

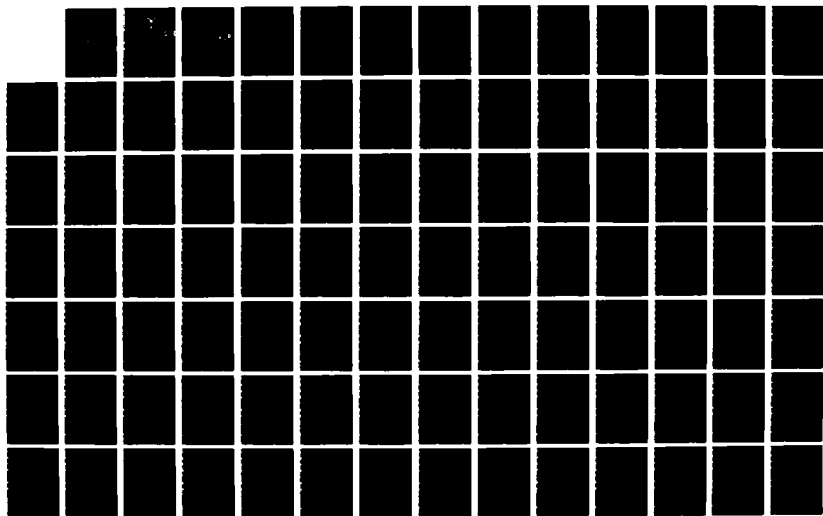
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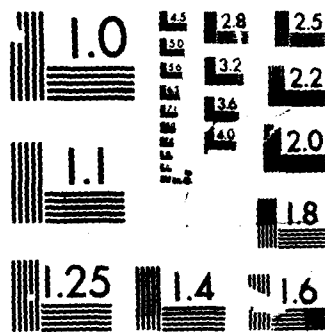
A HISTORICAL ANALYSIS OF BASIC AIR FORCE DOCTRINE
EDUCATION WITHIN THE UN (U) AIR FORCE INST OF TECH
WRIGHT-PATTERSON AFB OH SCHOOL OF SVST J A HARROLD
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EDUCATION WITHIN THE
UNITED STATES AIR FORCE AIR COMMAND
AND STAFF COLLEGE, 1947 - 1987

THESIS

James A. Harrold, BS
Captain, USAF

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A HISTORICAL ANALYSIS OF
BASIC AIR FORCE DOCTRINE EDUCATION WITHIN
THE UNITED STATES AIR FORCE
AIR COMMAND AND STAFF COLLEGE,
1947 - 1987

THESIS

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology
Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management

James A. Harrold, BS
Captain, USAF

September 1987

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Preface

The purpose of this study was to investigate education in the area of Air Force basic doctrine Air Force Professional Military Education System. I developed an interest in this area after reading several books and articles, many authored by Air Force personnel, highly critical of doctrinal education in the Air Force.

Extensive library research was conducted at the Air University Library and the USAF Historical Research Center at Maxwell AFB, Alabama. Through examination of Air Command and Staff College curricula for the past 40 years, I determined that the Air Force has in fact taught its basic beliefs, although the context in which this education occurred has changed over time. This study served to present preliminary data on this subject, and opens the door for more research into the area of education in doctrine.

I wish to thank all those who have helped me in the process of researching, analyzing, and writing this thesis. My thesis advisor, Major John Stibravy, always offered timely and very helpful suggestions. Mr. Terry Hawkins and Ms. Jane Gibish of the Air University Library were very helpful in assisting me in my search for archived documentation. Most of all, thanks to my wife Sherry, and Trevor and Jordan for their love, patience, and encouragement.

James A. Harrold

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Abstract

The purpose of this study was to examine the historical treatment of Air Force basic doctrine within the Air Force Professional Military Education System. The curricula of one specific component of this system, namely the Air Command and Staff College, was located and analyzed. The reason this research was undertaken was to answer the criticisms of several authors who have contended that the Air Force has historically not conducted education in its basic doctrine. This failure has led, maintain the critics, to poor performance in war.

The study had three objectives. The first was to determine if the Air Force had conducted doctrinal education. The second was to examine the context in which this education had taken place. The third objective was to determine the existence of historical trends in the area of doctrinal education.

The research was conducted at the Air University Library and the USAF Historical Research Center at Maxwell AFB, Alabama. Curricula was contained in closed storage. The material was removed, examined, and analyzed according to the methodology presented in Chapter III.

The author determined that the Air Force did conduct education in the area of basic doctrine. Emphasis placed on

doctrine has differed from year to year. In addition, the context of other courses in which doctrine was taught varied. The author determined the existence of five distinct historical periods, which were discussed in Chapter VIII.

The contention that the Air Force did not teach doctrine could not be substantiated by the researcher. However, it was apparent that doctrine was presented within very different contexts through the history of the Air Command and Staff College. The author hypothesizes in Chapter VIII that doctrinal education could be represented as a model, in which doctrinal education is the result of several sometimes conflicting inputs. However, research time limitations precluded the author from collecting sufficient evidence to argue convincingly for this model's acceptance. It was therefore presented as the basis for future study in the area of doctrinal education in the Air Force.

A HISTORICAL ANALYSIS OF
BASIC AIR FORCE DOCTRINE EDUCATION WITHIN
THE UNITED STATES AIR FORCE
AIR COMMAND AND STAFF COLLEGE,
1947 - 1987

I. Introduction

General Issue

There exists within the Air Force a perceived lack of education in the area of basic doctrine. Doctrine was defined by historian I.B. Holley as "an officially approved teaching based on experience" (65:91). In 1986, Lieutenant Colonel William McDaniel of the Directorate of Logistics Plans and Programs, HQ USAF, stated that, at least as far as the logistics community was concerned, "...doctrine has not played a major role in the Air Force since World War II..." (73:14). At least six separate contributors to 1986 issues of the Air University Review agreed with McDaniel. A review of recent literature revealed that authorities were very concerned about the lack of doctrinal foundation within the officer corps because doctrinal illiteracy would lead to war-fighting incompetency. One authority, Colonel Thomas A. Fabyanic, USAF (Ret.) of the University of South Florida expressed this concern in 1986.

If we expect success in battle, every Air Force officer must understand our basic views about war to the extent that even the most junior among us can conduct meaningful operations instinctively in the absence of command, control, and communications. Real war demands no less [58:16].

Many sources reviewed in a search of the relevant literature placed the blame for the lack of doctrinal knowledge with the Air University Professional Military Education (PME) system. Historian Lieutenant Colonel Barry Watts implied this, and then stated that the Air Force must "...begin moving toward greater emphasis on nurturing warriors in addition to the necessary managers, planners, engineers, and technicians" (80:117).

Lieutenant General Leo Marquez, then Deputy Chief of Staff for Logistics and Engineering, HQ USAF, stated in 1986:

We must change the focus of our educational institutions, and we must change ourselves. We should place military history and doctrine into our curricula at both professional and technical schools [72:11].

In 1986, Air Force Major John W. Fal of Air University stated:

We don't teach doctrine, especially joint doctrine. Because of this we make mistakes. I believe that the Air Force needs to develop a formal doctrinal education program [60:97].

Problem Statement

While many critics have said that the Air Force has, since WWII, failed to teach basic doctrine, little historical research has been accomplished to substantiate or

reject this claim. This study determined, through historical research, the relevant validity of this contention. The end result of this study was a historical review and analysis of basic doctrinal education within the Air University PME system (specifically Air Command and Staff College and its predecessors) since the end of the Second World War.

This study benefitted the Air Force by presenting the history of its doctrinal education efforts. This enabled Air Force educators and other interested parties to develop future course materials by observing lessons from the past.

Review of the Literature on the General Issue

In reviewing the background literature, the researcher was able to discern several patterns of thought on the subject of the failures and misapplications of Air Force and other military doctrine. While several schools of thought were presented in the literature, three basic views appeared to be dominant. These views were developed into a framework within which the background literature was analyzed. The three views are as follows:

1. Doctrine was flawed or misapplied in specific wars or conflicts, leading to failure on the part of the Air Force (and the other services) to achieve objectives.

2. The doctrinal development process within the Air Force was flawed, leading to weak or inaccurate official statements of basic beliefs. The eventual application of

these improperly developed statements led to inevitable battlefield failure.

3. The Doctrinal education process within the Air Force was flawed, leading to a misinformed officer corps. When these officers attempted to apply their poor education in war, they failed to achieve desired warfighting objectives.

These arguments were presented by several authors; some used only one of the views, some employed a combination of these themes.

The background literature for this problem can be divided into two general areas: popular literature and Air Force literature. Air Force literature provided a greater amount of material than did popular literature. The popular literature's subject matter was generic: it was usually concerned with the broad area of defense reform. While the researcher reviewed many popular sources, only a few dealt specifically with the problem.

Popular Books. One of the most thoughtful and best documented books written on defense reform since 1980 was The Pentagon and the Art of War by Edward L. Luttwak (71). Luttwak's primary contention was that the organizational structure of the U.S. military is outmoded, and breeds ineffectiveness, waste, and inability to fight modern wars (71:68). Luttwak was critical of military officers, but only to the extent that the organizational mold has forced them to become ineffective. He emphasized his belief that modern officers are extremely dedicated.

The average (author's emphasis) officer one encounters is deeply dedicated, exceedingly well educated, and of sound moral character. In fact, inside the officer corps of each service, and certainly among the generals and admirals of each, there is enough potential talent to lead...not only the U.S. Air Force but all the air forces of the Western world...[71:202].

Within the framework presented above, Luttwak presented arguments for all three points of view, but he was particularly critical of the educational system within the United States military. He said that the officer corps was devoid of real leadership (71:202), due in large part to the military educational system. This system was biased in favor of subjects typically found at civilian schools, and lacking in concentration on the military arts and sciences.

But the academies that nowadays provide some 10 percent of all officers, and a far greater proportion of the generals and admirals, do offer an excellent preparation for military careers in which the approved model is that of the corporate executive--or more precisely, the junior executive in a very large, very stable corporation, such as an electrical utility. ...Thus the apparent demand of American society for a very civilianized body of officers, as far removed from the dreaded image of an arrogant military aristocracy or a warrior fraternity, has now been fully satisfied [71:199].

Luttwak contended that this model of a "civilianized" officer corps, which is first introduced at the military academies, is applied throughout the career of a typical officer. He said that the application of this model was responsible for a "materialist bias," that is, trading battlefield competency (knowledge of doctrine) for high-technology weapons (71:130), for a genuine lack of

leadership (71:185), and for an inability of senior officers at high levels of command to develop any workable war plans (71:269). So it is not unreasonable to predict a syndrome of doctrinal illiteracy, given the preoccupation of the officer corps with civilian concepts of management.

Another book, National Defense, by James Fallows (59), made contentions similar to Luttwak's. Fallows also cited a lack of military competency within the officer corps, and traced this to what he terms a "managerial ethic" (59:108), which leads to lack of concern for troops, and lack of ability on the battlefield (59:108). He, like Luttwak, said that this managerial bias can be traced to a flawed military educational system, which has emphasized civilian subjects to the detriment of military teachings.

The ideal is the scholar-warrior, the man of action incorporated in the man of thought. The reality, most of the time, is the dilettante, who cannot reasonably be expected to master physics, or history, or management as a sideline, but who is expected to touch bases instead of concentrating on the subject he should know, which is the nature of war [59:118].

Richard A. Gabriel, a former Army officer, and author of several works on military issues, harshly criticized the United States military establishment in Military Incompetence. This book discussed several military operations since the end of the Vietnam War, including the Mayaguez rescue, the abortive Iranian hostage rescue, and the invasion of Grenada, which the author contended reflected a basic inability of the Air Force and the other services to accomplish missions effectively and with minimum

loss of life. The reason that the military was incompetent in battlefield operations was not because of a problem "...with individual officers. The problem is with a system that seems to prevent good men from exercising their talents in the service of their men and their country" (62:ix).

Part of this systematic problem, according to Gabriel, was with the way the military educated its officers.

The ideal officer is one who understands and can apply the skills of war but who is also concerned with and trained in the human dimensions of our society. An officer must know intimately and appreciate the human dimension of war. The education of the military officer cannot be limited to the acquisition of technical expertise, something the present military training and education system seems unable to do well in any case. An officer's education must include (and develop) an ethical viewpoint as well. Men cannot be "managed" to their deaths; they are not objects to be moved about for the benefit of the system [62:195].

Gabriel summarized his views on military education by stating that

Our system of military education fails to educate the whole officer, and often produces officers unlearned in the skills of war but remarkably apt at management and the skills required to survive and prosper within the military bureaucracy [62:196].

Other Popular Literature. A review of articles dealing with military issues was conducted for the years 1985, 1986, and 1987. The search was limited to the New York Times, the Washington Post, and the Wall Street Journal. Most of these articles concerned themselves specifically with attempts within Congress to reform the Department of Defense, which eventually resulted in the passage, in 1986, of the

Goldwater-Nichols Act, and the restructuring of the Joint Chiefs of Staff. However, these articles were not considered directly relevant to this study. Some articles were published during this time frame that seemed to criticize doctrinal application, doctrinal development, or doctrinal education. These articles are included in this review.

Former U.S. Senator Gary Hart said, in a New York Times editorial that it was now time for military reformists to address the issues of training and education within the officer corps. He contended that military training was unrealistic, and military education emphasized the wrong subjects.

We must reform officer education so that it emphasizes military theory over bureaucratic management and teaches how--not what--to think on the battlefield [64:Sec A,31].

Arthur T. Hadley, a military correspondent for several years, developed an analysis of the officer corps entitled The Split Military Psyche. His premise was that inter-service rivalries were caused, in part, by the way the different service train their junior officers. The Air Force officer, in his view, had "...a love affair with speed and machinery [that] can encourage an anti-intellectualism that...remains a factor in the service's outlook" [63:Sec F,26].

Not all articles turned up in this review were critical. An April 15, 1985 article in the New York Times documented a resurgence of doctrinal thought.

In the Vietnam era the "whiz kid" civilian systems analysts in Robert S. McNamara's Pentagon viewed as mere platitudes of little value the "principles of war" formulated by the Prussian army officer Carl von Clausewitz and other theoreticians of war of the past. In recent years, there has been a burst of philosophical revivalism in which uniformed officers have returned to a study of such principles [74:Sec B,6].

The next phase of this literature review focused on Air Force literature, which contained more specific references to the problem statement of this study.

Air Force Literature. Most sources for this portion of the literature review were discovered in books, and in official publications such as Air University Review and the Air Force Journal of Logistics. The researcher discovered a wide variety of opinions and viewpoints offered up for discussion. Within Air Force literature, the three central viewpoints (flawed doctrinal application, a flawed doctrinal development process, and a flawed doctrinal education process) were sometimes presented as individual arguments and sometimes as component parts of an author's thesis.

Watts (80), cited earlier, presented a strong argument that the Air Force has historically misapplied doctrine in various conflicts. He argued that the Air Force applied, in World War II, Korea, and Vietnam, the deterministic doctrine of Giulio Douhet and Billy Mitchell, which stated that, "...in future wars there probably would not be any way to stop a determined bombing attack" (80:45). Watts' thesis was that the aspect of "friction truly constitutes the

fundamental atmosphere of war" (80:116), and that it was the task of the Air Force to develop doctrine which faced up to this reality.

Lieutenant Colonel Dennis M. Drew of Air University was also a leader of the "flawed doctrine" school. He said that prior to Vietnam, two assumptions formed the foundation of Air Force doctrine. The first of these assumptions was that the objective of war was complete destruction of the enemy. The second assumption was that the enemy would be an industrialized state with military production facilities, destruction of which would insure victory in war (55:4-5). Given these beliefs, and the reliance on strategic bombing necessitated by them,

The Strategic Air Command became the dominant command within the Air Force. The tactical air forces reflected the trend as they became ministrategic commands equipped with fighter-bombers designed to deliver nuclear weapons [55:5].

According to Drew, application of this doctrine in Vietnam (Operation Rolling Thunder, 1965 - 68) by the Air Force was improper, since the stated political objective of the war was not the destruction of North Vietnam, and North Vietnam itself was certainly not an industrialized state (55:8-9). However, Drew said that airmen had no other doctrine to apply, and attempted to "...take the World War II air campaign in Europe and transplant it twenty years later into North Vietnam" (55:8). Unfortunately,

In the aftermath of the war, there is also the lingering suspicion that the war in Vietnam was not an aberration. ...[and] many experts believe that such "revolutionary" wars are far more likely to demand American military involvement (in some capacity) than are any other kinds of conflict [55:11].

Michael J. Eula, a historian with the University of California at Irvine, also discussed the Air Force's historic reliance on the theories promoted by Douhet in Command of the Air. Like Drew, he said that Air Force leadership has been too dependent on strategic bombing, and has tried to approach war as a mathematical equation (57:98). Eula stressed that factors other than bombing accuracy may be important in war.

Linebacker II is a particularly good example of Douhet's underestimation of the enemy's morale. Despite intensive bombing at unprecedented rates, the will of the North Vietnamese was not broken. Here, the key to understanding lies in the realm of culture. ...Technology does not necessarily overcome anger and a sense of nationalist zeal. Conversely, technocrats are not necessarily fighters [57:98].

The second theme, that of a flawed doctrinal development process, was presented by several writers. In his landmark historical study, Ideas, Concepts, Doctrine, Robert Frank Futrell (61) traced the development of Air Force doctrine from World War I until 1964. He stated that "...the Air Force has never found a proper organizational location for a function which it requires in order to refine, test, evaluate, and promulgate air doctrine" (61:444). Instead, this responsibility has shifted between

Headquarters USAF, Air University, and the Major Commands, with varying degrees of success.

Major Leland Conner of Air University said that the doctrinal development process has shown a history of unresponsiveness to changes in national policy, and that the process is flawed because Air Staff officers responsible for its development are by necessity more concerned with the coordination process than producing a quality product (44:72).

Defense critic William S. Lind argued that the process is flawed because military doctrine does not reflect views on war, but rather, is the result of concern for "intra-institutional factors" (70:26). He accused the Air Force and the other services of writing doctrine to espouse

...those influences that reflect not the objective purposes of and obstacles facing the services--such as mission and threat--but rather the parochial interests and outlooks of groups or individuals within the organization [70:25-26].

The final viewpoint, and the subject of this study, was that the doctrinal education process is flawed. Many sources were discovered which presented this argument. Some of the authors believed that it is a responsibility of individual officers to learn doctrine. Captain Dieter Barnes of the Squadron Officer School staff said that the purpose of Air Force education is to build an intellectual foundation. Each officer bears the responsibility of staying current in doctrine (41:99). General Marquez said there is

...a heavy burden on Air Force logisticians to be much more than the supply specialists, maintenance teachers, and transportation experts for which our education and training has prepared us. ...In short, we must be complete warriors with the minds of commanders as well as logisticians [72:9].

As Peters and Waterman argued in their classic, In Search of Excellence, top performers in the corporate world are those who are able to "...create a broad, uplifting, shared culture, a coherent framework within which charged-up people search for appropriate adaptations" (75:51).

And many of the same authors who stressed personal responsibility also emphasized the responsibility the Air Force bears in developing its officers' instincts. Several authors employed this argument, including General Marquez (72), Fabyanic (58), Fal (60), and Watts (80), all cited earlier, as well as Colonel David C. Rutenberg of Air University who said that all Air Force training and education should be "...constructed primarily on military doctrine and the principles of war" (77:36).

In an article outlining operational failures in Vietnam caused by the improper application of doctrine, Fabyanic discussed the role of the Air War College.

The current mission of the AWC is 'to prepare select officers for key command and staff assignments where they have the responsibility for developing, managing, and employing air power as a component of national security.' ...Officers are not prepared for war but for assignments, and apparently it is equally important for them to develop and manage air power as it is for them to employ it [58:21].

Instead, he proposed that the entire curriculum of Air War College should be founded on "the grammar and logic of war" (58:21).

Background on Doctrine

The literature review revealed that a definitional problem exists regarding the term "doctrine" itself.

Futrell said that

Air Force thinkers have not only found it difficult to face the task of codifying the Air Force's fundamental beliefs, but...have employed a diversity of discourse to categorize these fundamental beliefs [61:2].

General Curtis E. LeMay, as quoted in Air Force Manual 1-1, Basic Aerospace Doctrine of the United States Air Force, used these words in 1968:

At the very heart of warfare lies doctrine. It represents the central beliefs for waging war in order to achieve victory. Doctrine is of the mind, a network of faith and knowledge reinforced by experience which lays the pattern for the utilization of men, equipment, and tactics. It is the building material for strategy. It is fundamental to sound judgement [53:iv].

Holley, paraphrased in Table 1, differentiated between the terms doctrine, principles, and concepts, which writers have often used interchangeably. His views appear in paraphrased form below as Table 1.

Table 1. Concepts, Doctrines, and Principles

	CONCEPT	DOCTRINE	PRINCIPLE
Definition	Hypothesis; an innovation	Precept; an authoritative rule	Axiom; an epitome or essence
Colloquial Definition	Trial and Error	Tried and True	Self-evident Truth
Derivation by	Inference	Generalization	Abstraction
End Sought	Propose Innovation	Establish Procedure	Inform for Understanding
Authorship	Any Observer	Designated Staff Officer	Military Scholar
Authority	Unofficial	Official	Validated by Use
Style	Persuasive; Argumentative	Prescriptive; Affirmative	Expository; Declaratory
Format	Staff study or Journals	Regulation or Manual	Word or Phrase
Measure	Extent to which it stimulates thought	Extent to which it is applied in practice	Extent to which it illuminates decision making

Source: I.B. Holley (61:92)

Drew defined doctrine by analogy (54). Using the example of a tree, he divided doctrine into four subsets. The root system is history. The trunk is fundamental doctrine, or what has traditionally been called the principles of war. Fundamental doctrine is used to explain the role of armed forces in general. The branches represent

environmental doctrine, or that which explains how particular types of forces, such as air forces, wage war. Finally, leaves are used to represent organizational doctrine, or doctrine unique to specific groups. It is at this level that the United States Air Force would explain its role in the defense establishment (54:2).

The official definition of the term doctrine has evolved over time. The term is discussed in several military publications and manuals. JCS Publication 1, Dictionary of Military and Associated Terms, said that doctrine is

Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application [69:118].

For its part, the Air Force publishes AFM 1-1, Basic Aerospace Doctrine of the United States Air Force, as its primary definitional volume. This manual employs the following language.

Aerospace doctrine is a statement of officially sanctioned beliefs and warfighting principles which describe and guide the proper use of aerospace forces in military action. The Air Force promulgates and teaches this doctrine as a common frame of reference on the best way to prepare and employ aerospace forces. Accordingly, aerospace doctrine drives how the Air Force organizes, trains, equips, and sustains its forces [53:v].

Definition

For purposes of this study, a working definition of the term basic doctrine was developed. This definition drew on the review of the literature and represents the researcher's paraphrasing of several sources.

Basic Doctrine of the USAF: The set of officially developed beliefs, principles, and guidelines concerning the employment of USAF forces in the accomplishment of stated national objectives. Basic doctrine describes how USAF forces create, sustain, and operate combat capability in differing environments and levels of conflict, yet it does not prescribe specific solutions to every problem a commander, staff officer, or other Air Force member may face in actual conflict. Its basis is past combat experience, yet it attempts to look ahead to future types and levels of armed conflict.

Research Objectives

1. Investigate and examine the content of curricula used by ACSC to teach basic doctrine.
2. Investigate and examine the content of lesson plans, learning objectives, and other faculty-produced documentation applicable to the basic doctrinal education process. Determine the context in which education in basic doctrine occurred.
3. Investigate and examine any significant trends apparent in the basic doctrinal education process.

Scope. The Air Force divides its official doctrinal literature into three categories: basic, operational, and tactical doctrine (53:v). This division is a general-to-specific breakdown of the subject matter. Because criticism of the doctrinal education process examined in the literature review concentrated on general doctrinal education, this study examined only educational efforts in the area of basic doctrine. Specifically, the author limited this study to officially published statements of basic doctrine (discussed in Chapter II of this study). Furthermore, only doctrinal education conducted by the Air Command and Staff College and its historical antecedents was examined in this study.

Investigative Questions.

1. What specific textbooks, manuscripts, study guides, and other materials have been used by ACSC to teach basic doctrine? What are the peculiar features of this material, such as scope, length, format, and other factors?

2. What faculty-produced items, such as lesson plans and learning objectives are available for review and analysis? In what context has the faculty chosen to present the subject matter of basic doctrine?

3. What significant historical trends are apparent in the review of the materials mentioned above?

In order to give the reader a sense of the historical trends in Air Force doctrinal thought, a review of

officially published doctrinal manuals is presented in Chapter II of this study. This will serve as further background to the analysis of basic doctrinal education presented in Chapter IV.

II. Review of the Literature

Part I. Description of the Literature

The purpose of this study was to examine education in the area of basic doctrine as conducted by the Air University. In order to accomplish this, it was necessary to review all basic doctrinal statements produced by the United States Air Force since 1953, the first year the Air Force as an independent service published its basic doctrine. Several authors have traced the development of air doctrine throughout various historical periods. Futrell (51) presented the most complete work, at least for the period from World War I until 1964. The purposes of this chapter were to review the doctrinal manuals themselves and to briefly review commentary literature dealing with basic doctrine.

The Air Force published its basic doctrine in the form of an Air Force Manual (AFM) nine times since 1953. It was published as AFM 1-2 in 1953, 1954, 1955, and 1959. It was published as AFM 1-1 in 1964, 1969, 1971, 1975, and 1984. It was the hypothesis of the researcher (as presented in Chapter VIII) that these publications came about as a result of wartime experiences as well as the emphasis placed on different issues by presidential administrations and Air Force leaders.

For each doctrinal publication, the researcher reviewed and analyzed the contents in the light of factors thought to be influential in the development of that particular revision. A descriptive outline was then produced for each edition. Each outline contained the following elements:

1. Name of the President and the Secretary of Defense.
2. Name of Chief of Staff of the Air Force.
3. Highlights of introductory comments by the Chief of Staff.
4. Abstract of document.
5. Listing of major changes from previous edition.
6. Political, Department of Defense, or Air Force issues believed by the researcher to be instrumental in the development of the edition in question.

As a summary, three tables were constructed outlining selected changes in format and content in successive manuals. These tables are at the end of this chapter.

Review of Air Force Basic Doctrine Manuals

United States Air Force Basic Doctrine, AFM 1-2,
1 April 1953 (45).

1. President: Dwight D. Eisenhower, Secretary of Defense: Charles E. Wilson.
2. Chief of Staff: General Hoyt S. Vandenberg.
3. In his introductory remarks, General Vandenberg stated that the purpose of the manual was to "...provide and impart to all Air Force personnel a basis for understanding

the use of air forces, in peace and in war, and to serve as a background for succeeding manuals covering the tactics and techniques of employing air forces"(45:i).

4. This manual was divided into five sections (I - V), as follows:

I. Military Force as an Instrument of National Policy

II. The Relationship of Military Forces

III. Air Forces and the Principles of War

IV. Employment of Air Forces

V. Air Power and National Security

All nations pursued aims constituting national objectives. National objectives were attained through the instruments of policy: political, economic, psychological, and military. The two purposes of the U.S. military were deterrence and to "be prepared to repel the forces of aggression" (45:1). Within the military establishment, "...air forces alone have the power to penetrate to the heart of an enemy's strength without first defeating defending forces..." (45:3).

Military operations were conducted through the cooperative efforts of the three types of forces: air, land, and sea. Each force had capabilities which made it suited for certain actions. Land forces were most decisive in invasion scenarios. Sea forces were most capable in the area of maintaining control of sea lanes, and air forces

found their greatest opportunity in dealing "...immediately and directly with the enemy's war-making capacity..." (45:4).

Effective mission accomplishment was dependent on proper command structure. The most effective structure involved vesting command in the force element with the greatest capacity for destruction. In addition, all of the forces involved in any action must have had a common philosophy of planning, in order to accomplish the mission at the lowest overall cost to personnel and resources.

There were ten principles of war. These were objective, offensive, concentration of force, economy of force, flexibility, mobility, security, surprise, control, and cooperation (45:8-9). Air power could be applied through effective use of these principles.

In applying these principles, two types of air actions were undertaken, heartland and peripheral. Heartland actions were those taken against "vital elements of a nation's war sustaining resources..." (45:15), while peripheral actions were those directed against the enemy's military forces, wherever they may exist (45:15). According to Section III,

an objective appraisal of the singular characteristics of air forces logically leads to an understanding of the dynamic impact of these forces in military operation. Evaluation of this impact in turn leads to the recognition that air forces are most likely to be the dominant force in war [45:7].

In this first official statement of Air force beliefs, the relatively young service went to great lengths to show how the principles of war fit the air weapon. The primacy of air forces over land and sea forces was implied throughout, and "the establishment of adequate air forces in-being calculated to be decisive is therefore the paramount consideration for the security of the United States" (45:17).

5. Since this was the inaugural edition, there were no previous documents published since Air Force independence in 1947.

6. According to Futrell (61), the factor that most heavily influenced this manual was the internal wrangling within the Air Force as to who should write doctrine, Air Staff or Air University (61:182-200). As a result, many Air Force leaders felt the publication was simply a compromise document, and not a true statement on air power. Futrell recorded Major General Barker, former AU Commander, on this issue:

It has taken five tedious years to get an approved manual on basic doctrine. ...[This process resulted] in no change of importance in the doctrine. The changes were in what to include or exclude, how to express an idea, arrangement or subject matter [61:199].

United States Air Force Basic Doctrine, AFM 1-2,

1 April 1954 (46).

1. President: Dwight D. Eisenhower, Secretary of Defense: Charles E. Wilson.
2. Chief of Staff: General N.F. Twining.
3. The wording of General Twining's introduction was in essence, the same as in the previous edition.
4. See abstract for previous edition.
5. This edition made a cosmetic change to the Table of Contents, by using Sections A through E as opposed to Sections I. through IV. Wording and content were for all intents identical to the previous manual.
6. This revision was published in response to suggestions from Air Force major command commanders concerning the 1953 manual. Few had any real criticisms, and this edition was almost identical to the previous edition (51:201).

United States Air Force Basic Doctrine, AFM 1-2,

1 April 1955 (47).

1. President: Dwight D. Eisenhower. Secretary of Defense: Charles E. Wilson.
2. Chief of Staff: General N.F. Twining.
3. In the forward, this edition took on a new air of authority. AFM 1-2 now provided "the ultimate authority for [the employment of air forces] and thus serves as a basis for all other Air Force Manuals dealing with the employment of air forces" (47:ii).

4. A nation had national objectives, which included economic well being, political stability, social and industrial progress, and security. Conflict between nations occurred as nations strove to achieve their objectives. Not all conflict, however, led to war. Diplomatic and other measures existed to solve conflicts short of hostilities. A nation used four instruments of power: the psycho-social, the political, the economic, and the military instruments.

The military instrument was used to bring about, with regard to an adversary nation, a desired condition which may have included persuasion, neutralization, denial, destruction, and capture. Military operations were undertaken and applied differently according to the objective desired. Command arrangements were made according to the type of force being applied. The force with the greatest destructive potential maintained command of the conflict.

Air forces possessed certain characteristics, including range, speed, mobility, flexibility, and penetrative ability. Air forces were an indivisible entity which had to be applied under an arrangement of unity of command. Other principles were to be followed carefully when employing air forces, including attainment of a common objective, use of initiative, exploitation of surprise, concentration of effort, maintenance of security, and coordination of effort.

Air forces could be used for peaceful or wartime uses. In peace, air forces represented national resolve, as a show of force. In war, air forces were used primarily for offensive purposes, but also had a role in air defense. In war, air dominance was necessary to enhance the military effectiveness of all types of forces. Control of the air led to the ability to destroy the enemy's military in the field, and its war-making capacity in its interior region.

"The paramount consideration for the security and well being of the United States is the timely provision of adequate air power" (47:10).

5. Numerous changes from the previous two manuals were noted, including:

- a. Presentation of a stronger statement of the role of air power, without denegrating the role of the other services.

- b. Devotion of an entire chapter to the characteristics of air forces, instead of the more generic "principles of war."

- c. Use of a format more conducive to a learning environment. Specifically, main points were set apart by use of bold type.

- d. "Adequate logistics" were mentioned for the first time (47:9).

6. This doctrinal statement, with its new emphasis on the primacy of air power, could have been reflective of

political thinking under President Eisenhower, the "new look" (61:208-209). This program called for a reduction in spending on conventional arms coupled with a reliance on a deterrence based on "massive retaliation" (61:213).

This strategy was, of course, very dependent on a highly mobile first-strike capability. The Air Force's long-range bombers were ideal for this role. Futrell quoted the Chairman of the Joint Chiefs of Staff, Admiral Radford, on this issue.

The President of the United States, the Secretary of Defense, and the Joint Chiefs of Staff are of one mind: this nation will maintain a national air power superior to that of any other nation in the world [61:212].

United States Air Force Basic Aerospace Doctrine,
AFM 1-2, 1 December 1959 (48).

1. President: Dwight D. Eisenhower. Secretary of Defense: Neil H. McElroy.

2. Chief of Staff: General Thomas D. White.

3. In the introduction, General White called the Air Force the primary "aerospace arm of the United States" (48:i). This was the first time the term aerospace was used. The manual was still referred to as the "ultimate reference authority" (48:i).

4. This edition did not present a picture very much different than the 1955 text. The big change was the use of the word aerospace as opposed to air, thus acknowledging the introduction of missiles and space technology into military

utility. Chapter 5 said that "...aerospace power embraces the entire aeronautical and astronautical capacity of the United States" (48:13). Chapter 4, which dealt with employment was expanded over the 1955 edition, and referred now to employment of aerospace power in limited war, cold war, and special operations (43:9). This may have been reflective of early U.S. involvement in Southeast Asia, or may at least have shown that official thinking had begun to consider the implications of such involvement.

5. Major changes from previous editions:

- a. Use of the term aerospace as opposed to air.
- b. Mention of involvement of the Air Force in limited wars, the cold war, and special operations (48:9).
- c. An expansion of the predominant characteristics of aerospace forces (48:6).
- d. An expansion of the premise of control of the air to "general supremacy in the aerospace" (48:9).

6. Inclusion of the term "aerospace" in this edition was not a simple cosmetic change according to Futrell (61). With the Soviet Sputnik launch, and the new national emphasis on space, the Air Force felt compelled to redefine its role. In April 1958, Air Staff proposed that AFM 1-2 be revised, since air power had "moved naturally and inevitably to higher altitudes and higher speeds until it now stands on the threshold of space operation" (61:231).

Futrell also quoted Undersecretary of the Air Force Malcolm A. MacIntyre's view that the term "aerospace" was designed "to identify, in a single word, the continuous operational field in which the Air Force must now function as technological progress permits us to operate farther and farther away from the earth's surface" (61:282).

A second factor impacting this manual was the "new look's" continuing emphasis on strategic superiority, as demonstrated by the reference to the need for "general supremacy in the aerospace" (48:9). According to General Thomas White, USAF Vice Chief of Staff (as quoted by Futrell), "Our Air Force with its ability to deliver nuclear weapons has been recognized as an instrument of national policy" (61:216).

However, this manual's mention of limited wars and special operations was reflective of the thinking in the second half of the "new look" era, which began in 1956 with the publication of several academic works questioning the value of massive retaliation (61:226). Wars other than a general war with the USSR were being considered. General Weyland, Commander-in-Chief of the Tactical Air Command, proposed during this period that the Air Force establish a highly-mobile striking force, capable of responding to small-scale contingencies (61:225).

United States Air Force Basic Doctrine, AFM 1-1,

14 August 1964 (49).

1. President: Lyndon B. Johnson. Secretary of Defense: Robert S. McNamara.

2. Chief of Staff: General Curtis E. LeMay.

3. General LeMay said that this manual was "...the ultimate reference authority for the employment of aerospace forces" (49:11). Yet, he acknowledged that this manual must constantly be examined for currency, as technology may open up the possibility of "...new interpretations..." (49:ii).

4. The document was now comprised of seven completely reorganized chapters, as follows:

1. Dynamics of Aerospace Doctrine.

2. General Characteristics and Requirements of Aerospace Forces.

3. Employment of Aerospace Forces in General War.

4. Employment of Aerospace Forces in Tactical Nuclear Operations.

5. Employment of Aerospace Forces in Conventional Air Operations.

6. Employment of Aerospace Forces in Counter-insurgency.

7. Conclusion.

Aerospace Doctrine was divided into three components: basic doctrine, operational doctrine, and unified doctrine.

This doctrine was used to dictate the use of aerospace forces in support of national political objectives. International conflict was described as a continuum, with thermonuclear war at one extreme, and political, economic, and educational competition at the other. Military forces could be used anywhere along this continuum, from employment of its weapons of mass destruction, to show of force, or deterrence.

Aerospace forces operated in the medium above the earth's surface, to include outer space. Aerospace forces possessed range, speed, mobility, responsiveness, and tactical versatility. In using aerospace forces, it was necessary to insure that these forces are survivable, under proper command and control arrangements, insured of penetrative ability, be given proper targets, and have the ability to recover and recycle.

In general war, aerospace forces could be employed under a variety of strategies, including countervalue, counterforce, limited counterforce, and combined counterforce and countervalue. Use of these strategies depended greatly on the strategic superiority of U.S. aerospace forces. Continued superiority created realistic deterrence. However, active air defenses also had to be maintained, as well as second-strike ability.

Aerospace forces could also be employed in tactical nuclear operations. Some of the possible employment

strategies included destruction of enemy aircraft in flight, enemy airfields and missile complexes, enemy logistics support, and weapons stockpiles. Proper use of appropriate yield nuclear weapons could enable friendly ground forces to achieve success. The missions of interdiction, reconnaissance, counter-air, and airlift all had characteristics which could be exploited in the tactical nuclear environment.

In conventional operations, aerospace forces were to be used to probe enemy territory, and also depended on whether sanctuary was an element of the conflict. Aerospace forces could also be used in counter-insurgency, where the ultimate objective was control of the people. In the early stages of the conflict, the role of the Air Force was to assist the friendly nation's air force. In later stages, it was necessary to take direct actions against the insurgent forces.

In all cases and under all strategies, technological and tactical superiority was a necessity for the proper employment of aerospace forces.

5. This edition was significantly different from all previous manuals. Some of the changes included:

- a. The division of doctrine into three component parts: basic, operational, and unified.
- b. The viewpoint of war as a continuum of conflict.

c. The attempt to define the Air Force's role at different places on the conflict continuum.

d. The open acknowledgement of various levels of nuclear strategy.

e. The mention, for the first time, of doctrine of employment for counter-insurgency situations.

6. This manual was published during a period of intense rethinking of national defense strategy, the period of Kennedy's "new frontier" (61:317). This period was marked by the development to the new strategy of "flexible response," which was announced by President Kennedy shortly after taking office. As quoted by Futrell (61), part of the Administration's defense policy was as follows:

Our defense posture must be both flexible and determined. Any potential aggressor contemplating an attack on any part of the free world with any kind of weapons, conventional or nuclear, must know that our response will be suitable, selective, swift, and effective. ...We must be able to make deliberate choices in weapons and strategy, shift the tempo of our production, and alter the direction of our forces to meet rapidly changing conditions..." [61:331].

This revision of the manual directly reflected this Administration policy in several areas, including:

a. The concept of a continuum of conflict, along which the Air Force was to be ready to respond with appropriate force.

b. The chapter on fighting wars of counter-insurgency, which indicated one specific type of flexibility in response.

The concept of flexible response was coupled with the McNamara emphasis on "cost-effectiveness," which by necessity made certain weapons systems more attractive than others. According to Futrell, this thinking led to a very great reliance on missiles, as opposed to manned-bombers (61:335-7). In the manual, this was reflected in the discussion of the strategies of counterforce and countervalue.

United States Air Force Basic Doctrine, AFM 1-1, 28 September 1971 (50).

1. President: Richard M. Nixon. Secretary of Defense: Melvin R. Laird.
2. Chief of Staff: General John D. Ryan. Vice-Chief of Staff (signer of Introduction): General John C. Meyer.
3. In his introduction, General Meyer did not call the doctrine an "authoritative source," but rather the "doctrinal basis" for other manuals (50:1).
4. Aerospace doctrine was divided into four components: basic doctrine, operational doctrine, functional, or support doctrine, and joint doctrine. Military force was one component of national power, and its uses included deterrence, exertion of pressure, assistance to other nations, and safeguarding the internal security of the United States. Deterrence was maintained through the use of "assured destruction" (50:1-2). Modern conflict was a spectrum, and the military must know how to conduct

"careful management of the use of force" at various places on this spectrum (50:1-3). Use of aerospace forces had a detrimental effect on enemy forces, and was therefore the primary force to be employed.

Aerospace forces possessed range, mobility, speed, versatility, and flexibility. In order to realized the full effect of these characteristics, proper command arrangements and unity of forces were a necessity. The tasks of aerospace forces included counter-air, close air support, air interdiction, air reconnaissance, airlift, anti-naval, and strategic attack. Aerospace forces were most effective when they were in possession of timely intelligence and designed to withstand austere operating conditions, extremes in weather, enemy electronic countermeasures, and enemy fire.

In conventional warfare, aerospace forces conducted operations falling into three broad categories: conventional probing attacks (used to test an opponent's will), conventional warfare with adjacent sanctuary, and conventional warfare without adjacent sanctuary.

Aerospace forces could be employed in the following types of conflicts: low-intensity nuclear conflicts, high-intensity nuclear conflicts, and conflicts requiring special operations.

5. Published toward the end of U.S. involvement in Southeast Asia, this edition changed little from the 1964 manual, although there were some changes.

a. Chapter 1 now defined four types of doctrine, including basic doctrine, operational doctrine, and joint doctrine (previously called unified doctrine), and added the category of functional doctrine, which "provides guidance for the specialized activities of the Air force such as ... logistics" (50:1-1).

b. At least seven pages of this relatively short text were devoted to operations in conventional and nuclear environments, while conflicts of the Southeast Asia model were covered in only a cursory manner. For example, there was no chapter on counter-insurgency (as with the 1964 publication); however, a two-page section on special operations remained. Within this portion, issues such as foreign internal defense were discussed, and emphasis was placed on the role of USAF special operations personnel as trainers and equippers of indigenous personnel (50:6-1).

6. Even though the United States was in the height of its involvement in Vietnam, little space in this document was devoted to this conflict. Drew (55) quoted in Chapter I, said that this time in the Air Force's intellectual history was part of its "air power wilderness" (50:2), a time when the USAF was unsure of its beliefs. According to Drew, the Air Force had not at this time learned from its Vietnam experience, and was therefore unable to document any new thought in the area of air power.

United States Air Force Basic Doctrine, AFM 1-1,

15 January 1975 (51).

1. President: Gerald R. Ford. Secretary of Defense: James R. Schlesinger.

2. Chief of Staff: General David C. Jones.

3. In the introduction, General Jones urged "...all Air Force officers to study and evaluate our doctrine," (51:i) even though the document was only distributed one per every eight officers on active duty (51:3-6).

4. The major instruments of national policy in the United States were the economic, political, psychological, and military instruments. The military instrument was designed to deter potential enemies, conduct warfare if required, and "...resolve conflicts on terms acceptable to the United States" (51:1-1). Conflict was inherent in international relations and took on various forms. The military instrument was to respond to conflicts with only the appropriate force as dictated by the particular conflict. However, appropriate force was a political, not a military decision. The total force policy was the combination of active duty, guard, and reserve units, which were used incrementally as the situation dictated.

The Air Force operated in the aerospace, and possessed the characteristics of flexibility, responsiveness, survivability, and surveillance. Certain employment principles were to be followed, including objective,

offensive, defensive, surprise, security, and unity of effort. Aerospace forces were effective only as adequate logistics capabilities were prepared and personnel were properly recruited and trained.

In modern conflict, aerospace operations were to be versatile and responsive to the National Command Authorities. Command was to be centralized with decentralized execution. The missions of aerospace forces included strategic attack, counter-air, air interdiction, close air support, aerospace defense of the United States, aerospace surveillance and reconnaissance, airlift, and special operations.

Aerospace forces were to be able to respond to various types of conflict. These were strategic nuclear warfare, theatre nuclear warfare, and sub-theatre and localized conflicts.

5. Changes from previous editions:

a. This edition was much shorter than previous editions, condensing several sections. For example, while the previous edition devoted a chapter to each type of defined conflict, this revision simply had a chapter on "modern conflict" (51:ii).

b. This manual devoted only one paragraph to insurgency operations, whereas previous editions devoted entire chapters to this subject. In 1975, the following was the only official Air Force comment on this type of warfare in its basic doctrine:

Normally, nations subject to insurgency, guerilla warfare and subtheater conventional threats place major emphasis upon developing and maintaining the capabilities of their ground forces. As a result, these nations will often lack adequate air power, and the Air Force is likely to play the key role in any future US response to request for support [51:3-6].

6. The major influence on the written doctrine of this period, according to Drew (55), was the war in Vietnam. But this influence had a curious aspect attached to it.

The first thing one notices about post-Vietnam basic doctrinal manuals is that the Air Force has largely ignored the war in Vietnam. The manuals concentrate almost exclusively on theatre-level "conventional" warfare and are clearly centered on the European case. The attempt to forget Vietnam is not limited to doctrine. ...Thirteen years after the end of the American combat role in Vietnam, the official Air Force history has yet to be written... [55:11].

Functions and Basic Doctrine of the United States Air Force, AFM 1-1, 14 February 1979 (56).

1. President: Jimmy Carter. Secretary of Defense: Harold Brown.

2. Chief of Staff: General Lew Allen, Jr.

3. In the introduction, General Allen said in his almost personal message said that he believed "...this manual will help you think seriously about why we are in business--why we have an Air Force, and what it must be ready to do in the next 30 years and beyond" (56:i).

4. The national security objective of the United States was to maintain the freedom of the nation. This

objective led to national security policies, which were guidelines for achieving the objective. The instruments of national power (political, economic, psychosocial, scientific-technological, and military) were used to achieve national objectives. The missions of the military were: deterrence through sufficient strength, acceptance of an equitable share of collective defense of allies, clear demonstration of military capability, availability of all military resources, and military actions complementary of the other instruments of national policy. The military was to be flexible enough to adjust to domestic and international change. The various types of forces were to act as a team in carrying out national policy. The bottom line of military readiness was fourfold: sustain deterrence, assure territorial integrity, conduct warfare, and resolve conflict.

The Air Force had primary and collateral functions as defined by the Department of Defense. Its primary functions were conducting combat air operations, formulating air doctrine, providing forces for strategic warfare, and providing worldwide air transport. Its collateral functions were to interdict enemy sea power, conduct anti-submarine warfare, and conduct aerial mine-laying. These functions were carried out through nine primary missions: strategic aerospace offense, space operations, strategic aerospace defense, airlift, close air support, air interdiction,

counter-air operations, surveillance and reconnaissance, and special operations. A sound command and control system was necessary for the success of these missions. This system included the network of intelligence, indications and warning, communications, data processing, environmental services, and trained personnel.

The major characteristics of aerospace forces were speed, range, and maneuverability. These characteristics were best exploited through proper use of people, weapons systems, facilities, and organizational structure.

Aerospace forces were to be properly organized, trained, equipped, and sustained. Several principles were important in accomplishing these actions. These included maintenance of unity of command, organizing in peace as in war, development of a unified command structure, proper coordination and control.

In order to fight, it was necessary to follow established principles of employment of aerospace forces. These were: objective, offensive, mass, economy of force, surprise, security, unity of effort, maneuver, simplicity, timing and tempo, and defensive.

5. Changes from previous edition. This edition was radically different from any previous edition. The style of writing was very informal. Extensive use was made of illustrations and bold face topic sentences. Contextual changes included:

a. A more descriptive approach to the Air Force. The manual went into great detail about organizational structure, personnel principles, and relationships with other services.

b. The language was very simple. The impression was that this was written for people with little or no field or wartime experience. Also appearing were many quotes from historic figures, as backing for major points of emphasis.

c. This edition included a chapter on the evolution of basic doctrine, and a brief synopsis of previous manuals.

d. As an appendix, this revision offered a suggested reading list, another first.

6. Faoyanic said this manual was written in "...comic book style, [with] quotations from prominent individuals whose doctrinal competence is not obvious, and [with] irrelevant observations about managing people (58:15). Drew said the [bad memory of] the Vietnam war was, as with the previous edition, the primary influence in the development of this manual. He called this edition "the nadir of Air Force doctrine" (58:12).

This manual was visually appealing but wallowed in generalities, unsubstantiated assertions, and irrelevant quotations. It was a triumph of form over substance, an air power doctrine manual that contained almost nothing about the nature of war, the art of war, or the employment of air power [58:12].

United States Air Force Basic Doctrine, AFM 1-1,

16 March 1984 (59).

1. President: Ronald W. Reagan. Secretary of Defense: Casper Weinberger.

2. Chief of Staff: General Charles A. Gabriel.

3. General Gabriel stated that "...each of us, as professional airmen, has a responsibility to be articulate and knowledgeable advocates of aerospace power" (59:iii).

4. The national security objective of the United States was maintaining a free society. This objective could be obtained through national military objectives, which included deterring potential aggressors, preventing political coercion by an enemy, and fighting at whatever level necessary. The military, through land, sea, and air forces was to be able to produce three fundamental effects: neutralization, destruction, and capture of enemy territory and resources. The national command authorities used the unified command structure in order to direct the military in the accomplishment of objectives.

Aerospace forces were employed according to the most effective doctrine. It was necessary, therefore, that commanders were thoroughly familiar with employment doctrine. The characteristics of aerospace forces were speed, range, and flexibility. Capabilities included responsiveness, mobility, survivability, presence,

destructive firepower, and observation. Aerospace forces were to be applied through the proven principles of war, which included objective, offensive, surprise, security, economy of force, maneuver, timing and tempo, unity of command, simplicity, logistics, and cohesion.

The broad plan of employment of aerospace forces was comprised of the following elements: employing forces as an indivisible entity, carrying out simultaneous strategic and tactical actions, gaining control of the aerospace environment, attacking an enemy's warfighting potential, considering both offensive and defensive actions, exploiting the psychological impacts of aerospace power, developing a coherent plan for execution, and establishing one authority for air defense and airspace control.

The primary missions of the Air Force were: strategic aerospace offense, strategic aerospace defense, counter-air, air interdiction, close air support, special operations, airlift, aerospace surveillance and reconnaissance, and aerospace maritime operations. In addition, the Air Force was responsible for several specialized tasks, including aerial refueling, electronic combat, air command and control, intelligence, aerospace rescue and recovery, psychological operations, and weather service.

5. Changes from previous edition.

a. Illustrations and point paper style was deleted.

- b. The section on the evolution of basic doctrine was left in, but expanded greatly.
- c. Quotes from famous people were deleted.
- d. The reading list was retained and expanded.
- e. Items included were directly related to warfighting.

6. while citing several shortcomings, Fabyanic still stated that "...the latest version of AFM 1-1... is a major improvement over its 1979 predecessor..." (58:15). Drew contended that the reason for the improvement was an important shift in Air Force thinking. This change in thinking was brought about, he said, by young officers who were extremely dissatisfied with the 1979 AFM 1-1. These officers produced, beginning in 1979, "...a spate of critical and thought-provoking articles centering on Air Force doctrine" (55:12).

After admitting, in effect, the failure of the 1979 manual, "...the Air Staff began assembling a team of more qualified personnel...to direct doctrine development efforts and produce the doctrine manuals" (55:12)

Part II. Tables of Comparison

The following tables were developed to compare certain aspects of the basic doctrinal manuals. They were not designed to be all-inclusive, or to show quantitative trends. Rather, these tables were meant to give the reader a general idea of changes over time in concepts contained in

the manuals. Table 2 lists the names of the various Presidents, Secretaries of Defense, and Chiefs of Staff. It was the researcher's contention that these individuals exercised significant influence in the Air Force doctrinal process. Table 3 briefly describes the manuals' treatment of the principles of war and describes the strategic viewpoint from which the manual was written. As Futrell (61) demonstrated, views held on these issues by various individuals greatly changed the content of the basic doctrine over time. Finally, Table 4 gives a short description of stylistic changes in successive manuals.

Table 2. National Leadership Chart

YEAR	PRESIDENT	SECT OF DEFENSE	CHIEF OF STAFF
1953	D.D. Eisenhower	C.E. Wilson	H.S. Vandenberg
1954	D.D. Eisenhower	C.E. Wilson	N.F. Twining
1955	D.D. Eisenhower	C.E. Wilson	N.F. Twining
1959	D.D. Eisenhower	N.H. McElroy	T.D. White
1964	L.B. Johnson	R.S. McNamara	C.E. LeMay
1971	R.M. Nixon	M.R. Laird	J.D. Ryan
1975	G.R. Ford	J.R. Schlesinger	D.C. Jones
1979	J.E. Carter	H. Brown	L. Allen, Jr.
1984	R.W. Reagan	C. Weinberger	C.A. Gabriel

Table 3. Basic Doctrine Treatment of the Principles of War and Strategy

YEAR	PRINCIPLES OF WAR	STRATEGIC VIEWPOINT
1953	10 principles: objective, offensive, concentration, economy of force, flexibility, mobility, security, surprise, control, cooperation	World War II model of large war with industrial enemy. Reliance on weapons of mass destruction
1954	Same 10 principles as in 1953 edition	Same reliance on mass destruction weapons with "big war" model
1955	Principles of war deleted and replaced by "principles for employment of air forces:" air forces are an entity, have a common objective, exercise initiative, exploit surprise, concentrate effort, maintain security, and have proper coordination	Air power is dominant in the strategy of the "big war"
1959	Principles are the same as 1955 edition and have the same perspective	Conflict may not always lead to war, WW II model may not apply, first mention of the concept of limited war
1964	Principles not mentioned as such, employment principles may vary w/conflict	Flexible response reflected throughout, levels of response formalized according to conflict: general war, tactical nuclear war, conventional war, war of counter-insurgency

Table 3 (Continued)

YEAR	PRINCIPLES OF WAR	STRATEGIC VIEWPOINT
1971	As with previous edition principles of war are not mentioned	First use of term "assured destruction," flexible response still an option, first use of term "special operations"
1975	Employment principles return: objective, offensive, defensive, concentration, surprise, security, unity of effort	Nuclear deterrence is stressed with first definition of the triad.
1979	Principles divided into three categories: control, employment, and the principles of war	Again, stress is on the strategy of deterrence, although acknowledgement of levels of conflict is made
1984	Principles of war are given as objective, offensive, surprise, security, mass and economy of force, maneuver, timing and tempo, unity of command, logistics, and cohesion	Strategy stressed is once again a type of flexible response

Table 4. Basic Doctrine Manuscript Characteristics

YEAR	LENGTH (PAGES)	NO. SECT.	DISTRIBUTION (LOWEST LEV)	FORMAT HIGHLIGHTS
1953	17	5	3/Squadron	Strictly narrative w/ main topics set apart by topic sentences
1954	19	5	1/Each Act. Duty Officer	Similar to 1953 but w/topic sentences in boldface type
1955	10	5	1/Each Act. Duty Officer	Similar to 1954 w/ boldface topic sentences
1959	13	5	1/Each Act. Duty Officer	Similar to 1955 w/ boldface topic sentences
1964	20	7	1/Each Act. Duty Officer	Less boldface type and smaller print than previously
1971	18	6	1/Each Act. Duty Officer	Very similar to 1964 edition
1975	11	3	1/Every Eight Active Duty Officers	Boldface eliminated, Smaller print, Extensive summary preface included

Table 4. (Continued)

1979	95	6	1/Every Four Active Duty Officers	Much longer, use of illustrations throughout, inclusion of many quotations, much more informal writing style, more description of Air Force functions, includes suggested reading list as appendix
1984	68	4	1/Every Eight Active Duty Officers	Long summary pre- face, less descrip- tion of functions, use of boldface, no illustrations

III. Methodology

The Historical Research Method

This study was historical in nature. The primary data examined were ACSC course curricula. The ultimate purposes of the study were first, to validate whether the Air Force had, since the end of the Second World War, conducted basic doctrinal education and second, to examine the context in which this education had taken place.

The researcher conducted a brief review of literature dealing with historical research in order to develop an appropriate methodology. The generalized historical method presented below represents a synthesis of ideas presented by Busha and Harter (43) and Powell (76). There were five basic steps followed in the examination of historical data. These were:

1. Identification of the problem, or proposal of the purpose of the research.
2. Collection of background information.
3. Formulation of a hypothesis or research questions.
4. Collection of evidence to support the hypothesis of answer the research questions.
5. Analysis of the data.
6. Formulation of inferences, conclusions, or further hypotheses.

The Historical Research Method for this Study

Step 1, Problem Identification, was accomplished in Chapter I of this study with the formulation of the problem statement. Step 2, Collection of Background Material, was also done in Chapter I, where the researcher analyzed background sources concerning problem areas within the field of Air Force doctrine. Further background information was presented in Chapter II where official Air Force doctrinal manuals were reviewed and analyzed. Step 3, Formulation of Research Questions, was accomplished in Chapter I with the presentation of the problem statement and the statement of research objectives and questions. Step 4, Data Collection, was accomplished at the Air University Library (Maxwell AFB, AL) and was described in detail in Chapter III. Step 5, Data Analysis, was conducted in Chapters IV, V, VI, and VII. Finally, Chapter VIII deals with Step 6, Conclusions and Inferences.

Description of the Data

The data consisted of ACSC course material held in storage at the Air University Library. The curricula was organized by academic year. While some of the materials used were identical for successive years, each year normally presented a picture in and of itself. In general, each curriculum set contained a course catalog or course outline,

which described, in varying degrees of detail, highlights of the prospective academic year. In most cases, this description included school administrative policies, course titles, and a breakdown of instruction hours spent on each type of instruction.

Generalization of Methodology

This was a historical study. The methodology was almost entirely non-quantitative. The primary method employed in presenting this data is abstraction. With this method, the data were examined and then briefly described in the text of this study in Chapters IV, V, VI, and VII.

In examining the data, the researcher was attempting to determine whether or not doctrinal education had in fact occurred at ACSC, and then to examine the context in which this education took place. In this way, a basis could be formed for the development of generalizations on the history and state of education in the area of doctrine within this branch of Air University.

Examining Air Command and Staff College Curricula

Curriculum for each academic year from program inception until the most recent academic year was examined. (The curricula was held in storage at the Air University Library). The analysis process was conducted using the following general methodology:

1. For each academic year, curriculum was read and an abstract was produced briefly outlining the material.

2. An abstract was developed outlining the educational methodologies used by the school as indicated in the course catalogs.

3. An abstract of the context in which doctrine was presented was produced. Context was considered to be items such as other related subjects presented, unit of instruction doctrine was presented in, and other items deemed relevant by the researcher.

Presentation of the Data. In Chapter IV of this thesis project, a summary of each academic year from 1947 through 1956 was presented. Because of the large volume of material, this methodology was applied only to the curricula for the first ten years of the school's history. The presentation consisted of the following elements:

1. An abstract of the course curriculum used during the particular academic year.

2. An abstract outlining the educational methodologies employed.

3. An abstract presenting the researcher's determination of the context in which the curriculum was presented.

Academic Years 1957 - 1980. The material examined for this study was extremely voluminous. The methodology employed above was applied only to the first ten years of curricula as a demonstration of the methodology. It could

have been applied to each academic year, but this would have produced a very lengthy research report. In order to save time for the reader, the researcher chose to present the remainder of the material by an alternate method.

For academic years 1957 through 1986, curricula was analyzed and presented in ten-year increments, and then presented as separate chapters of this study. Thus, Chapter V summarized the material for 1957 through 1966, Chapter VI described 1967 through 1976, and Chapter VII showed the results of the analysis of curricula used from 1977 through 1987. For each of these periods, the material was summarized using the same headings used in Chapter IV, that is: Abstract of Curriculum, Educational Methodology, and Context in which Curriculum was Presented.

IV. Analysis of Data, 1947 - 1956

Introduction

This chapter began the task of examining doctrinal curricula in the Air Command and Staff College and its historical antecedents. As indicated in Chapter III, a detailed methodology was applied to the first ten years of the school's curricula, that is 1947 through 1956. For each academic year, the curriculum was analyzed and the analysis was presented by providing the following information: an abstract of the curriculum, a description of educational methodologies employed, and a summary of the context in which doctrinal education took place for the particular academic year.

As indicated in Chapter I, this study was concerned with how ACSC and its predecessors taught official USAF basic doctrine. As the reader will recall from Chapter II, the Air Force did not officially publish its views as an independent service until 1 April 1953. Therefore, the year-by-year analysis for the years prior to 1953 were presented as follows. For each academic year, the abstract of the curriculum was accompanied by a review of the context in which the education took place. This was because it was difficult or impossible for the researcher to determine simply from course titles whether the curricula for these years was drawn from any official Air Force literature. For

the years 1953 and following, the analysis was presented as outlined in the first paragraph above.

History of the Air Command and Staff College

The Air University Catalog, 1984-1985, briefly stated the history of the Air Command and Staff College as follows:

The Air Command and Staff College (ACSC) had its beginning in 1946 when the Air Force established the Air Command and Staff School (ACSS) at Maxwell Air Force Base. Its first class of officers was enrolled in a nine-month regular course. In 1948 the Air Force opened the Special Staff School at Craig Air Force Base, Alabama, as part of ACSS and academic instructor training. This school moved to Maxwell AFB during the Korean War. During the Korean conflict, ACSS shortened the regular course to 15 weeks and renamed it the Field Officer Course. In 1954, ACSS discontinued the special staff courses and extended the length of the regular course back to its nine-month curriculum as the Command and Staff Course. The Air Force changed the name of ACSS to the Air Command and Staff College in 1962 [18:19].

Academic Year 1946

Abstract of Curriculum and Its Context. For the 1946 academic year (AY), it was difficult to determine the content of courses simply from the course titles as listed in the Curriculum Catalog (11), since no course descriptions were included. (It should be noted that for many AYs, the only curriculum-related material the researcher was able to obtain in the archives were course catalogs. While this was a limitation, information obtained from other archives and sources helped shed light on the data.) The course was six months in duration, and the school was broken down into five "divisions," as follows (11:ii):

Air Force Division.
 Logistics Division.
 Organization Division.
 New Developments Division.
 Ground Forces Division.
 Naval Division

It was the researcher's assumption that basic doctrine would probably be taught by the Air Force Division. This division was allocated 368 of 905 total academic hours (11:iii). Of this total, the majority was taken up with courses dealing with technical and organizational aspects of the Air Force. For example, courses were offered in "radar and electronics aids," "flak analysis," and "air defense communications." (11:3-4,7). Of the 271 class sessions included in this division, the researcher identified 13 which appeared to focus on the Air Force's fundamental views on war, or basic doctrine. The course titles and instructional hours appear below:

<u>Course Title</u> (11:1,10-13)	<u>Hours</u>
Principles of War (3 sessions)	3
War--An Instrument of National Policy	1
The U.S. and Future Wars	1
Air Power	1
Development of Air Warfare (2 sessions)	2
Air Forces	1
Military Potential of [the] U.S.	1
Air Warfare--Concepts--Strategy--Tactics (6 sessions)	6
Air Power in Warfare	4
Future of Air War	1
	<u>21</u> hrs.

Educational Methodology. Almost all these courses were offered as "conference" periods, according to the catalog (11:1-13). The researcher was unable to

determine if this was a seminar conference or an expert symposium. The "Military Potential of [the] U.S." session was presented as a lecture, and "Air Power In Air Warfare" was handled as a "problem" (11:12). Again, the researcher was unable to determine whether a problem was a seminar session or some other type of meeting.

Academic Year 1947

Abstract of Curriculum and Its Context. The 1947 Curriculum Catalog (12), like the previous year, simply listed course titles, along with some administrative details. There were now seven divisions, the new one called the "Intelligence Division" (12:ii). The "Air Force Division" was now called the "Operations Division" (12:ii) and the "Ground Forces Division" was now called the "Army Division" (12:ii), reflecting Air Force independence achieved in September 1947.

The Operations Division was allocated 21% of 814 total course hours (12:vi). Nineteen of 220 class sessions within this division focused on basic doctrine, as follows:

<u>Course Title</u> (12:1,3,6,9)	<u>Hours</u>
war, an Instrument of National Policy	1
Military Policy of the U.S.	1
Air Power	1
Development of Air Warfare	1
U.S. and Future Wars	1
Principles of War (2 sessions)	2
Grand Strategy (2 sessions)	2
Air Warfare (6 sessions)	6
Air Power in Warfare (4 sessions)	4
	<u>19 hrs.</u>

Educational Methodology. The "Grand Strategy" course was the only new offering in the curriculum. Educational methodology employed shifted to a heavier emphasis on lectures. One of the "Principles of War" sessions was coded as a conference period, the other as a lecture (12:1); one of six "Air Warfare" sessions was a conference period (12:8), and all of the "Air Power in Air Warfare" sessions were presented as a problem (12:9). Otherwise, 13 of the 19 hours were lecture periods.

Academic Year 1948

Abstract of Curriculum and Its Context. The curriculum for the 1948 AY was similar to the two previous years. The Curriculum Catalog (13) now listed eight school divisions, with the "Academic Plans Division" being added (13:II). Additionally, each division was now broken down into "sections" (13:II). The Operations Division was broken down into eight sections, which were Plans and Special Operations, Tactical Air, Strategic Air, Air Defense, Troop Carrier, Communications, Reconnaissance, and Weather (13:II).

The Operations Division was given 159 of 546 academic hours (13:V). Courses dealing with basic doctrine issues used 9 of 159 class sessions, with course titles and hours as follows:

<u>Course Title (13:1,5,7)</u>	<u>Hours</u>
War, an Instrument of National Policy	1
Military Policy of [the] U.S.	1
Air Power	1
Principles of War	1
Grand Strategy (2 sessions)	2
Air Warfare (3 sessions)	3
	<u>9</u> hrs.

Educational Methodology. All of these courses were presented as lectures. At this early stage in the school's history, the trend seemed to be toward faculty-intensive classes. The lecture method was used more extensively, and the number of courses was being reduced, perhaps indicative of a trend toward more succinct presentation of material.

Academic Year 1949A (January - June 1949)

Abstract of Curriculum and Its Context. For the 1949A AY, course descriptions were included with the course titles for the first time. The school still consisted of eight divisions, and the Operations Division still retained its eight sections. The Operations Division was given 185 of 574 academic hours. Of these 185 hours, courses related to basic doctrine consumed 8 hours, and 5 of 111 class sessions within the Operations Division, as follows:

<u>Title (9:27,29)</u>	<u>Hours</u>
War, an Instrument of National Policy	1
Air Power Concept	1
Principles of War	1
Air Warfare	3
Grand Strategy	2
	<u>8</u> hrs.

According to the course objectives, the purpose of the "War, an Instrument of National Policy" course was "...discussion of war as to its nature..." (9:27). "Air Power Concept" was "...a review of air power to include ... [its] significance..." (9:27). The "Air Warfare" course was apparently a history course looking at "...strategy employed in World war II..." (9:29). No course objectives were listed for the "Grand Strategy" course, perhaps since it was presented by a guest speaker.

Educational Methodology. All of these courses were presented as lectures. However, the "Air Warfare" and "Grand Strategy" sessions were given by guest speakers, perhaps revealing a tacit acknowledgement that expertise in these area did not exist at Air University. All other courses were presented as lectures.

Academic Year 1949B (July - December 1949)

Abstract of Curriculum and Its Context. The 1949B Curriculum Catalog (10) differed significantly from the 1949A edition. For the first time, the catalog included a statement of "Mission and Scope" (10:II). The mission of the Air Command and Staff School was "to prepare officers for the command of groups and wings and for staff duties appropriate to these grades" (10:II). Eight descriptors of the scope of instruction were also presented; instruction in doctrine was not among them. The catalog simply stated that the scope of instruction would include "...critical

examination of current equipment, techniques and accepted standards...with the direction of thought toward improvement" (10:11).

The Operations Division, which still had eight sections, used 157 of 508 instructional hours. Of these, 10 hours, and 10 of 108 class sessions, were devoted to basic doctrine, as listed below:

<u>Title</u> (10:29,31)	<u>Hours</u>
War, an Instrument of National Policy	1
Air Power Concept	1
Principles of War	1
Air Warfare	3
RAF Operational Doctrine	2
RCAF Operational Doctrine	2
	<u>10</u> hrs.

The course descriptions were somewhat longer in this catalog. For most of the courses, however, the basic objectives remained the same. For the "Principles of War" course, students were to be made "...aware of the principles and apply them to air power" (10:29). The RAF and RCAF courses, which apparently replaced the "Grand Strategy" course, were designed to "...present activities and future plans of [the service in question]" (10:31).

Educational Methodology. The educational methodology employed was either lecture, or use of a guest lecturer, as with the "Air Warfare" and the RAF and RCAF courses, which apparently made use of British and Canadian officers.

Academic Year 1950A (January - June 1950)

Abstract of Curriculum and Its Context. The 1950A Regular Course Curriculum Catalog (14) was again an apparent improvement over its predecessors. Instead of "Mission and Scope," "Mission and Objectives" were now listed (14:ii). The mission statement was as follows:

To provide selected officers, having preparation equivalent to graduation from Air Tactical School, with an effective and progressive approach to the command of Air Force groups and wings and to the principal staff tasks of Air Force wings and numbered air force headquarters [14:ii].

This expanded mission statement was adopted from the Report of the USAF Military Education Board (also known as the Fairchild Board), 24 - 25 January 1950.

Objective 3 (of ten) in the catalog read as follows:

Provision of sufficient discussion of the philosophies and theories of war for an understanding of the military role of the Department of National Defense [14:ii].

This was the first time that study of "...the philosophies of ...war" was a stated objective of the school.

Instead of divisions, the school was now divided into "Directorates of Instruction" (14:v). These were the Directorates of Military Management, Operations, and Logistics (14:v). The Directorate of Operations Instruction had five sections, which were Plans and Special Operations, Air Defense, Tactical Air, Strategic Air, and Intelligence (14:v). This division was allocated 243 of a school total of 569 academic hours (14:viii).

In addition, the course was now phased into five phases, as follows (14:iv):

Phase I	Indoctrination.
Phase II	The Air Force Group Commander.
Phase III	The Wing Commander and Wing Headquarters.
Phase IV	The Numbered Air Force Headquarters.
Phase V	Planning and Directing Air Force Employment.

The objective of these phases was apparently to organize the curriculum by the ultimate application, in the student officer's career, of the subject matter. Each instructional directorate taught classes in each phase.

Within the Operations Directorate, the researcher located two courses concerned with basic doctrine, as follows:

<u>Title (14:4)</u>	<u>hours</u>
Instruments of National Policy	1
Air Power Concept	1
	<u>2 hrs.</u>

The objective of the "Instruments" course was to give students "...a fuller understanding of the many instruments or fields of national policy" (14:4), whereas the previous years' description spoke of the "nature of war" (10:29). "Air Power Concept" purported to "...give an appreciation of Air Power and ...its significance in modern warfare" (14:4).

Academic Year 1950B (July - December 1950)

Abstract of Curriculum and Its Context. The 1950B Regular Course Curriculum Catalog (15) was similar to

the 1950A catalog in most respects. The same system of instructional directorates was used, as well as the division of the course into five phases. The "Mission and Objectives" statements were identical. One new feature to this catalog was quite significant, however. This was that courses were linked directly to school objectives. Listed along with each course title in the catalog was the alphaoetic code of one or more of the school objectives.

Objective c read as follows:

Provision of sufficient discussion of the philosophies and theories of war for an understanding of the military role of the Department of National Defense [15:ii].

In Chapter I of this thesis, the researcher outlined some of the definitional difficulties inherent in the study of doctrine. In attempting to assign specific courses of instruction to objectives, the school began to experience this definitional difficulty. Fully 23 of 43 class sessions handled by the Operations Directorate were linked to this objective. While all courses linked to this objective were supposed to help the student develop a "theory of war," many were simply descriptive of some broad threat, while many only described the roles or missions of a component of the armed forces or of forces of other nations. Here is the complete list of course titles which were supposed to meet the requirements of objective c (15:4-48):

Seapower

The Navy's Mission and the General Concept of

- Soviet Air Power
- The Soviet Army
- Soviet Sea Power
- Strategic Air Operations
- Strategic System of Air Bases
- Vulnerability of the USSR to Air Attack
- Role of the Army in Future Operations
- The Fleet Task Force and Group
- Infantry, General
- Naval Aviation Employment
- Global Geography
- Biological Warfare
- Psychological Warfare
- Introduction [to group leader sessions]
- Concept of Strategic Air Operations
- Objective Survey
- Objective Survey

The wording of this objective was apparently vague enough to allow the school to apply it to many courses. It was the researcher's view that many of these courses went beyond the teaching of basic doctrine, or may have only been descriptive in nature. Based on analysis of the course titles and descriptions, the researcher believed the following courses were concerned with basic doctrine:

<u>Title (15:4,11)</u>	<u>Hours</u>
Air Power	1
War as an Instrument of National Policy	1
Identification of Strategic Concepts	2
Determinants of Modern Strategy	2
Principles of War	1
	<u>7 hrs.</u>

Educational Methodology. This AY marked a new concept in methodology employed, as outlined by the Curriculum Catalog:

Two general methods are employed in giving instruction in each of the above phases. The first is presentations, or other platform types of instructional periods, by specialists in various fields, either faculty members...or guest speakers. ...The second method is in class periods conducted by leaders of student groups, wherein the preceding specialist instruction is discussed or put into practical application [15:iv].

The class sessions listed above were handled as follows: "Air Power" and "War an Instrument of National Policy," and "Identification of Strategic Concepts" were "presentations" (lectures) given by a faculty member. The last two courses were presented as "commander's meetings," which was

...a period which simulates a gathering of group or wing commanders to discuss views and formulate policy pertinent to the current concerns of the command. These meetings will be conducted by a member of the AC&SS staff acting as the next higher commander [15:vi].

Academic Year 1951A (January - April 51)

Abstract of Curriculum and Its Context. Because of the Korean war,

In January 1951 the Air Tactical School and Air Command and Staff School were converted into short courses with the objective of providing refresher training for the multitude of reserve officers being returned to active duty in the expanding Air Force (35:46).

This change reduced the number of course hours offered, and changed the administration of the program. There were now four phases of instruction, as opposed to five (16:vii), and there were only 493 hours of instruction. Instead of the three instructional directorates, there were now six divisions, as follows:

Personnel & Administrative Division
Operations & Intelligence Division
Electronics Division
Logistics Division
Judge Advocate Division
Comptroller Division

Instruction in basic doctrine apparently took place within the Operations and Intelligence Division, which was allocated 136 of 493 instructional hours. Again, courses were linked to school objectives, and objective c remained identical to the previous year. Thirty of 217 class sessions were linked to this objective. However, like the previous year, the researcher believed that not all courses were actually concerned with basic doctrine. Those that were are as follows:

<u>Title (16:2-3)</u>	<u>hours</u>
Identification of Strategic Concepts	2
war as an Instrument of National Policy	1
Principles of War	1
General Concept of Air Power	1
Considerations for Employing Military Power	
	<u>3</u>
	8 hrs.

The "period objective" for "Identification of Strategic Concepts" was the provision of a "...method for identifying [and] evaluating various strategic concepts" (16:2). It was not clear to the researcher if this class was concerned entirely with basic doctrine, but probably presented some of the Air Force's basic beliefs in the course of surveying various strategies. "War as an Instrument of National Policy" attempted to "...promote understanding of war as an accessory to other instruments of

national policy" (16:2), and "Principles of War" was designed to "...review the classical principles of war [and] to study their utility in modern war" (16:2).

"General Concept of Air Power" hoped to "...promote understanding of the components of air power...[within] the Department of National Defense" (16:3). The objective of "Considerations for Employing Military Power" was exploration of "...the considerations for employing military power to specific situations" (16:3).

Educational Methodology. The general methodology of the school was the same as for the previous AY, combining lectures and group sessions (16:iv). All the courses listed above were presented by lecture, with the exception of "Considerations for Employing Military Power," which was handled as a "commander's meeting," discussed earlier, and also as a "committee meeting," which was apparently a group report on the subject produced by a small student committee (16:v).

Academic Year 1951B (17 May - 17 August 51)

Abstract of Curriculum and Its Context. The 1951B Regular Course Curriculum Catalog (17) changed extensively from its previous edition. The course was still divided into four instructional phases and instruction was conducted by the same seven divisions mentioned for the previous AY. However, the mission of the school was now to:

...increase the ability of selected field grade Air Force officers to soundly approach and effectively execute the command tasks associated with wings and groups and the principal staff tasks of numbered air forces, air divisions, and wings [17:ii].

Along with this, the objectives were revised. The objective concerning "theories of war" was now changed to read:

...give sufficient instruction and guidance to provide a theory of war and sufficient discussion of strategic concepts to insure understanding of the purpose of the Department of Defense and the organization, functions and employment of its military components [17:ii].

This broad definition allowed the school to link 40 of 208 class sessions conducted by the Operations and Intelligence Division (the division was allocated 136 of 500 academic hours). As with previous years, many of these classes were concerned with describing some function or mission of a component of the DOD or the Air Force, and very few were concerned, in the view of the researcher. Those that were are as follows:

<u>Title (17:2-3)</u>	<u>Hours</u>
War as an Instrument of National Policy	1
Identification of Strategic Concepts	3
Principles of War	2
Application of Strategic Concepts	2
General Concept of Air Power	1
	<u>9 hrs.</u>

The objective of "War as an Instrument of National Policy" was to "...promote understanding of war as an accessory to other instruments of national policy" (--:2). "Identification of Strategic Concepts" was to "...foster the

adoption of a method for identifying and evaluating various strategic concepts" (17:3). "Principles of War" was designed to "...review the classical principles of war and to study their utility in modern war" (17:3). "Application of Strategic Concepts" was apparently a follow-up to "Identification of Strategic Concepts" and enabled students to "...apply the considerations for employing military power to specific situations in land, air, and sea campaigns" (17:3). "General Concept of Air Power" was designed to "...promote understanding of the components of air power...and the purpose of the Air Force" (17:5).

Educational Methodology. All of the above courses were listed as "presentations," or lectures, with the exception of "Application of Strategic Concepts," which was handled as a "committee meeting," discussed previously. Another methodology employed was outside readings. The emphasis on the importance of outside reading was first stressed during this AY, but continued to play a very important role in the course of instruction in later years. The Curriculum Catalog outlined this program as follows:

During the course, all officers are required to read a limited number of selected articles and encouraged to follow the Air Force professional reading program. Those activities are intended to increase the professional knowledge of each officer as well as to create incentives for continued study [17:iii].

Academic Year 1952A (13 January - 13 June 1952).

Abstract of Curriculum and Its Context. During this and other AYs, the school was conducting numerous specialized schools, such as the Logistics Officer Course and the Comptroller Officer Course. The most general course was called the "Field Officer Course," and will be the course looked at in this study. As with previous AYs, the mission of the school was modified slightly in this edition of the Curriculum Catalog, the mission read as follows:

The mission of the Field Officer Course is to increase the abilities of selected officers to execute command tasks associated with wings and groups, and to perform principal staff tasks associated with numbered air forces, air divisions, and wings [28:ii].

In addition, the objectives were modified. Now, instead of a broad objective relating to "theories of war" and descriptive aspects of the DOD, objective j simply said that the school intended "...to increase student understanding of the nature of war" (28:ii). Objectives related to the missions and roles of military components were listed separately. The school itself was divided into ten "AC&SS agencies," including the following:

- Personnel and Administration Division
- Operations Division
- Logistics Division
- Intelligence Division
- Comptroller Division
- Electronics Division
- Inspector Division
- Judge Advocate Division
- Field Officer Course Directorate
- Headquarters, Air Command and Staff School

Courses related to basic doctrine were apparently taught by the Operations Division, which was allocated 264 of 952 academic hours (28:vii). The course was divided into three phases, which were Orientation, Command Administration, and Command Employment (28:iv). Most courses concerned with basic doctrine were taught within the Command Employment phase. Of the 38 courses were offered during the Command Employment Phase, six corresponded to the objective concerning the "nature of war." These were:

<u>Title</u> (28:19)	<u>Hours</u>
War as an Instrument of National Policy	1
Principles of War	1
The Nature of War (Lecture)	3
The Nature of War (Non-lecture)	4
Global Geography	1
Psychological Warfare	2
Air Force Concept of Air Power	1
	<u>13 hrs.</u>

The objectives of these courses remained unchanged from the previous years. "Global Geography," a course added to the above list for the first time, was designed to discuss "...the influence of geography on warfare" (28:19), while "Psychological Warfare" wanted to look into the "...psychological effect of air weapons" (28:19).

Educational Methodology. The lecture method was employed for all of the above courses, with the exception of the four hour "Nature of War" section, which was handled as two discussion periods.

Academic Year 1952B (14 July - 12 December 1952)

Abstract of Curriculum and Its Context. The curriculum for 1951B AY was very similar to the 1951A curriculum. The Operations Division was allocated 186 of 666 academic hours (29:ix), and the course was divided into the same phases of instruction. Out of 69 class sessions in the Command Employment Phase, five were devoted to meeting the school objective concerning "the nature of war." (29:16). The courses in this category were:

<u>Title (29:16)</u>	<u>Hours</u>
The Nature of war (Lecture)	4
The Nature of war (Non-lecture)	4
Principles of War (Lecture)	2
Principles of War (Non-lecture)	3
Air Force Concept of Air Power	2
	<u>15 hrs.</u>

The course descriptions for these courses were identical to those of the previous AY. The "Global Geography" and "Psychological Warfare" courses did not appear in this year's catalog.

Educational Methodology. Lecture was the predominant method employed. However, four hours of the "Nature of war" and three hours of the "Principles of war" courses used discussion (29:16).

Academic Year 1953A (19 January - 19 June 1953)

Abstract of Curriculum. During this AY, the term "doctrine" was used for the first time in the Curriculum Catalog (30). Once again, the course objectives were

changed. The objective emphasizing "theories of war" read as follows:

[The student will gain] an understanding of, and interest in, national and international geography, cultures, ideologies, politics, theory of war, and other subjects as they relate to and affect military strategy [30:ii].

But another objective stressed "...an understanding of current Air Force objectives, organizations, doctrines, procedures, strategies, and tactics" (30:ii). And yet another objective indicated that the student should gain "...an increased ability to analyze, evaluate and to project his thinking in areas of doctrine, strategy, and tactics" (30:iii).

The school's philosophy behind its teaching of doctrine was outlined in the introduction to the catalog.

There must be a balanced approach between: (1) the acceptance and understanding of current United States Air Force doctrine, principles and standardized procedures, and (2) the analysis, evaluation, and projection of thought in the area of new doctrine, principles, and procedures in the United States Air Force [30:vi].

As with previous AYs, the school was divided into several divisions, with the Operations Division and the Field Officer Course [Division] apparently handling most of the teaching on basic doctrine. The course itself was divided into three phases: Orientation, Command and Staff, and Employment of Forces. All of the instruction in basic doctrine was conducted within the Orientation phase. Of the 174.5 instructional hours in this phase, 13 were devoted to

the teaching of basic doctrine. (there were 968 total instructional hours for the school). The courses were:

<u>Title (30:3-4)</u>	<u>hours</u>
Nature of Conflict	2
Basic Characteristics of Military Forces	1
Principles of War (Lecture)	2
Principles of War (Non-lecture)	4
Evaluation of Doctrine and Concepts	4
USAF Basic Doctrine and Concepts	2
	<u>13 hrs.</u>

These course titles and the course objectives were represented the first time that courses were taught which dealt with officially published Air Force doctrine. In this case, the basis for the courses was the draft AFM 1-2, USAF Basic Doctrine (45). This manual was written by the staff of the Air University, and was published later in this AY, on 1 April 1953.

For the first time, courses were offered which specifically mentioned "doctrine" in the course titles.

"Evaluation of Doctrine and Concepts" wanted to give students an

appreciation of the need for objective and critical analysis in applying old weapons and methods to new situations and the pitfalls to be avoided [30:4].

"USAF Basic Doctrine and Concepts" stressed "...knowledge of USAF doctrine and concepts in regard to the components of air power..." (45:4).

The other courses listed above, such as "Principles of War," "Nature of Conflict," and "Basic Characteristics of Military Forces" were included because the course titles

themselves seemed to have their foundation in AFM 1-2, even though this document was still in draft at this time. For example, Chapter I of AFM 1-2 was called "Military Force as an Instrument of National Policy," and outlined the Air Force view on the nature of war. Chapter II of AFM 1-2 closely parallels the "Basic Characteristics" course in its discussion of the relationship of U.S. military forces. Finally, Chapter III of AFM 1-2 was called "Air Forces and the Principles of War (45)." The courses offered by the school were apparently expansions of the Air Force's official views on these subjects as expressed in AFM 1-2.

Educational Methodology. Of the 13 course hours devoted to these courses, nine were taken up with lectures. The only exception was a four hour discussion period on the "Principles of War." It also appeared that professional reading as a part of the educational methodology became even more important during this AY. Included with the curriculum package given to students was "A Selected Professional Reading List" (1), which included a bibliography and abstracts of books on foreign policy, the USSR, The United States, World War II, Air Power, and Communications (1:1).

Context in Which Curriculum was Taught. These courses on basic doctrine were offered as part of the "Basic Orientation" block of the Orientation Phase of the program. Other course offerings in this block included courses on Soviet objectives, U.S. Army and Navy doctrine, and

International Alliances. This block was apparently designed to orient students to some basic military thought in preparation for more detailed study of military forces later in the course.

Academic Year 1953B (July - December 1953)

Abstract of Curriculum. The object of the school's instruction was not, according to this AY's Curriculum Catalog (4), "...aimed at the problems of the specialist, but rather at the problems of a commander who must make a decision and then implement it" (4:5). For this AY, the mission statement remained the same as that of the last AY; however, the objectives were changed somewhat. This year, students were to obtain knowledge of "...Air Force objectives, organizations, doctrines, and procedures" (4:6). Doctrine did not seem to be heavily emphasized, given the wording of this objective.

The school was now divided into four directorates: Administration, Educational Assistance, General Courses, and Staff Instruction (4:7). In addition, the course was divided into three phases: Orientation, Command and Staff, and Employment (4:21). This catalog did not describe in specific detail the scope of each course, but did briefly outline the types of instruction offered during each phase.

Within the Basic Orientation Section of the Orientation Phase, which consumed 60 of a course total of 969 instructional hours, several topics were listed which

seemed to be concerned with basic doctrine. Included were "Nature of Conflict," "National Objectives," "Characteristics of Military Forces," "Military Objectives," "Strategy and Tactics," and "Military Doctrine and Concepts" (4:21). It was unclear whether each of these topics was a separate course, or parts of another course. It appeared that these topics were taken almost directly from AFM 1-2.

Context in Which Curriculum was Taught. During this period in Air University's history, it was acting as the Air Force center for doctrinal development (61:182-200). The task of developing doctrinal manuals had been quite difficult, as expressed by Colonel William W. Momyer, Air War College Deputy Commandant for Evaluation, in a 17 September 1952 letter to the Deputy Commander of Air University.

In this attempt to strike out on our own, we have encountered many obstacles that were certainly anticipated, and others that could not be foreseen. Of course, we have encountered the additional prejudice in respect to what constitutes doctrine, tactics, techniques, and procedures. Thus, we have been seeking for a level of writing that has no definition and is not always apparent when one thinks it has been obtained [68:1].

The "Evaluation of Doctrine and Concepts" course specifically addressed "pitfalls to be avoided" (4:4) in the analysis of Air Force doctrine. It is possible that this course developed as a result of the many years of frustration that occurred while Air University attempted to define and write basic doctrine. Thus it seemed to the

researcher that this AY was the first to be influenced significantly by written Air Force doctrinal statements, even though AFM 1-2 was only in draft form at the beginning of 1953.

Academic Year 1954A (18 January - 18 June 54)

Abstract of Curriculum. This AY was the last period in the school's history with a six-month course. Little had changed from the 1953A AY, according to the Curriculum Catalog (31). The mission and objectives remained the same, as well as the organization of the course itself. Again, the catalog linked courses to specific school objectives. Of the 144 class sessions, 80 were linked to one or more of the three school objectives which mentioned the study of doctrine. Not all these courses actually dealt with basic doctrine, as published in AFM 1-2; they either went beyond the scope of the subject matter, or were descriptive of some component of the national defense structure. Seven courses concerned themselves specifically with some element of basic doctrine; these were:

<u>Title</u> (31:4)	<u>Hours</u>
U.S. Strategy and Tactics	3
Nature of Modern Conflict	2
Basic Characteristics of Military Forces	1
Principles of War (2 sessions)	7
U.S. Objectives and Military Strategy	2
Evaluation of Doctrine and Concepts	4
USAF Basic Doctrine and Concepts	2
	<u>21 hrs.</u>

In terms of course objectives, "Nature of Conflict" sought to give students "...an appreciation of ...now the

instruments of national power are used in the pursuit of national objectives" (31:3). while "U.S. Strategy and Tactics" attempted to develop "...knowledge of strategy and tactics used by the U.S. in pursuit of objectives" (31:3). "Basic Characteristics of Military Forces" described "...how the typical phases of war influence [the employment of the different types of forces]" (31:4). "The Principles of War" sessions tried to pass along "...knowledge and understanding of the principles of war and their application to air power" (31:4).

"USAF Basic Doctrine and Concepts" was intended to give students "...knowledge of USAF doctrine and current concepts for employment of air forces" (31:4). On the other hand, "Evaluation of Doctrine and Concepts" wanted to give students "...an appreciation of the need for objective and critical analysis..." in evaluating any statements of air power doctrine (31:4). Finally, "U.S. Objectives and Military Strategy" was presented simply to "...review and analyze current U.S. military strategy and its relationship to national objectives" (31:13). Again, it appeared from the course titles and objectives that these courses were expanded explanations of what the Air Force had made official in AFM 1-2.

Educational Methodology. All of the above class sessions used the lecture method, with the exception of one of the "Principles of war" classes, which took the form of two student-led discussions.

Context in Which Curriculum was Taught. As with previous years, these courses were conducted within the Basic Orientation block of the Orientation Phase with many of the same types of classes listed previously. This unit was devoted apparently to building a firm foundation of basic military thought.

Academic Year 1955

Abstract of Curriculum (September 54 - June 55).

This AY marked the inauguration of a 10-month course, the pattern which would now continue for the rest of the school's history. Along with the lengthening of the course came a complete restructuring of the curriculum. For the first time in several years, no "Mission and Objectives" statement appeared in the Curriculum Outline (22). The course itself was divided into nine units, as follows:

- I. Introduction
- II. Command and Staff
- III. Application
- IV. Weapons
- V. The Enemy
- VI. Free World
- VII. Staff Functions and Programs
- VIII. Concepts for Air Operations
- IX. Application

Within each unit, blocks of courses were presented as "projects," which apparently represented an attempt to present each course in a sequential sequence.

The entire course was presented graphically in the form of a flow chart.

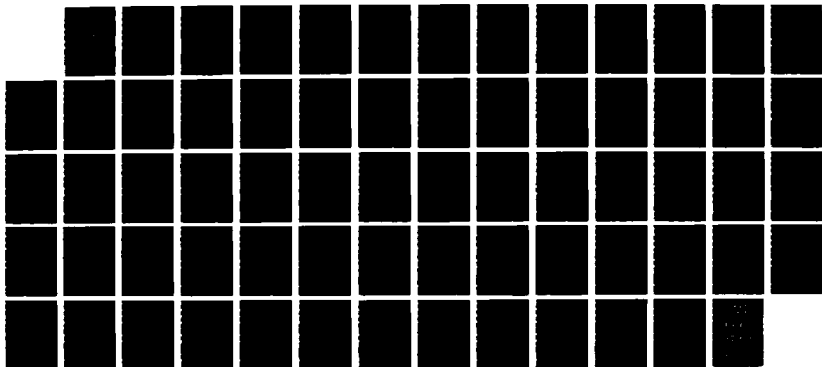
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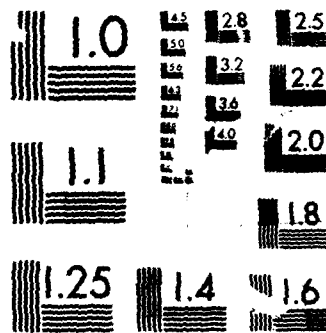
A HISTORICAL ANALYSIS OF BASIC AIR FORCE DOCTRINE
EDUCATION WITHIN THE UN (U) AIR FORCE INST OF TECH
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

with each phase apparently building on the previous phase. The charts indicated that the "Study of Doctrine" is the foundation of the entire course of instruction. However, the term "doctrine" was not defined in the outline; it appeared that the school meant to imply that "doctrine" as a term meant the entire set of Air Force beliefs about any subject.

For this AY, the researcher discovered two sets of somewhat contradictory curriculum guidances. The first was the Curriculum Outline (22), mentioned above. The second was a two volume Curriculum Catalog set (20;21). In both sources, the study of basic doctrine was presented in Units I and IX. For Unit I, courses listed in the outline and the catalog were nearly identical. However, the course offerings for Unit IX, the class listings were somewhat different.

Within Unit I, several class sessions were conducted which concerned themselves with basic doctrine. For the first time, an entire block of instruction was offered in "Air Power Fundamentals" (20:8). Courses which concerned themselves with broad national objectives were now offered as a separate section. The "Air Power Fundamentals" section had 11 courses, 8 of which covered some aspect of the Air Force's basic beliefs on warfare (courses such as "U.S. Army Organization and Doctrine" were also offered in this block of instruction). These courses were:

<u>Title</u> (20:8)	<u>Hours</u>
Evolution and History of the USAF	1
What is Doctrine	1
Nature of Modern War	1
U.S. Military Strategy	1
Principles of War	4
U.S. Air Force Organization and Doctrine	2
Role of Air Power in Military Strategy	3
Air Power Fundamentals: A Summary	1
	<u>14</u> hrs.

The stated objectives of all of the above courses was that the student "gain knowledge" of the subject matter (20:8). "What is Doctrine" was a new course offering, and proposed to give students "...an appreciation of what is meant by the term 'doctrine' as used by the USAF" (20:8). Apparently, not enough officers understood this term, let alone study its components.

Unit VIII, according to the outline,

provided the student an opportunity to evaluate the current command concepts and doctrine for employment with a view toward examination and recommendation of changes to AFM 1-2 [22:16].

Within this unit, students were apparently required to produce written criticisms of AFM 1-2 and other Air Force doctrinal statements. These classes included:

Title (22:16)

Basic Air Doctrine
Air Defense Doctrine
Strategic Air Doctrine
Theater Air Doctrine
Logistics Support Doctrine
Recommendations for Air Doctrine

While all of these courses addressed doctrine, only two concerned themselves with basic doctrine; these were "Basic Air Doctrine" and "Recommendations for Air Doctrine."

The specific objective of "Basic Air Doctrine" was "...to develop through discussion an understanding of the requirement for and the value of air doctrine" (22:16), while "Recommendations for Air Doctrine" hoped to "...produce in writing conclusions and recommendations for Air Doctrine" (22:16).

Courses offered in the area of basic doctrine,

<u>Title</u> (21:15-6)	<u>Hours</u>
Evaluation of Doctrine and Concepts	4
Logistics Support Doctrine	4
Strategic Air Warfare	4
Air Defense Doctrine	4
Theater Air Doctrine	0
Evaluation of AFM 1-2, USAF Basic Doctrine	12
	36 hrs.

When combined with the courses presented in "Air Power Fundamentals," the total number of hours spent on doctrine was 50, the greatest number to date. However, courses such as "Logistics Support Doctrine," and the courses on strategic, air defense, and theater doctrine probably go beyond the scope of basic doctrine. This leaves a total of 30 hours devoted to doctrine, still the most hours to date.

The objective of the "Evaluation of Doctrine and Concepts" course was to give students "...an appreciation of the need for objective and critical analysis in applying old weapons and methods to new situations" (21:15). This course description had been used previously. The purpose of "Evaluation of AFM 1-2, USAF Basic Doctrine" was "...to obtain student recommendations for revision of AFM 1-2" (21:16).

Educational Methodology. Specific methodologies employed were not listed on a class-by-class basis. By unit, Unit I comprised 64 hours of platform instruction and 3 seminars, totaling 32 hours, for a total of 96 hours (22:3). Unit VIII was more seminar-intensive, with 10 hours of platform instruction, and 6 seminars totaling 40 hours (22:16).

Context in Which Curriculum Was Taught. The shift to a longer course was a significant event in the history of the school, and had been prompted by an internal study by the Air Command and Staff School conducted in the Autumn of 1953 (66). The study was concerned with several aspects of field-grade officer education, and made several recommendations to the Commander of Air University.

One of the study's findings was that

Study areas essential to the proper schooling of lieutenant colonels and majors are slighted or omitted in the present Field Officer Course due to the inadequacy of the present 22 week course length [66:1].

The study was also critical of the current system of offering the Field Officer Course in addition to specialized courses for officers in the logistics, communications, intelligence, and comptroller specialities. The study said that this "...seriously inhibits the development of realistic staff action problems in the field officer course" (66:2).

To remedy these problems, the study proposed a lengthened course, the first phase of which would consist of "...coverage of basic concepts, ...and other subjects appropriate to the operation of units primarily employing fighter-type aircraft (66:4), with the last half of the course concentrating on more advanced concepts. In addition, the specialized staff courses would be phased out and offered as separate courses. Previously, these courses were offered concurrently, and officers eligible for these were not eligible for the Field Officer Course (66:5). Finally, courses offered by the Air Training Command were beginning to duplicate material offered by the AC&SS courses, and the study felt that Air University should not concentrate as much on these technical areas (66:5).

Academic Year 1956 (September 55 - June 56)

Abstract of Curriculum. According to the Curriculum Brief (23) for the 1956 AY,

The USAF educational system must be oriented toward the basic end of the profession, air power. Thus it must...produce a discipline necessary to future accomplishment of the mission of the Air Force, consisting of understanding of aerial combat. This includes air action in 'cold' and 'limited' war situations and its support personnel [23:b].

Thus, the school expressed its commitment to educating officers in the art of war.

In addition, the statement of mission and objectives returned to the Curriculum Catalog (25) for this AY. The mission of the Air Command and Staff School was now to:

...increase the professional qualifications of selected USAF majors and lieutenant colonels and to improve their abilities to execute the command and staff tasks required to implement air strategy and missions of the Air Force and to contribute to the development of air doctrine, strategy, and tactics [25:iii].

The number of objectives was now reduced to four. The objective concerned with doctrine read as follows:

To increase [the student's] knowledge of the capabilities and limitations of current and future weapons systems and their relationship to sound employment doctrine [25:iii].

The course itself was divided into two phases. Phase I was called "Air Power Fundamentals" and the second phase was "USAF Operations" (25:iv). A total of 13 units were included within the phases. Instruction in the area of basic doctrine occurred throughout the program, and within various units. The breakdown of the course was again illustrated graphically, and again the "study of doctrine" was again shown as the foundational element of the entire course.

This AY was the first for which other curriculum documentation, such as study guides and instructional circulars were retained in archives in addition to the curriculum catalog. These documents were more descriptive than the catalogs. In spite of the impression given by the Curriculum Catalog (25), the "study of doctrine," at least basic doctrine, took place in two units, not throughout the entire course. These units will be separately analyzed below.

Unit III, "U.S. Military Doctrine" was conducted over the space of one academic week. The objective of the unit was "...to provide the officer with a better understanding of U.S. military doctrine" (25:1). It consisted of four projects, which were "Principles of War," "U.S Army Doctrine," "U.S. Navy Doctrine," and "U.S. Air Force Doctrine" (25:1). For purposes of this study, only the "Principles of War" and "U.S. Air Force Doctrine" projects were considered relevant.

The objective of the "Principles of War" project was "...that the officer understand the principles of war and their application to air power" (38:2). The project apparently consisted of a lecture by a member of the faculty, followed by a discussion period covering the principles of war. This project hoped to give students a feel for the historical evolution of the particular principles of war, as espoused by AFM 1-2 (38:2). Students were responsible for several readings prior to participation in the project, including a handout on the principles of war, AFM 1-2, and U.S. Military Doctrine, by BGen Dale O. Smith.

The other project in this unit which dealt with doctrine was called "USAF Basic Doctrine" (38:7). At the end of this project, each officer was to understand "basic Air Force doctrine, ...[its] development, ...[and] how this basic doctrine affects him" (38:7). The project consisted

of three lectures and four hours of seminar work. As with the other project, students were expected to review several sources in advance, again including AFM 1-2, and three lectures by General Laurence S. Kuter, a former Air University commander.

This project apparently had the intent of insuring that each student thoroughly understood doctrine before evaluating it later in the course (38:10). Some of the issues explored during the lectures and seminar discussions included the requirement for doctrine, the value of doctrine, the development of doctrine, some misconceptions about doctrine, the dynamic nature of doctrine, and the relationship of doctrine to an officer's role in the Air Force (38:9).

The other unit concerned with doctrine was Unit XII, "Evaluation of Air Doctrine" (39). This unit was conducted at the beginning of May 1956, about a month before the end of the entire course. The unit examined both basic doctrine and what was at the time called "functional doctrine" (39:1). In order to prepare for this project, students were required to review several sources from popular and Air Force literature. Twenty-eight hours were allotted to this unit, two of which were lecture. The lecture periods served to introduce the topic, and then seminars were conducted in which the students developed their written critiques of Air Force doctrine, and outlined proposed changes (39:5).

Educational Methodology. Exact number of hours devoted to lectures and seminars were not explicitly stated in the sources reviewed by the researcher. However, it appeared that of the approximately 10 hours allocated to the two projects examined in Unit III, about half were lecture sessions, and the other half seminar (38:2). In Unit XII, 26 of 28 total instructional hours were devoted to seminar work (39:2).

In addition, it appeared that the school expected more of the students in terms of reading. Each unit examined above had an accompanying reading requirement, which in some cases was significant. For example, in order to prepare for the "Evaluation of Air Doctrine" unit, students were expected to review 10 sources, three of which were full-length books (39:4). A supplementary bibliography was also available to students. This emphasis on reading was not new for the school, but seemed to be taking more precedence.

Context in Which Curriculum Was Taught. At this point in time, thinking in the area of the changing nature of war was apparently showing its influence at the school. In stating its educational philosophy, the school said that the Air Force educational system must be able to produce officers who understand "...air action in 'cold' and 'limited' war situations..." (23:b). This was the first mention of these terms in the curricula. Academic thinking of the time was beginning to find its way into Air University.

Additionally, the greater emphasis on the seminar method reflected the school's philosophy that

Tradition in thought and action may inhibit evolution and be dangerous when life or death depends on immediate solutions to new situations. The USAF carrier officer must, therefore, avoid regimentation and rigidity of dogma, and cultivate instead a behavior of independent thinking and forward-looking (sic) through an educational system, not of post-war reflection and rationalization, but of pre-war preparation [23:c].

Summary

Summary of the Context of Curriculum Development. The first ten years of the Air Command and Staff School, as it was then known, were apparently among the most turbulent in the school's history. Not only did course titles and objectives change several times, but the school's mission and objectives also underwent several revisions. It was difficult for the researcher to determine which input factors, as proposed in Chapter I, had the greatest influence during this time period.

In the early years of this period, probably from 1946 through 1947 or 1948, the views of the Air Force as an institution seemed dominant; at least the views of Air Force leadership seemed to dominate. Or it may be that, as Tolson (65:80) said, the schools simply "borrowed" courses from other military schools. The generic course titles such as "War, as an Instrument of National Policy," and "Principles of War" indicated that the courses could have been taught at any military institution.

Later, from about 1948 through 1950, the faculty seemed to be a more dominant force in the school. As the faculty learned from experience, it tailored the course offerings to meet the needs of students and also greatly pared down the number of courses offered; for the 1950A AY, only two courses dealing with basic doctrine were offered. However, another interpretation is that the faculty was in fact unqualified to teach anything at all about doctrine, and could not offer too many courses. This interpretation had some support in the form of the Hood letter of 1951 (67), in which General Hood, then Commandant of the school expressed his concern with the faculty competence to the Commander of Air University.

Starting with the 1950B AY, the school began to change the curricula more drastically. The Fairchild Board (37), convened early in 1950 conducted the first serious look at professional military education in the Air Force, and the issues it raised began to be reflected in the curricula, with the appearance of such items as objective-based curricula. This influence was felt for many years.

Starting with the 1953A AY, the influence of officially-promulgated statements of basic doctrine found their way into the educational process. Evaluation of Air Doctrine, proposed and published, became a common feature of the curricula, and continued throughout this period. The reader will recall that at this time during its history, Air

University was the official Air Force institution for doctrine development; the evaluation courses were useful to both the students and the institution.

Finally, in 1956, the influences of recent strategic thinking in the academic community began to exercise influence. The mention in 1956 of 'cold war' and 'limited war' reflected the writings of a few strategists who were at the time trying to bring meaning to the East-West conflict.

V. Analysis of Data, 1957 - 1966

Introduction

This chapter examined course curricula for the academic years 1957 through 1966. Unlike Chapter IV, the analysis was not accomplished on a year-by-year basis. Instead, as explained in Chapter III, Methodology, this chapter, as well as Chapters VI and VII, summarized the curricula for a ten-year period of time. The same broad areas of analysis used in Chapter IV (Abstract of Curriculum, Educational Methodology, and Context of Curriculum) were used in this and subsequent chapters in describing the research material.

This chapter served two purposes. The first purpose was to present the subject matter in a summarized format in order to save time for the reader. As was demonstrated in Chapter IV, the material lent itself to a year-by-year analysis, but the researcher assumed that most readers would not be interested in this level of detail for the entire 40 years of the Air Command and Staff College's existence. Secondly, this chapter demonstrated the researcher's ability to examine and analyze voluminous historical documentation and present in a coherent, succinct, and logical summary.

Abstract of Curricula. After reviewing the curricula for the ten-year period, 1957 - 1966, the researcher determined that the material could be divided into three

distinct periods, based on differences in the curricula. The first three years of this decade from 1957 through 1959 seemed to be a natural extension of the years immediately preceeding 1957. Another period was apparent from 1960 through 1963, with the final period occuring from 1964 through 1966.

In the 1957 - 1959 curriculum catalogs, the key statement was that the "...curriculum is based on the Air University as a center for development and dissemination of USAF doctrine" (24:15). During this three-year period, more hours were devoted to teaching directly related to AFM 1-2 than in all of the other seven years of the period combined.

During this period, the course, which took up 850 to 900 academic hours, continued to be divided into two phases of instruction, with the first phase emphasizing air power fundamentals; the second phase concerned itself with present and future employment doctrine. Fifteen to sixteen units comprised the two phases, with two units covering aspects of USAF basic doctrine.

Doctrine was first treated early in the program, around Unit III, where it was introduced along with topics such as the principles of war, and U.S. Army and U.S. Navy doctrine. The basic text in the 16 to 26 hours devoted to USAF doctrine in this unit was AFM 1-2, USAF Basic Doctrine. Many other articles and texts were assigned as required and suggested readings. And at least in 1957, an alternate AFM

1-2 draft was used as a text in order to solicit comments from students on content and readability.

The last unit of the course during this period was devoted to future issues. As part of this course of study, students were asked to participate in seminars where current USAF doctrine was appraised, and where written suggestions and criticisms of this doctrine were produced.

In 1960, the school which had been known as Command and Staff School came to be known as Air Command and Staff College and the curriculum began to take on a new look to reflect this change. The school was no longer considered, at least according to the curriculum catalogs, as the center for doctrinal development within the Air Force. And in general, the units in which doctrine was included as one subject were allocated more hours, but the number of hours spent on USAF doctrine (the AFM 1-2 series) was reduced.

For example, during the 1961 AY, 84 academic hours were devoted out of a total of 898 to a unit called "The Military Instrument of Power" (19:19). One section of this unit was concerned with "military doctrine" (19:18), with five hours devoted to study of Air Force doctrine. The section concerned with doctrinal appraisal also took a reduction in hours, from 14 in 1960 to eight in 1963. This was while total course hours was increasing slightly.

The last phase of this ten-year period was from 1964 until 1966. During these years, the curricula changed

significantly in organization and content, and led into the next historical period. The course organization was the first item to undergo change.

The course was organized during this period into three or four areas, including Military Fundamentals (beginning in 1966), Military Management, Military Environment, and Military Employment. The school tracked exactly the number of hours each study area consumed in the entire program. For example, in 1965, the military employment area, where doctrine was discussed, was allocated 645 hours, or 47.0% of the academic hours (5:10).

The military employment area discussed doctrine along with many other issues, but the number of hours devoted to basic doctrine, as made official by AFM 1-1, was reduced. The low was four hours in 1964 and the high was seven in 1966. The doctrinal appraisal unit was no longer offered, and most courses in doctrine concentrated on simply describing what USAF doctrine was.

Educational Methodology. During this ten-year period, the school formalized in writing its methodology more than it had in previous years. During the last three years of the period, "programmed learning" was mentioned for the first time as a methodology (5:3). Again, using the three year divisions mentioned previously, the researcher noted a shift in the manner in which the material was presented. During the first three years, heavy emphasis was placed on

the seminar method. This was probably logical, since doctrine appraisal, a large part of the program, lends itself to this type of study. In 1959, for example, a total of 32 hours were devoted strictly to official Air Force doctrine. Of this total, 28 hours were conducted by seminar, and four by lecture.

As official doctrine was given fewer hours in the program, the use of the seminar method decreased. During the 1963 AY, 16 hours were allocated to basic doctrine, with four lecture and twelve seminar hours. In 1965, two of the five hours devoted to doctrine were conducted as lectures, and the other three as seminar periods. This may not be significant, except that it points to a goal of merely informing students as opposed to showing interest in their views, as would be done in a seminar.

The reading program, as an educational methodology, increased in importance throughout this ten-year period. Each unit of instruction normally listed many required sources, and many optional sources as background. Beginning in 1960 and continuing thereafter, supplemental reading texts on most curriculum areas were given to students. These were apparently updated annually by the faculty. In addition to reading, writing became a more frequently used method in the school.

A "special studies" program was introduced in 1961 (changed to "thesis" in 1964), which had the objective of

forcing students to examine some problem area, conduct research, and write a research study outlining analysis of the problem (19:13). The first year this program was introduced, 124 hours out of a total 843 were allocated for all research and writing. By 1966, 769 of 1,860 academic hours were devoted to independent research, which also included classroom research.

Textbooks were an important part of the school's educational methodology. Early in this period, the texts located by the researcher were directly related to some seminar or lecture. For example, in the USAF Doctrine sections of the Military Doctrine units, only reading required for a seminar such as AFM 1-2 or proposed drafts of this manual were included in the course material. In addition, suggested questions for seminar leaders were part of the text. These texts would probably be considered study guides rather than true textbooks.

Toward 1966, texts began to resemble supplemental material. For example, during the 1965 AY, the school distributed a book called U.S. Military Doctrine, Roles, and Missions (40), which was a 200 page book containing reprints of all current doctrine of the services and other pertinent documents. Similar anthologies were produced for topics such as limited war, general war, and counter-insurgencies.

Context in Which Doctrine was Taught. For the first four years of this period, USAF doctrine was presented

within instructional units concerned with doctrine. Unit III of the school's course from 1957 through 1960 was entitled "Military Doctrine." Along with the emphasis on Air Force written doctrine, this unit also examined the written doctrinal statements of the Army and the Navy, as well as joint statements of doctrine. The emphasis was on doctrine itself, and not on doctrine as one part of the military structure. Generally, this unit had as its introduction a section on the "principles of war," with thorough discussion of the historical development of these principles, as well as their applicability to modern military forces. In addition, doctrine appraisal was presented as the last unit of the course, and as part of a unit concerned with future issues. The concern seemed to be that future published doctrine must be responsive to technological and political changes, and that students who will live through these changes must be able to ensure that USAF doctrine is kept responsive.

In addition, this four year period saw the introduction of units on "cold war," "limited war," and "general war" into the curricula. The thought here was that it was insufficient to simply talk about doctrine, without demonstrating its applicability to actual warfighting. Discussion of these subjects continued, and in fact increased during the entire ten-year period.

Beginning in 1962, doctrine was handled within a unit concerned with "the military instrument of national power." This continued until 1964. Doctrine was discussed along with issues such as technological advances, roles and missions of DOD forces, and Soviet and Chinese military capabilities. Also introduced was a project on "applied military power," which hoped, through war-gaming, to enable students to use their new knowledge to conduct operations against the forces of Soviet Union and the Warsaw Pact. This trend would continue, and become more sophisticated, making use of computer simulation.

Beginning in 1965, as stated previously, doctrine was presented in the broad context of military employment. Military employment encompassed "...a survey of past employment, an intensive study and practice of current employment, and a careful examination of the future employment of military forces" (5:57). Normally, doctrine was handled within a subunit called "Basis for Employment" (5:65), a background section which also included descriptive courses on various DOD and Air Force components.

In addition, units were added during this period which dealt with insurgency and counter-insurgency as war types. The units on general and limited war were kept. The teaching of insurgency concepts was probably reflective of the growing American involvement in Southeast Asia.

Summary

This chapter presented a review of the academic years 1957 through 1966. During this period, the school changed its name to the present title of Air Command and Staff College, and the curricula took on a new form. At the beginning of this ten-year period, the school was still experimenting with different ways of presenting course material. By the end of this period, the curricula had been thoroughly examined, and a very quantitative approach to teaching was in effect.

USAF doctrine, as it is presented in the AFM 1-2/1-1 series was still used as a source material, but with decreasing frequency. One or two individual units within the program were entirely or mostly devoted to basic doctrine in 1957. By 1966, official doctrine was taught within the broad context of military employment. Significantly, military employment shared nearly equal time with military management.

VI. Analysis of Data, 1967 - 1976

Introduction

This chapter examined course curricula for the academic years 1967 through 1976. Like Chapter V, the analysis was a summary of the entire ten-year period, and not a year-by-year analysis, as was presented in Chapter IV. Chapter headings remained identical to those in Chapter V; these were Abstract of the Curricula, Educational Methodology, and Context in Which Doctrine Was Taught.

Abstract of the Curricula. During this ten-year period of time, basic doctrine as officially published in AFM 1-1 enjoyed decreasing coverage in the school's curricula, as compared to previous years. The course at this time was broken down into three to five areas, with a slightly different emphasis given to the subject matter in each division plan.

Regardless of the specific division plan, basic doctrine was presented in an area called "Military Employment" for each of the ten years. In addition to this section, there was usually a section each year on "Military Management" (also called "Command and Management"), and "Military Environment," along with various schemes of arrangement for the introductory phase of the course.

In general, this block of instruction consumed a decreasing amount of academic hours (academic hours did not

include hours allotted to the thesis or electives) during this ten year period. In 1967, Military Employment held about 45% of the total course hours. By 1975, this percentage had declined to about 35% of total hours. Military Management's share of total hours increased slightly from a low of 20% in 1967 to a high of 35% in 1974. Military Environment, which resembled a political science curriculum, also increased in its total proportion of hours from 14% in 1967 to 22% in 1974.

Within the Military Employment block, basic doctrine was presented in a variety of ways. In 1967, it was presented as the second of four phases, which was called "U.S. Military Forces" (2:8). This phase was allocated 269 of 390 hours (69%) within the Military Employment block. In 1968, doctrine was taught within the "U.S. and Allied Military Capabilities" phase, which consumed 116 of 361 (32%) block hours (2:13).

From 1969 through 1971, doctrine was presented within the "U.S. Military Strategy and Doctrine" phase, and was given roughly nine percent of the total block hours. In 1972, doctrine was handled as part of the "Fundamentals of Military Employment" phase, and used 36 of 301 block hours, or about 12%. For the last four years of this ten-year period, doctrine was taught during the "Introduction to Military Employment" phase, which was given around 6% of the total block hours.

During this period, the number of courses devoted to Air Force basic doctrine gradually declined. For example, beginning in 1969, this number of classes stood at a high of eight. This went to a low of three in 1975. In 1969, the list of classes offered within the 32 academic hour "U.S. Military Strategy and Doctrine" was as follows (6-:17). Those indicated with an asterik(*) are those which the researcher determined to be concerned with official Air Force doctrine.

- *Nature of Military Strategy and Doctrine
- *Principles of War
- Alternative U.S. Military Strategies
- U.S. Strategic Objectives
- Conflict Analysis
- Escalation Theory
- Arms Control and Disarmament
- Range of National Policy Choice
- Reading and Analysis of "THE PLAN"
- USAF Planning Concepts
- *Comparative Analysis of Air Doctrine
- *Aerospace Force Characteristics and Capabilities
- *Air Force Basic Doctrine
- *Doctrinal Concepts of AFM 1-1
- *Joint Doctrine at Operational Levels
- *Joint Doctrine

By 1975, the list of courses offered within the 18 hour "Introduction to Military Employment" phase was as follows (7:43-44), with doctrine-related courses again indicated by an asterik (*):

- Military Employment Area Introduction
- Evolution of Modern Strategic Thought
- Strategic Options
- *U.S. National Security Strategy
- *Doctrinal Studies
- *Joint Doctrine

Textbooks used by the school continued to be of the collected readings type. Prior to each unit of instruction, students were given copies of the required readings, which were collections of the most recent writings in the particular subject matter.

In the area of doctrine, a reference used throughout most of this period was Comparative Analysis of Air Doctrine (26). This book was actually a reprint of two pre-independent Air Force Army manuals, two of the latest editions of AFM 1-2/1-1, and the Royal Air Force's officially published doctrine. This was to date the most extensive text used for comparison purposes, although in previous years the school offered courses along this line. It is unclear if and when the school quit using this book, but was probably dropped when the "Comparative Analysis" course was deleted after the 1973 academic year.

Educational Methodology. In general, instruction time was for courses dealing with doctrine was divided evenly between seminar and lecture sessions. As with the previous ten-year period, the thesis program remained a strong part of the curricula, with approximately 10% of total academic time dedicated to this project.

During this time, the school also initiated an electives program, which typically consumed about six percent of total academic time. This program was established to meet the needs of individual students who

wished to gain a more indepth knowledge of certain areas or to gain a specialized knowledge which would benefit the student during future assignments. A wide range of courses of study was offered, including one on U.S. military strategy, and another on counter-insurgency (42).

Context in Which Doctrine Was Taught. As the list of courses presented under the abstract section indicated, the number of courses concerned with officially-published doctrine declined throughout this period. In the earlier years, doctrine was presented along with courses dealing with U.S. strategic interests and the nature of national policy. In the "Military Environment" section, specific courses were presented on the nature of the East-West struggle and Soviet objectives. The "Military Employment" section, then, attempted to relate this international struggle to specific national military objectives.

By the end of this ten-year period, both the number of courses dealing with national objectives and the number of courses dealing with doctrine were reduced substantially. From specific courses, such as "Arms Control and Disarmament" (6:17), the school seemed to display a preference for more generalized survey courses, such as "U.S. National Security Strategy" (7:44).

In addition, the trend continued from the previous ten-year period of offering entire study units in various levels of war. For example, units were offered dealing with

limited wars, wars of counter-insurgency, general wars, high-intensity wars, and in military applications of space. The teaching on doctrine and national objectives, which usually preceeded these units, served as a philosophical background to the application-oriented curriculum of these conflict-specific units.

In summary, courses in doctrine were presented during this entire period within the context of U.S. national strategy and objectives. The intent was to motivate students to see the "big picture," to gain a larger perspective of the role of Air Force beliefs within the larger pattern of national policies and beliefs. However, in the early years of this period, Air Force doctrine was given a greater emphasis in this learning process (with such classes as "Comparative Analysis of Air Doctrine," and "Doctrinal Concepts of AFM 1-1" (6:17), while by the end of this period, official doctrine was treated only lightly, and in more general terms.

Summary

During this period, the school's curricula became more focused on the issue of national objectives and their relationship to official Air Force doctrine. Yet very little time was devoted to the study of this relationship, and so courses could only present surveys of the subject matter. At the same time, courses dealing with the particulars of doctrine became less important.

In addition, the units in which doctrinal issues were explored began to consume less of the total academic time of the school, and courses devoted to management became more important.

VII. Analysis of Data, 1977 - 1987

Introduction

This chapter analyzes curricula for the academic years 1977 through 1987. This was the final chapter of analysis and chapter headings remained the same as those used in the previous two chapters.

Abstract of Curricula. This final ten-year period of the Air Command and Staff College was another period of rapid change. In the 1950s, as the reader will recall, the school was experimenting with different approaches to presenting the material. During this final period, the faculty again was quite active in the development of original curricula, and several major innovations were achieved.

The years 1977 through 1979 seemed to be a continuation of the previous years, at least in terms of how the course was organized. Doctrine was presented within the first phase of the Military Employment area. Texts used remained the same as those used in previous years. However, the hours devoted to the teaching of doctrine had increased to 46 of 269 total area hours. This was significant because a number of new courses were added to the doctrine curriculum. The list of courses offered in doctrine for 1979, for example, was as follows (3:35-36):

Doctrine: Theory and Practice
Principles of War
Concepts, Doctrines, and Principles
Origins of U.S. Air Doctrine
Unconventional Doctrine
Another View of Doctrine
Space Doctrine
Strategic Doctrine

The course descriptions for the above courses emphasized that most of the courses were presented from a historical perspective. The faculty wanted students to become familiar with the way that various views of doctrine had developed.

During the 1980 AY, the faculty introduced in its text for the doctrine phase of the curriculum a model called the "Strategy Process Model" (35:i,17). This model apparently originated with faculty member Lieutenant Colonel Dennis Drew and Dr. Donald Snow of the University of Alabama. The model itself is pictured later in this chapter as Figure 1. It served as the basis for the presentation of all curriculum in the area of doctrine presented throughout the rest of this period. This model is described later in this chapter.

During this period, the school was attempting to build a more integrated program of instruction than it had previously. For example, texts included learning objectives and discussion questions as well as readings. The texts served as the foundation of the curricula, rather than as just a set of additional readings.

A text called Introduction to Strategy (73), by Drew and Snow of the Air University faculty was used extensively in the areas dealing with doctrine. In addition, during the 1384 AY, three new textbooks were introduced, including Great Warriors (33), Great Thinkers (32), and Military History and Theory (34). These texts served as the foundation for the curriculum. Learning objectives, as well as lectures and seminars were built around the material in the these books.

The 1980 AY was the last year the Curriculum Catalog was used. As a substitute, the school used handout monthly schedules to inform students about the program. This made analysis difficult, since the course could no longer be seen in its entirety. However, in 1987, the school began publishing a Curriculum Compendium (27), which once again presented the entire course in one book.

During the 1987 AY, the course was divided into six areas, as follows (27:ii-iv).

Area I	Staff Communications and Research
Area II	Command, Leadership, and Resource Management
Area III	National Security Affairs
Area IV	Thinking About War
Area V	Warfare Studies
Area VI	Space Operations

It was significant that four of six areas have to do with warfighting. In the introduction, the compendium said that the school's "...curriculum focuses on warfighting and related subject areas" (27:ii). According to the

compendium, the "Thinking About War" and "Warfare Studies" areas used nearly half of the academic hours in the course, with 367 of 869 total academic hours (27:5).

The "Thinking About War" area included four phases, including military theory, military history, military doctrine, and military strategy. The doctrine phase consumed 20 hours, including three courses on USAF official doctrine (27:2-4). The other phases in this area looked at the intellectual foundations of modern war and traced the historical threads of current thought on warfighting.

Educational Methodology. During the middle part of this period, the school stopped publishing the Curriculum Catalog used during previous periods, so it was difficult to determine the breakdown of lecture versus seminar instruction. However, in 1979 it appeared that nearly all of the classes devoted to doctrine were presented as lectures (3:35-36). By 1987, courses were nearly evenly divided between lecture and seminar sessions. For the total 1987 AY, 451 academic hours were seminar sessions and 466 were lectures. Within the "Thinking About War" area, 33 of 81 hours were presented as seminars, with the rest as lectures (27:4).

Context in which Doctrine was Taught. For most of this period, doctrine was taught as one part of a system of strategy which determined the way that the United States went to war. Instead of presenting doctrine as a statement

of unique military beliefs, a school of thought was developed by the faculty which viewed doctrine as only one of many factors playing a role in national actions. Previous curricula implied that doctrine was only one part of national strategy process, but the curriculum of 1980 formalized this thought. According to the philosophy driving the new curriculum was the thought that military tactics used in war were the result of the interaction among several factors, doctrine among them. Culture, technology, and the type of threat being faced were also players in this process. When a sound national strategy was coupled with sound military tactics, favorable results would occur.

This thinking was put into graphical form in the "Strategy Process Model" (27:13), and also formed the major hypothesis of Introduction to Strategy (78). This model was developed by two faculty members, and was the basis for all teaching in the area of doctrine. That is, each of the factors included as part of the strategy process was included in the curriculum, and special attention was paid to the manner in which these factors interacted. The model appears below as Figure 1.

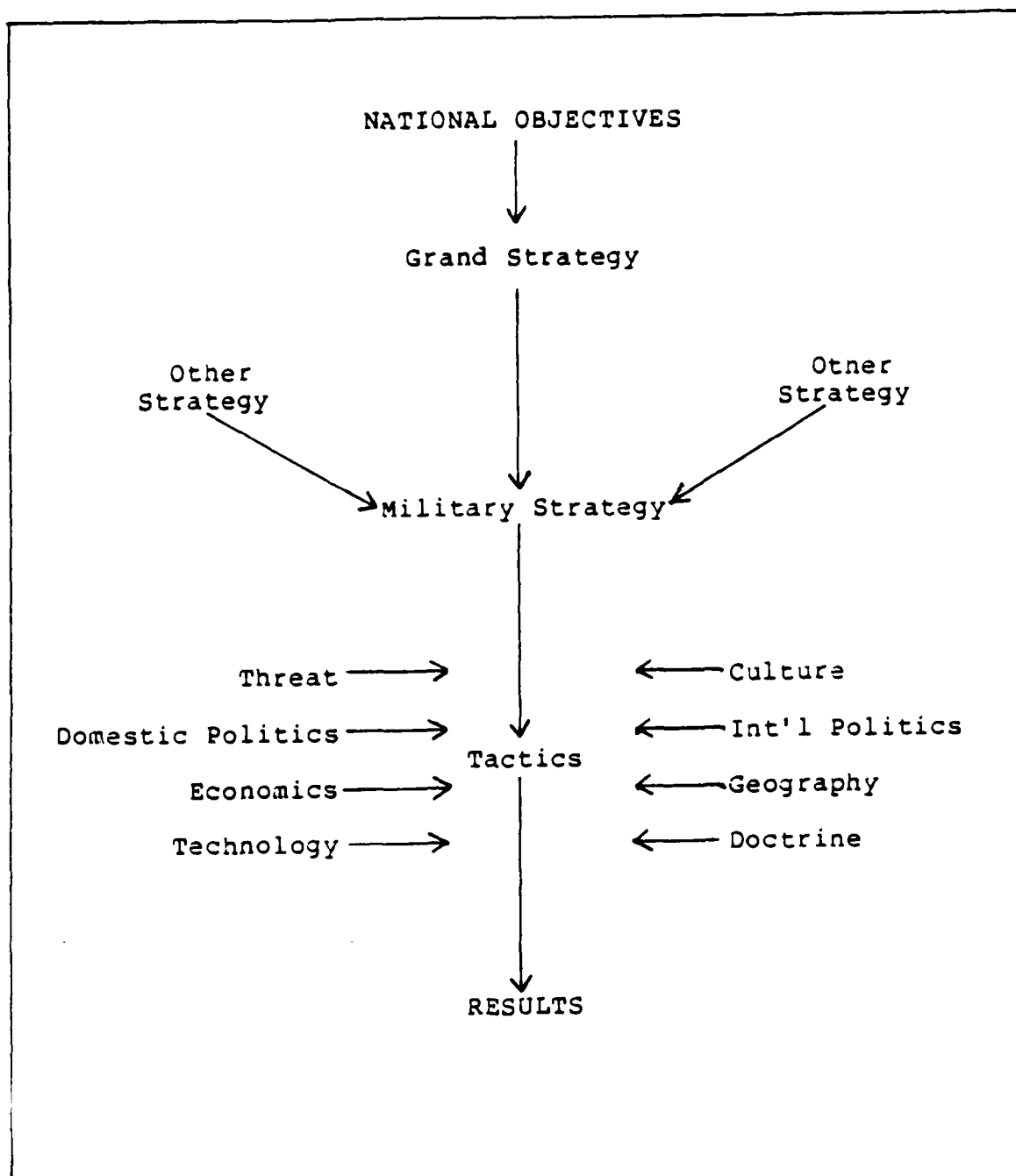


Figure 1. Snow's and Drew's Strategy Process Model
(Adapted from 27:13)

As can be seen, the driving factors in the model were national objectives, which in turn produced the nation's grand strategy. The military then developed its strategy based on the national grand strategy. Many factors influence the application of military strategy, doctrine among these.

This model was of academic interest simply because of the contrast with previous curricula it represented. In earlier years, some curricula had implied that military or Air Force doctrine could not be developed, taught, or used in a vacuum. But now the Strategy Process Model had formalized this systems approach to strategy and doctrine. This may have also the first time in the school's history that the faculty had developed a complete area of curriculum from start to finish. In previous years, it appeared that the curricula was simply modified. The strategy process model presented a complete school of thought and methodology for the study of doctrine, and this entire curriculum area was built on it.

During this time period, the school demonstrated a renewed commitment to the study of war as its primary mission. More time was devoted to doctrine than during the previous ten-year period, but more time was also devoted to military history and classical military thought.

Summary

During this ten-year period, it appeared that the faculty greatly influenced the development of curricula in the area of doctrine. Instead of merely teaching courses in doctrine, history, national strategy, and military science, the faculty was influential enough to establish a school of thought in the area of strategic studies. Previous curricula gave the impression that the faculty simply inherited the class workload, and made some modifications where necessary. The faculty involved in the development of curricula in this last ten-year period seemed intent instead on ensuring that all courses were presented as an integrated whole.

VIII. Conclusions and Recommendations

Introduction

According to the problem statement expressed in Chapter I of this study, many critics, civilian and military, contended that the Air Force failed to teach basic doctrine. Chapter I referenced many authors who expressed this opinion. However, the researcher determined that while many people have asserted that the Air Force failed to teach doctrine, little historical work has been accomplished to substantiate or reject this claim. The intent of this project was to find historical documentation which would either validate or argue against this assertion. In order to examine this issue, three research objectives were established. The first objective was to determine whether the Air Force had conducted education in the area of USAF basic doctrine since the end of the Second World War. The second objective was to determine the context in which this education, if any, had taken place. The third objective was to examine any historical trends which were apparent in the basic doctrine educational process. As an example of Air University education, the researcher chose to examine the Air Command and Staff College and its historical predecessors.

This component of the Air University system was selected because this school has traditionally served as the

intermediate level of Air Force Professional Military Education. Sources cited in Chapter I direct some of their harsnest criticism at Air Force field grade officers, whom they say either misapplied doctrine or were never taught doctrine, and therefore failed to make proper wartime decisions. Since the intermediate level school was responsible for educating many of these officers, it was logical to examine the education they had received.

Originally, the researcher proposed to study doctrinal education within the entire Air University system, to include Air War College, Air Command and Staff College, and Squadron Officer School. Also proposed was a literature review of all articles concerning basic doctrine published in the Air University Review between its first issue in 1947 and its last issue in early 1987. After spending many hours reviewing volumes of curricula held in storage in the Air University Library at Maxwell AFB, Alabama, the researcher determined that a project of this magnitude was beyond the scope of this degree program. However, studies examining doctrinal education at the other Air University schools, and an examination of Air University Review's contribution to the educational process are, in the researcher's opinion, endeavors which should be undertaken in the future.

Conclusions

Conclusions Concerning Research Objective 1. Research Objective 1 was to determine whether education in the area of USAF basic doctrine had taken place since world war II.

As demonstrated in Chapters IV, V, VI, and VII, the Air Command and Staff College has in fact taught doctrine throughout its history. However, official doctrine, as stated in the AFM 1-2/1-1 series of publications, has enjoyed varying levels of importance and emphasis within the education process.

Early in the school's existence, from 1947 until 1952, the Air Force had no published doctrine as an independent service. Therefore, officially published doctrine could not play a role at this time. However, the curricula did reflect Air Force thinking at the time, although some of the curricula may have been borrowed from other service schools, as was contended by Tolson (79), cited in Chapter IV.

In 1953, the Air Force published the first AFM 1-2, and the school's curricula began to closely resemble the thinking expressed in this document and its revisions. From 1953 through the middle part of the 1960's, official USAF doctrine played a major role in the curricula. A course concerned with the analysis of doctrine was a standard feature in the late 1950's. The comments and suggestions generated by these seminars formed the basis for revisions to AFM 1-2, at least while Air University was responsible for writing Air Force doctrine.

Around 1970, officially published Air Force doctrine began to experience a decline in use as a source material for the school's courses. The new curricula began to resemble the early stages of a systems approach to the

subject of military strategy and doctrine. That is to say, the courses presented emphasized subjects such as national policy, strategic choice, and foreign policy. Air Force doctrine was seen as one component of this holistic system. This thinking was even further developed in the late 1970s and early 1980s.

In 1979, the Air Force again revised its official doctrine by publishing a new edition of AFM 1-1. As was discussed in Chapters I and II, many experts thought that this particular revision represented the poorest effort in the field of doctrine that the service had ever produced. At ACSC, this manual was seldom used as a reference during the early 1980s, but doctrine was taught, again as part of a system.

Conclusions Concerning Research Objective 2. Research Objective 2 was to examine the context in which basic doctrinal education took place within ACSC and its predecessors. In other words, what types of courses were presented in the same unit of instruction? What was the school philosophy behind the method of presentation?

Basic doctrine was presented at ACSC within different contexts, with the curricula coming full-circle from 1947 to 1987. For example, during the first ten years of the school's existence, doctrine was always presented in the larger context of national objectives and the principles of war. It was true that the curricula itself underwent many physical changes during this ten-year period, but doctrine

was always presented as part of a larger national scheme, probably because doctrine was presented this way in the AFM 1-2 series.

Starting around 1980, doctrine was again presented as part of a large national strategy system. In fact, this thinking was formalized during this period with the introduction of the strategy process model described in an earlier chapter of this report. The main difference between the way doctrine was presented during this period and the way it was presented during the school's early years was that earlier courses presented doctrine as part of a large national strategy scheme because it had always been taught this way in traditional military schools, while in the 1980s, doctrine was taught as part of the strategy process because certain members of the faculty had, through their own research, developed a hypothetical model of national policy, of which doctrine was one part.

During the intervening years of 1965 to 1975, doctrine was presented as part of the larger national objectives context, but other courses, more descriptive in nature, were also integrated into the curricula. Courses which hoped to describe roles and missions of different DOD components were taught alongside doctrine. The 1979 revision of AFM 1-1, which the reader will recall from Chapter II as very descriptive in nature, probably was a codification of this type of thinking.

Conclusions Concerning Research Objective 3. Research Objective 3 sought to define any historical trends which had occurred in the teaching of basic doctrine. It appeared to the researcher that the teaching of doctrine could be separated into five distinct historical phases, as follows:

Phase 1. The Pre-AFM 1-1 Phase, 1947 - 1952 .

Phase 2. The AFM 1-1 Phase, 1953 - 1963.

Phase 3. The Transition Phase 1964 - 1972.

Phase 4. The Decline of Doctrine Phase 1973 - 1978.

Phase 4. The Strategic Thinking Phase 1979 - 1987.

During the Pre AFM 1-1 Phase, Phase 1, the Air Force had not yet officially promulgated its doctrine in the form of a USAF Basic Doctrine manual. Basic doctrine was presented in the context of national objectives and the principles of war. The source material was material borrowed from other military schools or decided upon at the higher levels of the Air University. Most of the thought reflected in the curricula appeared to come directly from World War II experience.

Phase 2, the AFM 1-1 Phase, took place during the years Air University was the center for doctrinal development in the Air Force. The curricula during these years was heavily loaded with source material directly from the AFM 1-2 and 1-1 series. Course titles such as "Characteristics of Military Forces" and "The Instruments of National Power" appeared to have their origin in the basic doctrine manuals, and the course material was a more

descriptive extension of the same thought reflected in the manuals. Usually during this period several seminar sessions were devoted to "appraisal" or "evaluation" of doctrine, in which students would propose changes to AFM 1-2/1-1. Air University apparently incorporated the best of these, or at least a synthesis of the thought behind them, into its next revision of the manual. After 1960, the Air University was no longer the center for doctrinal development, but it continued to teach doctrine in a similar way until 1963.

Academic Year 1964 launched the Transition Phase. During this phase, doctrine, as promulgated by the Air Force in official writings, declined as a source for course work. The school continued to present courses comparing current air doctrine to past thought, and doctrine was still given a significant amount of academic time. But also during this time, the curricula of the school as a whole grew more complicated and crowded. A thesis program was initiated, as well as an electives program which emphasized specialized knowledge. While time was available in earlier years to teach doctrine, during this phase time was becoming a premium commodity, so the teaching of doctrine began to decline.

During Phase 4, education in the area of basic doctrine declined to its lowest point. In fact, some writers have said that doctrinal thinking in general within the Air Force reached its nadir during this period.

Fabyanic (58) and Drew (55), quoted in Chapter II, made this point. At ACSC, courses were more summary in style. Whereas, in previous years, many courses had been offered to explain various aspects of doctrine, during this period only one or two classes were offered during the entire course to explain the role of doctrine in the Air Force. While doctrine enjoyed less classroom time, studies of management appeared to be on the rise, as outlined in Chapter VI. This trend continued until 1975 or 1979, when a renewed faculty commitment to strategic studies apparently started to guide curriculum development.

The 1979 AY saw an increase in the number of hours devoted to doctrine. Though not explicitly stated, the curricula began to take on a bias toward the study of history. Course descriptions mentioned the inclusion of the historical development of thought in relation to the subject matter at hand. This was leading into 1980, when for the first time the school presented a theoretical model which would serve as the basis for curriculum development. This "Strategy Process Model," described in Chapter VII, attempted to describe the strategy-doctrine, and in doing so formed the foundation of a complete revision of the curricula.

With the introduction of this model, the faculty was for the first time trying to consciously develop a true "school of thought" within the institution. Doctrine, strategy, and national objectives would not be presented as

separate entities, but would be viewed as a system, with inputs (grand strategy), a process (military strategy as impacted by doctrine), and an output of results. The study of history played a large part in this curricula, as did the study of the intellectual origins of doctrine.

Interestingly, the 1979 edition of AFM 1-1 was only slightly used, but the curricula itself appeared vastly superior to any contributions this manual could have made.

Other Conclusions. Through the study of the volumes of material associated with ACSC curricula, the researcher determined that in addition to the above conclusions, several heuristics could be developed concerning the teaching of doctrine within the Air Force. These are as follows:

1. Doctrine cannot be taught in a vacuum.

Doctrine naturally falls into some historical or political context, and it should be presented as such. This thinking was formalized in 1980.

2. Doctrinal development and doctrinal education should be two steps in the same process. In the 1950s, when Air University was a center for doctrinal development in the Air Force, curricula seemed to be part of a process of development, education, and revision of doctrine. After this time, the relationship between doctrine as promulgated by the Air Force and doctrine as taught by Air University seemed strained.

3. Many factors impact doctrinal development and doctrinal education. While the researcher was unable to discover enough evidence to argue convincingly for its acceptance (because of research time limitations), it is believed that doctrinal education follows the model described below.

The Doctrinal Education Model. Doctrinal education within the United States Air Force, as shown in Figure 2 below, was the output of a process which produced educational philosophies, goals, objectives, and curricula in response to certain input factors. These input factors fell into three categories: primary inputs, environmental inputs, and Air University inputs. These inputs included, but were not limited to:

1. Primary inputs.
 - a. War experiences.
 - b. Basic doctrine.
2. Environmental inputs.
 - a. Presidential concerns.
 - b. Chief of Staff concerns.
 - c. weapons technology.
 - d. Intellectual milieu.
3. Air University inputs.
 - a. AU Commander concerns.
 - b. Quality of students.
 - c. Quality of faculty.

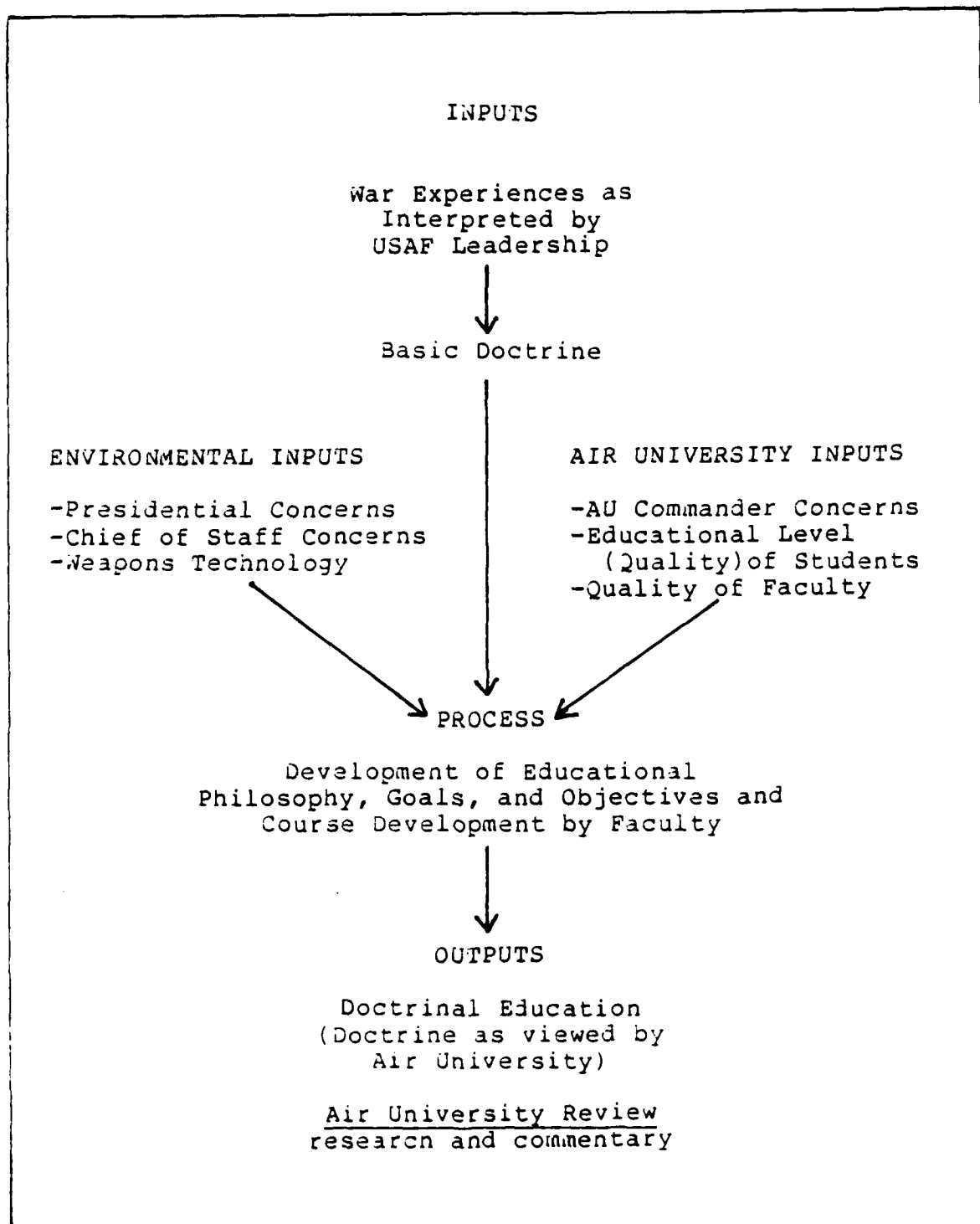


Figure 2. The Doctrinal Education Model

Additionally, it is hypothesized that the factors which significantly influenced doctrinal education changed over time. For example, during one period of time, the official basic doctrinal literature published by the Air Force may have been the most significant factor; during another time period, the quality of the ACSC faculty may have played a greater role.

As the model shows, factors in addition to wars and basic doctrine came into play in the process. Three of these factors influenced both the writing of basic doctrine and the doctrinal education process. These were :

1. Military concerns of the presidential administration.
2. Doctrinal interest of the USAF Chief of Staff.
3. State of the art in weapons technology.

Three other influences existed strictly within the educational process:

4. Particular areas of emphasis of the Air University commander.
5. Educational level (and other qualitative factors) of students.
6. Quality of faculty.

Recommendations

The researcher believes that the model described above has merit, but was unable to begin to argue for its acceptance, because lack of time limited research into many

of the areas presented as inputs. However, the review of the curricula pointed toward the influence of several factors in the doctrinal education process. Much more research is needed to validate or reject this model. Specifically, research should be conducted in the following areas:

1. Strength of the various influences in the process. For example, at some point in history, did the concerns of the president exercise a very strong influence compared with other points in history? The researcher suggests that each of the input factors be investigated separately. This could lead to several thesis-length studies. Some suggested titles are:

1. How the Quality of the Air University Faculty Influences Doctrinal Education.

2. How the Quality of Air University Students Influences Doctrinal Education.

3. How Air University Commanders Have Influenced Doctrinal Education.

4. How the Doctrinal Development Process has Influenced Doctrinal Education.

5. Has a climate of academic freedom been traditionally encouraged at Air University, and what effect has this climate had on the teaching of doctrine?

The researcher believes that sufficient data exists at the Air University Library and the USAF Historical Research

Center, both at Maxwell AFB, in order to completely examine these issues. In addition, studies similar to this one should be accomplished for both the Air War College and the Squadron Officer School.

Summary

The researcher believes, based on this historical study, that the contention that the Air Force has failed to teach doctrine cannot be validated. Of course, it must be admitted that this study examined only the Air Command and Staff College and its historical predecessors. The Air Force has continued to teach its basic beliefs about warfighting in various contexts. It is unclear whether Air University has yet arrived at the precise method of correctly presenting the subject matter. The context in which doctrine is presented and the educational methodology given to present it may be situational; no best method may exist.

It is recommended that doctrinal education in the Air Force be continued for at least 4 years. As is noted in Chapter 1 of this study, the Air Force has a long history of doctrinal education at the Air Command and Staff College. The Air Force has not done enough to ensure that its doctrine is properly presented and taught. The Air Force should continue to develop and refine its doctrine and ensure that it is properly presented and taught. The Air Force should also ensure that its doctrine is properly presented and taught in a way that is consistent with its mission and values.

course curricula presents the basis for at least one more thesis study. The researcher believes that since 1980, ACSC has developed a curriculum approach that is sound and justifiable. Doctrine should be viewed in its historical and national strategy contexts, and not as a discrete set of unique beliefs. More research should be accomplished in this area.

Appendix: Bibliography of Additional Sources Used but not
Cited in Main Bibliography
(Arranged in Chronological Sequence of Publication)

Academic Years 1956 - 1966.

Air University. Unit III, Military Doctrine. CSS
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SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b RESTRICTIVE MARKINGS		
2a SECURITY CLASSIFICATION AUTHORITY			3 DISTRIBUTION / AVAILABILITY OF REPORT Approved for public release; distribution unlimited.		
2b DECLASSIFICATION / DOWNGRADING SCHEDULE					
4 PERFORMING ORGANIZATION REPORT NUMBER(S) AFIT/GLM/LSR/87S-32			5 MONITORING ORGANIZATION REPORT NUMBER(S)		
6a NAME OF PERFORMING ORGANIZATION School of Systems and Logistics		6b OFFICE SYMBOL (If applicable) AFIT/LSR	7a NAME OF MONITORING ORGANIZATION		
6c ADDRESS (City, State, and ZIP Code) Air Force Institute of Technology Wright-Patterson AFB OH 45433-6583			7b ADDRESS (City, State, and ZIP Code)		
8a NAME OF FUNDING / SPONSORING ORGANIZATION		8b OFFICE SYMBOL (If applicable)	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER		
8c ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO	PROJECT NO.	TASK NO
			WORK UNIT ACCESSION NO		
11 TITLE (Include Security Classification) A HISTORICAL ANALYSIS OF BASIC AIR FORCE DOCTRINE EDUCATION WITHIN THE UNITED STATES AIR FORCE AIR COMMAND AND STAFF COLLEGE, 1947 - 1987					
12 PERSONAL AUTHOR(S) James A. Harrold, B.S., Captain, USAF					
13a TYPE OF REPORT MS Thesis		13b TIME COVERED FROM _____ TO _____		14 DATE OF REPORT (Year, Month, Day) 1987 September	
15 PAGE COUNT 160					
16 SUPPLEMENTARY NOTATION					
17 COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP			
15	06		Air Force Training, Doctrine, Education, Schools,		
05	06		Military Training		
19 ABSTRACT (Continue on reverse if necessary and identify by block number) Thesis Advisor: JOHN A. STIBRAVY, Major, USAF Assistant Professor of English					
<div style="text-align: right;"> Approved for public release by E. J. [Signature] Date: 24 Sep 87 Air Force Wright-Patterson AFB OH </div>					
20 DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a NAME OF RESPONSIBLE INDIVIDUAL Maj John A. Stibravy			22b TELEPHONE (Include Area Code) (513) 255-2820		22c OFFICE SYMBOL AFIT/LSR

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Abstract

The purpose of this study was to examine the historical treatment of Air Force basic doctrine within the Air Force Professional Military Education System. The curricula of one specific component of this system, namely the Air Command and Staff College, was located and analyzed. The reason this research was undertaken was to answer the criticisms of several authors who have contended that the Air Force has historically not conducted education in its basic doctrine. This failure has led, maintain the critics, to poor performance in war.

The study had three objectives. The first was to determine if the Air Force had conducted doctrinal education. The second was to examine the context in which this education had taken place. The third objective was to determine the existence of historical trends in the area of doctrinal education.

The research was conducted at the Air University Library and the USAF Historical Research Center at Maxwell AFB, Alabama. Curricula was contained in closed storage. The material was removed, examined, and analyzed according to the methodology presented in Chapter III.

The author determined that the Air Force did conduct education in the area of basic doctrine. Emphasis placed on doctrine has differed from year to year. In addition, the context of other courses in which doctrine was taught varied. The author determined the existence of five distinct historical periods, which were discussed in Chapter VIII.

The contention that the Air Force did not teach doctrine could not be substantiated by the researcher. However, it was apparent that doctrine was presented within very different contexts through the history of the Air Command and Staff College. The author hypothesizes in Chapter VIII that doctrinal education is the result of several sometimes conflicting inputs. However, research time limitations precluded the author from collecting sufficient evidence to argue convincingly for this model's acceptance. It was therefore presented as the basis for future study in the area of doctrinal education in the Air Force.

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