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A followup review of the actions taken on recommendations made in reports on the service academies' student attrition, academic and military programs, and financial operations showed that the academies appear to be making changes in their environments to eliminate depotivational aspects associated with attrition and to establish programs to motivate their students. The service academies include the U.S. Air Force Academy, the U.S. Coast Guard Academy, the U.S. Merchant Marine Academy, the U.S. Military Academy, and the U.S. Naval Academy. Findings/Conclusions: The academies now recognize that many entering students are not committed to a military career. Academic and military programs have improved, and some actions have been taken to reduce operating costs, although much more needs to be done. Even though attrition rates are lower, the factors causing attrition still need to be watched. Recommendations: The Secretary of Defense should direct the Army to develop professional competency objectives, establish a comprehensive professional examination, and establish a systematic program to assess graduate performance; direct the services and the academies to make comparative analyses of the staffing levels; require the use of the least costly form of staffing at the academies and, as appropriate, at other Defense activities: convert military positions at the academies and other Defense activities which civilians could fill: and see that the academies make all of the reviews required by the Office of Management and Budget Circular A-76. During upcoming budget hearings, the Congress should inquire into the implementation of its guidance to the Department of Defense regarding the use of the least costly form of staffing consistent with requirements. The Congress should reiterate its concern over staffing costs so that its intentions are unmistakably clear to Defense officials. (Author/SC)

# REPORT TO THE CONGRESS

# BY THE COMPTROLLER GENERAL OF THE UNITED STATES

# The Five Service Academies: A Followup Report

The academies appear to be making changes to their environments to eliminate demotivational aspects associated with attrition and establish programs to motivate their students. Academic and military programs have improved. Some actions have been taken to reduce operating costs but much more needs to be done.

# COMPTROLLER GENERAL OF THE UNITED STATES WASHINGTON, D.C. 20548

B-159219

To the President of the Senate and the Speaker of the House of Representatives

Because of continuing congressional interest in the Federal service academies, we made a followup review to determine what actions were being taken on the recommendations made in our previous reports. We also updated information on the cost per graduate and student attrition.

We made this review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, and the Secretaries of Commerce, Transportation, Defense, and military departments.

Comptroller General of the United States

#### DIGEST

During 1975 and 1976 GAO issued three reports on the service academies' student attrition, academic and military programs, and financial operations. This report follows up on the recommendations in those reports and updates selected information.

#### STUDENT ATTRITION

The academies have tried to follow GAO's recommendations and seem to be eliminating aspects of the training programs associated with attrition. They also seem to be implementing programs to motivate students. The academies should continue to examine how their policies and practices help motivate career officers. (See p. 4.)

The academies now recognize that many entering students are not committed to a military career and, for this reason, the training environment should develop student commitment and motivation. (See p. 4.)

Because procedures for selecting students who would make desirable career officers are imperfect, some attrition is necessary and desirable. Further, it is of questionable validity to specify a given attrition rate as being appropriate. Attrition should be viewed primarily in terms of the factors causing it and the importance of those factors to the goals of the academies.

Attrition rates tend to be down from 1975.

--Air Force Academy attrition has come down from its peak of 46 percent for the class of of 1975 to 41 percent for the class of 1977 and should be about 40 percent for the next two graduating classes. (See p. 6.)

- --Military Academy attrition increased from 36 percent for the class of 1975 to 46 percent for the most recent class or 1977. However, the increase was due primarily to a recent honor incident. Attrition should drop to about 36 percent for the classes of 1978 and 1979. (See p. 7.)
- --Naval Academy attrition has decreased from 39 percent for the class of 1975 to 33 percent for the most recent class of 1977. Although attrition will probably rise to about 36 percent for next year's graduating class, it should then drop to about 29 percent for the class of 1979--the lowest rate in 12 years. (See p. 9.)
- --Coast Guard Academy attrition has decreased slightly from 46 percent for the class of 1975 to 44 percent for the most recent class of 1977 and should remain steady for the next two graduating classes. (See p. 10.)
- --Merchant Marine Academy attrition stayed the same for the class of 1977 as it was for the class of 1975--38 percent. However, attrition for the classes of 1978 and 1979 should decrease to about 30 percent. (See p. 11.)

Even though attrition rates tend to be lower, attrition and the factors causing it still need to be watched closely.

#### ACADEMIC AND MILITARY PROGRAMS

Academic and military programs have improved.

- --The Coast Guard Academy established professional competency objectives for its students and a comprehensive professional examination as well as adding staff to improve library services.
- -- The Air Force and Coast Guard Academics have taken actions to meet the services' tachnical needs.

- -- The Naval Academy has upgraded the academic qualification of its military faculty.
- -- The Merchant Marine Academy improved several of its programs. (See p. 12.)

The Army should do more to determine professional competency and should assess graduate performance. (See p. 12.)

#### FINANCIAL OPERATIONS

The Air Force Academy reduced its staff by 246; the Military Academy, by 207. The three larger service academies still have major differences in staffing levels that have not been fully explained nor justified. During the past 2 years, only 1 of 39 staffing categories had been studied in depth, and overstaffing was disclosed. (See p. 18.)

The academies have substituted civilians for 147 military positions and more substitutions are planned. The Army, Navy, and Air Force continue to assign over 2,300 enlisted personnel to their support positions. (See p. 19.)

The academies made most of the reviews required to determine whether to contract for support activities. However, the Air Force and Military Academies do not intend to include waiter services in their plans for studying the potential for contracting certain activities in their cadet dining halls. (The Air Force Academy could save at least \$845,000 annually by contracting for waiter services.) (See p. 21.)

In August 1974 the Congress told the Department of Defense to use the least costly form of staffing (military, civilian, or contract), consistent with military requirements, and to consider the advantages of converting from one to another for a specific job. Neither the services nor the academies have done this. The academies have not been given responsibility for determining whether they were using the least costly form of staffing and Defense has not issued a directive implementing the congressional guidance. (See p. 18.)

Academy officials were concerned that using more civilians would eventually harm academy operations, because the Congress would be more likely to cut the civilian rather than military staff. This motivates the academies to keep as many military positions as possible. (See p. 20.)

#### RECOMMENDATIONS

GAO recommends that the Secretary of Defense:

- --Direct the Army to (1) develop professional competency objectives, (2) establish a comprehensive professional examination, and (3) establish a systematic program to assess graduate performance. (See p. 16.)
- --Direct the services and the academies to make comparative analyses of the staffing levels.
- --By directive or other appropriate means, require the use of the least costly form of staffing at the academies and, as appropriate, at other Defense activities.
- --Convert military positions at the academies and other Defense activities which civilians could fill.
- --See that the academies make all of the reviews required by the Office of Management and Budget Circular A-76 and direct the Military and Air Force Acadamies to include waiter services in the scope of their dining hall studies. (See p. 23.)

#### AGENCY COMMENTS

Advance written comments from the Department of Defense, which were requested by October 31, 1977, were not received in time to be considered in preparing this final report. Informal comments from Defense officials were obtained and incorporated as appropriate.

Officials of the Departments of Commerce and Transportation said they agreed with the facts

in the report. Defense officials have undertaken a review of their directives and procedures regarding the use of the least costly form of staffing and will request the academies to convert those positions which civilians could fill.

The services and the academies generally agreed with our findings and recommendations. The Army, however, does not agree that a need exists for a comprehensive professional examination, and the Air Force does not intend to study the potential for contracting for waiter services (See pp. 17 and 23.)

#### RECOMMENDATIONS TO THE CONGRESS

During budget hearings next year, the Congress should inquire into the implementation of its guidance to the Department of Defense regarding the use of the least costly form of staffing consistent with military requirements. The Congress should reiterate its concern over staffing costs so that its intentions are unmistakably clear to Defense officials. (See p. 24.)

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#### CHAPTER 1

#### INTRODUCTION

During 1975 and 1976, we issued three reports 1/ on the five Federal service academies' financial matters, student attrition, and academic and military programs. In accordance with our policy, we have made a followup review to determine the actions taken on our recommendations and to update selected information.

The five Federal service academics are:

- -- U.S. Air Force Academy, Colorado Springs, Colorado.
- --U.S. Coast Guard Academy, New London, Connecticut.
- -- U.S. Merchant Marine Academy, Kings Point, New York.
- --U.S. Military Academy, West Point, New York.
- --U.S. Naval Academy, Annapolis, Maryland.

After our report on financial matters, the academy comptrollers met and agreed on a uniform methodology for determining the cost per graduate. Except for unfunded retirement costs, the academies now include all costs we previously identified as applicable to their operations. The academies estimated cost per graduate for the most recent periods are:

	Gr	aduating clas	
Academy	1976	1977	<u>1978</u>
Air Force Military Naval	\$ 96,600 1,200 500	\$105,200 a/126,200 84,800	\$101,700 a/100,200 91,300 84,100
Coast Guard Merchant Marine	71,900 36,100	77 / 400 36   100	37,800

a/These costs are distorted due to the honor incident--147 cadets dismissed from the class of 1977 and 95 of them reentering the class of 1978.

<sup>1/&</sup>quot;Financial Operations of the Five Service Academies" (FPCD75-117, Feb. 6, 1975); "Academic and Military Programs of the Five Service Academies" (FPCD-76-8, Oct. 31, 1975); and "Student Attrition at the Five Federal Service Academies" (FPCD-76-12, Mar. 5, 1976).

We believe that, to present a complete and accurate statement of program costs, the unfunded obligation for future retirement costs should be recognized. Accordingly, shown below is the estimated cost per graduate, including unfunded retirement costs, based on factors which represent the discounted present value of expected future retirement benefits currently accruing to active duty military and civilian personnel.

	Gr	aduating clas	s
Academy	1976	<u> 1977</u>	1978
Air Force	\$110,200	\$119,900	\$115,900
Military	113,800	a/142,800	a/120,500
Naval	92,100	94,700	101,000
Coast Guard	79,900	85,900	93,400
Merchant Marine	39,700	39,700	41,400

a/These costs are distorted due to the honor incident--147 cadets dismissed from the class of 1977 and 95 of them reentering the class of 1978. Adjusting for this distortion, the cost per graduate would be \$120,600 for the class of 1977 and \$132,900 for the class of 1978.

Although not directly relevant to a study of the service academies there is considerable interest in the cost of the other major officer acquisition program. The services do not have comparable cost data on their Reserve Officer Training Corps programs. In our report 1/ on those programs, we pointed out the need for a uniform cost reporting system and recommended that such a system be established. Air Force officials, who are responsible for acting on this matter, said they expect to have a uniform cost system approved and operating by the beginning of next year.

Early in 1977, the Department of the Army established a West Point Study Group to make an indepth examination of all the major aspects of the Military Academy. The group, with committees headed by three general officers, developed its report after 7 months of wide-ranging studies of the Academy's academic programs, military training, and cadet environment.

<sup>1/&</sup>quot;Reserve Officer Training Corps: Management Deficiencies Still to be Corrected" (FPCD-77-15, Mar. 15, 1977).

The final report, issued in September 1977, made recommendations to the curriculum, faculty, honor system, military training programs, teaching methods, plebe system, and the athletic program. Major recommendations involve the Academy's management and administration. They include establishment of an external advisory board and an internal policy board to assist the Superintendent in the overall direction of the Academy.

#### SCOPE OF REVIEW

We visited each of the five academies during our field-work, which was completed in August 1977. Our review was mainly directed at the actions taken in reponse to the recommendations in our previous reports. We obtained data and held discussions with officials at both the academies and departmental headquarters and incorporated their comments where appropriate in our report.

#### CHAPTER 2

# ATTRITION TENDS TO BE DOWN BUT STILL

## NEEDS TO BE WATCHED CAREFULLY

At the time of our March 1976 report on student attrition at the five Federal service academies, attrition among recent graduating classes had been comparatively high, in some cases reaching 11- or 12-year record levels. Yet, in spite of these apparently high levels, attrition among all the academies was not uniform. When attrition increased at one academy, it frequently decreased at another. Also, it was the exception rather than the rule for attrition rates to be about the same among all academies, or even the three military academies.

Some student attrition is necessary and desirable because procedures for initial selection of those students who would make desirable career officers is imperfect. Further, it is of questionable validity to specify a given attrition rate as being appropriate. Attrition should be viewed primarily in terms of the factors causing it and the importance of those factors to the goals and missions of the academies.

More recently, attrition rates tend to be down from the 1975 levels, but differences in the direction of attrition (up or down) as well as in the spread of attrition levels continue to exist. Attrition trends still need to be watched closely since they tend not to be stable.

We did not attempt to deal with each of the many recommendations made in our previous report or to attribute any organizational changes to its effect on attrition; rather, through discussion with academy officials and review of selected documents, we formed a general impression as to whether the academies had made efforts to address our recommendations. At the same time, we did not, to any substantive degree, verify that the changes which we were told occurred were, in fact, instituted and working.

We believe that the academies have made attempts to address our recommendations and they appear to be instituting changes to their environments to eliminate many aspects of the training programs which demotivate students. At the same time, they seem to be instituting motivational programs.

The academies' management seem to realize that (1) many students entering the academies are not committed to a

military career and (2) as a result, the training programs should develop student commitment and motivation rather than to test them. As pointed out in our previous report, we believe that the attitudes and philosophies of the academies' top officials, notably the Superintendents and Commandants, play a key role in attrition. If their philosophy is to test commitment and weed out those who are not committed, the academies will lose some potentially good officers. On the other hand, if the philosophy is, as it now seems to be, one of positive motivation and development of commitment, fewer potentially good officers will be lost.

Academy officials said that recent decreases in attrition rate, in their view, resulted from a change in their training philosophy.

Institutions such as the academies which have long histories of tradition seem to change slowly; and frequently, such change is caused by forces external to the institution. To a large degree change, particularly major change, should take place only after careful study and reflection. Yet, at the same time, change is necessary, and as a result, there is a continuing need to assure that our institutions do not become so rigid and inflexible that they become self-serving and not responsive to those whom they serve.

To encourage appropriate change, institutions must be examined periodically to assure that its policies and practices continue to contribute to the purpose for which they exist. Practices which were once sound may no longer be appropriate. To use tradition as the sole basis for a policy or practice is to ignore the inevitability and desirability of change.

The academies seem to be examining their environments more critically. Whether this is a function of the external pressures exerted on them is still debatable, although the evidence suggests that these external forces played key roles. In any event, the academies should continue to examine their policies and practices in terms of how they contribute to developing motivated career officers.

Because of differences in attrition among the academies, a brief discussion of recent attrition changes for each follows.

#### AIR FORCE ACADEMY

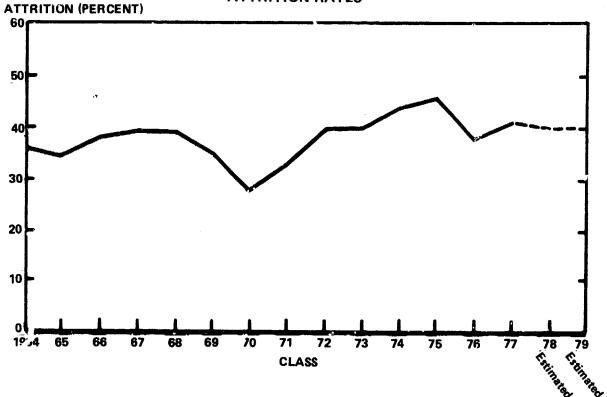
Our March 1976 report pointed out that the most recent graduating class—the class of 1975—had a 46-percent attrition rate (the highest in its history). The report also pointed out that since about 85 percent of attrition occurs in a student's first 2 years at the academy, this record high attrition rate reflected attrition which occurred 3 and 4 years ago. When we looked at more recent attrition by academic year, we saw a general downtrend which should have been reflected in reduced attrition for the classes to graduate in 1976 and 1977. We estimated that attrition would decrease from 46 to 38 percent for the class of 1976 and then rise slightly to 41 percent for the class of 1977.

Actual attrition for the classes of 1976 and 1977 was 38 and 41 percent, respectively. We now estimate that for the next two graduating classes—the classes of 1978 and 1979—the attrition rate will level off at around 40 percent for both classes.

It's too soon to reliably estimate attrition for the class of 1980 since the students have only been at the academy 1 year. Yet, it should be noted that first-year attrition for this class was lower than for the previous class and the lowest it has been in 7 years.

The following chart shows actual student attrition at the Air Force Academy over the last 14 graduating classes and our estimates for the next 2 classes.

# AIR FORCE ACADEMY ATTRITION RATES



Note: The Academy modified its policy of administering the oath from the first day to the second day for the classes of 1978 and 1979. Individuals leaving before taking the oath were not considered in the attrition statistics. The Academy returned to administering the oath on the first day with the class of 1980.

#### MILITARY ACADEMY

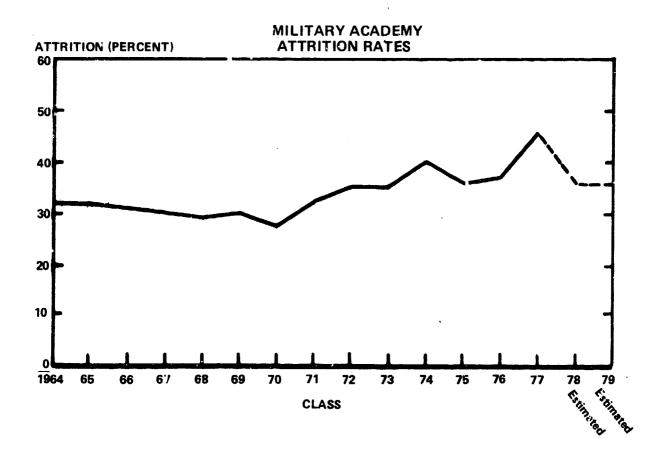
Our previous report noted that the Military Academy reached an 11-year high attrition rate of 40 percent for the class of 1974, but then dropped to 36 percent for the class of 1975. We estimated a 38-percent attrition rate for the class of 1976 and 37 percent for the class of 1977 "\* \* \* barring any abnormal occurrences \* \* \*."

Actual attrition was 37 percent for the class of 1976 and 46 percent for the most recent graduating class of 1977. A major honor incident in the fall of 1976 caused 147 students of the 1977 graduating class to leave the Academy. Had these honor violations not occurred, attrition would have been close to our estimated 37 percent.

Attrition for the classes to graduate in the next 2 years--classes of 1978 and 1979--will level off to about 36 percent, a rate more in line with the lest eight graduating classes but above the 28 to 32 percent range which existed for the earlier classes of 1964-71. (See the chart below.)

First-year attrition for the class of 1980 (attrition occurring during 1976-77) showed a slight rise over two previous classes and therefore might be slightly higher than the 36 percent estimated for the classes of 1978 and 1979. According to Academy officials, the honor violations and the resulting news articles and inquiries had a negative effect on the morale of the new cadets and probably served to increase attrition over what normally would have taken place.

The following chart shows actual student attrition at the Military Academy for the last 14 graduating classes and our estimates for the next 2 classes.



#### NAVAL ACADEMY

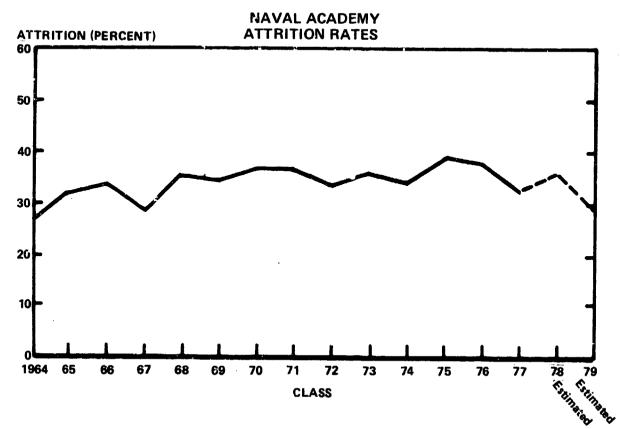
Naval Academy attrition during our previous report reached a 12-year high of 39 percent for the graduating class of 1975. We estimated that attrition would decrease to 38 percent for the class of 1976 and would decline further for the class of 1977.

Actual attrition was 38 percent for the class of 1976 and 33 percent for the most recent graduating class of 1977.

For the class to graduate next year attrition should rise to around 36 percent, but should then decrease to about 29 percent for the class of 1979—the lowest attrition rate since the class of 1967.

First-year attrition for the class of 1980 decreased over previous classes and was the lowest first-year (\*th class) attrition in at least 14 years.

The following chart shows actual student attrition at the Naval Academy for the last 14 graduating classes and our estimates for the next 2 classes.



#### COAST GUARD ACADEMY

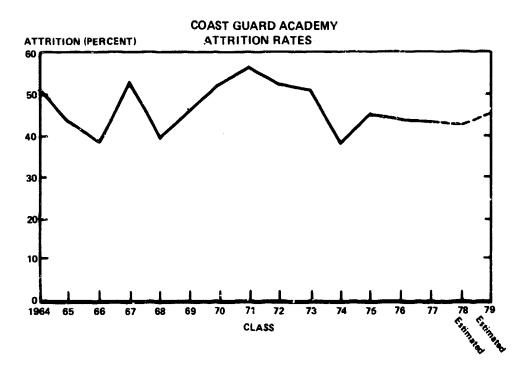
During our previous review, Coast Guard Academy attrition was 46 percent for the 1975 graduating class. Although this was high compared to the other academies, it was below the attrition rate of many earlier years. For example, for the classes of 1970 to 1973 attrition was 52, 56, 52, and 51 percent, respectively. Of the five academies, the Coast Guard Academy has tended to have the highest attrition rates—only three times in the last 14 years did attrition fall below 40 percent.

In our earlier report, we estimated that attrition for the classes to graduate in 1976 and 1977 would be around 43 percent. Actual attrition for these classes was 44 percent.

For the classes to graduate in the next 2 years, attrition should remain at about the same level as for the last 2 years—around 44 percent. Although attrition seems to be leveling off at a rate higher than the other academies, it is lower than normal.

First-year attrition for the class of 1980 was lower than the class of 1979 but higher for the class of 1978.

The following chart shows actual student attrition at the Coast Guard Academy for the last 14 graduating classes and our estimates for the next 2 classes.



#### MERCHANT MARINE ACADEMY

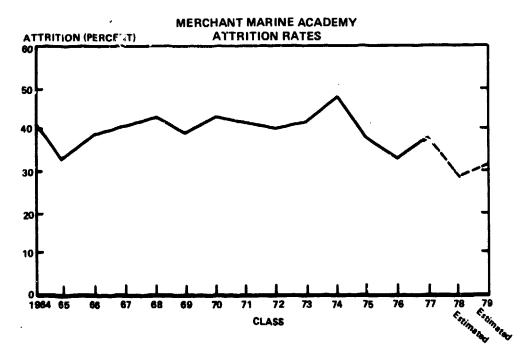
During our previous review, student attrition at the Merchant Marine Academy reached an 11-year high of 48 percent for the graduating class of 1974, but dropped to 38 percent for the class of 1975. We also estimated that attrition would decrease to about 33 percent for the class of 1976 and then rise to about 37 percent for the class of 1977.

Actual attrition for the classes of 1976 and 1977 was 33 and 38 percent, respectively.

For the classes to graduate in the next 2 years, attrition should decrease substantially from the most recent 38 percent to about 30 percent. This will represent the lowest attrition rate at the Academy for at least the last 16 years. First-year attrition for the class of 1980 remained steady as for the previous two classes. This could indicate, at least, a temporary stabilization of attrition at around the 30-percent level.

Academy officials could not attribute any specific reasons for the decrease other than a more favorable outlook for its graduates in terms of positions after graduation.

The following chart shows actual student attrition at the Merchant Marine Academy over the last 14 years and our estimates for the next 2 years.



#### CHAPTER 3

#### ACADEMIC AND MILITARY PROGRAMS

#### HAVE IMPROVED

The academies have taken numerous actions on our recommendations which have improved their academic and military training programs. We believe that the Army should do more to determine professional competency and to assess graduate performance.

To improve the academies' programs, we previously recommended that the

- --Air Force, Coast Guard, and Military Academies establish a comprehensive professional examination;
- --Army and Air Force systematically assess graduate performance;
- --Air Force and Coast Guard take actions to meet their technical needs;
- --Naval Academy upgrade qualifications of its academic faculty;
- --Coast Guard provide additional staffing for the Academy library; and
- --Merchant Marine Academy give greater attention to sea year projects, establish a training program for inexperienced faculty, and establish a self-defense training program.

#### COMPREHENSIVE PROFESSIONAL EXAMINATION

During our previous review, both the Naval and Merchant Marine Academies required their students to complete a comprehensive examination to verify their level of professional competence. The Coast Guard Academy now administers such an examination to its seniors which provides both students and instructors a status report on the student's professional qualifications.

Air Force Academy officials believe that the intent of this recommendation is being accomplished through other means. Academy officials said that they had developed behavioral objectives for the professional development curriculum. The level of professional competency is determined through graded evaluations in the academic and military courses to assure that the objectives have been met. Academy officials plan to publish the desired learning objectives and provide them to the students next year.

Military Academy officials concluded that a single examination would be inadequate, possibly distractive, less reliable than present systems, and not in the Army's best interest. Academy officials said they are developing more definitive training standards and objectives in technical professional training.

Both the Coast Guard and the Naval Academies have developed manuals for their students defining professional competency objectives which they feel benefit both the students and the service. For example, Coast Guard officials said that by defining the level of professional competency required upon graduation in the form of professional competency objectives, three things will be accomplished:

- -- The Academy curricula can be shaped to achieve that level.
- -- A yardstick will be available against which achievements or shortfalls can be measured.
- --The service will share a common perception of what may be expected and required of newly commissioned Academy graduates.

We noted that the Army has developed a soldiers manual which defines the level of professional competency expected of its enlisted personnel but no similar manual exists for its officer corps.

## ASSESSMENT OF GRADUATE PERFORMANCE

The Army does not have a program to systematically review the performance of their Academy graduates. After reviewing our recommendation that such a program be established, the Military Academy advised the Department of the Army in Jebruary 1976 that a program of this type would be useful in evaluating and upgrading the quality of the Academy's education and training programs. They recommended that the Department of the Army establish a study group to design a systematic officer performance assessment program.

The Department of Army Military Academy Study Group made another study and recommended a program to evaluate graduate

performance. This study was completed in September 1977 and the Army has not had time to act on the recommendation.

In August 1977 the Air Force Academy established an activity to develop a data base on all cadets and graduates. This data will provide the basis for systematic studies of graduate performance.

### MEETING TECHNICAL NEEDS

The Air Force and Coast Guard are taking additional steps to encourage more students to major in technical fields to satisfy service needs. Beginning with the class of 1976, the Air Force has provided information on the immediate and long-term requirements and career progression patterns. Students are being counseled on the needs of the Air Force to aid them in making their career choices. Further, the Air Force Academy revised its curriculum for the 1976 fall semester, increasing the science and engineering core from 49-1/2 to 58-1/2 semester hours.

The Coast Guard has intensified its effort to attract students interested in technical training. The technical needs of the service have been emphasized in the Academy's recruiting and advertising efforts. Academy officials believe these efforts have been successful in that a greater percentage of recent classes have selected technical majors.

# QUALIFICATIONS OF NAVAL ACADEMY FACULTY HAVE BEEN UPGRADED

In response to our recommendation that the Navy establish a program to insure that all members of the academic faculty possess advanced degrees, the Academy adopted new policies requiring:

- --All new civilian academic faculty to have a doctoral degree in the discipline they will teach.
- --All military academic faculty to have at least a master's degree in the discipline they will teach.

The Naval Academy has taken actions to greatly reduce the number of military faculty without advanced academic gualifications. During our previous review, about 50 percent (130) of the military faculty had only an undergraduate degree, and 78 of these were occupying positions in which the incumbent should possess at least a master's degree in the discipline being taught. As a result of efforts to eliminate

this discrepancy, only 25 officers will be occupying such positions at the beginning of the 1977-78 academic year. Of the 25 positions, 14 are in the English and history departments, fields where few naval officers possess advanced discress. Academy officials have requested Department of the approval to use civilians in 13 of the 14 positions beginning in fiscal year 1979.

We believe Academy officials have been most aggressive in resolving this matter and the Navy should approve the reguest for converting the military positions.

# LIBRARY SERVICES IMPROVED WITH ADDITIONAL STAFFING

Since our previous review, the Coast Guard Academy has increased its library staff by two resulting in a major improvement in the services offered. One individual is a reference librarian who is available for research reference assistance in the evenings, 5 days a week. This capability wannot previously available.

Academy officials said a need for one or two additional persons to fully staff library operations still exists but that their critical needs had been met.

# IMPROVEMENTS IN MERCHANT MARINE ACADEMY PROGRAMS

The Merchant Marine Academy took action to improve the formulation and evaluation of sea year projects, to establish a self-defense training program, and to initiate a program for inexperienced faculty.

The Academy made a special study of its shipboard training program and sea projects. The results showed that while the program was considered effective, improvements were required. Academy officials said that sea project content is now being kept under continual review and revision to keep them current and meaningful. Projects are being graded and students are receiving feedback more timely than during our previous review.

In January 1976 a self-defense program for all fourth-classmen (freshmen) was added to the curriculum. The program consists of 20 hours of instruction extending over 2 academic quarters. Academy officials believe it has been well received and functioning very successfully as evidenced by the requests rrom upper classmen to take the course.

A training program for new and inexperienced faculty members was established. All new faculty are now given approximately 4 hours of indoctrination and orientation. Faculty members with no previous teaching experience are given in-service training by their respective departments.

#### CONCLUSIONS

We commend the academies for the timely response to our recommendations. These actions have improved and strengthened their academic and military programs and resolved most of the issues identified in our previous report. However, we believe the Army should reconsider its need for a comprehensive professional examination and a systematic program to assess graduate performance.

The Naval, Coast Guard, and Merchant Marine Academies have recognized the need for and benefits of a comprehensive examination to determine the level of professional competency of their students before graduation. The Air Force Academy has developed objectives for each of its professional development curriculum and plans to publish them for its students next year. The Army recognized this need when it developed the soldiers manual used to verify the professional competency of its enlisted personnel. We believe the Army should consider developing and promulgating professional competency objectives the same as the other academies have and use these as the basis for examining their students before graduation.

Besides ourselves, the Military Academy and the Army study group have recognized the benefits of a systematic program to assess graduate performance and have recommended that the Army establish one. The Air Force, Naval, and Coast Guard Academies have such programs, and we believe the Army would also benefit from such a program.

#### RECOMMENDATIONS

We recommend that the Secretary of Defense direct the Army to:

- --Develop professional competency objectives and establish a comprehensive examination to verify the level of professional competence of academy students before commissioning.
- --Establish a program to systematically assess graduate performance.

#### AGENCY COMMENTS

Officials of the Departments of Commerce and Transportation said the vagreed with the facts in the report. The services and the academies agreed with our findings. The Army does not agree that it needs to implement a comprehensive professional examination; however, it is addressing the proposal for a systematic program to assess graduate performance to determine what action should be taken.

#### CHAPTER 4

#### OPPORTUNITIES TO REDUCE COSTS STILL EXIST

In our report on financial operations, we identified areas the services needed to study further for cost reductions. These areas were (1) verifying appropriateness of staffing levels, (2) using civilians in military support positions, and (3) contracting for support activities. The academies took some actions in each area which are described below, but much more needs to be done.

In August 1974 the Congress directed the Department of Defense to use the least costly form of staffing consistent with military requirements and other Defense needs. The Congress told the Secretary of Tefense to consider the advantages of converting from one form of staffing to another (military, civilian, or contract) to do a specified job. We found that the Military, Naval, and Air Force Academies and Defense have not followed this guidance in developing their budget requests. Academy officials said that they have not been assigned responsibility for determining whether they are using the least costly form of staffing. Further, Defense has not issued a directive implementing the congressional guidance.

#### APPROPRIATENESS OF STAFF LEVELS

Because of wide variations in staffing levels for similar functions, we recommended that the Army and Air Force review the appropriateness of their academies' staffing. This had not been completed. Air Force Academy officials told us that they had occasionally discussed staffing, in general terms, with officials at the other academies. However, no indepth analysis of differences had been made at the time of our followup review. Since our previous review, the Air Force Academy has reduced its staff by 246 as follows:

Reason for reduction	Number	
Increased productivity	119	
Contracting out	49	
Function transferred	78	

Military Academy officials told us that during the last 2 years they have made an indepth analysis of the custodial function and, as a result, they reduced staffing by 27 custodial positions. Academy officials said the Department of the Army staffing survey team has not reviewed their staffing

levels since 1974, but a review is planned for fiscal year 1979. However, since our previous review, the Army has directed the Academy to reduce its staff by 132 civilian and 75 military spaces.

For analysis purposes, the academies have divided their staff among 39 functional categories. Large variances in staffing levels still need to be explained or justified. Examples of these differences are:

	Numb	er of position	าร
Function	Air Force	Military	Naval
Band	96	99	66
Data processing	60	40	25
Communications	74	51	21
Comptroller	65	104	55
Security	85	129	47
Supply and maintenance	219	112	61

Academy officials said that they will select from six to nine functions for indepth analysis later this year and that an analysis of all areas should be completed in the next few years.

#### USING MORE CIVILIANS

Our previous study showed that the services could save about \$3,000 annually each time a civilian was substituted for a military person at the academies; other Defense studies confirmed the large savings.

The Army, Navy, and Air Force continue to assign large numbers of enlisted personnel to support positions at their academies as shown in the following table.

Acalemy	Number of enlisted personnel
Military	668
Naval	605
Air Force	1,114

Academy officials said they have no requirement to review and convert military positions which could be filled by civilians. In response to our recommendation, however, the academies have converted 147 military positions to civilian and more substitutions are planned.

As shown above, the Air Force Academy, which converted 45 positions, has substantially more enlisted personnel than

the other academies. The Academy determined that 472 of these military positions required current military experience. This determination is generally made by Academy department heads who are asked whether the position should be designated for military or civilian incumbency. For example, the head of the athletic department determined that three supply clerk and two administrative clerk positions should be military because of their recent training and experience in the Air Force supply system and their broad military background which greatly expedites coordination with activities outside the In the Comptroller's office, 13 accounting and budget positions were designated for military personnel because of the need for rotational positions for military assigned overseas. We noted that no reason had been identified for designating 77 positions for military enlisted personnel.

Military Academy officials said that they reviewed the enlisted positions and identified 118 positions that could potentially be converted to civilian incumbency. The Academy sought Army approval to convert only 26 positions which was accomplished in fiscal year 1976. Academy officials said during our followup review that 22 of the remaining 92 positions were no longer suitable for conversion, but they would study further the other 70 positions to determine whether they can still be converted.

Naval Academy officials said they converted 76 positions, but that civilians could fill additional positions. The officials said they would make another review and propose converting those positions identified as candidates for civilian substitution to the Department of the Navy.

Academy officials were concerned that using more civilians would eventually have an adverse effect on academy operations because of possible congressional cuts in civilian personnel strengths. They felt that the Congress was less likely to reduce military strengths; therefore, they are reluctant to recommend converting military positions. These officials also believe that if they give up military positions, civilian positions may not be returned. Thus, academy officials try to retain as many military positions as possible.

The Senate Appropriations Committee, in its report on the fiscal year 1978 Defense Appropriation Bill said that the Committee believes that civilians could fill at least an additional 50,000 military positions without affecting military readiness. The Committee directed Defense to submit a detailed justification of military versus civilian staffing

required for certain manpower planning and programing categories, which include the academies.

#### CONTRACTING FOR SUPPORT ACTIVITIES

Since our previous review, the academies have made most of the studies required by the Office of Management and Budget Circular A-76. The Circular requires the agencies to review support activities to determine whether the services should be obtained by contract. Some activities, which still need to be reviewed, are either scheduled for study next year or the academies are awaiting headquarters direction to make the study.

The Naval Academy reviewed all but four areas during the past 2 years and plans to review those four areas this year. As a result of those reviews, it has awarded contracts for dining hall operations, janitorial services, computer maintenance, real property maintenance, and others. The Academy studied the potential for contracting the midshipmen dining hall in response to our previous recommendation and determined that savings of more than \$500,000 annually could be realized by contracting for waiter, dishwasher, and custodial services. These services have been contracted for since January 1976.

The Air Force Academy has reviewed all but three activities and is awaiting headquarters direction to study those. The Academy also contracts for a number of support activities, including janitorial and laundry services. During the During the past year, it studied the potential for contracting certain cadet dining hall activities. The scope of study included sanitation and supply services but not waiter services. study was canceled in April 1977 because of procedural deficiencies. In our report 1/ we said that the analysis showed that costs for sanitation and supply services could be reduced by at least 34 percent by contracting for them and additional savings of over \$845,000 could be realized by contracting for waiter services. In September 1977 the Air Force advised us that they planned to make another study but did not plan to include waiter services in its scope because they believed that contracting for those services would seriously disrupt their training program.

<sup>1/&</sup>quot;Potential for Contracting Selected Operations at the Air Force Academy Cadet Dining Hall" (FPCD-77-57, June 20, 1977).

The Military Academy reviewed 12 support activities as well as the entire base operating support function of the Stewart Subpost. Six additional areas are scheduled for review during the next 2 years. The Academy plans to study its cadet dining hall next year but does not intend to include waiter services.

We noted that the Coast Guard Academy has contracted for sanitation and waiter services for its cadet dining hall during the past 5 years. Academy officials said that they were very satisfied with the contract operations.

Further, we noted that the Congress included a provision in the fiscal year 1978 Defense Appropriation Act which places a moritorium until September 1978 on any conversion to contract of base operating support activities except for real property maintenance. This provision will affect the reviews by the academies, especially the studies of dining hall operations.

#### CONCLUSIONS

The extent of review of academy staffing level has been disappointing. Only 1 of 39 functional areas has been reviewed in depth during the past 2 years and that review indentified large overstaffing. Academy and service officials need to study this matter more. We do not contend that staffing levels should be identical for each function but that large variances should be explained or justified.

Neither the academies nor the services have fully complied with the congressional directive to use the least costly form of staffing. We believe that Defense's failure to issue a directive implementing this guidance has been the primary reason for lack of compliance. The academies and the services should be required to justify each military position and action should be taken to use civilians in positions where military incumbency cannot be justified.

The concerns of academy officials that substituting civilians would adversely affect academy operation because of congressional cuts in civilian strengths need to be addressed. Incentives to retain military positions because of the belief that the Congress is less likely to cut military strength need to be removed.

The academies should make all of reviews required by Circular A-76, and Air Force Headquarters should direct its Academy to study the three remaining activities. We believe the Air Force and Military Academies should include waiter

service in the scope of their dining hall studies because of the potential for large savings, over \$845,000 at the Air Force Academy. Experience with contractor-operated dining halls at the Naval and Coast Guard Academies shows that contracting for waiter services is practicable and has not seriously disrupted their programs.

#### RECOMMENDATIONS

We recommend that the Secretary of Defense:

- --Direct the services and the academies to make comparative analyses of the staffing levels.
- --By directive or other appropriate means, require the use of the least costly form of staffing at the academies and, as appropriate, at other Defense activities.
- --Convert military positions at the academies and other Defense activities which civilians could fill.
- --See that the academies make all of the reviews required by Circular A-76 and direct the Military and Air Force to include waiter services in the scope of their dining hall studies.

#### AGENCY COMMENTS

Advance written comments of the Department of Defense, which were requested by October 31, 1977, were not received in time to be considered in preparing this final report. However, informal comments from Defense officials were obtained.

Officials of the Departments of Commerce and Transportation said they agreed with the facts in the report. Defense officials have undertaken a review of their directives and procedures regarding the use of the least costly form of staffing and will request the academies to convert those positions which civilians could fill.

The services and the academies generally agreed with our findings and recommendations. However, the Air Force does not intend to study the potential for contracting for waiter services.

# RECOMMENDATIONS TO THE CONGRESS

During budget hearings next year, the Congress should inquire into the implementation of its guidance to the Department of Defense regarding the use of the least costly form of staffing consistent with military requirements. The Congress should reiterate its concern over staffing costs so that its intentions are unmistakably clear to Defense officials.

APPENDIX I APPENDIX I

#### PRINCIPAL OFFICIALS

#### RESPONSIBLE FOR ADMINISTERING

## ACTIVITIES DISCUSSED IN THIS REPORT

Tenure of office From To

#### DEPARTMENT OF DEFENSE

#### SECRETARY OF DEFENSE:

Harold Brown	Jan. 1977	Present
Donald H. Rumsfeld		Jan. 1977
William P. Clements, Jr. (acting) James R. Schlesinger		Nov. 1975 Nov. 1975

#### DEPARTMENT OF THE ARMY

#### SECRETARY OF THE ARMY:

Clifford L. Alexander	Feb. 1977	Present	
Martin R. Hoffman	Aug. 1975	Feb. 197	7
Howard H. Callaway	May 1973	July 197	5

## DEPARTMENT OF THE NAVY

#### SECRETARY OF THE NAVY:

W.	Graham Claytor, Jr.	Feb. 1977	Present
J.	William Middendorf II	Apr. 1974	

#### DEPARTMENT OF THE AIR FORCE

#### SECRETARY OF THE AIR FORCE:

John C. Stetson	Feb. 1977	Present
Thomas C. Reed	Jan. 1976	Feb. 1977
James W. Plummer (acting)	Nov. 1975	Jan. 1976

#### DEPARTMENT OF TRANSPORTATION

#### SECRETARY OF TRANSPORTATION:

Brock Adams	Jan. 1977	Present
William T. Coleman, Jr.	Mar. 1975	Jan. 1977
John T. Barnum (acting)	Feb. 1975	Mar. 1975
Claude S. Brinegar	Feb. 1973	Feb. 1975

# Tenure of office From To

# DEPARTMENT OF COMMERCE

# SECRETARY OF COMMERCE:

Juanita M. Kreps	Jan. 1977	Present
Elliot L. Richardson Rogers C. B. Morton Frederick B. Dent	Feb. 1976 May 1975 Feb. 1973	Jan. 1977 Feb. 1976