AIR WAR COLLEGE

RESEARCH REPORT

ON SKELTON: A STRATEGY FOR AIR WAR COLLEGE

LIEUTENANT COLONEL LINDA L. SMITH

1990

AIR UNIVERSITY
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

APPROVED FOR PUBLIC
RELEASE; DISTRIBUTION
UNLIMITED
AIR WAR COLLEGE
AIR UNIVERSITY

ON SKELTON: A STRATEGY FOR AIR WAR COLLEGE

by

LINDA L. SMITH
Lieutenant Colonel, USAFR

A RESEARCH REPORT SUBMITTED TO THE FACULTY
IN
FULFILLMENT OF THE RESEARCH
REQUIREMENT

Research Advisor: Dr. James Winkates

MAXWELL AIR FORCE BASE, ALABAMA

April 1990
DISCLAIMER

This study represents the views of the author and does not necessarily reflect the official opinion of the Air War College or the Department of the Air Force. In accordance with Air Force Regulation 110-8, it is not copyrighted but is the property of the United States government.

Loan copies of this document may be obtained through the interlibrary loan desk of Air University Library, Maxwell Air Force Base, Alabama 36112-5564 (telephone (205) 293-7223 or AUTOVON 875-7223).
EXECUTIVE SUMMARY

TITLE: ON SKELTON: A STRATEGY FOR AIR WAR COLLEGE

AUTHOR: Linda L. Smith, Lieutenant Colonel, USAFR

The Skelton Committee, the first congressional review of professional military education, was formed to determine the ability of the services to develop strategists and to review plans for implementing the requirements of Title IV, the Department of Defense (DOD) Reorganization Act of 1986, also known as the Goldwater-Nichols Acts. The Skelton Committee identified Air War College as one of the schools having the most lectures and least rigorous academic standards of all the senior service schools. This paper examines the mission and objectives of Air War College and contends the school should form a task force to reexamine completely its mission and objectives. A major problem in formulating an educational strategy at AWC is the heterogeneous makeup of the student body which includes a majority of non-warfighting decision makers. Finally, faculty development and composition were areas the Skelton Committee addressed. This paper further examines the faculty development process at Air War College and provides recommendations for recruiting faculty and improving the faculty development program at the school.
BIOGRAPHICAL SKETCH

Lieutenant Colonel Linda L. Smith has served as an educator or an intelligence officer throughout her career. She is currently an Individual Mobilization Augmentee with Air Force Intelligence Agency/Reserve (AFIA/RE). She has served as Operations and Training Officer for several detachments and has been a member of the AFIA/RE Southeast Region Staff Assistance Team since 1985. As an intelligence officer she had two and one-half tours in Southeast Asia and was officer-in-charge of the intelligence library and targets branch at Seymour Johnson Air Force Base, North Carolina, 1971-1973. Following her assignment in wing intelligence she was social actions instructor at Seymour Johnson AFB.

Lt Col Smith was faculty instructor at Squadron Officer School at Maxwell AFB, Alabama, 1974-77 prior to joining AFIA/RE. She holds a bachelor of science in education and a master of science in guidance and counseling from Troy State University. Additional military schools include Air Command and Staff College, 1982-83 and Academic Instructor Course, 1974.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCLAIMER</td>
<td>ii</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>iii</td>
</tr>
<tr>
<td>BIOGRAPHICAL SKETCH</td>
<td>iv</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. ON SKELTON: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. ON SKELTON: THE OBJECTIVE</td>
<td>5</td>
</tr>
<tr>
<td>III. ON SKELTON: THE MISSION</td>
<td>10</td>
</tr>
<tr>
<td>Brief PME History</td>
<td>16</td>
</tr>
<tr>
<td>Prussian and Russian Model</td>
<td>17</td>
</tr>
<tr>
<td>Voroshilov Academy</td>
<td>19</td>
</tr>
<tr>
<td>Student Selection</td>
<td>21</td>
</tr>
<tr>
<td>IV. ON THE MISSION: RECOMMENDATIONS</td>
<td>27</td>
</tr>
<tr>
<td>Bagnal/RETO Study</td>
<td>28</td>
</tr>
<tr>
<td>Columbia School of Business Case Study</td>
<td>30</td>
</tr>
<tr>
<td>V. ON THE FACULTY: DEVELOPMENT</td>
<td>32</td>
</tr>
<tr>
<td>Historical View</td>
<td>32</td>
</tr>
<tr>
<td>Turnover</td>
<td>35</td>
</tr>
<tr>
<td>Civilian Faculty</td>
<td>35</td>
</tr>
<tr>
<td>VI. ON FACULTY DEVELOPMENT: RECOMMENDATIONS</td>
<td>37</td>
</tr>
<tr>
<td>VII. SUMMARY OF RECOMMENDATIONS</td>
<td>44</td>
</tr>
<tr>
<td>VIII. ON SKELTON: CONCLUSIONS</td>
<td>45</td>
</tr>
<tr>
<td>SELECTED REFERENCES</td>
<td>48</td>
</tr>
</tbody>
</table>
CHAPTER I

ON SKELTON: INTRODUCTION

In 1946 Winston Churchill commented on the ability of the United States to raise and use large forces in World War II: "Professional attainment, based upon prolonged study and collective study at colleges, rank by rank, age by age—those are the needs of commanders of the future armies and the secret of future victories." (1:234) Forty years later the House Armed Services Committee Panel on Excellence in Professional Military Education (PME), known as the Skelton Committee, questioned the ability of the services to produce strategists who can meet wartime challenges or peacetime requirements across the spectrum of conflict. The Committee, the first congressional review of PME, was formed to determine the ability of the services to develop strategists and to review plans for implementing the requirements of Title IV, the Department of Defense (DOD) Reorganization Act of 1986, also known as the Goldwater-Nichols Act. (2:12) The Skelton Committee, a watershed for PME, has prompted several subcommittees and hearings to respond to critiques on senior service schools. Air War College (AWC) was the school identified as having the most "passive learning" methods and the least rigorous academic standards of all the schools.

This report is based on numerous interviews with faculty and students; extensive research of PME literature; discussions with
educational advisors at Air University and planners at Center for Aerospace Doctrine, Research and Education (CADRE); conferences with J-7, Chairman, Joint Chiefs of Staff Division for Military and Educational Doctrine; and telephone or personal interviews with four panel members who served on the Skelton Committee. In many areas, AWC has already "leapfrogged" the Skelton recommendations in revising educational methodologies or strategies for learning. For example, the staff adopted testing in AY 90 and reduced lecture time by 35 hours. (3:1) These steps are positive responses to the Skelton findings but may not address the "heart and soul" of any educational strategy: What is our objective? The Committee concluded the AWC mission statement is too broad and vague to provide direction in writing a curriculum, and recommended the AWC staff review the statement to determine why so little of the course is warfighting oriented. (2:187)

Strategies in educational "campaigns" can be defined as "the art of applying educational methods or means to fulfill the ends of policy." (3:270) The most important question educators should ask is What specific educational objective will be served by the institution's strategies? What specific national interests require these objectives to be pursued? Paraphrased, "What is professional military education all about?" AFM 60-52, Handbook for Air Force Instructors, 15 January 1984, delineates that Step 1 for any educational program is to establish an objective. (4:3) Without an appropriate objective an educational institution will flounder in every area. The Skelton Committee concluded: "In military strategy terms there has not been a determination of the 'center of gravity' in the curricula on which each
level of schools should focus." (2:21)

Further, the Committee encourages the Department of Defense to develop and implement a clearer and more coherent framework for PME. (2:21) The starting point, states the Committee, is to develop a curriculum around three building blocks:

(a) A firm grasp of an officer's own service, sister services and joint commands
(b) A clear understanding of tactics and operational art
(c) An understanding of the relationship between the disciplines of history, international relations, political science and economics. (2:30)

The Committee concludes that an appropriate, overarching goal for senior service schools is to teach national military strategy. After reviewing curriculum instability in the AWC program linked to an inappropriate mission statement, Chapter II provides a framework for PME objectives at AWC by answering the following:

(a) What is national military strategy?
(b) What is an appropriate mission statement for AWC?
(c) Who should attend AWC?

Chapter IV then provides strategies essential for resolving long term issues in curricula at AWC.

Faculty selection is also highlighted in the Skelton Report as a key element in effective PME. (2:3) Faculty selection was identified as early as 1946 as a problem and remains a concern today. The Skelton Committee asserts that faculty improvement must start at the top. The Chairman, JCS and service chiefs must place a high priority on recruiting and maintaining qualified faculty. (2:3)
Chapter V answers the following:

(a) What are faculty development issues at AWC?
(b) What is the proper model for faculty composition?

Chapter VI addresses solutions for achieving the model.

Finally, Chapter VIII will conclude by reflecting the framework of the study: What should be taught at AWC? Who should learn? and Who should teach? The strategies will link means (mission, students, teachers) to the ends (learning military strategy) and provide solutions for long term planning.
CHAPTER II

ON SKELETON: THE OBJECTIVE

Curriculum Instability

Research and interviews conclude lack of a clearly defined mission statement has led to "churning in the program" at Air War College. This opinion is reflected in external and internal reports. One of the most profound critiques is by Williamson Murray:

That there has been confusion about goals can be seen in the current mission statement for the Air War College . . . . This statement betrays the failing of most of our war colleges over the past quarter century: the general lack of focus in their curriculum on the subject of war and strategy. (16:14)

Writing in 1957, Masland and Radway observed the problem of continual vacillation and constant "redoing of the curricula to make it better." (17:418) Curriculum planners, assuring Masland of a stable curriculum for five years, would recant on subsequent visits with rationale of why department heads had to redefine or change the objectives and/or curriculum. (18:131) The result has been a "mile wide and inch deep" curriculum of everything from cholesterol to Clausewitz. Katzenbach believes this condition of intellectual smorgasbord is as perennial as the World Series. (35:38)

Maureen Mylander, in "Graduate School for the Generals," implies the school's focus on lectures is a symptom of deeper ailments
at senior service schools. The dependence on lecturers and the vast breadth of the subject matter "keep the herd moving so fast that there is scant time for intellectual grazing." The danger, Mylander concludes, is that the curriculum gives a false security that students have achieved appropriate expertise. (19:47)

John Collins, in his 1982 edition of *U.S. Planning: A Critique*, confirms that all senior level colleges except ICAF assess an assortment of doctrines, past and present, then project them into the future. Studies, however, shed less light than they should for these reasons:

a. Too little attention to problem definition
b. Too little attention to fundamentals
c. Too little attention to concept formation
d. Too little attention to strategic connections
e. Too little time per topic.

The first, the supreme, the most far-reaching act of judgment that the "statesman and commander have to make is to establish . . . the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature." (20:140)

An article by Captain Penczak, USMC, summarizes the relationship of too broad a curriculum to unclear objectives. He likens a curriculum to blocks which are delivered by dump truck and compares the fast moving pace to a "runaway train."

The students board on day one and then hope to survive the wild ride until the train careens to a halt on graduation day. People on a runaway train do not concentrate on learning, they concentrate on survival. In a school environment this approach focuses attention on the wrong objective. That objective must be clearly defined or students become sieves struggling to filter the load in the
dumptruck, to complete one project just to press on to another with little time for free-thinking or reflection. (22:39)

Air War College histories reveal the constant churning in curricula and plans. (23) The first classes were to "prepare officers to command and employ large Air Force units and promote broad aspects of airpower." (26:46) The 50's saw a shift in preparing senior officers for command and staff duties. Understanding national security policy and military strategy was the theme of the 60's. (27:8) In 1986, the mission statement reflected more appropriately the move toward a warfighting role: "developing, maintaining and employing the aerospace component to deter conflict and achieve victory in the event of war." (28:6) Other historical boards or studies result in further misunderstanding on what Air University's problems are, but each of these are applicable to AWC:

<table>
<thead>
<tr>
<th>Date</th>
<th>Source</th>
<th>Find: q</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>BOV</td>
<td>Provide broad knowledge of economic, political and international setting</td>
</tr>
<tr>
<td>1949</td>
<td>Orleans</td>
<td>Missions should be more explicit. Too much stress on keeping pace with new developments and not on substantive education</td>
</tr>
<tr>
<td>1955</td>
<td>Ralph Tyler</td>
<td>Lack of clear, consistent PME goals</td>
</tr>
<tr>
<td>1956</td>
<td>Rawlings Board</td>
<td>Officer education deficient</td>
</tr>
<tr>
<td>1959</td>
<td>Power Board</td>
<td>Need engineering and scientific studies</td>
</tr>
<tr>
<td>1962</td>
<td>AFERB</td>
<td>Must understand nature of war and art of waging it</td>
</tr>
<tr>
<td>1963</td>
<td>AFERB</td>
<td>Curriculum changes too erratic . . . . at whim of faculty, students, etc.</td>
</tr>
</tbody>
</table>
1975  Clements  Emphasis has varied from
time to time on core
curricula.

1985  Blue Ribbon  PME instructors and
curriculum committees
devote the least amount of
time to research, writing
and teaching.

Regardless of the changes made, the first step must be to put
brakes on the "runaway train." AWC must have an educational vehicle
that enhances student learning and eliminates the atmosphere of
survival. The student's desire to learn should be as strong as his
desire to win on the battlefield. Focusing a curriculum around key
objectives and selecting students with the most desire to meet those
objectives--and be better able to meet future Air Force needs--are
essential.

Air War College, as seen above, has had continual outside
influences to promote curriculum development. The truth is, the
primary responsibility for developing the mission statement and
learning objectives falls on the institution. When the institution is
not confident or unsure, it will be continually tossed about as
external agencies try to affect the course of the school. Only when
the institution is confident it "has it all together" and can
intuitively explain the whys of curriculum development can stability
ensue. An internal report within Air University reinforces this
assumption: "Air University has not made these basic decisions, or
because there is no accepted description of what a professional Air
Force officer should be, there have been constant changes in emphasis
and curricula." (24:5-1) Further, the study concludes that the more
things change, the more they remain the same—characterized by instability. Finally, Lt Gen Ralph E. Havens, recent AU Commander, in one of his last speeches reflected on the problem. General Havens had made significant strides in redirecting AWC and may have begun rebuilding the foundation as he posed these questions:

Are We looking at Big Picture?
Open Minded?
How and What are We Producing?
How Does the Program Serve the Air Force? (25)

I would add: Do we look at inputs or outputs? Historically, without exception, it has been the former. That is, the AWC curricula has been too school-centered (input) and too little student-centered, seldom asking "What should our graduates know, do, etc.?" Apparently, commandants, staff and faculty have injected heavy doses of their personal interests into the curriculum without adequate "needs assessment" to determine the proper mission, objectives and output among its graduates. (24:4-9) However, a clear mission statement is the foundation for any institution which hopes to produce the desired output.
CHAPTER III

ON SKELTON: THE MISSION

The Skelton Committee addressed the primary objective at AWC as instructing national military strategy as distinct from national security strategy. National security strategy is the "art and science of developing and using the political, economic and psychological powers of a nation, together with its armed forces, during peace and war, to secure national objectives." (2:26) National military strategy is defined as the "art and science of employing the armed forces of a nation to secure the objectives of policy by application of force or threat of force." (2:26) Accepting these definitions will provide focus in writing a mission statement for AWC. It is clear the "heart and soul" of the Committee's recommendation is that the senior service schools should focus on the conduct of war as an operational art. Operational art is "the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization and conduct of campaigns and major operations." (2:26) One panel member concluded that "national military strategy is a senior service school responsibility in which the component service should receive the primary emphasis. The mission focus is on "How should Air Force officers best employ and deploy air power?"
The focus on national military strategy is explicitly emphasized in the following proposed mission statement for AWC:

To educate senior officers in national military strategy and in the art and science of deployment and employment of aerospace forces in theater operational warfare. The AWC graduate should understand the history of military thought and strategy and improve his/her decision making skills in all aspects of the management of violence.

This mission statement reflects the need for the graduate to become an "applied strategist" as opposed to merely a "theoretical one." "We need to create a corps of professional strategists where training centers not around bureaucratic tasks like managing paper flow . . . . but around thinking about military strategy." (10:6) The "theoretical strategist" must be analytical, pragmatic, innovative and broadly educated. He/she must be able to see interrelationships and be pragmatic in view of changing world trends. He/she must challenge the status quo and be a generalist rather than a specialist. There are few individuals who fit this description and fortunately we do not need many. Senior service schools, however, should have the primary goal of developing "applied strategists." Applied strategists are warfighters who understand theoretical strategy but are primarily interested and competent in applying the forces. PME institutions should educate both to some extent:

Strategy, like science . . . . occupies two planes, one basic, the other applied. Theoreticians must feed fresh concepts to practical problem solvers who otherwise would starve intellectually. The U.S. military education system should develop both. (2:28)

The Panel, however, concludes that applied strategy is the primary focus of senior service schools; theoretical strategy is appropriately taught at higher levels of military institutions such as the newly
developing National Center for Strategic Studies. Skelton chides senior service schools for not producing Clausewitz's, Mahan's, Nimitz's, etc. to meet future requirements for national military strategy but believes these strategists will primarily come from faculty of senior service schools. His concern is that since 1945 strategic thinking, particularly among the faculty, has declined. Lack of understanding national security strategy and national military strategy, he believes, has resulted in mistakes such as Vietnam, lack of minesweeping capability in the Persian Gulf, and other instances when military planning becomes delinked from national security strategy. Other authors such as Eugene Rostow draw similar conclusions:

Most commonly the word 'strategy' denotes the relationship between means and ends in the actual use of forces and study of most economical and effective means for winning a battle. Strategy in this sense—the art of warfighting is and should remain the central part of senior military colleges. (40:16)

How does the recommended mission statement provide focus for AWC? Harold Lasswell's phrase the "management of violence" is narrow enough to specify the required expertise of the military officer but it is inclusive of many disciplines (i.e., logistics, C3I, theater warfare). The function of a military force is successful armed combat. (11:40) The duties of a military officer include the organizing and training of this force, the planning of its activities and the direction of its operation in and out of combat. (11:40)
The spirit of my proposed mission statement is reflected in the 1939 goal of the Air Corps Tactical School (Advanced Course). The course will start with the organization, tactical employment and logistics of the division and larger units of the ground army and the Air Corps group. It will cover the tactical employment of the major units of the Air Corps operating independently and with or in support of ground forces and Naval units, Naval operations, logistics of large Air Corps units, including the establishment and organization of air base areas, command and staff of larger Air Corps units, GHQ Air Force and the Army, strategic studies designed to develop practical plans for encountering or neutralizing any major threat in any and all of those areas from which a serious threat against our National policies might be initiated and sustained. (51:6)

To insure a clear perspective, I need to address three peripheral concerns: deterrence, educational theories and study of history.

A study of the "management of violence" does not mean we exclude subjects on maintaining peace. Commander in Chief, Strategic Air Command (SAC), recently changed the motto of SAC from "Peace is our Profession" to "Peace is our Product." He stated as a military commander he could not train people for peace but must train them for war, praying that peace will prevail. In today's technologically changing world, the best way to deter war is to insure we are capable of fighting should deterrence fail. For potential wartime leaders, AWC must provide extensive decision-making opportunities in the context of what we believe future wars will demand. We must prepare for war to provide deterrence, a complex process considering we are hoping to avoid the very action for which we are preparing.
The warrior/leader, perceived as the product of the reoriented AWC, certainly must be conversant in the language of deterrence. He/she will help make the U.S. forces a credible deterrent by assisting in organizing, training and equipping forces in being to provide a believable retaliatory threat to all potential enemies. Some graduates, generally few in number, may serve as direct advisors to senior civilian and military leaders who will determine the nature, size and objectives of aerospace forces included in the overall calculus of deterrence. However, the Air Force's senior PME school cannot be "all things to all people." The foundation of sound military leadership must lie in depth of understanding of the employment of aerospace forces should deterrence fail. Deterrence, in twentieth century terms, is largely a function of the will and willingness to invest in military strength exhibited by both houses of Congress and the executive branch. The warrior/leader takes the "hand that is dealt" by the civilian leadership and plays it to the best of his/her ability in the field of battle should deterrence fail. The U.S. could perhaps survive a failure of deterrence—it could not survive incompetent combat leadership and the subsequent defeat by a powerful enemy.

Bernard Brodie in a 1959 U.S. News and World Report interview makes the military mission clear: "As long as there is a finite chance of war, we have to be interested in outcomes; and although all outcomes would be bad, some would be very much worse than others." (52:51) He further clarifies in his book, Strategy in the Missile Age, that even if our deterrence is outstanding we must be capable of fighting wars
and surviving. Credible deterrence is the insurance against war occurring unintentionally. As a leader of the Free World, "we must have an alternative to peace as long as we don't have any insurance of peace." (53:278)

Second, teaching national military strategy is an educational, not a training, process. Flying an airplane is basically a mechanical ability; directing the operations of a wing is an ability learned from books, practice and experience. The senior officer's skills are not employed in violence but in the management of violence. Unlike other professions, he hopes never to implement the skills for which he is educated. The management of violence is a complex and intellectual skill which requires extensive study and demands the "modern officer devote about one-third of his professional life to formal schooling." (11:40) This realistically reflects the limited opportunities of most officers to acquire practical experience in warfare.

Third, the management of violence is a continuous process and the officer must appreciate its historical context. "Only when he is aware of the historical developments in warfare can the officer expect to be the elite of his profession." (11:40) History helps identify leadership skills that make a difference in successful combat. History is important because it is difficult to replicate combat, so we must absorb the "lessons learned and capitalize on others' experiences." (30:39) The enlightened warrior knows only a prudent study of history will assist him in appreciating the chameleon nature of war. (38:98)
The student should learn the "historical links of leadership, being well-versed in history's pivotal battles and how the great captains won those battles." (46:14)

Summarily, the focus on study of warfare is not a narrow field but an intellectually broadening one, complete in economic, political and social phenomena as they directly affect the conduct of war. The key steps in developing an educational strategy is for the institution to first determine what the level of education is, i.e., national military strategy, and then to describe the primary mission. After defining the mission, the next step in educational strategy is to determine who should attend the institution? History shows that outstanding PME institutions had little difficulty in determining who should attend them.

**Brief PME History**

A compendium of historical studies is helpful to provide a base of understanding of the endemic struggle in clarifying objectives. An historical analysis may help a planner ask the right questions so he can define the problem—whatever it is. (5:82) The academic strategist has a vital role to play and must make educated guesses. He may not accompany his students on the battlefield but he influences the battlefield commander's mind via the classroom. (5:271) The environment of pedagogical combat in an era when "peace is breaking out all over" may be the most important battlefield of the next decade where commanders can test their strategies, ideas and doctrine.
The warfighting/strategist objective for which all schools should strive has its roots in history. Henry Knox, a great contributor to congressional debates, who eventually helped establish military education, commented:

"a perfect knowledge of the principles of war by sea and land is absolutely incumbent upon a people ... determined to be free and independent ... This system should embrace the whole theory of the art of war as practiced by the most enlightened nations." (6:69)

Elihu Root, Secretary of War and founding father of the Army War College, "captured the essence of why the War college exists ... at the laying of the cornerstone for the original building: 'not to promote war, but to preserve peace by intelligent and adequate preparation to repel aggression.'" (6:3)

**Prussian and Russian Model**

In foreign arenas, Scharnhorst rearranged instruction at the Prussian War Academy in Berlin in 1810 to concentrate on tactics and strategy. The War Academy was the premier institution of Prussian professionalism and became a prerequisite for attaining higher rank or position on the General Staff. One measure of Prussia's success was that the Academy by 1859 produced over 50 per cent of all military literature in Europe. Scharnhorst was the first to concentrate the curriculum on the conduct of the operations of war "instead of busying them with details of several technical arts and sciences." (7:77) Scharnhorst's best pupil was Carl von Clausewitz.

The Academy was under the Chief of the General Staff, who
appointed faculty, selected students, and approved the studies. The "called" students studied for three years and only special permission was granted for "uncalled" students to attend (7:79). Entrance examinations determined if the student had basic education but, more importantly, determined his power of judgment, a major critical trait of combat leadership. (7:80)

The Order of Teaching which Count Moltke issued in 1888 had the practical aim of a school of war and insuring the German staff officer applied the science of war. For "history," stated Moltke, "is the most effective means of teaching war during peace." (7:95) Students used the inductive method of learning as they poured in detail over original, historical records to form their own conclusions about what should have been done. (7:95)

General T. N. Dupuy's thesis in A Genius for War: The German Army and General Staff, 1807-1945, is that war schools should exist for warriors. One of his premises was that Germany was able to produce so many generals like Hindenburg, Rommel, Etterlin, etc. because of the German military educational institutions. After discounting the theory that the Germans had a monopoly on understanding military theory or analyzing operational experiences, he notes that nothing is inherent in German performance that other countries lacked. "In the intervening century the only significant military professional development in Prussia and Germany that was not matched in other countries was the professionalism of the General Staff." (8:303) How were these leaders developed? Their selection was from the elite: stiff examinations as a prerequisite for education and promotion required serious study of
the profession. The key to their success was the combination of intellectual with soldierly qualities (8:306) and the deliberate efforts to give rewards to those who were intellectual thinkers. Examination for selection may not be desirable in our system, but better tools to identify future combat decision makers can lead to a focused, more relevant curriculum for future warriors.

Voroshilov Academy

Although one could point to our system with pride as the Soviets face innumerable economic and political problems, we should not diminish our respect for Voroshilov Academy, Russia's premier senior service school, which boasts graduates such as Army General D.T. Iazov, Soviet Defense minister; Colonel General M.A. Moiseev, Chief of the General Staff; Marshal S.F. Akhromeev, Chief of General Staff; Marshal N.V. Ogarkov, Chief of General Staff; or Army General P.G. Luschev, First Deputy Minister of Defense. (9:32) There have been no Air War College graduates promoted to Chief of Staff, USAF. Ironically, the one AWC graduate who became Chief of Staff of his service was a Marine. Note, that in 43 years, only 23 AWC students achieved three star rank. War fighters attend Voroshilov as its Marshal exclaimed "to study war," and Russia's highest military leaders are, in large measure, from the roster of its graduates. Senior Soviet military leaders demonstrate interest in Voroshilov by assigning 200 generals to the 22 departments as teachers or analysts. The institution teaches the military elite and serves as a center for doctrinal issues. Although it is difficult to compare the Voroshilov to AWC "elite," the majority of students at
Voroshilov are warfighters comprised of combined arms and tank troops.

Senior service school attendance should be the capstone of an individual's military career and the graduate should have no doubt that this school is preparing him for greater wartime responsibilities. In a 1976 survey Lt Col Virant, AWC student, queried 150 Air War College students on whether they believed a Distinguished Graduate program is a meaningful and valuable tool to recognize excellence. Seventy percent believed the program was valuable for recognizing excellence, but seventy-three percent stated that being a Distinguished Graduate would have no contribution to a future assignment. (12:54) A meaningful program that graduates perceive as having strong impact on their future careers is essential in light of historical evidence of its importance in war.

The skill of the physician is diagnoses and treatment; his responsibility is the health of his clients. The skill of the officer is the management of violence; his responsibility is the military security of his client, society. (13:42)

The Skelton Committee is concerned that attendance at senior service schools was at one time a reward and considered a necessary tour of duty prior to World War II. The AY 89 End of Year Critiques reveal only 55% of AWC graduates perceived that attendance had any bearing on job selection and only 52% of the graduates indicated their graduation reflected any sign of higher status or prestige. (42:3) How would a different method of selecting students for AWC affect the equation?
Student Selection

Although the Air Force promotion system is becoming more decentralized and may affect future student selection to Air War College, the current selection system remains with the centralized board at Headquarters Air Force Military Personnel center (AFMPC). Boards are convened as Central Candidacy Boards to select the "best qualified" line officers for resident PME with recommendations from the major commands. These selections are intended to select those officers who have the highest promotion potential. In making the decision, the board considers the following:

- Performance records
- Previous education and experience
- Aeronautical rating and career area
- Current MAJCOM of assignment recommendation
- Projected use upon graduation
- Formal educational objectives
- Individual's school performance

The selection procedure operates on the myth that all the "fast burners" regardless of branch and experience or future positions should attend AWC. However, the 1987 Dougherty Board concluded:

The Board has reservations about attendance of significant numbers of narrowly focused technical specialists at advanced levels of military schooling. While some specialists should attend to enhance their ability to contribute to the performance of their service, individuals who do not need the schooling should not be selected. Selection should be based on the opportunity to improve performance, not to increase the likelihood of promotion or to fill quotas. To insure the attendance of appropriate officers, the Board believes the Commandants of the schools should review the records of those officers nominated to attend and have the right to refuse attendance with inappropriate background or questionable records of performance.
If we accept the warfighting focus proposed in the previous chapter, then the output of AWC should be warfighters and closely associated combat decision-makers. If general officers are to lead us into combat, then graduates should represent the group from which generals are chosen or their chief advisors and staffers who are responsible for conducting war. Although graduates may not actually wear stars, they have to be able to think, write and otherwise perform as if they did. (18:109) If we accept the purpose of AWC is to educate warfighters, we must ask, "Are the right people attending?" My research reveals no one has given clearly a definitive answer, but the perception exists that current selection policies may not be identifying all those who need to attend and may be sending some who should not attend.

Rostow reinforces these views that the boards do not consistently select their best officers and sometimes send personnel officers, medical officers and other specialists who will never be in combat leadership/decision-making positions. (40:21) My research does not reveal any further Air Force investigation into reviewing or correcting these problems. The system should identify the best and the brightest according to who will be leading the future Air Force. To attempt to answer the question, we need to know what the wartime requirements are. Who are the decision makers and their staffs in the operational theaters? We simply must address the tough questions about who should attend our senior PME institution.
A common argument is made that we need senior service college graduates throughout all commands and positions because a graduate is by nature a "better officer." A curriculum can be designed to make a graduate better as a professional but cannot be designed to tailor toward future assignments unless those positions are identified. (18:113) In an attempt to be "all things to all students," the curriculum must, to a degree, be pitched to the lowest common denominator. The result is an unfocused and unsatisfying preparation for our future warfighting leader.

To illustrate, experience shows that general officer ranks are overwhelmingly composed of rated officers, but AWC selection does not reflect this demographic. Analysis of the Air War College class of 1988 conducted by major command chairs drew two conclusions:

a. Class demographics of non-rated officers show a disposition toward "soft support" career fields as opposed to those specialties which would most likely be involved with warfighting in the classic sense.

b. If the AWC mission is to prepare future leaders and warfighters, then the rated percentage of this class is well below that of active-duty general officers. (14:1)

Of the entire general officer corps, almost 80 per cent are rated compared to the remainder in non-rated positions. However, AWC demographics reflect only 49.32 per cent rated and 50.68 per cent non-rated. The "bottom line is when compared against present line general officer population, AWC class composition is skewed." (14:6) Selection is based on previous job performance, not on selecting future leaders. If AWC prepares future generals, they are missing a great number of those leaders in residence. If warrior/leaders are generals
and vice versa, then AWC is not influencing the professional education of the majority of them. A 1986 Field Supervisory Survey conducted by AWC reveals only 39% of the 278 brigadier general and major generals who responded graduated from AWC. The survey did not determine how many of these were rated. However, under current policy with present Air Force missions and organization, the majority of decision makers are, in fact, rated officers. This could change in the battlefield of the future, and we must constantly evaluate who our wartime leaders are. The selection system should identify the best and the brightest of those who will be leading the Air Force in future wars, and the reality is that the senior warfighting leadership now comes primarily from rated officers (just as in the army they come from combined arms officers). Not only should rated officers be targeted for AWC in residence, but other warfighting AFSCs must be heavily represented.

Chief of Staff of Air Force (CSAF) in responding to inquiries by HASC Subcommittee on PME, was asked: "Is there a desired mix of warfighters to war supporters selected to attend the Air War College?" General Welch replied, "If there were no other constraints, AWC would prefer all its students be 'warfighters,'" Realistically, however, the need to offer professional education and career enhancing opportunities to a broad spectrum of officers leads us to favor an appropriate ratio of two warfighters to every war supporter. Obviously, the 2:1 ratio is currently not realized at AWC. A warfighting objective with warriors as students could change the face of Air War College. The majority of individuals interviewed agreed a
more selective student body would help solve many other problems such as building depth into a curriculum completely focused on the study of strategy and doctrine for warfare. Student body composition should be those who will be key decision makers or supporters of key decision makers in wartime.

Huntington claims individuals such as doctors, chaplains, or lawyers, etc. are not managers of violence but are auxiliary vocations having the same relation to the expertise of the officer as the skills of the nurse, laboratory technician or pharmacist does to the doctor. These personnel aid the doctor but do not diagnose or treat. Other professions may direct the conduct of war at subprofessional levels such as contractors, computer programmers, and personnel managers. In a recent review by Allan Millett, he contends such personnel policies of sending non-warfighting personnel detract from the college's sense of mission and purpose. "If the war colleges are to prepare the U.S. military services to fight, then one type of curriculum is necessary; if they are to prepare managers and staff officers, a very different set of curriculum is required." (45:184) Exclusion of some groups does not mean they are incompetent or failures but would themselves be better served by receiving their professional or technical education at other institutions. A selection system in which Commanders in Chief and the AFMPC system cooperate to choose students based on positions requiring warfighting strategists, as well as the other qualifications discussed above, would not exclude education to broaden the thinking of non-warfighting fields. Programs are already in place to accomplish this task: the AWC program by seminar or correspondence, which
contains a synopsis of the core curriculum of the resident program but does not include the wargaming simulations, field studies or electives; and degree-granting programs administered through Air Force Institute of Technology are alternatives. While it is beyond the scope of this paper to consider thoroughly the non-resident programs, it seems clear that some non-warfighting officers (engineers, scientists, etc.) could benefit from the course. Perhaps modules of instruction directly related to different career fields could be attached to the basic seminar/correspondence programs. Industrial College of the Armed Forces would better serve officers in logistics or financial fields.
CHAPTER IV

ON THE MISSION: RECOMMENDATIONS

A problem as systemic as described cannot be resolved in a few months. But if AWC is to develop into the premier senior service school it desires, a task force similar to the one chartered by Chief of Staff, Army (CSA) in 1975 and 1986 would be productive. The study (5 volumes), chaired by Lt General Charles W. Bagnal, Director, Officers' Professional Development Study Group (OPDS), was a response to findings made in a 1975 study, A Review of Education and Training for Officers (RETO) (5 volumes). The objective of the 10 month OPDS study was to evaluate the officer professional development system in light of Army needs and to identify systemic strengths and weaknesses; and develop findings and make recommendations for the CSA.

Dr. Lawrence Korb, former assistant secretary of defense, highlighted the need for such a study in every senior service school in a 1982 symposium on officer education at National Defense University. Dr. Korb concluded that the services have no philosophy for officer education and do a poor job of determining why the kind, amount and cost of this education is necessary. He believes a review of what the military education system should teach, how they should teach, and agreeing on the desired product is necessary. "The time is ripe to again review the use made of educated officers." (18:27)
The two best solutions are to establish a task force within AWC to study perhaps for many months, what the mission of the school should be and who should attend. These proposals can be forwarded to the Air Staff which is not currently manned to decide these issues. No one is in a better position than the AWC faculty to compose the task force. The first step, I believe, is to prepare an assessment tool to evaluate what decision makers in key warfighting positions do and what their AFSCs are. Gosset, writing in Mission of the University, proposes that reform must not be done in a slipshod way but must clearly define the mission. "What matters is that the [institution arrives] by its own legs after personal combat with fundamental questions." (47:46) After determining the mission and output, many issues raised over the last forty years will be resolved. A similar review which could be very helpful in this "needs assessment" is the previously mentioned Bagnal study.

**Bagnal/RETO Study**

The Bagnal study focuses on what it means to have a warrior spirit and how to develop a broader understanding of the art and science of war. The report concludes there is a lack of focus on combat action and warfighting in PME. (30:35) Recurring themes critical in the OPDS but identified in the earlier RETO study were:

- Army leaders at senior levels behave more like corporate executives than warriors.
- Peacetime needs rather than wartime requirements are driving the development of officers today.
The officer professional development system does not go far enough today in preparing officers for war and combat.

Career development for officers is secondary to the need for the Army to defend the country and deter war.

The bold, original, creative officer cannot survive in today's Army.

The officer corps today is focused on personal gain and not on selflessness.

The promotion system does not reward those officers who have the seasoning and potential to be the best wartime leaders. (30:22)

The intent in referring to this study is not to digest all the OPDS findings but to offer this teamwork, task-force approach as an effective process to find solutions. The Bagnal study concluded:

a) Every policy or program of the curriculum must meet the educational objective; every resource that is expended and every key decision must be based on the clear understanding that our mission is to fight. Otherwise, everything is for naught. (30:52)

b) Senior school selection must be based on a "rigorous" position analysis of all colonel and higher positions that support warfighting:

Prior selection and subsequent utilization of graduates should be rationalized to this analysis, existing or projected position vacancies and, of course, the demonstrated performance and potential of the officers. (31:F-1-15)

The thorough analysis concluded that only one of seven USAWC graduates historically achieve the rank of general so the focus of contribution in the product will be as colonels. The school's program then should focus on producing colonels who think and act like generals and will most likely be serving as generals. (31:F-1-17) Individuals capable of filling identified warfighting positions should be the
attendees. As a minimum, this excludes nurses, doctors, lawyers, chaplains, reservists who do not fill wartime mobility positions, and civilians who are not assigned to wartime contingency operations. Narrow the student selection, and problems inherent in the college will resolve themselves, i.e., irrelevant research, too few strategy papers written, and the need for "bottom of the learning taxonomy" lectures. Why? As doctors preparing for the surgery room are serious when they know they'll be performers instead of onlookers, so will war college students who are preparing to use their warfighting skills in the next conflict.

A final conclusion of the Committee highlights a second problem previously identified at AWC before Representative Skelton's visit:

If the Army cannot afford to pay the bill to have critical quality and maturity of the faculty then we need to design a different... strategy and forego attempts to enhance education and decision making in the Army School system. (30:52)

Columbia School of Business Case Study

The transition from emphasis on teaching by the traditional method of instruction (lectures) to emphasis on learning by the modern instructional method (seminars, case studies) is time consuming and intellectually very painful. Institutions that make this transition can take advantage of civilian research for the past 20 years. The key is "in-depth faculty preparation." (31: F-1-28) The task is not a simple one but consists of reversing attitudes and perceptions which faculty have taken years to internalize.
In the 1960's many business schools were debating similar issues and changing curriculum and faculty development. Schools were concerned about their proper role or place and trying to move away from descriptive materials toward depth and analytical complexity worthy of a professional school. The schools were being challenged by a complex and changing world. (39:1) Columbia Business School undertook the challenge but found faculty members overly fragmented and a curriculum with a "breadth of education" rather than one which prepared students for a specific job. Only when the Committee on Instruction took a deep breath and decided to "achieve intellectual integration by means of faculty seminar and study groups before getting 'paper or catalog integration' was real progress made." (39:19) Twenty-two task forces accepted assignments to explore deficient areas. To avoid specialization each task force had representatives of several divisions. (39:19) The frequent meetings did not discuss methods in the beginning but the "broader ideas, problems and activities of its arena and then delved into specific objectives." (39:19) The faculty was challenged to start with a clean slate similar to the later RETO and the Bagnal study and take a necessary look at the business at hand. It was this approach which produced the desired reorientation at Columbia and which can be of prime importance to the Air War College.
CHAPTER V

ON THE FACULTY: DEVELOPMENT

This chapter addresses faculty development at AWC. Faculty
development is a complex process designed to provide the school with
well-qualified and highly-developed personnel. (31:Y-1) "Where Will
the Warriors Come From?" was a question Captain Schratz (US Navy, Ret)
proposed. His thesis is the "future warrior must be identified,
nurtured and supported at every level" to produce future commanders.
(29:63)

The "process of developing and sustaining high quality
instruction across the spectrum and over the long haul does not compare
favorably to its civilian counterpart." (31:Y-1) Civilian educators
are mentored from their undergraduate days and focus on subject matter
and methodology. Civilian instructors receive more preparation leading
to the highest levels of academia and are expected to lecture, write
and develop.

Historical View

Interviews revealed faculty development in the Air Force
senior level school is more ad hoc and less structured. Professor I.
B. Holley's advice to a recent AWC Commandant was
I don't think it is putting the matter unfairly to say that recruiting faculty members at the Air War College is, by contrast to the West Point procedure, a catch-as-catch-can proposition. We will do well to devote much time and thought to the effort to improve the way we identify, recruit and prepare future War College faculty. (44:1)

Through the years, committees or studies level two criticisms on faculty development: faculty academic expertise and faculty tenure. The message is clear in most of these studies: the heart of the system is the teaching faculty. Scharnhorst reinforced this view when he stated the most significant person without question is the teacher and the reputation of the institution rests upon his ability, judgment and esteem. (38:98) The Gerow report in 1946, commenting on senior level faculty, observed that "unless open minded officers of proven ability and vision are provided . . . the establishment of the school will prove futile." (32:44) The faculty issue "has been a topic for 31 of 43 Board of Visitor reports." (24:5-9) The most thorough study is the 1985 PME Faculty Enhancement known as the Blue Ribbon Committee on Air War College Faculty Improvement. The Committee recognized "a lack of faculty adequately prepared to meet the special needs of an aerospace force at the end of the 20th century." (33:3)

Committees were reflecting similar conclusions as early as 1946. In a somewhat prophetic manner General Fairchild in writing to AWC's first commandant stated:

Relatively few instructors would be needed, but they should be pretty well rounded and experienced. Unfortunately, these would be the kind of people everybody else will want for almost any job . . . it is going to be like pulling teeth to get the sort of men you will want. (43:3)
Prior to the Blue Ribbon Committee, the 1975 Clements Committee concluded faculty was the key in setting standards of excellence. The 1985 Committee endorsed previous findings and called for urgent corrective measures:

They must combine the highest level of academic and professional military expertise with gifted teaching ability. The Air Force must take bold and perhaps radical steps to produce these people. They must be identified long before they become eligible to join the faculty. Some must be sent to AFIT for Air Force sponsored degree programs to develop their academic competency. It will take years to develop this cadre; some will eventually become permanent military faculty on the model of the West Point permanent associate professors... these are people who make a commitment upon joining the faculty to serve the remainder of their career at Air University, and in return the Air Force must make a commitment to retain them in such a career field. (24:5-14)

Crackel affirms the Air Force has neither invested for the long term in military education nor sought to attain depth among its PME faculty. (36:27)

A review of current academic credentials of AWC military department heads since 1978 reveals only three have possessed doctorates and the majority of the master's degrees are in areas not related to curriculum studies. Even if AWC could acquire such professors called for in the Blue Ribbon Committee, highly trained personnel may find it unacceptable to work for individuals less qualified than they. Further, educators note that instructors should be two learning levels above the student body. (34)
Turnover

In addition to recruiting academic professionals, faculty development is adversely affected by turnover. With new students every year and a minimum 33 per cent turnover in faculty, the process becomes very marginal. (18:132) The short-term faculty want to put their personal stamp on the program. (18:132) Often cosmetic changes are made with the aim of marginal improvements in specific courses without broad understanding of the larger issues involved in PME at the senior level. Overuse of guest lecturers is often a result of having faculty unqualified to lecture.

The traditional criteria of faculty selection—ready availability and professional attainment—which were appropriate to a less specialized and dynamic era, with the short tours of faculty duty, undue emphasis on visiting lecturers, and dependence on fellow students which were frequent concomitants, will probably have to change before the colleges can contribute to expanding military expertise and hold their own against the defense intellectuals and their think tanks and university research seminars. (1:234)

Skelton suggested the AWC curriculum contained over 62 per cent lecture which is confirmed in a review of the school histories.

Civilian Faculty

If Skelton's goal is to develop military strategists, solving the problem of faculty development by investing more into the civilian solution pre-empts the process. In 1979 Lt General Furlong, Air University Commander, conducted a symposium in which he called for all mid-level and senior schools to regain their "lost stature in strategy and doctrine." The conference report cited one of the reasons for the
loss of strategy expertise is military professionals avoid national security policy making. (35:66) Crackel contends that attempts to civilianize faculty will reduce the school's vitality and "surrender its intellectual destiny to those in mufti." (36:13) Only one of the present military faculty of AWC currently publishes or lectures on stage which reflects Crackel's concern that "little originates in the faculties of military schools." (36:25) Increased emphasis should be placed on recruiting military professionals who are strategy and doctrine experts and can provide role models for students.
CHAPTER VI

ON FACULTY DEVELOPMENT: RECOMMENDATIONS

Model for Faculty Selection

RETO concludes the issue of faculty development is systemic and names nine salient aspects of the service academies which Skelton recommends as a model for faculty development:

- Early identification of faculty
- Recruitment
- Subject matter expertise
- Instructional technology expertise
- Proper utilization
- Continuing development
- Reputation for excellence (school and faculty)
- High priority
- Rewards and incentives
- Faculty stability/tenure
- Proper learning environment
- Repetitive teaching tours

Can these strategies apply to the Air Force school system in general? AWC is proceeding with reduced lecture time, increased seminar hours, and increased student research time in AY 90. However, until the faculty issues are addressed and resolved the change may only exacerbate previous findings that the faculty is the heart of the problem.

Solving the faculty development problem at Air War College will not be quick nor easy. Recommendations listed below are those suggested in the RETO and applicable quotations are provided; but they are equally applicable to AWC. I must emphasize that these problems
are a top-down leadership function and little can be accomplished at
the local level except continued request to the Air Staff to provide
substantive and institutional changes. However, the Air Force
Academy's approach to identifying and acquiring quality faculty members
may serve as a model for AWC.

a. Early Identification of Prospective Faculty: Several
actions can help identify prospective faculty. Ex-faculty
can recruit possible instructors. It is important to
identify potential faculty at the major or, perhaps,
captain ranks. These individuals can then be schooled to
prepare for subject matter expertise. Crackel suggests an
education career track can provide the nucleus of officers
capable of making a sustained contribution to PME. The
entry should be in the middle of an officer's career and
only after he/she has demonstrated potential in the subject
area and a talent for teaching it. (36:29) A program like
this would enhance PME and allow the institution to manage
its "requirements-to assets" picture better. (31:Y-8) With
the creation of military education specialties, within
services, we can look to the services for expertise in
strategy and military history rather than to think
tanks and academia whose experience is not in military
affairs. (36:29)

b. Recruitment: An ongoing program is required to
identify faculty by degree, subject matter, or teaching
expertise. The Army has a special identifier which is
narrowly defined, unlike the broad 0940 level AFSC for Air
Force educators. The identifier needs to be broken into
different levels, i.e., senior instructor,
associate instructor, curriculum planner, etc.

c. Subject Matter Expertise. This is the crucial factor
in quality of faculty. Those who develop and teach
specific curricula must be first subject matter experts.
Officers must be educated before they report to the faculty
positions. Standards must be set for each instructor, and
once assigned to a teaching area the instructor should
remain in that area to develop unquestioned expertise. The
standards then become the minimum for new faculty
members.
d. Instructional Technology Expertise: New strategies for learning require new instructional technology. Academic Instructor School at Maxwell AFB is superbly equipped for educating officers in various methodologies and relating instruction to particular needs. A minimum four week course should be required for faculty with no educational background.

e. Proper Utilization: He/she must be assigned and remain in the position calling for the skills. Although other difficult decisions are necessary by the school, as a rule the faculty member, students and the Air Force are "served best by requiring the best teachers to teach even though they may do just as well at some other important job." (31:Y-10)

f. Continuing Development: Activities such as seminars, workshops, professional meetings, research and writing for publication are going to guard against an officer going "stale" after he/she learns the lessons taught. Faculty instructors must be aggressive in contributing to curriculum design because they are the ones most in touch with the students.

g. Reputation/Learning Environment: The perceived value of educational experiences provided by service schools must clearly outweigh the "careerist" notion of officers that being selected for attendance is as important as attending. If students and faculty believe that the program meets Air Force requirements, and is timely and relevant to long range development, "the school will enjoy a good reputation." (31:Y-11)

h. Priority: Top leadership must not allow reduced budgets to degrade the classroom quality to teach and create battlefield strategy. Filling PME faculty positions should be second in priority in filling Air Force needs, preceded only by operational commander positions.

i. Rewards/Incentive: Rather than simply receiving "high quality files" for faculty positions, the Air Force must insure it does everything it can to cause qualified officers to desire the positions and volunteer for them. More tangible rewards might be allowing credit to faculty members who have not been selected for or completed the school. Selection and promotion boards must give ample evidence that qualified faculty members need not avoid the tour as a "dead end" assignment. Officers also
must not perceive the tour as a way to get a "ticket punched." Either extreme is undesirable.

j. Stability/Tenure/Repetitive Tours: Advantages of faculty stability are numerous. "Officers who teach tend to get better at what they do the longer they do it. Their level of competence increases as they prepare, teach, refine, teach, write, teach." (31:Y-13) Continuity is not a luxury but a necessity since material is as complex as it is important. Determining when a change is required is as important as the actual substance of a change. (31:Y-13) High turnover suboptimizes curriculum planning in that the process becomes more significant than the content. Courses that should be developed are given lower priority to those that are operational but not performing as they should. "New blood" from the field provides healthy transfusions but there must be an appropriate balance between tenure and turnover so that neither continuity or new ideas are forfeited. (31:Y-13) Some may suggest the Air Force cannot afford the luxury of such an extensive faculty development program throughout the school system. One also must ask whether the Air Force can afford not to upgrade the faculty in the system.

The Bagnal study concludes

Expertise in and the capacity to teach the complex business of the preparation for and conduct of land war in the 1980's and 1990's can be developed. Once this expertise is developed, the {Air Force} must take advantage of it through a program to insure successive teaching assignments for the officers who are good at it and want to do it. Further, and more important, this program must be in the main stream of the peacetime {Air Force} with tangible incentives and uniformly recognized high priorities. (31:Y-16)

The Air Force must develop officers who are experts in their subjects and who have the skill to impart this knowledge and the desire to do it repetitively. Given bright and right students who are well prepared for the experience, the nature of the relationship will lead to a better educated student and professional. (31:Y-16)
Faculty Composition

Suggested models of faculty composition are in the Skelton Committee with guidelines on how many of the faculty should represent other services.

Other individuals have offered solutions. Professor Jack Thompson, former AWC faculty, calls for a 52 person faculty of which 22 would be specialists in military history, doctrine and strategy, 12 would be command leadership experts and 18 would specialize in international and national security affairs, including regional studies. He proposes some of the ancillary tasks that full colonels are doing such as planning, evaluation, scheduling, spouses' programs, trips, etc. should be done by civilian staff or by junior officers. (48:3) Sixteen of the faculty would be lieutenant colonels and colonels from all services with doctorates or master degrees in their field. These would be tenured positions and tenured associate professor slots. These officers would realize they might spend the last 8-10 years at Air War college and retire as colonels but make an important intellectual contribution to the Air Force. "Among some 12-14,000 colonels in the four services, setting aside 16 positions for such important duty would not seem an undue burden on the personnel system or the services as a whole." (48:3) Another 16 would be the role-model operators, 10 from the Air Force and 6 from other services. Command Chairs should be expanded to the other services with the holders excused from administrative functions and freed to teach and perform academic duties. The role models should be the brightest
people available, preferably with a master's degree in one of the fields taught at the Air War College. They should serve a minimum of two years but then receive the most desirable and upwardly mobile assignments possible. (48:4)

Permanent civilian faculty could number 12 and receive academic rank from assistant to full professor appropriate with their performance and suitability in the role as a military educator. They would teach, research and publish. The remaining 8 positions would be distinguished visiting professors for one or two years. (48:4)

Air War College plans for faculty composition are much more optimistic and call for 20 operational experts, 20 civilians including visiting professors and 19 members from other services. This plan is more in line with Skelton's proposals and should insure adequate representation in each seminar of operators and academicians.

My proposal is to eliminate the command and leadership faculty positions and transfer them to the joint and combined warfare area to teach leadership only as it relates to a combat situation. Physical fitness should not be a part of the core curriculum. National security decision making objectives should be significantly reduced unless they relate to warfighting and to operational decisions such as interface of intelligence agencies to the campaign planning and theater operations. The Skelton panel did not consider subjects such as defense management, executive development, executive decision-making, bureaucratic processes and regional studies as "joint matters." These areas are not directly related to what should be the real focus of intermediate and senior service military education—force employment.
and development. Although the subjects may be joint they are beyond "national military strategy," and more suitable to "national security strategy." Reassessing the curriculum as it relates to the mission will redefine faculty needs inherent in the process.
CHAPTER VII

SUMMARY OF RECOMMENDATIONS

1. Air War College should establish an "ad hoc" task force to perform a "top to bottom" review of what AWC is all about. The task force should be given top priority and start with a clean slate. Representatives should come from every department and represent each group within the school.

2. AWC should develop an annual "needs assessment tool" to send to supervisors of AWC graduates to identify strengths and weaknesses of the curriculum and constantly upgrade its estimate of student requirements.

3. Air Force should review attendees to the Air War College in a line by line analysis of career fields which demand combat decision-making leaders.

4. AWC should develop a master plan of what can be done to recruit faculty who are subject experts and devise ways to identify faculty early so they can be "schooled" for future senior service school assignments. AWC should press Congress for passage of a waiver of the dual compensation law to enable AWC to recruit retired officers who can return for faculty duty without their retirement pay being jeopardized.

5. AWC should increase its emphasis on study of military history, campaigns and battles and include more student research into strategy, doctrine and history.

6. Air Force should establish a relationship of performance at Air War College to follow on assignments so the school is not just a "square filler" but a means to an end.
CHAPTER VIII
ON SKELTON: CONCLUSIONS

My initial mission in this study was to determine whether standards of rigor could be met at AWC by lecture or seminar. However, as I began to investigate the system of military education at AWC, I concluded the issues of lecture vs seminar were much deeper. They were only symptomatic of more substantive issues such as "What is or should be the objective of AWC?" and "Why must faculty development be improved?" This study has only touched the tip of the proverbial iceberg. Offhandedly, seminar studies did not provide evidence that would exclusively support either the lecture or the seminar method. Further, an exhaustive 1989 study by Lt Col Gail Arnott, AWC student, concludes "the specific teaching methods used in senior service schools are not important predictors of success in fulfilling lesson objectives." Designing instructional procedures and materials to help the student must achieve the objectives. I was, therefore, compelled again to an analysis of objectives. Admiral Crowe accurately surmised a strategic model in assessing the effectiveness of a strategy:

To enhance 'jointness' in senior service schools we have to emphasize our need for senior military professionals--expert warfighters--who can connect political goals to military means and who in turn can comprehend both poles of that ends-means calculus and assist in their articulation.
A strategy is only effective if it applies means to ends. However, what is missing in the AWC strategy model are clearly defined objectives focused on warfighting. There are systemic problems in obtaining warfighter students, and AWC needs a military faculty able to meet educational and academic standards in all cases. Presently, the faculty quality is diminished by high turnover, lack of subject-area expertise and lack of incentives for tenure.

Any short-term solution in correcting these problems may produce unacceptable risk and can completely destroy the faculty or overload the student body to the extent that little may be taught or learned. Rostow appropriately concludes that when curricula is changed too often (even with best of intentions by commandants, the JCS, or the Congress), the faculty is placed in difficult circumstances. When dealing with a weak faculty, stability is critical. Faculties are best led by persuasion and example. Teaching adult students in a vastly changing world is not easy. "Doing so with a curriculum that changes too frequently places the faculty in a catch-up mode that undermines its credibility in the classroom and weakens its zest for committee work and scholarship." (44:29)

The Columbia, RETO and Bagnal case studies are evidences of what AWC should emulate to carry it into the 20th century. The cost of military education and its critical role in society dictate such an effort. Once the study is complete, a five year moratorium on change (unless declared critical to the overall objective) would help to produce the longed-for stability so many of my interviewees expressed.
The result would be far more than simply another institutional response to a congressional committee—the product of our Air War College would provide the warfighting leadership so vital to our nation's security.
SELECTED REFERENCES


15. Norrell, Colonel E. "CSAF Testimony to the HASC Subcommittee on PME" (Your Ltr, 11 May 88), 13 May 1988.


25. Lt General Ralph Havens, personal visual aids in 20 April 89 briefing.

26. _Air University Catalog_. 1946-47.

27. _Air University Catalog_, 1965-66.


34. Interview with Dr. Donald Brown, Chief of Curriculum Division, Academic Instructor School, Maxwell AFB, Alabama. 6 October 1989.


41. AWC/XP. Field Supervisory Survey, 1986.

42. Smith, Lt Col James H. AY-89 End of Year. 10 August 1989.


