind Warden. Many of the other Commandants were more of a 'keep an even keel' person.³⁸⁴

Brigadier General Jay H. Lindell replaced Brigadier General Fullhart as Commandant in June 2006 and began to scale back the leadership and management

³⁸³ Comments from a faculty member who wished to remain anonymous, 2008.

³⁸⁴ Interview with Mr. Budd Jones, September 2007.

emphasis Fullhart instituted. Dr. Forsyth recalled, “We are in the process of trying to stay true to that [Fullhart’s leadership emphasis], but at the same time, change the curriculum back to make it a little bit more executable.”³⁸⁵ One of the changes made to scale back Fullhart’s emphasis was to the ACSC mission statement, which did not survive after Fullhart’s departure. The new ACSC mission statement read, “Prepare field-grade officers to develop, employ, and command air, space and cyberspace power in joint, combined and multinational operations.”³⁸⁶ The growing importance to the U.S. military of the potential of cyberspace as a virtual battlefield and operating alongside partners from other nations, as shown in the experience of the U.S. military during the Global War on Terror, is reflected in this new mission statement for ACSC.

Brigadier General Fullhart’s curricular and faculty development initiatives did not survive after he departed. ACSC’s curricular emphasis on leadership and critical thinking soon went back to levels seen in the years prior to Fullhart’s arrival, and the emphasis on leadership training for the faculty was greatly reduced or eliminated. The tenure of Brigadier General Fullhart as ACSC Commandant vividly illustrates not only the enormous power to influence curriculum that lies with the office of the Commandant, but also how fleeting a Commandant’s curricular emphasis can be when a new Commandant assumes command of ACSC.

³⁸⁵ Interview with Dr. Jim Forsyth, September 2007.

³⁸⁶ ACSC Home Page, accessed on August 1, 2008.

Summary

The terrorist attacks of September 11, 2001 changed the outlook for a lot of Americans and people around the world. The date marks the deadliest terrorist attacks on U.S. soil in history; the date also marks a turning point in Professional Military Education. After September 11, 2001, the curriculum at ACSC did not immediately or significantly change. Rather, the curriculum has evolved in the years since 9-11-01 as the Global War on Terror has progressed and as Air Force leadership has changed.

In the early days after 9-11-01, the curriculum modifications originated with the faculty who recognized the need to inject discussions about terrorism and radical Islam into appropriate lessons. As time progressed, Air Force leadership forced top-down curricular changes to the ACSC program. The Force Development initiative forced ACSC to transition to a modular curriculum structure and include a block of instruction called Specialized Studies, which took an extraordinary effort from the faculty to be ready for AY 2004, but was successfully accomplished. Specialized Studies ran for three years, was renamed Developmental Studies, and then was cancelled due to lack of funding. In reality, Developmental Studies was cancelled because the initiative was not the same priority for the new Air Force Chief of Staff as it had been for the previous Chief of Staff. Developmental Studies is a good example of how curricular influence from top Air Force leadership comes and goes as the leadership changes.

Another significant era of change at ACSC after 9-11-01 was during the tenure of Brigadier General Randall Fullhart. Brigadier General Fullhart's legacy at ACSC is mixed. On one hand, Fullhart was a Conscientious Commandant who took his role as the

leader of ACSC very seriously and worked hard to instill in the students the skills and knowledge he believed were critical for officers to possess. In addition, Fullhart instituted aggressive faculty development programs he felt would keep faculty members relevant in the classroom, abreast of current military operations and intellectually stimulated and growing. It was becoming increasingly important for faculty members to have recent operational experience in light of the fact a growing number of students attending ACSC had recent experience in Afghanistan or Iraq. Faculty with recent operational experience, especially in either Afghanistan or Iraq had more credibility in the eyes of the students than faculty who did not.

Moreover, Fullhart engaged ACSC with the wider Air Force and civilian institutions, and made significant improvements and upgrades to ACSC facilities and technological infrastructure. On the other hand, Fullhart was a controversial Commandant. He forced unpopular curricular changes and implemented even more unpopular faculty training, quite often against the pointed feedback of seasoned faculty members. Before Fullhart left ACSC, several seasoned civilian faculty members simply left ACSC out of frustration. Therefore, in a sense, Fullhart could be compared with John Warden in that both Commandants came to ACSC and made their presence felt immediately through significant changes. However, it is telling that many of Warden's initiatives survived beyond his tenure, while those of Fullhart's did not.

Secretary Wynne and General Moseley's rationale behind including language and cultural studies at ACSC was for PME to maintain relevance to the realities of the evolving Global War on Terror. Language skills and a keener cultural understanding of

geographical areas such as the Middle East are considered essential war fighting skills for future U.S. military operations. Thus, as the U.S. continues to engage in operations to defeat terrorism, PME continues to be an area of emphasis and refinement for senior leaders seeking ways to provide officers with the necessary skills to fight and win the nation's wars.

In the first 5 years after the September 11, 2001 attacks, ACSC witnessed some radical changes to its curriculum and structure. Changes in Air Force and ACSC leadership resulted in significant changes; but as leadership changed, so did the changes they had instituted. However, ACSC has survived as a regionally-accredited degree-granting institution with a rigorous curriculum and inherent flexibility that is able to respond to internal or external guidance.

CHAPTER VIII

FINDINGS AND CONCLUSIONS

Summary

This study explored the evolution of the Air Command and Staff College curriculum from 1990 to 2006. Specifically, this study answered a central question and three supporting research questions: how the ACSC curriculum evolved since 1990; what influences drove curricular changes; how were influences manifested in the curriculum; and what factors enhanced or impeded the changes were explored. Following a brief synopsis of the role of technology in the time period under study, this chapter will discuss how each of the study's research questions was answered.

This study was designed as a historical research study utilizing qualitative research methods to gather data. Data was gathered through personal interviews with past and present members of Air Command and Staff College who served in or is currently serving in key positions and review of historical documents related to ACSC and its curriculum. Three key findings were produced from this study's research: The ACSC curriculum was continually in flux; both internal and external influences drove curricular change, but the most significant curriculum changes originated with individuals in positions of authority; and few curricular changes lasted. These findings led to the following conclusion: Air Command and Staff College will not have curricular stability as long as its dominant curricular influence remains senior officers who serve

only one or two years as leaders of Professional Military Education and are free to make unilateral curricular decision as they see fit.

During the time period under study, the ACSC curriculum changed continually. At no time in the sixteen year study period did the curriculum remain exactly the same from one academic year to the next. The ACSC curriculum for each academic year is built in line with the influences that act upon the curriculum. The study revealed that ACSC's curriculum is subject to both internal and external influences. The most significant curriculum changes were instituted by Air Force leaders, primarily the Air Force Chief of Staff and the ACSC Commandant, who came into their positions with strong ideas on what ACSC should teach its students.

Although at times it appeared the curriculum had briefly stabilized because the courses offered did not change, in name, from one year to the next, a closer examination of the curriculum revealed that changes still occurred. Usually these changes were through an increase or decrease in contact hours for a particular course, which indicated an emphasis or de-emphasis of that course in the overall curriculum from the previous year. Or, such changes as the injection of new lessons such as case studies on recent world events to illustrate course content were made. Furthermore, many curricular changes at ACSC did not last long after their implementation. Often, new leadership arrived and scrapped large parts of the curriculum they inherited in favor of instilling their own curricular ideas.

Research Question 1

The first research question in this study is, “What were the external and internal influences on the curriculum?” This study revealed that internal influences were those that fell within the confines of the ACSC organization itself, primarily the curricular influence of the Commandant and faculty. External influences included the Skelton Report, the Department of Defense, the Joint Chiefs of Staff, the Air Force Chief of Staff, the Air University Commander and world events.

The Skelton Report was a significant curricular influence. As a result of this report, joint education requirements were dictated to each military education school within the Department of Defense by the Chairman of the Joint Chiefs of Staff. Every five years, each PME institution undergoes an inspection by the Joint Staff of its joint education curriculum to ensure it adheres to the joint education requirements established by the Chairman of the Joint Chiefs of Staff. This inspection is called the Process of Accreditation for Joint Education (PAJE). If ACSC passes its PAJE inspection every five years, ACSC is then accredited by the Joint Staff to award Phase I joint education certification to its graduates. Phase II joint education is then accomplished at the Joint Forces Staff College in Norfolk, Virginia. Once an officer has Phase I and Phase II joint education accomplished, that officer can apply for Joint Specialty Officer (JSO) status. The Skelton Report recommended that the Department of Defense establish Joint Specialty Officers, those officers trained and educated to excel in leading U.S. forces in joint operations, to serve in high-level military positions.

In addition to joint education requirements, the Skelton Report was the genesis of ACSC's effort to increase the number of civilian faculty with doctoral degrees and increase the rigor of its academic program. ACSC was sharply criticized by the Skelton Report for its lack of academic rigor and the quality of its faculty. ACSC responded with new efforts to enhance its status by complying with the Report's recommendations. Overall, the Skelton Report made 31 recommendations applicable to ACSC, 30 of which were complied with. The lone recommendation of the Skelton Report not implemented by ACSC dealt with issuing officer efficiency reports to students upon graduation; ACSC issues training reports to its graduates and determined that issuing officer efficiency reports would not add any value. Therefore, that recommendation was not implemented.

The Department of Defense and Joint Chief of Staff were also external curricular influences. The study revealed that the Department of Defense generally left Professional Military Education to the Chairman of the Joint Chiefs of Staff, who codified PME policy in its publication, *Officer Professional Military Education Policy* (OPMEP). The OPMEP establishes the criteria for joint education accreditation. Beyond joint education, the OPMEP leaves curriculum up to the individual schools to determine. However, the Department of Defense did directly influence curriculum at ACSC after the terrorist attacks of September 11, 2001. The DoD dictated that ACSC offer language training and regional cultural instruction, beginning with AY 2007, based on lessons learned from U.S. experiences in Afghanistan and Iraq. Otherwise, the Department of Defense was not a significant, direct curricular influence.

The Air Force Chief of Staff position was a significant external curricular influence for ACSC. General John Jumper became Air Force Chief of Staff in 2002 and instituted the largest change in curricular content at ACSC since the arrival of Colonel John Warden as ACSC Commandant in 1992. General Jumper instituted a Force Development initiative in which he revamped the way the Air Force assigns and manages career development of its officers. As part of Force Development, General Jumper ordered ACSC to include new functional training courses called Specialized Studies in its curriculum beginning in AY 2004. Specialized studies consisted of 9 courses designed to familiarize officers with specific career field functional areas and became 50% of the ACSC curriculum in AY 2004.

Specialized Studies was executed in Academic Years 2004-2006, but was eliminated from the ACSC curriculum after AY 2006. General Michael Moseley, the Air Force Chief of Staff who replaced General Jumper, eliminated Specialized Studies in its entirety because of budgetary constraints and the fact he did not view Specialized Studies with the same priority as General Jumper had. The case of Specialized Studies represents a clear example of how the ACSC curriculum is in continual flux as it responds to the dictates of individual leaders. General Jumper dictated Specialized Studies be added; General Moseley dictated Specialized Studies be eliminated.

The Air University Commander, as the direct supervisor of the ACSC Commandant, is in a direct position to influence curriculum at ACSC. No evidence was found that the officers who served as Air University Commander during the study's time period micro-managed the curriculum of Air University schools. Air University

Commanders monitored the ACSC curriculum for compliance with directives from the Chief of Staff or the Joint Chiefs of Staff, but otherwise allowed the ACSC Commandants to manage their own curriculum. The only instance of direct curricular influence originating with the Air University Commander was the creation of the Air University Continuum of Education and Strategic Guidance in 1999.

Lieutenant General Joseph Redden, Air University Commander in 1999, directed the creation of the Air University Continuum of Education and Strategic Guidance to integrate curriculum implementation across all Air University schools and to ensure an officer received the appropriate military education at the appropriate stage of his or her career. All Air University schools were required to include 5 core subject areas in their curriculum: Profession of Arms, Military Studies, International Security Studies, Communications Studies, and Leadership and Management Studies. The ACSC Commandant briefed the Air University Commander each spring on the ACSC curriculum content and rationale for the coming academic year which gave the Air University Commander the opportunity to ensure the Continuum of Education requirements were included.

World events were also an external influence on the ACSC curriculum. Throughout the post-Cold War period covered by this study, U.S. military forces were involved in various operations around the world, including operations in Iraq (1991 and again beginning in 2003), Somalia (1993), Haiti (1994), Kosovo (1998), and Afghanistan (beginning in 2001). In addition, terrorist attacks such as the bombings of the U.S. military barracks at Khobar Towers, Saudi Arabia (1996), the bombings of the

U.S. embassies in Kenya and Tanzania (1998), the attack on the USS Cole Navy ship in Yemen (2000), the attacks on the World Trade Center and Pentagon on September 11, 2001, and military action in Afghanistan beginning in October, 2001 were significant world events for the U.S.

Most world events typically became part of the ACSC curriculum in the form of individual lessons incorporated in various parts of the core existing core curriculum, and did not typically become part of the curriculum immediately after their occurrence. Faculty did discuss these events as they occurred in seminar with students because they were current events with military significance. However, formal curricular lessons that explored these world events for their military significance and lessons learned were not included as individual case studies, lectures, or seminar discussions in core curriculum courses until the academic year or years following the occurrence of the event. The terrorist attacks on September 11, 2001, however, had a deeper and more far-reaching curricular impact than other world events.

The September 11, 2001 attacks were the catalyst for significant change to the ACSC curriculum. National security issues such as terrorism, failed states, globalization, radical Islamism, wars of religion and ideology were incorporated and each included discussions on the 9-11 attacks. In addition, as experiences and lessons learned from U.S. military operations in Afghanistan and Iraq were published, ACSC faculty used this knowledge to create new lessons within core curriculum courses to illustrate ideas and concepts. Finally, language and cultural studies were directed to be taught at ACSC beginning in AY 2007 based on the experience of U.S. forces in the Global War on

Terror which began after September 11, 2001. At the time this study ended, ACSC faculty were still focused on keeping the curriculum relevant to the post-September 11, 2001 international security environment.

Internal curricular influences were the ACSC Commandant and the faculty. ACSC Commandants during this study period can be classified as reformers or managers. Reformers are those Commandants who significantly altered the curricular content or structure of ACSC, while managers are those Commandants that may have initiated smaller-scale changes, but mostly kept the curriculum intact during their tenure as Commandant. Two Commandants stand out as reformers: Colonel John A. Warden III and Brigadier General Randall W. Fullhart. The rest of the Commandants from this period were managers.

Colonel John A. Warden became Commandant in 1992 and held the position for 3 years, the longest tenure of any Commandant during this time period. Warden's changes were so far-reaching his tenure is known as the "Warden Revolution". Warden's changes went beyond simple curricular content; he altered the organizational structure of ACSC and how curriculum was delivered. Although he arrived at ACSC with an unofficial mandate to change ACSC, the changes Warden made were his own ideas. Warden recognized the changing international security context of the post-Cold War era, and brought the ACSC curriculum in line with his vision of the new security environment.

Warden's curricular content changes included building the core curriculum around an Air Campaign Course which incorporated the problem-solving methodology

of an operational-level theater campaign. His organizational change included combining separate curriculum development and classroom instruction entities into a single directorate, because Warden believed those who delivered curriculum should have a hand in its development. Warden's instructional change included moving the curriculum from heavily lecture-based to heavily seminar-based, restructuring the student academic day to allow time for reading, study and reflection, incorporating a rigorous required reading program for students, and accelerating the hiring of civilian faculty with doctoral degrees. Most of these changes were accomplished in the first year of his tenure, a pace of change not equaled by any other Commandant during this period. Warden spent the last two years of his tenure refining his initiatives.

Brigadier General Randall W. Fullhart served as Commandant for only 18 months, between October 2004 and April 2006, and like Warden, made significant changes to the ACSC curriculum. Fullhart's changes were not made in the background of a changed security context as were Warden's changes. Fullhart could have sharply focused the curriculum toward the lessons that were beginning to come out of the Iraq and Afghanistan campaigns during his tenure, but he did not. Instead, Fullhart believed the curriculum needed a more managerial focus.

Fullhart was a staunch believer in formal leadership and management principles and critical thinking skills. Thus, he insisted these concepts be the central focus of the ACSC curriculum, against the advice of a lot of his faculty. Fullhart completely re-wrote the ACSC mission statement to reflect his emphasis on leadership, management, and critical thinking, and developed an in-depth faculty training program he designed to

create “Instructor-Leaders and Thinkers.” Fullhart’s curriculum still addressed the required areas of the Air University Continuum of Education and joint education requirements; however, Leadership courses and Research practices were more heavily emphasized than in previous years. Brigadier General Fullhart’s curricular focus did not survive his tenure. Within one year of his departure, the heavy emphasis on formal leadership and management was eliminated. Fullhart’s successors did not share his curricular vision and thus, eliminated it.

The significant curricular changes instituted by Warden and Fullhart did not last. Warden’s curriculum remained longer than Fullhart’s did, most likely due to the focus of Warden’s curriculum resembling the traditional ACSC focus of employing airpower at the operational level of war more closely than Fullhart’s curriculum focused on Servant Leadership. Both Warden and Fullhart were firm believers that the ACSC curriculum they inherited was not sufficient, and so they changed it to fit their personal curricular vision, as was their prerogative as Commandant. Commandants should retain the authority to make changes to the ACSC curriculum, just as any military commander should retain the authority to change and lead their organization as they see fit within guidelines set by the chain of command. However, this authority, combined with short tenure as Commandant, opens the door for significant curricular instability. The examples of Warden and Fullhart illustrate how the ACSC curriculum is at the mercy of those in positions of authority over ACSC.

Research Question 2

The second research question for this study is, “How were external and internal influences manifested in the curriculum?” This study revealed that external and internal influences were manifested in the ACSC curriculum via small or larger-scale changes. Small scale changes included adding new or eliminating existing lectures and individual lessons within a core curriculum course, individual seminar discussions, or adding or deleting special readings. Larger scale changes included incorporating entire new courses within the core curriculum, changing the core content of an existing course, or adding a new elective course on a particular subject or area of emphasis.

Before external and internal curricular input is formally manifested in the ACSC curriculum, proposed changes are first vetted through ACSC’s Educational Program Committee (EPC). The EPC is the governing body within ACSC with responsibility for the curriculum content. It is the EPC that takes the curriculum changes driven by external and internal influences and ensures the curriculum reflects the necessary small or large-scale changes for the next available academic year. The EPC recommends curriculum content to the Commandant, who makes the final decision on what is taught at ACSC, unless of course, the Commandant is directed by higher authority to include particular curriculum content.

The aforementioned process is illustrated through ACSC’s formal feedback system. ACSC students can comment on the curriculum they receive and faculty can comment on the curriculum they are required to deliver. Students and faculty can comment upon each individual lesson within a course, each course, and their overall

experience at ACSC during the academic year. Upon completion of each individual lesson, students are afforded the opportunity to electronically submit feedback on the particular lesson they just received, and faculty can comment on how well the lesson went from their perspective. All lectures and seminar lessons are cyber-linked to a form where students and faculty submit formal feedback. Likewise, at the completion of each course, students and faculty are asked to electronically provide End-of-Course (EOC) feedback.

The formal feedback system is built with metrics. Students are asked to rate various areas of individual lessons and courses on a scale of 1 to 6, where 1 is strongly disagree and 6 is strongly agree. Students and faculty can also comment on how well they believe the individual lessons and overall course achieved their stated educational objectives, and offer any suggested improvements. Finally, at the end of the academic year, all students and faculty are asked to provide feedback encompassing their entire ACSC experience during the academic year.

Most often, formal student feedback comments center on their perceptions of how well the curriculum was delivered as opposed to curricular content. For example, suggestions for updating lesson support readings, bringing in different guest speakers, or shortening/extending the length of a particular lecture or seminar are typical of student feedback.

Beyond the formal feedback process, ACSC students are encouraged to informally talk with faculty members about aspects of the curriculum they feel should be changed. Students can also seek conversations with faculty to provide constructive

criticism of the curriculum or simply have a deeper conversation about a particular curricular subject area. Regardless of motivation, students have the opportunity to talk about the curriculum face-to-face with faculty as well as provide formal feedback.

Student and faculty feedback is collected and becomes part of ACSC's formal EOC-Curriculum Development-EPC process. After each course is delivered, an EOC meeting is held where the current course team briefs the Dean of Academic Affairs and the course team for the following academic year on various aspects of the just-completed course, including faculty observations and student feedback. The new course team then develops course curriculum for the next academic year and briefs their proposed course to the ACSC EPC, who approves the course as proposed or suggests changes. The course team briefs the EPC members on how student and faculty feedback briefed at the EOC meeting will be incorporated in the course or how the feedback is not valid or applicable to the course.

Research Question 3

The final research question for this study is, "What factors facilitate or impede curricular change relative to external and internal influences?" This study revealed that the ACSC curriculum is responsive to both external and internal influences. Curricular change was facilitated by the ACSC faculty and the fact ACSC is a military organization. Significant curricular changes, particularly during the Warden and Fullhart years, were resisted by some of the ACSC faculty, but the changes were instituted nonetheless. The fact that ACSC is a military organization, and therefore, is subject to orders from the ACSC Commandant and higher ranking personnel outside ACSC in its

chain-of-command, is the primary reason the ACSC curriculum experienced so much change.

Although Professional Military Education curriculum can be, and often is, dictated by direct order, the ACSC faculty can also facilitate or impede curricular change. The ACSC faculty is on the front line of curriculum delivery. If the faculty agrees with new curriculum changes, the faculty can make the transition to the new curriculum smooth. However, if the faculty disagrees with the new changes, the faculty can make incorporating the new changes problematic. The ACSC faculty cannot refuse an order to deliver a particular curriculum; however, once the seminar door closes, faculty is alone with the students, and can present the curriculum in whatever context they choose. Thus, faculty can present the curriculum in a light favorable or unfavorable to leadership, depending on how the faculty views the changes.

Technological Influence

Although not covered in the chapters, emerging technology enabled new and innovative curriculum delivery methods, but had no significant impact on curriculum content. Colonel John Warden, ACSC Commandant from 1992 to 1995, is the first commandant to make incorporating emerging technology across all facets of ACSC a top priority. Under Warden's leadership, ACSC faculty utilized emerging, state-of-the-art computer technology to create robust war games and exercises, and to create lesson presentation aids. ACSC students had participated in war games and exercises prior to the availability of computer technology; however, computer technology enabled ACSC to create more challenging and life-like scenarios for students to resolve. Computers

were programmed to allow students to formulate and execute a plan of action, inject realistic problems into the action, simulate enemy actions, and compute success and failure scores. In addition, faculty used computers to create lesson aids such as maps, graphs, and video which were then used in class to demonstrate points and generally enhance delivery of curriculum content. Curriculum content did not change as a result of bringing new technology on board at ACSC; technology simply enhanced the delivery of ACSC curriculum.

Technology, however, does have a role in ACSC curriculum content. Rapid technological advancements in modern weaponry, communications, and information technology after the end of the Cold War contributed significantly to the changing nature of the international security environment. As the U.S. began facing adversaries very adept at utilizing existing technology in unconventional ways, new ways of thinking about the conduct of military operations became necessary. Professional Military Education necessarily incorporates elements of this new thinking into its curriculum to remain relevant. In this way, technology does, in fact, influence curriculum at ACSC.

Theoretical Influence

During the period of this study, no formal curriculum theory or adult learning theory was consciously injected into the formulation of the ACSC curriculum. Nor does ACSC consciously attempt to keep up with trends in curriculum or adult learning theory development. The curriculum that was developed, approved, and taught each academic year was developed in the absence of a conscious effort to use or adhere to a particular

theory of curriculum or adult learning. However, the ACSC curriculum most resembles core curriculum theory and Andragogy.

Core curriculum theory presupposes that there is a single, uniform body of knowledge that all students should know and this curriculum will produce graduates well positioned to serve their community. In core curriculum, a mandated, pre-defined curriculum is designed outside the classroom and students all learn a common set of knowledge and skills. Instruction in this curriculum theory revolves around imparting this pre-determined body of knowledge to the students. Although instruction in a core curriculum can tend toward teaching a single “correct” answer, critical thinking, problem solving, and team learning are not precluded. In fact, ACSC goes to great lengths to inject academic rigor, or the promoting of student ability to critically evaluate and synthesize the content under study, into its core curriculum and teach its faculty to stimulate mental inquiry amongst the students rather than passively transmit the required course content.

The ACSC curriculum is built as a core curriculum. Subject material that is deemed necessary for field grade military officers attending ACSC to know in order to become the future military leaders of the United States is codified as the ACSC curriculum for a given academic year. This subject material can, and usually does, change quite often at ACSC. Although ACSC’s Educational Program Committee molds and shapes the individual courses and lessons that make up the annual ACSC curriculum, the subjects and knowledge areas that will be taught are downward directed to ACSC’s Educational Program Committee from the ACSC Commandant or from areas

outside of ACSC. In theory, every graduate of ACSC is poised for success as a military leader in the defense community because each ACSC student received the same education.

In addition, ACSC designs its educational program around adult learning theory. This seems intuitive, given the fact that the students attending ACSC are military officers with 12-14 years of service and are in their mid to late 30s in age. Although its students are all adults, ACSC does not consciously subscribe to a particular adult learning theory or make efforts to keep up with trends in adult education. However, the ACSC curriculum mirrors behaviorist learning theory, an integrated framework of adult learning. Behaviorist learning theory emphasizes observable behavior as well as identification of the skills needed to perform in an occupation, teaching those skills, and requiring a certain standard of performance in the practice of those skills. The ACSC curriculum is based on the skills that mid-career officers need to have in order to fight and win the nation's wars. ACSC instructors teach those skills and officers are held accountable for their performance when practicing the skills they learn at ACSC.

Furthermore, the ACSC curriculum mirrors the foundation for adult learning Eduard Lindeman first laid out in the 1920s and Malcolm Knowles's Andragogy assumptions. Lindeman stated that the setting for adult education was:

Small groups of aspiring adults who desire to keep their minds fresh and vigorous, who begin to learn by confronting pertinent situations, who dig down into the reservoirs of their experience before resorting to texts and secondary facts, who are led in the discussion by teachers who are also searchers after wisdom and not oracles: this constitutes the setting for adult education.³⁸⁷

³⁸⁷ Lindeman, 1926, 10-11.

Lindeman wrote that in adult education, student experience counts just as much as teacher knowledge and that the role of the teacher is to “engage in a process of mutual inquiry with them [students] rather than to transmit his or her knowledge to them and then evaluate their conformity to it.”³⁸⁸ Knowles expounded on Lindeman’s thoughts by writing that the richest resource in adult learning is the learner himself. Thus, the “emphasis in adult education is on experiential techniques—techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods instead of transmittal techniques.”³⁸⁹

The adult education described by Lindeman and Knowles can be found at ACSC. The ACSC student body of nearly 600 students is organized into seminars of 12 to 14 students who are assigned a course instructor, whose purpose in seminar is to lead a group discussion on a particular curricular topic. A course instructor may teach two seminars, but will not be assigned to teach a seminar larger than 12 to 14 students at any one time. Furthermore, each seminar lesson is structured using the instructional methodologies mentioned by Knowles; group discussions, simulation exercises, problem-solving activities, case method investigation, and laboratory methods. Course instructors are taught how to employ these instructional methodologies through the ACSC Faculty Development program, and individual lessons are designed with one of these instructional methodologies in mind.

³⁸⁸ Ibid, 166.

³⁸⁹ Knowles, 1980, 66.

Conclusions

The ACSC curriculum is unstable. During the period of this study, no broad, lasting consensus about what the ACSC curricula should contain was evident. The ACSC curriculum in 2006 did not resemble the 1990 curriculum. At any point in the period of this study, the ACSC curriculum resembled the priorities and ideas of the person in charge at that time. Curricular changes that do not necessarily enhance the ACSC curriculum are often made at the whims of leaders who happen to be in a position of authority and can effect these changes. Curricular changes instituted by these leaders are often their own personal ideas and priorities and are not necessarily made on the basis of sound educational criteria. Curriculum changes instituted by one leader are easily scrapped by a succeeding leader who does not share the same ideas or priorities and his or her predecessor, and then he or she institutes his or her own ideas. Thus, the cycle of curricular change continually spins with each cycle of leadership change, which averages about every two years.

This cycle of curricular change at ACSC causes unnecessary turmoil in the curriculum development process, frustrates the ACSC faculty members, and is detrimental to effective recruitment and retention of professional faculty, particularly civilians with doctoral degrees. Moreover, the major curriculum shifts as well as the smaller-scale curricular changes did not appear to be connected to each other in any coherent way. Rather, these changes appeared to be the result of the current whims of those in charge as opposed to changes based upon sound educational reasoning.

Professional Military Education curriculum should, in fact, be responsive to the evolving nature of warfare and the international security environment. As new developments in weapons technology, transportation, communications and information technology are introduced into the international security environment, PME curriculum does need to incorporate the impact of these developments on current and future U.S. military operations in order to remain relevant and on the forefront of developing officers capable of operating in such a rapidly changing environment.

Recommendations

Curricular changes that need to be made, such as those that keep the ACSC curriculum relevant and updated should be made using sound educational decision making criteria and not on personal preference alone. Professional educators on the ACSC faculty and assigned to Air University should be consulted and their input seriously considered. In addition, the professional civilian educators assigned to the Air University Board of Visitors should be consulted for their expert advice on curricular changes that will have significant impact on the content and direction of the ACSC curriculum before change is instituted. Implementing curricular changes for reasons of personal preference or simply for the sake of making creative changes so a personal legacy can be left behind could be avoided if significant curriculum changes desired by Commandants were first required to be approved by the AU Commander.

A conscious effort for curriculum and adult education theory should be part of the curriculum development process within ACSC. Taking time out from “doing” adult education in order to seriously think about why ACSC does what it does is not always

easy. However, relevant and current scholarship in the fields of curriculum theory and adult education should be reviewed by the ACSC Chief Academic Officer for incorporation into the curriculum design and implementation process at ACSC. This would ensure that the educational practitioners at ACSC are directed toward a more organized source of knowledge about curriculum and the teaching of adults as they plan, use, and evaluate the curricula at ACSC.

The Air Force should consider changing their practice of selecting personnel for the positions of ACSC Commandant and Air University Commander. Traditionally, the Air Force has assigned only senior active duty Air Force officers to these positions. These officers have traditionally been pilots with significant operational experience, but who do not hold doctoral degrees. The Air Force should consider placing professional educators in these positions, particularly experienced military officers or civilian educators with doctoral degrees. Hiring a civilian to either of these positions could reduce or eliminate the rapid change of leadership in the top PME positions and help stabilize the ACSC curriculum. Civilians do not change assignments nearly as frequently as their military counterparts do, and a civilian ACSC Commandant would most likely stay in the position for many years, helping stabilize the curriculum. Military officers from any career field who have a doctoral degree and educational experience, such as faculty at a PME institution, should also be considered for the position of Commandant.

Significance

This study gives curriculum planners at ACSC a solid understanding of curriculum evolution in the post-Cold War era. Curriculum planners can use this study to

look for similarities in today's ACSC curriculum with the curriculum of the past, which will help them avoid the counterproductive activities of the past. A historical awareness of the forces that have influenced ACSC curriculum and the rationale behind curricular changes will inform development of current and future curricula at ACSC.

This historical curricular awareness is important for ACSC because of the vested interest the American public has in how well its military officers are prepared to lead U.S. forces. Far-reaching consequences could result from a cadre of senior military leaders unprepared to successfully cope with today's volatile international security environment. Thus, this study makes a significant contribution to the existing knowledge of curriculum history at ACSC, provides understanding of its past, and allows curriculum developers at ACSC to avoid the mistakes of the past. Also, the civilian leadership of the United States periodically reviews the effectiveness of Professional Military Education curriculum in preparing its military leaders to succeed; this study will serve as a guide for review of past ACSC effectiveness.

Recommendations for Further Research

During the course of conducting research for this study, several areas that warrant further research were noted. First, in what ways did the Skelton Report affect the future curriculum of the Professional Military Education schools (other than ACSC) in the Department of Defense? We know that Joint Education requirements were dictated to all PME schools through the Chairman of the Joint Chiefs of Staff, however, outside of this requirement, how was the core curriculum at the schools affected? A comparison study of the Skelton Report's impact between ACSC and its sister schools in the Army

and Navy, the Army Command and General Staff College and the School of Naval Command and Staff respectively, would illuminate how each service component viewed Professional Military Education within their respective service and whether any opportunities for cross-sharing of curricular ideas between schools were missed.

In addition, a study on the legacy and continuing impact of the Skelton Report for Professional Military Education in the United States is appropriate. The year 2009 marks the 20th anniversary of the publication of the Skelton Report. Such a milestone for this very important report naturally begs the questions, “What is the legacy of the Skelton Report, twenty years after it was published,” and “In what ways is the Skelton Report influencing PME today?” Thus, a study examining not only the impact of the Skelton Report at the time of its publication in 1989, but also the continuing impact the Report is having on PME in the United States is timely.

A final area of suggested research is an exploration of the Air Force’s practice of assigning senior officers as Commandants of ACSC or Commanders of Air University. These senior officers have traditionally not been trained as professional educators and therefore know little or nothing about formal adult learning or curriculum theory and models. These officers bring a wealth of operational and leadership experiences to their positions, have at least a Master’s degree, and are graduates of senior-level PME schools. However, most of these officers cannot draw on adult learning and curriculum models to guide their decisions impacting PME curriculum or student learning. Although professional educators are assigned to ACSC and Air University, their input is often ignored if the officer in charge is bent on implementing his or her own ideas.

Senior officers or civilians with doctoral degrees have not been assigned to lead Air Force PME. A study exploring the reasons why the Air Force has never hired a professional educator to lead its top military education schools could potentially lead to a change in the Air Force assignment culture; especially if the study included other service PME schools and revealed those schools have hired professional educators to lead them.

Epilogue

This study ends with the state of the ACSC curriculum in June 2006 at the end of Academic Year 2006. However, the curriculum story at ACSC that began with the events of September 11, 2001 continues. For example, a foreign language requirement and cultural studies were added to the ACSC curriculum for AY 2007.

This language and cultural studies initiative was the result of the Department of Defense recognizing the need for its soldiers, sailors, airmen, and marines to have a better understanding of Middle Eastern culture and language as a result of its experiences during years of fighting in Afghanistan and Iraq. Air Force Chief of Staff General Moseley first announced the forthcoming change for ACSC and the rationale behind the new curricular initiative during the Air Force Association's Air Warfare Symposium in February 2006. General Moseley stated,

Starting next year, the students down at Maxwell are going to see a more robust education that is going to prepare them to be leaders in this global war on terror, and that included language education. It is going to be mandatory that they take one of four languages: Arabic, French, Spanish and Chinese. This will enable them to go to other countries, not only in the Middle East, but in the sub-Sahara, and be able to better work in those regions.³⁹⁰

³⁹⁰ Julie Weckerlein, Staff Sergeant, USAF, "BMT Extended, NCOs and Officers to learn new languages," Air Force Print News, February 3, 2006.

In a letter to all Air Force personnel in April, 2006, Secretary of the Air Force Michael W. Wynne reiterated the forthcoming change and expanded the rationale put forth by General Moseley. Secretary Wynne stated,

As an expeditionary force, we find ourselves deployed to foreign countries with increased responsibilities in new mission areas. To ensure success, we need to go beyond our typical Air Force and Joint Force war fighting skills. Therefore, I am spearheading refined initial and developmental education for all ranks. Officers will see changes such as cultural and language classes added to their curriculums. Understanding different languages and different cultures is especially important in the Global War on Terror, where we work with many coalition partners in distant lands.³⁹¹

Students of ACSC AY 2007 were the first to receive language and cultural studies. Students were required to take the Defense Language Aptitude Battery (DLAB) exam prior to arrival at ACSC. Based on their DLAB scores, students were allowed to select which language to study. Language training was not integrated into the core curriculum however. Instead, students were issued commercial language familiarization training software and were expected to complete the training outlined in the software as part of their normal study time. At the end of the academic year, students were required to pass a language familiarization exam in order to graduate.³⁹²

Cultural studies was not made into a stand-alone course, but was rather integrated into the existing core ACSC curriculum. ACSC faculty completed a comprehensive assessment and revision of course content in order to comply with the order from General Moseley and Secretary Wynne to incorporate language and cultural studies into

³⁹¹ Michael W. Wynne, Secretary of the Air Force, "Letter to Airmen: Education and the Airman," April 13, 2006.

³⁹² Interview with Dr. Glen Spivey, September 2007.

the curriculum. ACSC published the results of this assessment and curricular revision on its website for AY 2007:

The revision effectively balanced our study of military history, leadership and joint war fighting with a focused examination of the regions of Africa; East Asia and the Pacific area; Europe; “Eurasia”; the Near East; and South and Central America. With this mandate, ACSC has created a fresh approach to teaching mid-career officers. Not only will ACSC provide language familiarization in Mandarin Chinese, Arabic, French, and Spanish, the Department of International Security and Military Studies will address how political, cultural, strategic military and regional contexts impact military operations.³⁹³

Language and cultural studies remain part of the ACSC curriculum as of AY 2008.

³⁹³ ACSC Home Page, accessed on August 1, 2008.

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APPENDIX A
INTERVIEW GUIDE

Describe your association with ACSC, including positions held and responsibilities.

Describe the curriculum development process at ACSC during your tenure.

Describe the role you played in the curriculum development process during your tenure.

During your tenure, what were the major curricular changes at ACSC?

Identify the influences that drove curricular changes at ACSC during your tenure.

Describe how those influences were manifested in the curriculum.

What curricular influence stands out as having the most impact on the curriculum during your tenure and why?

Identify and describe factors that facilitated or impeded curricular change at ACSC.

How would you characterize ACSC curriculum during the Cold War?

How would you characterize ACSC curriculum during the post-Cold War era?

APPENDIX B

ACSC AY 1994 BOOK LIST

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