AIR COMMAND
AND
STAFF COLLEGE

STUDENT REPORT
AFROTC COLLEGE SCHOLARSHIP PROGRAM:
MAKING EVERY DOLLAR COUNT
MAJOR ROBERT A. HOOPER, USAF 86-1160
"insights into tomorrow"

DISTRIBUTION STATEMENT A
Approved for public release;
Distribution Unlimited
DISCLAIMER

The views and conclusions expressed in this document are those of the author. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency of the United States Government. The author has not had special access to official information or ideas and has employed only open-source material available to any writer on this subject.

This document is the property of the United States Government. It is available for distribution to the general public. A loan copy of the document may be obtained from the Air University Interlibrary Loan Service (AUL/LDEX, Maxwell AFB, Alabama, 36112) or the Defense Technical Information Center. Request must include the author's name and complete title of the study.

This document may be reproduced for use in other research reports or educational pursuits contingent upon the following stipulations:

-- Reproduction rights do not extend to any copyrighted material that may be contained in the research report.

-- All reproduced copies must contain the following credit line: "Reprinted by permission of the Air Command and Staff College."

-- All reproduced copies must contain the name(s) of the report's author(s).

-- If format modification is necessary to better serve the user's needs, adjustments may be made to this report--this authorization does not extend to copyrighted information or material. The following statement must accompany the modified document: "Adapted from Air Command and Staff Research Report (number) entitled (title) by (author)."

-- This notice must be included with any reproduced or adapted portions of this document.
REPORT NUMBER 86-1160

TITLE AFROTC COLLEGE SCHOLARSHIP PROGRAM: MAKING EVERY DOLLAR COUNT

AUTHOR(S) MAJOR ROBERT A. HOOPER, USAF

FACULTY ADVISOR MAJOR GARY G. RICKETTS, ACSC/EDOWD

SPONSOR COLONEL ROBERT E. CULTON, AFROTC/XR

Submitted to the faculty in partial fulfillment of requirements for graduation.

AIR COMMAND AND STAFF COLLEGE
AIR UNIVERSITY
MAXWELL AFB, AL 36112
The costs of the AFROTC College Scholarship Program (CSP) are growing more rapidly than program funding. Unless the trend is reversed, AFROTC will have to make difficult choices about how to allocate available scholarship funds. The study assesses the impact of growing CSP costs and recommends changes in CSP policies to help insure its effectiveness as a recruiting tool. Spiraling college tuitions are identified as the primary cause of higher CSP costs. Real world constraints, such as the difficult recruiting environment and political considerations, also influence CSP policies and sometimes contribute to higher costs. The study recommends that AFROTC (1) limit the per student costs by directing scholarship selectees to attend lower cost schools, and (2) prioritize CSP programs based on specific factors which measure recruiting efficiency, and use that information to eliminate marginal CSP programs.
In 1985 I completed a two year assignment as an Assistant Professor of Aerospace Studies at The University of Tennessee. One of the most useful tools in our recruiting efforts was the AFROTC College Scholarship Program (CSP). However, the costs of that program are growing at a frightful rate—pulled along by the spiraling costs of college tuitions nationwide. Unless there are substantial increases in CSP funding, higher per student costs will force AFROTC to make some tough choices about how to allocate available funds among various target groups. This study was formulated to assess the impact of growing CSP costs on the overall effectiveness of the program and to suggest alternative CSP policies which will help insure the CSP remains an effective recruiting tool. My primary objective is to provide a framework for further debate of these CSP policies which add to the cost of the program without enhancing its recruiting potential.

I established two general criteria for this study. First, it should identify real problems and suggest practical solutions to those problems. Second, the focus should be kept as narrowly as possible on CSP cost efficiency issues. There are many ancillary issues of great importance to AFROTC, but a review of multiple AFROTC programs is simply beyond the scope of this study. Therefore, I have avoided lengthy background discussions of the CSP. The background information which I have presented is used to establish the overall objectives of the CSP as a framework for further discussion. I believe this approach has allowed me to zero in on the most critical problems caused by the increasing costs of the CSP. I have tried to deal with those problems realistically in light of political and institutional constraints which must be considered.
ABOUT THE AUTHOR

Major Robert A. Hooper, a native of Nashville, Tennessee, graduated with a Bachelor of Arts degree in Psychology from Memphis State University in 1971. He received his Air Force commission through the Reserve Officer Training Corps and was assigned as a personnel officer to the Headquarters Air Force Office of Special Investigations in Washington, D.C. In 1975, he was awarded a Master of Science degree in Administration from The George Washington University. Major Hooper was selected to participate in the Air Staff Training (ASTRA) Program in 1977 and was assigned to the Office of General Officer Matters at the Pentagon. Following his ASTRA assignment, Major Hooper served at the Air Force Manpower and Personnel Center where his duties included the management of various programs in the Airman and Officer Separations Branches and the Female Assignment Policy Branch. In 1983, Major Hooper completed Air University's Academic Instructor School and was assigned to the Air Force Reserve Officer Training Corps as an Assistant Professor of Aerospace Studies at The University of Tennessee. As an AFROTC instructor, Major Hooper taught leadership and management to third year cadets and also served as the detachment Recruiting Officer. Major Hooper will be returning to the personnel career field as Chief of the Consolidated Base Personnel Office (CBPO) at Misawa Air Base, Japan, after completing Air Command and Staff College.
TABLE OF CONTENTS

Preface ........................................ iii
About the Author................................. iv
List of Illustrations ............................. vi
Executive Summary ............................... vii

CHAPTER ONE--INTRODUCTION

Problem Statement ................................ 1
Focus and Scope ................................ 2
Assumptions .................................... 2
Program Objectives .............................. 3

CHAPTER TWO--FACTORS WHICH INFLUENCE CSP POLICIES

Recruiting Environment and Production Goals . 7
Political Factors ................................. 10

CHAPTER THREE--CSP COSTS

Escalating Cost Trends ......................... 13
High Cost CSP Policies ........................ 15
Cost Reduction Proposals ...................... 16

CHAPTER FOUR--RECOMMENDATIONS

Directing Scholarships to Lower Cost Schools. 19
Establishing Priorities .......................... 20
A New Approach .................................. 21

BIBLIOGRAPHY ................................. 22
LIST OF ILLUSTRATIONS

TABLES

TABLE 1--FY 88 LINE PRODUCTION MODEL:3150 ........ 8
TABLE 2--CSP TUITION COSTS (1977-1984) ........ 14
EXECUTIVE SUMMARY

Part of our College mission is distribution of the students' problem solving products to DoD sponsors and other interested agencies to enhance insight into contemporary, defense related issues. While the College has accepted this product as meeting academic requirements for graduation, the views and opinions expressed or implied are solely those of the author and should not be construed as carrying official sanction.

REPORT NUMBER 86-1160

AUTHOR(S) MAJOR ROBERT A. HOOPER, USAF

TITLE AFROTC COLLEGE SCHOLARSHIP PROGRAM: MAKING EVERY DOLLAR COUNT

I. Problem: The College Scholarship Program (CSP) is the cornerstone of the AFROTC recruiting program. However, its costs are growing at a frightful rate -- pulled along by the spiraling costs of college tuitions nationwide. CSP funding is not likely to keep pace with program costs in the next several years. As a result, AFROTC will have to make some difficult choices about how to allocate available funds to get the most out of the shrinking CSP dollars.

II. Objectives: To assess the impact of the growing CSP costs on the program's recruiting effectiveness, and to recommend policy changes which will enable it to deal with the steadily rising scholarship costs. CSP policies which add to the cost of the program without enhancing AFROTC's ability to recruit and retain the right types and quality of officers should be modified or eliminated. The CSP is first and foremost a recruiting tool; this is clearly evident from a review of the authorizing legislation and AFROTC's own regulations and internal guidance. The program's effectiveness, and efficiency, must be judged in terms of how well it contributes to Air Force and AFROTC recruiting objectives.

III. Discussion: The CSP does not operate in isolation of other factors. CSP policies, and consequently costs, are influenced by (1) the recruiting environment and the resulting officer production objectives, and (2) political considerations. The recruiting pool is shrinking and becoming much more competitive, especially in the
more technical career areas. As a result, AFROTC faces shifting recruiting priorities which reflect a more difficult and expensive recruiting market. Of course, CSP policies are not established in isolation of other influences. There are political factors which must be considered, even though they often contribute directly to higher program costs. These include such things as Congressional involvement, budgetary concerns (Gramm-Rudman legislation), a positive public image, relations with educational communities, and concern about detachment viability and demographic balance in the cadet population. Any serious efforts to curb scholarship costs must consider these political factors. The dramatic increases in CSP costs are most directly caused by higher tuitions, especially at private colleges and universities. If tuitions continue to increase at the 1984 rate (15%), the total cost of the CSP will increase from $30.5 million in 1984 to $125 million in 1994 in order to support 7500 scholarships. Some high-cost CSP policies further compound the problem. These include (1) allowing students to select their school without regard to tuition rates, (2) paying total tuition costs, regardless of the amount, and (3) reluctance to shift to a more economical scholarship mix. Other program areas which deserve close scrutiny are pilot scholarships, scholarships for Commandant/Vice-Commandant Award winners, and language scholarships.

IV. Conclusions: AFROTC needs to develop a new approach to allocating and controlling CSP funds -- an approach which takes into consideration the realities of a tighter recruiting market, spiraling tuition costs, and more limited CSP funding. The primary cause of higher program costs is related to the higher college tuitions nationwide. Therefore, in order to reduce costs significantly, AFROTC must limit in some way the direct impact of exploding tuitions.

V. Recommendations: In order to control the rising costs of the CSP without impacting adversely on its recruiting effectiveness, AFROTC should take two specific actions. First, it should limit the number, or at least the percentage, of scholarship students who are allowed to attend "high cost" schools. Second, it should prioritize CSP programs according to their contribution to the specific recruiting objectives levied on AFROTC, and then eliminate or modify those programs which are inefficient or only marginally efficient.
Chapter One

INTRODUCTION

PROBLEM STATEMENT

The College Scholarship Program (CSP) is the cornerstone of the Air Force Reserve Officer Training Corps' (AFROTC) recruiting program. Its generous benefits provide an attractive incentive for students to participate in the AFROTC program. There is little doubt that it has been an effective recruiting tool, allowing AFROTC to shift emphasis from one target group to another as recruiting requirements change. However, it is an expensive program (estimated $35.1 million in AY 85-86) (32:11) whose costs continue to grow year by year as a result of spiraling costs of college tuitions nationwide (26:4). The steadily increasing costs have already forced AFROTC to begin to think about ways to contain the costs without impacting on the overall effectiveness of the program. Without substantial increases in CSP funding—an unlikely possibility (30:--)—AFROTC will have to make some difficult choices about how to allocate the available CSP dollars. These choices may have a significant impact on AFROTC's ability to attract the right numbers and categories of officer candidates in the difficult recruiting environment of the next several years.

The critical question is whether current CSP policies will wrestle enough out of the shrinking scholarship dollars to meet future recruiting challenges. One might ask if AFROTC scholarship policies support the overall recruiting effort in the most effective and cost efficient way. The policies which have worked in the past may not work in the future. As the recruiting environment changes and CSP funding becomes tighter, AFROTC must make sure that every scholarship dollar counts. Policies which add to the cost of the program without adding to AFROTC's ability to attract the right type and quality of students should be modified or eliminated. Institutional rigidity and policy inertia must give way to reasoned changes which will insure the CSP is able to meet its primary objective—support of officer procurement requirements, especially in hard to fill categories (6:89; 12:39).

The author believes an argument could be made that the CSP as it is currently functioning may not be supporting the recruiting needs of AFROTC in the most effective or cost efficient
manner. For the purposes of introducing the author's concern, a couple of examples of questionable policies may be helpful. First, AFROTC continues to award scholarships to pilot candidates (9:5). It could be argued that this is wasteful since there are more than enough qualified applicants to fill the pilot positions. Pilot scholarships are simply used to improve pilot quality—by some unquantifiable level (9:8). Second, students who are awarded scholarships are generally free to attend any of 756 colleges or universities in the nation, regardless of tuition costs (26:2). Reasonable limitations in this area, either on allowable tuition ceilings or on the number of CSP students at expensive private schools, would generate savings which could be redirected into additional scholarships. The author believes these policies illustrate a need for some adjustments in the College Scholarship Program.

FOCUS AND SCOPE

This study looks at whether some new approaches to allocating and controlling CSP funds would be more responsive to the recruiting needs of AFROTC than current policies. Are we getting as much as possible out of the shrinking CSP dollars? As a framework for answering this question, this study is organized into four chapters, beginning with an introduction to the problem and a review of program objectives in this first chapter. This background information helps establish a frame of reference for evaluating the program's overall effectiveness. The second chapter attempts to identify real world factors which impinge on scholarship policies. The author recognizes that the CSP does not exist in isolation of other programs or initiatives. Chapter Two introduces the reader to some of the real world factors which must be taken into consideration when trying to make the CSP more cost efficient. Chapter Three documents the growing costs of the CSP, identifies specific policies which contribute to higher program costs, and evaluates current AFROTC efforts to hold the cost of the CSP in check. The final chapter contains recommendations for adjustments in CSP policies which will enable it to meet the recruiting challenges of the next several years more effectively. The recommendations do not attempt to completely overhaul the CSP—that is far beyond the scope of this study. Rather, the recommendations suggest ways that AFROTC can develop the policy framework and organizational mechanisms to deal with long term cost problems.

ASSUMPTIONS

The author makes two assumptions about the CSP. First, the CSP should function primarily as a recruiting tool. The measure of its effectiveness should be the degree to which it contributes to the officer procurement needs of AFROTC and the Air Force. The
remainder of this chapter provides some rationale for this position by presenting a brief but important review of the goals and objectives of the CSP as set forth in public law and AFROTC's regulations and written policies.

Second, modifications to the CSP will not be easily accepted by AFROTC. In fact, there will almost certainly be strong resistance to change because of the impacts which the CSP has in non-scholarship areas. There are interrelationships with other program areas which expand the number of factors that must be considered. There are clearly political as well as institutional constraints which must be taken into account. Chapter Two provides a closer look at those real world factors which must be considered if adjustments are going to be made to current CSP policies. The author recognizes the difficulty of the task. Therefore, recommendations in this study have been kept limited enough in scope to hopefully be acceptable to AFROTC, yet substantial enough to make significant improvements in the effectiveness of the CSP.

One shortcoming of many previous studies on AFROTC was that they simply did not suggest realistic solutions to problems. Some contained outrageous recommendations which obviously stood no chance of being adopted. For example, one author recommended expanding AFROTC to 2,000 plus schools by discontinuing formal classes and requiring cadets to attend Officer Training School after graduation. Cadets would be enrolled in a type of inactive reserve status (28:ix). One author suggested the creation of a summer-only ROTC program as one alternative to boost production (25:1-10). While the goal of such recommendations is a better AFROTC program, it is clear that proposals such as these would not be acceptable to AFROTC.

This study will help AFROTC focus realistically on a growing problem. AFROTC must not shrink from the challenge to find new and innovative ways to manage the College Scholarship Program effectively in the face of ever increasing costs.

**PROGRAM OBJECTIVES**

Effective management of the CSP must begin with a clear understanding of the program's overall objectives. Program policies and guidelines must be constructed so as to support those objectives in the most cost efficient manner. The CSP should not be used as a mechanism to undergird other AFROTC policies which fall outside the intended parameters of the CSP. Fortunately, there is a good record of what the CSP was meant to accomplish—well documented in the public law, AFROTC regulations, and internal AFROTC documents. The purpose of this section is to outline the overall objectives of the CSP for use as a yardstick by which to evaluate its effectiveness.
Legislation

The CSP is authorized by Public Law 88-647, Section 2107 of Title 10, US Code (ROTC Vitalization Act of 1964), and amended by P.L. 92-166 and annual DoD Appropriation Acts. The originating legislation authorized each service to have up to 5500 scholarship cadets in the four-year program and established basic eligibility criteria (18:1064-1066). In 1971, in response to the creation of the All-Volunteer Force one year earlier, the law was amended (P.L. 92-166) to (1) allow up to 20% of the scholarship cadets to be in the two-year program, (2) require at least 50% of the scholarship cadets to qualify for in-state tuition, and (3) increase to 6500 the total number of AFROTC scholarships (19:487). These legislative changes responded to the services' needs for more flexibility and more total scholarships in order to meet their recruiting goals. Also inherent in the legislative changes is a continuing concern about the overall costs of the program—hence the in-state tuition requirements. Detailed reviews of the ROTC's legislative history are provided in three studies by other authors which the reader may find interesting (2:42-46; 28:68-70; 29:1-18).

Further adjustments in the number of Air Force ROTC scholarships are made through the annual Defense Authorization and Appropriation Acts. Current legislation authorizes 9500 scholarships, but funds only 7500 (26:5). Thus, Congress establishes a ceiling on the total number of scholarships which may be in effect at any one time. The burden is on the Air Force to allocate its available scholarship funds in the most effective way (technical vs. non-technical, etc.) within the broad parameters established by Title 10, Section 2107, as amended, and the annual appropriations legislation.

AFROTC is naturally concerned that as the costs of the program continue to grow, the level of funding approved by Congress may not be adequate to sustain 7500 scholarships (30:--). Concern over the possibility of funding reductions has been intensified by the passage of the Gramm-Rudman legislation on 11 December 1985 which mandates large reductions in the overall defense budget if rapid progress is not made toward reducing the federal deficit (2:16-17). Because of the uncertainty about future funding, AFROTC is evaluating the impact on its program if the scholarship ceiling is reduced to 7300 in FY 87, 7000 in FY 88, and 6500 in FY 89 (33:--). These scholarship reduction models are discussed further in Chapter Three.

AFROTC's CSP Objectives

Program objectives are outlined in AFROTC guidance. The basic guidance for the administration of the AFROTC College Scholarship Program is contained in AFROTC Regulation 45-10. The second paragraph of that regulation states "The objective of the CSP is to attract and retain students whose academic specialties and potential career areas are essential to Air Force needs" (6:89). This implies
a direct supportive relationship of AFROTC recruiting goals, a relationship which is strengthened in the next paragraph which states that "guidance for scholarship authorizations by category and academic specialty is provided by the Air Force in response to manpower requirements" (6:89). The CSP supports the recruiting effort in general, but it also has some very specific applications--such as supporting minority recruiting initiatives through the Quality Enhancement Program (QEP). "The QEP is a recruiting initiative designed to create an awareness within minority communities of AFROTC opportunities and the 4-year scholarship" (6:95).

This supportive relationship with the recruiting program is reflected in other AFROTC documents. For example, in the justification for the FY 89 budget request, AFROTC stated

"A sustained emphasis on awarding scholarships to meet hard-to-fill goals, such as engineering, science-technical, etc., is being made. AFROTC is a major active duty officer procurement program of the Air Force, and the College Scholarship Program is the primary tool used in support of officer procurement. If funds are not received at the requested funding level, AFROTC will be unable to meet its projected goals of qualified college scholarship students. These funds are vitally important to the AFROTC mission" (12:39).

In a briefing presented to ATC/CC in April 1985, AFROTC identified four Scholarship Program Objectives: (1) Assist in attaining production goals to meet Air Force needs, (2) Attract quality students, (3) Promote an effective recruiting program, and (4) Provide a credible enrollment incentive (32:2). Each of these clearly suggest that the success or failure of the scholarship program is inextricably tied to how well it supports the overall recruiting and officer procurement objectives.

DoD and Air Force Guidance

The importance of the scholarship program as a recruiting tool, and its value in attracting the hard-to-recruit type of officer, is well documented. For example, in 1970 when the military services were transitioning to the All-Volunteer Force (AVF), the commission appointed by the President to study the AVF stated in its report that there were a number of recent studies concerning the future of ROTC and that all recommended

"...an increase in the number of ROTC college scholarships. We endorse this recommendation and encourage the use of such scholarships as a way of attracting applicants not likely to enter the program without them--especially those whose skills or aptitudes are in short supply in the military" (1:75).
In the section of the USAF Personnel Plan which discusses the various sources of officer procurement, the Air Force identifies the scholarship program as one of ROTC's recruiting strengths. "Coupled with selected scholarship programs, ROTC is an excellent means to meet predictable and hard-to-fill requirements in technical/engineering specialties" (24:3-1). In DoD Directive 1215.8, entitled Senior Reserve Officers' Training Corps Programs, the Service Secretaries are directed to establish criteria for awarding extended financial assistance (5th year program) based on "validated requirements for accessing graduates with specified degrees" (23:4). These various sources verify the importance and significance of the CSP to AFROTC's recruiting efforts.

CHAPTER SUMMARY

The purpose of this chapter has been to introduce the reader to the difficult problem which the AFROTC College Scholarship Program faces as a result of the steadily rising costs of the program. Some difficult choices will have to be made in the near future about how to spend scholarship dollars which don't buy as much as they used to buy. Given the basic purpose of the CSP and its clearly stated objectives to support the recruiting needs of AFROTC, one should bear in mind that policies and guidelines which do not support those basic objectives ought to be eliminated or modified.

The author recognizes the CSP is influenced by many factors and that quick and drastic changes to the way scholarship dollars are spent are probably not likely. Resistance to change will come from many directions. Realistic efforts to make the CSP more productive and cost-efficient must deal with the various influencing factors. Several of the more significant factors are discussed in Chapter Two.
Chapter Two

FACTORS WHICH INFLUENCE CSP POLICIES

The College Scholarship Program (CSP) does not operate in isolation of other factors. If AFROTC hopes to squeeze the most out of available scholarship dollars, it is important to understand the factors which have a bearing on CSP policy development. This chapter discusses several of the more significant factors which underlie the difficulty of trying to hold the line on costs.

It is not a single dimensional problem. It requires a solution which deals effectively with the real world constraints which go with any program where the budget exceeds 30 million dollars. In the case of the CSP, the influencing factors can be divided into two general categories. First, there is the impact of the recruiting environment and the resulting officer production objectives which are levied against AFROTC. Second, there are factors which are best thought of as political.

RECRUITING ENVIRONMENT AND PRODUCTION OBJECTIVES

The recruiting market for Air Force officers, particularly in the more scientific and technical disciplines, is expected to grow more difficult in the next several years. The projected overall college enrollment for students under 25 years of age—the primary officer recruiting market—is expected to decline from approximately 6.7 million students in 1986 to approximately 6.0 million students in 1992 (17:1). AFROTC already must attract 16% of the aeronautical engineering graduates and 5% of the electrical engineering graduates in order to meet its annual requirements (31:11). This is expected to grow worse as national engineering shortages are expected to quadruple by 1990 (31:11). Significant changes are occurring across the board in the demographic characteristics of students. For example, the 1985 high school population (tomorrow's recruiting market) is 19% smaller than in 1977. It is expected to decline another 20% by 1990. Also, AFROTC anticipates the number of Black students nationwide who can qualify for commissioning will not exceed 3200 in the year 1990 (31:11). These demographic trends will force AFROTC to compete with many other employers for the limited manpower pool.

Changing recruiting markets, coupled with changing Air Force needs, are reflected in the annual production objectives levied on various commissioning programs. These production objectives form the baseline for AFROTC's scholarship planning. Specific
numerical scholarship goals are set for each target group in response to general procurement objectives established for AFROTC by the Air Staff. The process begins with the annual ATC Line Officer Strategy Conference, usually held in December. The conference develops general strategies for accessing hard-to-recruit types of officers such as engineers, mathematicians, navigators, and minorities. And it evaluates special accession problems such as Extended Active Duty (EAD) delays, minority shortfalls, technical/non-technical mixes, and quality standards (9:--). Based on an analysis of future year officer requirements and the capabilities of the various commissioning sources, production goals are established which will insure a balance between AFROTC and OTS.

Based on conference recommendations, AF/MP establishes detailed line officer production objectives for AFROTC by category, race, sex, academic degree, and technical requisites. Based on these objectives, AFROTC develops a production model for the various categories (10:3; 13:2). The FY 88 Line Production Model to support the 3150 requirement levied on AFROTC is shown below (7:1).

<table>
<thead>
<tr>
<th>CAT</th>
<th>SELECTEES PRE-FIELD TRAINING(FT)</th>
<th>ENTER\textsuperscript{1} AS 300</th>
<th>ENTER\textsuperscript{2} AS 400</th>
<th>COMMISSIONED\textsuperscript{2} (SEP 88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT</td>
<td>1592</td>
<td>1111</td>
<td>1055</td>
<td>1000</td>
</tr>
<tr>
<td>NAVIGATOR</td>
<td>775</td>
<td>583</td>
<td>516</td>
<td>425</td>
</tr>
<tr>
<td>MISSILE</td>
<td>380</td>
<td>277</td>
<td>252</td>
<td>200</td>
</tr>
<tr>
<td>ENGINEER</td>
<td>1063</td>
<td>920</td>
<td>736</td>
<td>650</td>
</tr>
<tr>
<td>SCIENTIFIC</td>
<td>785</td>
<td>618</td>
<td>541</td>
<td>450</td>
</tr>
<tr>
<td>NON-TECH</td>
<td>618</td>
<td>453</td>
<td>444</td>
<td>425</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5214</td>
<td>3962</td>
<td>3544</td>
<td>3150</td>
</tr>
</tbody>
</table>

NOTE 1: This number reflects FT failures and changes of mind.
NOTE 2: This number is the production goal levied by AF/MP (20:2).

Table 1. FY 88 LINE PRODUCTION MODEL : 3150

The conference also performs a review of AFROTC scholarship usage and develops specific guidance for administration of the scholarship program. For the FY 87 production cycle (the most recent available) the following goals were provided to AFROTC:
(1) "Award four-year scholarships based on tentative FY 89 production objectives."

(2) "85% technical and 15% non-technical scholarship distribution."

(3) "Scholarship priorities will be: (a) engineers, with emphasis on electrical, (b) navigator candidates with technical degrees, (c) scientific/technical candidates, and (d) all others including minority, missile, pilot, and non-technicals."

(4) "Up to 25% of AFROTC pilot production goal may be awarded scholarships, most at the two-year point. Up to 25 four-year and 50 three-year scholarships, with no more than 75 in effect at any one time in the General Military Course, may be awarded, contingent on the engineer production level" (9:4-5). Similar scholarship guidance was provided for the previous year (8:4).

The guidance provided by the ATC Line Officer Production Conference provides the starting point for AFROTC to develop a scholarship model which will support the line officer production objectives and stay within the established parameters imposed by the Air Force and Congress. For example, the number of scholarships which can be in effect at any one time is capped at 7500 based on Congressional funding restrictions. Other legislated restrictions--such as a maximum of 50% receiving out-of-state tuition, and a maximum of 60% enrolled in the two-year program--must be considered in developing the model (6:89).

The difficulty of trying to develop an effective model which accounts for all of the above factors while attaining the optimum mix by category, race, sex, academic specialties, and technical requisites is self evident. Furthermore, the production needs by category are not static, but revised as needed--often well into the production year (11:1; 14:1; 20:1). Therefore, the scholarship model is developed through application of historical attrition rates in the various production categories, and allows some flexibility for future adjustments (30:--). The FY 88 scholarship model will support an overall line officer production rate of 3150 with a total scholarship population of 7500 (22:--).

AFROTC is very concerned about the level of funding that Congress may provide for the CSP in the next several years (30:--). Consequently alternative models are being developed which plan for a reduction to 6500 scholarships in FY 89. This would be accomplished incrementally by reducing to 7300 in FY 87, 7000 in FY 88, and 6500 in FY 89 (33:--). These scholarship reduction models are discussed in more detail in Chapter Three along with other possible options to slow the costs of the CSP.
POLITICAL FACTORS

While the recruiting environment and specific officer production requirements drive CSP policies to some extent, there are also large political influences which come into play. Because of the size, expense, and complexity of the CSP, subjective political considerations will always be involved—and, more often than not, will stand in the way of change. The author has identified five categories of political constraints which appear to have restrictive influences on CSP policies. These include Congressional involvement in policy, budgetary concerns, concerns over public image, relations with the educational community, and concerns about detachment viability and demographic balance.

Congressional Involvement in Policy

Perhaps the most overwhelming influence is the Congressional tendency to get too involved in program details. Limitations on the use of CSP funds are placed in the law, such as required ratios of the number of students qualified for in-state versus out-of-state tuition. Additionally, Congress uses the hearing process to encourage the services to make minor adjustments in their programs. The result is a constant concern about Congressional intent and a general reluctance to try and make significant changes, since so many changes now require Congressional approval (31:31-32).

Budgetary Concerns

The CSP is a high visibility budget item. It involves large transfers of dollars to students and is by far the largest single item in the AFROTC budget. Budget reductions in the CSP would translate immediately and directly to program cuts. As a result there is a sensitivity to the cost of each portion of the scholarship program that is not present in other Air Force programs.

The significance of budgetary factors is clearly evident in the potential impact of recently passed budget balancing legislation. The Gramm-Rudman Act, passed on 11 December 1985, mandates across the board cuts (to be shared 50% by the military and 50% by non-military programs) if certain deficit reduction milestones are not achieved in the federal budget (2:16-17). It could result in the most massive spending cuts in several years (2:16). The impact on specific programs is uncertain, but it is causing enough concern that initiatives which were being worked by AFROTC to contain the growing CSP costs are being placed on indefinite hold until more information is available (32:--). This kind of reaction illustrates the sensitivity of the CSP to cost issues.

Public Image

"Bad press" is a continuing concern (30:--). How would reductions in scholarship programs, regardless of their cost efficiency, be viewed by the public? Another aspect of this same question is how
the Air Force program will stack up to the programs of other services—not in terms of effectiveness but in terms of perception. This concern about image may be unavoidable in view of the tight competition for quality students. The AFROTC Scholarship Program must be able to compete against all service academies, other service ROTC programs, federal programs, state programs, private industry, and universities themselves (31:10). The ability of the CSP to attract good students depends to some degree on its image as a quality program. Cuts which destroy that image will have long-term negative affects on the CSP's ability to help recruit the best officers.

Relations with Educational Community

ROTC has always ridden a sort of public relations roller coaster with the educational community. ROTC units are highly sought after by some universities, but others have marginal relationships at best—both in terms of campus political climates and financial viability. The AFROTC Scholarship Program is clearly one of the most lucrative in the nation and provides opportunities for some students to attend schools they would otherwise not be able to attend (particularly expensive private schools). Any significant reduction of scholarship benefits would no doubt be felt by some individual institutions. Whether or not that would cause any real deterioration in university relations is an open question. This is of particular concern in the minority community where financial assistance is more critical not only to the individuals, but to the schools themselves. In general, reductions in the amount of AFROTC scholarship dollars could be interpreted by some institutions as weakening the Air Force's commitment to educational excellence. AFROTC must be concerned that other programs may stand ready to fill the void.

Detachment Viability and Demographic Balance

The Air Force is required by DoD Directive 1215.8 to establish specific criteria for evaluating officer production at each ROTC unit to insure that investment of DoD resources is justified. Viability standards must consider the quality of officers produced, the cost of maintaining the unit and the kinds and numbers of officers produced (23:3). So, viability and demographic balance become a continuing concern which cuts across the scholarship program. The level of AFROTC's sensitivity to these concerns is reflected in their input to the FY 86 ATC Line Officer Procurement Strategy Conference Report. AFROTC argued strongly for a line officer production goal of 3300 versus 3100, based on the rationale that the necessary 5% reduction would "sharply increase the number of detachments unable to meet congressionally mandated viability standards" (11:2). AF/MPP acknowledged "the need to maintain a production goal which could sustain viability and minority production" (20:1). The CSP plays an important role in maintaining a balanced cadet population (4:1; 15:2). There is no doubt that an effective scholarship program can contribute to strong detachments and balanced
cadet populations. But what is the cost of the strength and balance? These political concerns must be factored into CSP policy decisions.

**CHAPTER SUMMARY**

If cost efficiencies were the only consideration, it would be easy to get a handle on the growing costs of AFROTC's scholarship program. However, there are other influencing factors which must be considered. Any serious efforts to curb scholarship costs must consider the political as well as fiscal factors. The author believes that much of the difficulty of controlling rising scholarship costs stems from trying to balance very specific procurement objectives against a number of complex political factors. Unfortunately, the problem is not one dimensional--the complex and often subjective factors discussed in this chapter must play a role in the policy development process.
Chapter Three

CSP COSTS

The AFROTC scholarship program is clearly one of the most lucrative financial assistance programs in the nation--paying full tuition (including fees and laboratory expenses) at any of 756 schools, textbook allowance, and a monthly stipend of $100 (26:2). The benefit package has no dollar limit--a factor which makes it very attractive, but also ties its costs inextricably to the spiraling costs of tuitions nationwide (especially at private colleges and universities). Those costs are exploding. The purpose of this chapter is to document the escalating costs of the CSP, identify AFROTC policies which contribute to those costs, and briefly evaluate some of the cost containment proposals which have been surfaced by AFROTC. The final chapter of this study will include some general recommendations for dealing with the cost problems realistically and effectively.

ESCALATING COST TRENDS

Scholarship costs actually involve two categories of payments--(1) tuition and fees, and (2) textbooks. The costs of the program have been increasing primarily in the tuition and fees area. In fact, the average per student cost for tuition increased a total of 56.6% (in constant dollars) between 1977 and 1984 versus only 6.6% for textbooks (26:3, 7). Furthermore, textbook costs represent less than 6% of the total CSP budget and are expected to increase only moderately in the future (26:3, 7). This split between tuition and textbook costs suggests that any real effort to deal with CSP cost issues must center on curbing the growth of per student tuition costs. That's where the costs are, so that is where cuts must be made.

In order to focus on the problem more clearly, it is critical to understand both the size of the scholarship costs and the reason for their rapid increases. Tuition costs between 1977 and 1984 are summarized in the following table (26:3).
If the costs continue to rise approximately 15% per year, the total cost of the CSP will exceed $125 million by 1994 (in constant 1984 dollars) to support 7500 scholarships (26:5).

Unfortunately, the trend toward higher tuition is not likely to be reversed. Colleges and universities are victims of the same economic forces that impact other parts of society, plus some that are unique to the educational community (26:4). The general state of the economy has driven up tuition costs through the twin forces of inflation and recession. Recession has had a particularly severe impact because of reduced federal, state, and private sector funding. At the same time colleges and universities have tried to remain competitive in the hiring marketplace—resulting in higher salaries and benefits, better and more expensive research facilities, and state-of-the-art equipment. However, some of the factors driving higher tuitions are unique to the educational community. One such factor is the cost of tenured staffs, particularly in liberal arts schools with declining enrollments. Perhaps the most important single reason is the generally declining enrollment nationwide. This factor, when coupled with the economic forces discussed above, means that each individual student must pay a higher percentage of the educational costs (26:4).

The per student costs for CSP cadets are also affected by their individual choice of schools. For example, in 1985 the in-state tuition costs for the CSP ranged from a high of $11,700 at Harvard to a low of $250 at the University of Puerto Rico (32:6). If the tuition costs at schools with AFROTC programs are divided into three categories (high cost—more than $7,000; medium cost—between $3,000–$7,000; low cost—less than $3,000), the impact of a blank-check benefit package becomes evident. As one would expect,
there is a tendency for scholarship recipients to select medium or high cost schools. For example, 30% of the CSP population attend high cost schools. They account for 60% of the total CSP budget, but produce only 11% of the CSP production needs (32:13). In terms of enrollment and dollars, this means that out of 7500 scholarship cadets enrolled in AY 85-86, 2250 attend high cost schools at an average cost of $9,288 each, while 5250 attend medium or low cost schools at an average cost of $2053 each (32:6). These trends raise the inevitable question about whether scholarship benefits should be limited in some way—particularly with regard to high cost schools.

**HIGH COST CSP POLICIES**

The major cost increases in the CSP are clearly being driven by the tuition factor. In order to address these costs, AFROTC must free itself from those policies which allow it to be held hostage by tuition increases. Some of these policies include:

1. Allowing students to select their school without regard to costs.
2. Paying total tuition costs (essentially a blank check).
3. Reluctance to shift to a more economical scholarship mix (4 yr. vs. 2 yr., etc.) when possible.

Policy adjustments in these areas would go a long way toward curbing the cost of the CSP without reducing AFROTC's ability to meet its procurement objectives.

While the major cost containment efforts need to be made in areas which reduce the per student costs, some savings can be realized through the re-allocation of funds to higher priority groups. The simple fact is that some elements of the CSP are more expensive than others. Two examples illustrate this. The four-year program has higher per graduate costs than the two-year program for two reasons—higher attrition rates because of limited information on which to base selections, and the length of the program (30:-). The second example is the Additional Terms of Entitlement Program, primarily for engineers, which can stretch a scholarship program to five years, thereby increasing the cost per graduate by 25% (5:3). Even though these particular programs may reflect high priority needs, they need to be evaluated on the basis of how much the additional costs of the programs contribute to the priority procurement needs. Do the priorities of these programs justify the expense?

Some other policies also raise questions about priorities:

1. **Pilot Scholarships.** AFROTC continues to award pilot scholarships even during periods when the qualified
non-scholarship applicant pool is large enough to meet procurement requirements. As recently as October 1985, HQ USAF cautioned AFROTC against too high a level of pilot production by noting that "the classroom absorption problem for pilots during the summer months and the need for AFROTC to procure 'difficult to obtain' officers argue for some reduction in these areas" (20:1).

(2) Scholarships for Commandant/Vice-Commandant Award Winners. This policy ignores the specific procurement needs and simply awards scholarships based on individual performance. Also, it does not attract new cadets to the Professional Officer Course (POC).

(3) Language Scholarships. The author's concern with this program is that the level of language competency—an academic minor (16:2)—may not provide sufficient competency to justify the expense in this very narrowly targeted program.

These three specific programs are symptomatic of the difficulties inherent in deciding between competing priorities and trying to allocate funds effectively and responsively. Nevertheless, the question of rising CSP costs cannot be addressed effectively without some prioritization of scholarship programs. Cuts must be made in those areas which are least harmful to the overall procurement objectives imposed on AFROTC.

COST REDUCTION PROPOSALS

AFROTC has been actively looking for ways to get the rising costs of the CSP under control since early 1985. The major obstacle has not been how to do it—but, how to package it so as to clear the inevitable political hurdles. Cost reduction means that some CSP areas will have to be trimmed or eliminated completely. Put simply, that is difficult to sell because of the perception problem and other political reasons outlined in Chapter Two.

Nevertheless, AFROTC has studied some alternatives which would help cut costs. These could be classified into two categories: Cost Containment Proposals and Reduction Models. AFROTC's cost containment proposals address ways to cut the per student costs by limiting attendance at high cost schools or capping tuition payments. Reduction models propose to cut costs by reducing the overall number of scholarships, without reducing individual benefit packages.

Cost Containment

The basic cost containment proposal developed by AFROTC in February 1985 (31:14) identified the problem as one of spiraling
tuitions which AFROTC has no control over. The criteria for its 
cost containment proposals were that it (1) continue to fully 
serve Air Force requirements, (2) maintain its competitive position 
by providing a range of scholarship opportunities, and (3) should 
save significant funds over the present system (31:27). The pri-
mary alternative studied was to cap the number of scholarship cadets 
who could attend high cost schools. The proposed percentage was 
15% to high cost schools (greater than $7,000 tuition), compared 
to 30% under the present free-flow policy (31:26; 32:18). The 
estimated savings from directing scholarships at this level, with 
a constant 7500 CSP population was approximately $23 million 
(31:28). The magnitude of the savings was confirmed in a second 
analysis by HQ AFROTC/XRS. That analysis looked at two variations 
of the proposal. The first was based on direction of 60% of the 
CSP students in the top 15 high cost schools to lower cost schools. 
The estimated cumulative 10 year savings with a constant 7500 
CSP population, was $108 million. When the same analysis was 
applied to the top 23 high cost schools, the savings was $134 
million (21:1). The two primary drawbacks noted for this sweeping 
cost containment proposal were that other competing scholarship 
programs were not cutting back or directing scholarships, and 
the cuts would reduce Air Force officer production at some "presti-
gious" schools (32:19), thus upsetting the present geographic and 
institutional balance. While these arguments recognize the politi-
cal sensitivities of the CSP, the author cannot see that they pre-
sent a compelling reason for not taking needed steps to curb scholar-
ship costs. Since the number of scholarships (7500) and the cate-
gorical mix would not change, there apparently would be no de-
gradation in AFROTC's ability to meet its procurement objectives.

Other cost containment alternatives discussed by AFROTC, but not 
given serious consideration are shown below (31:24-26):

(1) Cap individual entitlements (rejected because of image 
of "cheap program," concern over impact on quality and 
number of applicants, need to change authorizing legisla-
tion).

(2) Cap individual entitlements plus award percent of additional 
costs (same problems as first alternative, plus accounting 
and payment complexities).

(3) Delayed payment of entitlements--paid after one year in 
program (rejected because of impact on individual students, 
plus the possibility of weakening AFROTC's relationship 
with institutions).

The one negative factor which AFROTC felt was present in all of the 
proposals was the negative impact they would have on the overall 
appeal of the scholarship opportunities (31:26).
Scholarship Reduction Models

Another way of addressing the cost problem is simply to reduce the overall number of scholarships without altering the individual benefit packages. AFROTC has studied three scholarship reduction models which, when applied in sequence, would reduce the CSP population from 7500 to 6500 in FY 89 (33:--). Assumptions built into the models included (1) present scholarships would not be affected, (2) the reductions should be phased in over three years, (3) reductions would apply equally to the four-year and two-year programs, and (4) attrition would not change substantially (33:3).

AFROTC's estimates are that reductions to 7300 scholarships in FY 87, 7000 in FY 88, and 6500 in FY 89 would generate a total savings of $11.3 million over the phase-in period, even without any reduction in the per student costs (33:13). In addition to the dollar savings AFROTC also estimates that the quality of the scholarship population will increase as a result of better selectivity (33:13). On the negative side AFROTC does anticipate that a reduction to 6500 scholarships would require reassessment of some present CSP programs, such as non-technical scholarships, rated scholarships, and Field Training Commandant and Vice-Commandant scholarships (33:13). Essentially, a cut of 1,000 scholarships would force better prioritization of various program elements.

CHAPTER SUMMARY

The CSP is an expensive program whose costs continue to increase year to year, both in terms of total costs and average per student costs. The primary reason for the increases is the escalation of college tuitions nationwide, a factor which impacts directly on CSP costs because of CSP policies of paying all tuition costs and allowing students to select schools without regard to costs. Other CSP policies also contribute to higher overall program costs in the sense that they may not be targeted at high priority groups. Specific scholarship initiatives need to be prioritized in terms of their effectiveness in meeting procurement objectives so that funding cuts can be made in those areas which are clearly least efficient.

It must be acknowledged that AFROTC is attempting to get a handle on the complex problem of rising scholarship costs. One proposal would direct more scholarships to lower cost schools, thus limiting per student costs. Other proposals would reduce the total number of scholarships, without trying to reduce the average per student costs. There are no perfect solutions. The difficulty lies in trying to balance all of the competing interests (procurement objectives versus political concerns). However, it is clear that some definitive action is required in order to keep the cost of the CSP from becoming so exorbitant that the Air Force cannot afford it—financially or politically. Per student costs must be brought under tighter control if the CSP is to remain an effective recruiting tool, able to attract enough quality officers to meet Air Force requirements.
Chapter Four

RECOMMENDATIONS

Cost is only one aspect of the CSP with which AFROTC must be concerned. Nevertheless, it is an important factor which cannot be ignored. Whatever actions are undertaken to control costs, they must be done in a way which contributes to attainment of the legitimate procurement needs of the Air Force.

It is not within the charter or scope of this study to recommend detailed dollar-by-dollar program adjustments. That would reflect a short-term, narrow approach to a long-term complex problem. Instead, the recommendations contained in this final chapter address ways to build a policy framework which will enable AFROTC to deal with the continuing problem of CSP costs, well into the future. AFROTC will have to study the cost problem from many different angles, looking at the cost versus benefit of every program, before specific scholarship programs are sacrificed to the budget knife.

In order to deal effectively with the escalating CSP costs, AFROTC needs to attack the problem in two simultaneous arenas. First, since college tuitions themselves cannot be reduced, AFROTC should take specific actions to reduce the percentage of cadets who attend high cost schools. Second, AFROTC should establish a well defined process for prioritizing CSP initiatives, from the most necessary to the least necessary. Taken together, these actions would allow AFROTC to reduce CSP costs without destroying its effectiveness as a recruiting tool.

DIRECTING SCHOLARSHIPS TO LOWER COST SCHOOLS

Since the primary cause of higher CSP costs is college tuitions, steps must be taken to reduce the impact of spiraling tuition rates. Two methods are possible--either cap the dollar amount paid to individual students by some established formula, or continue to pay full tuition but direct selectees to lower cost schools. The first method, while much simpler to administer and control, has serious disadvantages in terms of how it would be perceived and in terms of its impact on individual scholarship recipients (some might not be able to continue if the CSP did not pay full tuition). By contrast, directing selectees to attend a school within a certain tuition range would only limit their choice of school, not the quality of the CSP benefit package. The most significant drawback of this method is that it may push the most sought after
students to opt for other scholarship programs which allow them to attend more prestigious schools. As a result it could change slightly the geographic and institutional balance in the CSP. While these factors are important, it is questionable whether that balance justifies 30% of the scholarship recipients consuming 60% of the scholarship budget (43:18). The placement of some restrictions on the number of CSP students attending high cost institutions is consistent with the views expressed by Secretary of Education William Bennett. While addressing the impact of deficit reduction programs on education, Secretary Bennett explained that middle class student aid programs must share the burden and that it is simply unrealistic "...to expect the government to support any student who wants to go to any institution" (3:1).

ESTABLISHING PRIORITIES

The ultimate measure of effectiveness of various CSP initiatives (e.g., language scholarships, expanded benefits, QEP, 2-year versus 4-year programs, pilot scholarships, etc.) must be the degree to which they contribute to AFROTC procurement objectives. This cannot be determined without some type of systematic prioritization of CSP programs. That prioritization process should be based on criteria which enhance the CSP's cost efficiency in recruiting the right mix of officers. Some of the factors that should be considered are:

(1) difficulty of recruiting certain hard-to-find disciplines,

(2) ability of other commissioning sources to fill specific requirements without offering financial incentives,

(3) dollar cost while in the CSP (includes retainability cost data and other expenses),

(4) total life cycle costs of scholarships (includes Active Duty retainability costs and the value of the particular training in meeting Air Force requirements), and

(5) political value of specific programs.

These, and other factors, can establish legitimate priorities as a framework for making cost efficient policy decisions.

Based on priorities established through a systematic process, programs should be modified, added, or dropped on at least an annual basis to ensure that CSP initiatives are aligned with validated procurement priorities.
A NEW APPROACH

AFROTC needs to develop a new approach to allocating and controlling CSP funds—an approach which takes into consideration the realities of a tighter recruiting market, spiraling tuition costs, and more limited CSP funding. While the recommendations above (directing students to low cost schools and systematic prioritization of CSP programs) will reduce costs, it is equally important for AFROTC to develop a mindset of thinking of the CSP in more narrow terms, i.e., primarily as a recruiting tool. The standard by which CSP policies should be judged ought to be how well they contribute to officer procurement needs. Political factors should be secondary. CSP policies and programs which do not contribute significantly to identifiable recruiting objectives, should be eliminated or modified. The choices will not be easy, but the alternative is to wait until CSP costs become so outrageously high that Congress imposes reductions through the legislative process. If that happens, AFROTC will lose the ability to protect the most critical scholarship programs. The author urges AFROTC to make the tough choices—giving more weight to cost efficiency in CSP policy decisions and less weight to political considerations.
BIBLIOGRAPHY

A. REFERENCES CITED

Books


Articles and Periodicals


Official Documents


CONTINUED


Unpublished Materials


Other Sources


CONTINUED

B. RELATED SOURCES

Official Documents


Unpublished Materials


Staley, Henry A., Maj, USAF. "Does AFROTC Need Two Commissioning Programs? An Analysis of the Two-Year and Four-Year Program. Research study prepared at Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama, 1961.
END

DTIC

6-86