DOCUMENT RESUME

ED 340 308 HE 025 161

TITLE Military Education: Implementation of Recommendations

at the Armed Forces Staff College. Report to the Chairman, Panel on Military Education, Committee on

Armed Services, House of Representatives.

INSTITUTION General Accounting Office, Washington, DC. National

Security and International Affairs Div.

REPORT NO GAO/NSIAD-92-30

PUB DATE 21 Oct 91 NOTE 39p.

AVAILABLE FROM U.S. General Accounting Office, P.O. Box 6015,

Gaithersburg, MD 20877 (first copy, free; additional

copies \$2.00 each; 100 or more discounted 25

percent).

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS College Faculty; Curriculum Development; Faculty

Development; Higher Education; Institutional Cooperation; *Military Schools; *Professional

Education; Program Evaluation; *Program

Implementation; *Program Improvement; Student

Evaluation; Student Exchange Programs

IDENTIFIERS *Armed Forces Staff College VA

ABSTRACT

This study evaluates the Armed Forces Staff College's implementation of selected recommendations from the April 1989 report of the Panel on Military Education. In particular, this report discusses Phase II officer professional military education (PME) programs taught at the Joint and Combined Staff Officer School in Norfolk, Virginia. The study gathered data through interviews with College officials, examination of documents, and consideration of College methodology. Findings indicated that of the 37 recommendations pertaining to the College, actions had been taken to implement 35 (95 percent), with 22 recommendations fully implemented. Of the 13 partially implemented, and 2 not implemented. Of the 13 partially implemented recommendations, 10 cover areas that are not fully within control of the College and were therefore difficult or impossible to implement. Of the two recommendations not adopted, one involved a student exchange with other service schools. College officials stated that the current arrangements (with members of different services housed together) already effectively contributes to a joint perspective. The other recommendation was a distinguished graduates program which was deemed to be difficult to implement given the current structure of the College. An extensive appendix lists each recommendation with the specific relevant findings. Included are a glossary, a list of related reports, and three tables. (JB)

* Reproductions supplied by EDRS are the best that can be made

* from the original document.



United States General Accounting Office:

Report to the Chairman, Panel on Military Education, Committee on Armed Services, House of Representatives

October 19<u>91</u>

MILITARY EDUCATION

Implementation of Recommendations at the Armed Forces Staff College

F 025 16,

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

GAO

United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division

B-246107

October 21, 1991

The Honorable Ike Skelton Chairman, Panel on Military Education Committee on Armed Services House of Representatives

Pear Mr. Chairman:

In response to your March 1991 request, we examined the Armed Forces Staff College's implementation of selected recommendations in the April 1989 report of the Panel on Military Education. These recommendations helped the Department of Defense (DOD) improve its officer professional military education (PME) programs. This report discusses Phase II PME programs taught at the Joint and Combined Staff Officer School in Norfolk, Virginia. It continues the series of reports addressing the nature and extent of actions taken by DOD in improving its officer education at the service and joint schools. (See "Related GAO Reports.")

As agreed with your office, we assessed the College's implementation of the 37 selected recommendations that are contained in the Panel's report and directly pertain to the College.

Background

An objective of the Goldwater-Nichols Department of Defense Reorganization Act of 1986 was to strengthen combined and joint operations of the various military services. In fulfilling this objective, the House Armed Services Committee established the Panel on Military Education in November 1987 to report its findings and recommendations about DOD's ability to develop joint specialty officers through its PME systems.

The Panel's April 1989 report envisioned that joint PME would be an integral part of PME and implemented in two phases. Phase I joint PME would be taught at the individual intermediate and senior level service schools. As such, the curriculum would cover joint matters based on the respective service's view. After completing Phase I, officers would attend Phase II at the College. Phase II would build on Phase I and would be taught from a joint perspective by integrating all the services.

The Chairman of the Joint Chiefs of Staff (JCS) has established policies, programs, guidelines, and procedures concerning joint PME. The JCS Military Education Policy Document, issued in May 1990, contains the Chairman's guidance. While Panel recommendations are advisory, the



military departments are required to include the Chairman's guidance into their own education systems. In many respects, the Chairman's guidance is consistent with the Panel's report for what is the Phase II joint PME curriculum.

Since the College's establishment in the mid-1940s, its joint curriculum has evolved, both in content and duration. When the Panel prepared its report, the College offered a 5-1/2 month intermediate course only. When Phase II was established in June 1990, the intermediate course was reduced to 9 weeks, and a 5-week senior course was added. Most recently, the intermediate curriculum was expanded to 12 weeks. As a result of these modifications, the present curriculum cannot consistently be compared with any preceding ones, since each is a different version.

As stated earlier, the College offers a separate intermediate and senior Phase II curriculum lasting 12 and 5 weeks, respectively. For the 1991-92 academic year that began on August 19, 1991, the intermediate program has 228 students. As such, the College will have nearly reached maximum enrollment of 240 students. The enrollment for the senior program, which started on October 21, 1991, is 60 students, the maximum enrollment. The College is a temporary duty assignment for student officers, and during the academic year, the College plans to have three classes graduate. In addition, the Army, Navy/Marine Corps, and Air Force have 52 faculty members with about equal representation from each military department.

Results in Brief

Of the 37 recommendations pertaining to the College, actions have been taken to implement 35 recommendations, or 95 percent. More specifically, 22 recommendations have been implemented, 13 have been partially implemented, and 2 have not been implemented.

The Panel made two recommendations dealing with the College that it considered most significant. The first one concerns establishing a two-phase PME system and has been implemented. In June 1990, the Phase II curriculum at the College was established. The second recommendation discusses grading, among other matters. It has only been partially implemented because the College's evaluation standards do not include letter grades.

Of the 13 partially implemented recommendations, 10 cover areas that are not fully within the College's control. These areas include (1) interservice representation on the faculty and in the student body and



Page 2

(2) faculty promotion potential as an incentive to teach at the College. The College cannot ensure proper inter-service representation on its own because it does not make faculty or student selections. The individual services, instead, perform these functions and make faculty promotion decisions. The remaining three partially implemented recommendations all concern grading. Instead of letter grades, the College uses the following criteria: exceeds, meets, or fails to meet standards. The Commandant has no plans to change the College's grading policy. College officials stated that letter grades tend to foster competition by measuring students against one another, thereby discouraging problem solving through teamwork and consensus building.

Two recommendations have not been adopted. The first one recommended a student exchange program with other service schools. College officials stated that its billeting arrangements—where members of the different services are housed together—contribute to a joint perspective more effectively than a short exchange tour.

The other recommendation concerns a distinguished graduate program. The College decided not to establish such a program, stating it would be difficult to implement, given the varied ranks and knowledge and experience levels of officers attending the school. In addition, a program that singles out graduates is seen as a detriment to the College's goal of fostering a joint perspective and teamwork.

Appendix I presents the recommendations along with our characterization of their status. It also provides additional details on the College's actions on each recommendation. Our earlier report¹ examined the content of the Phase II curriculum, along with such issues as faculty competitiveness and direct-entry admission.

Scope and Methodology

We focused on the Panel recommendations concerning Phase II PME and selected those the College was either directly responsible for or played a significant supporting role in implementing.

We determined the status of each recommendation by interviewing appropriate College officials and examining pertinent supporting documents. We also considered the College's methodology to generate the support data. Our interviews and examinations of the evidence enabled



 $^{^1\}underline{\text{Military Education: Curriculum Changes at the Armed Forces Staff College}}$ (GAO/NSIAD-91-288, Sept. 19, 1991).

us to characterize the extent to which a recommendation had been implemented. In those cases where no action was taken on a Panel recommendation, we interviewed appropriate officials to obtain their reasons for non-implementation.

We performed our review from August to October 1991 in accordance with generally accepted government auditing standards.

As requested, we did not obtain formal comments on this report. However, the views of responsible College officials were sought during the course of our work and are included in the report where appropriate.

We are sending copies of this report to other appropriate congressional committees; the Secretaries of Defense, Army, Navy, and Air Force; the Commandant of the Marine Corps; the Commandant of the Armed Forces Staff College; and the intermediate and senior service schools. Copies will also be made available to others on request.

Please contact me at (202) 275-3990 if you or your staff have any questions. Major contributors to this report are George E. Breen, Jr., Assistant Director; Meeta Sharma, Evaluator-in-Charge; and Frank Bowers, Senior Evaluator.

Sincerely yours,

Paul L. Jones

Director, Defense Force Management

Issues



Contents

| Letter | | 1 |
|--|--|---------------|
| Appendix I Status of Armed Forces Staff College's Implementation of Panel Recommendations on Professional Military Education | | 8 |
| Glossary | | 37 |
| Related GAO Reports | | 40 |
| Tables | Table I.1: Summary of the College's Implementation of Various Recommendations Table I.2: Service Representation Among the Faculty Table I.3: Percentage of Service Representation Among the Student Body | 9 15 16 |

Abbreviations

| DOD | Department of Defense |
|------|------------------------------------|
| JCS | Joint Chiefs of Staff |
| MEPD | Military Education Policy Document |
| PME | professional military education |



This appendix contains 37 Panel recommendations and summarizes the College's actions taken in response to those recommendations. Table I.1 provides our summary of the status of these recommendations.

Panel recommendations are listed in sequential order. The subject area of each recommendation is identified, and the actual wording of the recommendation is the same as it appears in the Panel report. Each recommendation is cross-referenced to the location of the recommendation in the Panel report. For example, Key 3 is the third recommendation in the executive summary, which contains the key recommendations. Chapter 4, recommendation 1, is the first recommendation in chapter 4. We also provide the page number where the recommendation can be found in the Panel report.

The entire recommendation applies to the College in most cases. Some recommendations contain multiple parts, some of which do not apply to the College. In such cases, we have underlined the applicable portions.

Each of the 37 recommendations has been characterized by us as implemented, partially implemented, or not implemented. An elaboration of the characterization is provided in the section marked "status." In addition, cross-references to related recommendations are provided here when responses are similar.



| N1- | Donal Danama | Subject | Status of recommendations ^b | Page |
|--|---------------------------------|--|--|------|
| <u>No.</u> | Panel Report ^a Key 3 | Subject Two-phase education | | 10 |
| | | Frequency of examinations and papers | Pl | 10 |
| 2 2 | Key 9 | Joint matters defined | | 11 |
| 3 4 | -4 | Case studies and war games | | 13 |
| - | III-5 | Joint doctrine development | | 13 |
| 5 | | Military faculty mix | Plc | 14 |
| 6 | -7 | Faculty qualifications | Plc | 15 |
| <u>′ </u> | | Student mix | Plc | 15 |
| 8 | III-8 III 10 | The state of the s | | 16 |
| 9 | III-10 III-12 | Control of joint education Environment for joint education | | 17 |
| 10 | III-12 | NOTE A 10 A 11 A 10 A 10 A 10 A 10 A 10 A 1 | Plc | 18 |
| 11 | III-13 | Student/faculty ratios | ' ' | 19 |
| 12 | IV-1 | Focus of strategy by school | | 21 |
| 13 | IV-3 | Two-phase education process Length of phase II curriculum | | 22 |
| 14 | IV-4 | The same and the s | Plc | 22 |
| 15 | IV-7 | Standards for joint education | 1 | 23 |
| 16 | IV-8 | Focus on operational level of war | | 24 |
| 17 | IV-9 | Participants in joint doctrine development | Pic | 24 |
| 18 | IV-10 | Military faculty mix | Plc | 24 |
| 19 | IV-12 | Recruiting competent joint school faculty | Plc | 2 |
| 20 | IV-13 | Student mix | | 20 |
| 21 | IV-15 | Student ranks | And the same of the same and th | 2(|
| 22 | IV·16 | Responsibility for joint education | | 2 |
| 23 | IV-18 | Phase II course length | | 2 |
| 24 | IV-19 | Focus of phase II course | All | |
| 25 | IV-35 | Student exchange periods | NI | 2 |
| 26 | V-1 | Recruiting and maintaining quality faculty | DIC | 2 |
| 27 | V-2 | Specialists/career educators | Plc | 2 |
| 28 | V-4 | Faculty development program | | 3 |
| 29 | V-12 | Student/faculty ratios | Plc | 3 |
| 30 | V-14 | Commandant selection | AND THE RESERVE THE PROPERTY OF THE PARTY OF | 3 |
| 31 | V-15 | Commandant's tour length | | 3 |
| 32 | V-16 | Commandant/president as general/ flag officers and involvement in instruction | | . 3 |



| No. | Panel Report ^a | Subject | Status of recommendations ^b | Page |
|-----|---------------------------|---|--|------|
| 33 | V-17 | Commandant involvement in student selection | | 33 |
| 34 | V-23 | Active/passive instruction | | 34 |
| 35 | V-24 | Rigorous performance standard | PI | 34 |
| 36 | V-25 | Evaluation of examinations and papers | PI | 35 |
| 37 | V-26 | Distinguished graduate program | NI | 35 |

^aKey recommendations are those recommendations that the Panel identified as key in the executive summary to its report. Recommendations III-1 through III-13 appear in Panel report chapter III, entitled "An Expanded Role for Joint Education." Recommendations IV-1 through IV-35 appear in Panel report chapter IV, entitled "Realigning Professional Military Education." Recommendations V-1 through V-26 appear in Panel report chapter V, entitled "Quality."

I = Implemented

PI = Partially implemented

NI = Not implemented

Recommendation Number 1

Two-Phase Education

Establish a two-phase Joint Specialist Officer (JSO) education process with Phase I taught in service colleges and a follow-on, temporary-duty Phase II taught at the Armed Forces Staff College (AFSC). (Key 3, Panel Report, p. 3.)

GAO Characterization

Implemented.

Status

In 1990, the Chairman, Joint Chiefs of Staff (JCS), issued the Military Education Policy Document (MEPD), establishing a two-phased joint specialty officer education program. Phase I is that portion incorporated into the curricula of intermediate and senior service schools. Both phases must be accredited by the Chairman. Phase II is taught at the Armed Forces Staff College. All of the schools have received certification of their joint professional military education (JPME) programs.



^bStatus of recommendations:

^cThese recommendations are beyond the College's ability to implement them

Recommendation Number 2

Frequency of Examinations and Papers

Require students at both intermediate and senior schools to complete frequent essay-type examinations and to write papers and reports that are thoroughly reviewed, critiqued, and graded by faculty. (Key 9, Panel Report, p. 7.)

GAO Characterization:

Partially Implemented.

Status

In September 1991, we issued a report covering the curricula at the College. We found that the curricula met the Panel's requirements for a Phase II course of instruction for intermediate and senior students. College officials stated that they have challenging curricula.

Students take a comprehensive midterm and final essay examination, each requiring 4 hours to complete. Students who fail either examination must take a makeup oral examination before a group of College officials. After students pass the oral examination, they are placed on academic probation until successfully completing the curriculum requirements. If a student fails the oral examination, disenrollment proceedings are instituted.

Students are required to prepare papers, presentations, and other documents designed to evaluate their ability to rationally analyze issues or problems and recommend solutions. These products are evaluated based on the substance and effectiveness of the students' thinking processes.

The Panel, in various hearings, asked that letter grades be awarded to students. The MEPD is more general by stating that schools should establish systems to evaluate student performance. It also states that a clear emphasis on high academic standards appropriate to graduate-level education is essential. The College does not administer letter grading. Instead, students receive either (1) exceeds, (2) meets, or (3) fails to meet standards. The Commandant of the College stated that the curriculum measures students against a standard rather than against one



¹Military Education: Curriculum Changes at the Armed Forces Staff College (GAO/NSIAD-91-288, Sept. 19, 1991).

another. He further stated that a strategic environment where complex situations have no simple solutions demands problem solving through negotiation and consensus building. According to the Commandant, letter grades may not encourage this.

Recommendation Number 3

Joint Matters Defined

For the purposes of professional military education, "joint matters" should be defined to include:

- (a) The elements contained in the Goldwater-Nichols Act.
- · Integrated employment of land, sea and air forces.
- National military strategy.
- · Strategic planning.
- · Contingency planning.
- Command and control of combat operations under unified command.
 - (b) Several other subjects subsumed in the elements contained in the Goldwater-Nichols Act definition.
- · Joint and combined operations.
- Joint doctrine.
- Joint logistics.
- Joint communications.
- Joint intelligence.
- Theater/campaign planning.
- Joint military command and control systems and their interfaces with national command systems.
 - (c) Joint force development, including certain military aspects of mobilization. (Chapter III, No. 1, Panel Report, p. 81.)

GAO Characterization

Implemented.

Status

The College has incorporated this guidance in its curricula. All the learning areas outlined in the Panel recommendation are covered in the



College's new 12-week curriculum. In addition, approximately 97 percent of the curriculum covers joint matters. It is taught from the perspective of the Chairman, JCS; the combatant commanders; and the Joint Task Force Commander. (See recommendation number 10 for additional details.)

Recommendation Number 4

Case Studies and War Games

The Armed Forces Staff College should concentrate on case studies and war games on the combat employment of joint forces, as did the Army-Navy Staff College in World War II. The development of solutions to joint warfighting problems in a joint environment is the best way to teach joint perspective. (Chapter III, No. 4, Panel Report, p. 81.)

GAO Characterization

Implemented.

Status

The College concentrates more on case studies in its recently developed 12-week intermediate program. The curriculum also includes a computer-simulated war game. The 12-week intermediate curriculum includes 12 case studies (totaling 24 hours) as opposed to 9 case studies (totaling 19 hours) in the 9-week curriculum that it replaced. The substance has also changed in that the 12-week case studies are more focused on joint matters from the Joint Staff perspective and cover more examples of Desert Storm/Desert Shield encounters. As a result of hardware and software upgrades, the new war game is more sophisticated by allowing greater manipulation of forces and strategies.

Recommendation Number 5

Joint Doctrine Development

The Chairman, JCS, should assign the joint schools a major share of the responsibility for developing joint doctrine and related joint knowledge. (Chapter III, No. 5, Panel Report, p. 81.)

GAO Characterization:

Implemented.



Status

After passage of the Goldwater-Nichols Department of Defense Reorganization Act of 1986, the Chairman, JCS, established, on the Joint Staff, a Director for Operational Plans and Interoperability. This office helps the Chairman fulfill the responsibility for developing doctrine for the joint employment of the armed forces. The Panel report stated that the schools have traditionally been a key source of doctrine and knowledge that has been adopted by the Joint Staff. The report added that joint schools' development of joint doctrine would encourage the services to send quality faculty and student officers to the schools.

The Chairman, JCS, has formally assigned responsibility to the National Defense University, of which the College is a part, for joint doctrine and knowledge development and assessment. The College has provided input, through the National Defense University, on certain key joint doctrine publications. It also develops joint doctrine in coordination with the Joint Doctrine Center in Norfolk, Virginia.

Recommendation Number 6

Military Faculty Mix

The mix of military faculty from each military department is a key factor in joint education. In schools that educate joint specialists, the standard should be equal representation from each of the three military departments. For other schools, representation from each department should eventually be substantially higher than today. These standards should apply to the entire active duty military faculty, not some fraction designated as a nominal "joint education" department. (Chapter III, No. 6, Panel Report, p. 82.)

GAO Characterization:

Partially Implemented.

Status

The faculty mix compares favorably with the Panel's goal of equal representation among the services. (See table I.2.) The College cannot implement this recommendation on its own because it cannot nominate faculty members. This is done by each service, with the Commandant authorized to approve or disapprove any nominations.

College officials disagreed with our characterization and consider this recommendation implemented. (See footnote a, table I.2.)



Table I.2: Service Representation Among the Faculty

| Department | Panel percentage | College percentage | |
|--------------------|------------------|--------------------|--|
| Army | 33 | 29* | |
| Navy/ Marine Corps | 33 | 33 | |
| Air Force | 33 | 38 | |

^aThe apparent underrepresentation in the percentage of Army faculty members occurred because the Navy/Marine Corps and Air Force faculty members assigned exceeded the authorized levels

Recommendation Number 7

Faculty Qualifications

Ideally, each military member of a joint faculty should have completed the intermediate service and joint schools and have had joint duty experience. In future years, joint specialist education should be increasingly taught by fully qualified JSOs. The faculties at the joint schools should be at least comparable to those at the best service schools in terms of experience, educational background, promotion opportunity, academic stature, and student/faculty ratio. (Chapter III, No. 7, Panel Report, p. 82.)

GAO Characterization

Partially Implemented.

Status

Fully qualified joint specialty officers comprise two-thirds of the College's faculty. In an effort to increase the percentage of joint specialty officers on its faculty, the College requires all potential faculty members to have

- · graduated from an in-residence service school,
- obtained a graduate degree, and
- served in a joint assignment.

The College's faculty meets the majority of the above requirements, making it comparable to the faculty at the service schools. According to College officials, the complexities of joint operations necessitate a faculty of even higher quality than that found at service schools. (Faculty promotions are discussed under recommendation 19, while the student/faculty ratio is discussed in recommendation 11.)



Recommendation Number 8

Student Mix

The mix of students from each military department is another key factor in joint education. In schools that educate joint specialists, the standard should be equal representation from each of the three military departments. For other schools, representation from each department in the entire student body should eventually be substantially higher than today. In addition, the student body mix should consist of students of equally high caliber from each military department. Finally, each service should provide a representative mix of students from all combat arms branches and warfare specialties. (Chapter III, No. 8, Panel Report, p. 82.)

GAO Characterization

Partially Implemented.

Status

Student representation at the College is not equal among the services, as shown in table I.3. It approximates the proportions referred to in MEPD. These proportions are approved by the Deputy Director, Joint Staff for Military Education.

Table I.3: Percentage of Service Representation Among the Student Body

| Figures in percentages | | | | |
|------------------------|------------|-----------|-----------------------|---------|
| | Panel goal | MEPD goal | Actual representation | |
| Department | | | Intermediate* | Seniorb |
| Army | 33 | 37 | 36 | 26 |
| Navy/ Marine Corps | 33 | 26 | 25 | 43 |
| Air Force | 33 | 37 | 39 | 31 |
| | | | | |

^aThese figures are for the first intermediate class of the 12-week program that began in August 1991

The College does not control the inter-service mix of students since it is not directly involved in student selection. However, it does monitor the mix to ensure that students from various combat branches and warfare specialties are represented. In addition, the Commandant stated that students from each service are of equally high caliber.



^bThese figures are for the last senior class of the 9-week program that ended in June 1991. Figures for the new senior program that began in October 1991 are presently unavailable.

Recommendation Number 9

Commandant Reports to Chairman, JCS

The Chairman, JCS, should control the joint schools and the joint portions of the service schools by Secretary of Defense direction. Schools that educate joint specialists should be responsive to the needs of the Chairman and, through him, to the commanders of the unified and specified commands. Curricula should change if deficiencies in the knowledge or abilities of the schools' graduates are identified. The Chairman, JCS, should revise faculty and student selection criteria and policies as necessary to ensure high quality for joint education. The joint school commandants should periodically report on the effectiveness of the criteria and policies. (Chapter III, No. 10, Panel Report, p. 82.)

GAO Characterization:

Implemented.

Status

There is frequent coordination and communication between the College and the Joint Staff as well as with the President, National Defense University. This enables the College to respond to the needs of the unified and specified commands. In addition, the Commandant annually reports to the President, National Defense University, on the status of joint PME activities at the College. The Military Education Division of the Joint Staff semiannually hosts a curriculum-related conference. In addition, the Military Education Coordination Conference has both a working group and an executive committee that also meets semiannually. The annual Joint Planners Conference is being considered as a forum to obtain the combatant commanders' feedback on joint PME issues. The Commandant does not formally report on the effectiveness of selection criteria and policies where faculty and students are concerned. However, the Commandant is generally satisfied with the quality of faculty and students.



Recommendation Number 10

Environment for Joint Education

Joint specialist education should be conducted in schools that are genuinely "joint;" that is, in an environment in which the military departments are equally represented and service biases minimized, and in which the joint curriculum is taught from a joint perspective—that of the Chairman of the Joint Chiefs of Staff, a commander of a unified command, or a contingency task force commander at the 3-star level. (Chapter III, No. 12, Panel Report, p. 82.)

GAO Characterization:

Implemented.

Status

The College fosters a joint environment in the following ways:

- Curriculum: Tests are administered to measure joint attitudes and perspectives at the beginning and end of the curriculum.
- Faculty: Team-teaching brings together representatives of each military department to teach each seminar.
- Students: Joint housing arrangements, joint physical fitness activities, and joint seminars encourage joint interaction.

The curriculum focuses at the operational level of war. In addition, 97 percent of the lessons comprising the courses deal with joint matters. It is taught from the joint perspective of the Chairman, JCS; the combatant commanders; and the Joint Task Force Commander.

Recommendation Number 11

Student/Faculty Ratios

The joint schools of the National Defense University require more attention by the joint institutions they service. The NDU schools essentially meet panel standards for faculty and student mix necessary to educate joint specialty officers. The faculty and student composition at the joint schools is ideal for studying joint operations, national military and national security strategy, and political-military affairs. The joint schools have the potential to fulfill the expectations of those who



learned about jointness the hard way in World War II. In comparison with service colleges, however, the joint colleges have small faculties and high student/faculty ratios to permit faculty members to assist in the development of joint doctrine and to create teaching materials on joint subjects for use in both joint and service schools. As a minimum, student/faculty ratios and resources devoted to the joint schools should equal those at the Army, Navy, and Air Force PME colleges. The service chiefs should contribute by providing more high-quality officers with joint, operational, and subject-matter expertise. (Chapter III, No. 13, Panel Report, p. 83.)

GAO Characterization:

Partially Implemented.

Status

The College currently has a student/faculty ratio of about 5.3 to 1 (intermediate program) and about 6.7 to 1 (senior program). These figures are higher than the Panel's recommended ratio of retween 3 and 4 to 1. They are also higher in comparison with the service schools, with the exception of the Marine Corps intermediate school. The College has identified a need for 15 additional faculty members to bring its ratio in line with the recommended ratio. To date, nine of these positions have been validated but not authorized. The additional faculty will be principally military, rather than civilian, given the joint operational warfighting emphasis of the curriculum.

The faculty's small size also limits opportunities for full-time curriculum development, research, writing, and joint doctrine development. However, the College is involved in joint doctrine development. It reviews and coordinates doctrine with the Joint Doctrine Center in Norfolk, Virginia, and participates in the development of the Joint Warfighting Manual and other joint publications.

Recommendation Number 12

Focus of Strategy by School

The Secretary of Defense, with the advice and assistance of the Chairman, JCS, should establish a clear, coherent conceptual framework for the PME system. The primary subject matter for PME schools and, consequently, the underlying theme of the PME framework, should be the employment of combat forces, the conduct of war. Each element of the



PME framework should be related to the employment of combat forces. The primary focus for each school level should be stated in terms of the three major levels of warfare, that is, tactical, theater (operational), and strategic. Each school level should be responsible for a specific level of warfare as follows:

Flag/General Officer National Security Strategy
Senior National Military Strategy
Intermediate Combined Arms Operations
and Joint Operational Art
Primary Branch of Warfare Specialty

- At the primary level an officer should learn about, in Army terms, his own branch (infantry, armor, artillery, etc.) or in Navy terms, his warfare specialty (surface, aviation, and submarines).
- At the intermediate level, where substantial formal joint professional military education begins, an officer should broaden his knowledge to include both (1) other branches of his own service and how they operate together (what the Army calls "combined arms" operations) and (2) other military services and how they operate together in theater-level warfare (commonly referred to as "operational art"). The service intermediate colleges should focus on joint operations from a service perspective (service headquarters or service component of a unified command). AFSC should focus from a joint perspective (JCS, unified command, or joint task force).
- At the senior level, an officer should broaden his knowledge still further to learn about national strategy and the interaction of the services in strategic operations. The senior service schools should focus on national military strategy. The National War College should focus on national security strategy, not only the military element of national power but also the economic, diplomatic, and political elements. Graduates of service war colleges should attend the senior joint school. (Chapter IV, No. 1, Panel Report, p. 125.)

GAO Characterization

Implemented.

Status

A framework has been established and incorporated in MEPD. The College, for its part, has developed a curriculum that focuses on joint operations and is taught from a joint perspective. In addition, Phase I teaches at the knowledge level requiring primarily recall and recognition abilities. Phase II, on the other hand, raises teaching to the application level. The College's curriculum reflects a reduced emphasis on processes and



procedures while emphasizing active instruction techniques such as simulation, role playing, and war gaming. (See recommendation number 10 for additional details.)

Recommendation Number 13

Two Phase Education Process

The Secretary of Defense, with the advice and assistance of the Chairman, Jcs, should establish a two-phase Joint Specialty Officer (JSO) education process. The service colleges should teach Phase I joint education to all students. Building on this foundation, AFSC should teach a follow-on temporary-duty Phase II to graduates of service colleges en route to assignments as joint specialists. Because of the Phase I preparation, Phase II should be shorter and more intense than the current AFSC course. The curricula for the two phases should be as follows:

- Phase I curriculum at service colleges should include: capabilities and limitations, doctrine, organizational concepts, and command and control of forces of all services; joint planning processes and systems; and the role of service component commands as part of a unified command.
- Phase II curriculum at AFSC should build on Phase I and concentrate on the integrated deployment and employment of multi-service forces. The course should provide time for: (a) a detailed survey course in joint doctrine; (b) several extensive case studies or war games that focus on the specifics of joint warfare and that involve theaters of war set in both developed and underdeveloped regions; (c) increasing the understanding of the four service cultures; and (d) most important, developing joint attitudes and perspectives. (Chapter IV, No. 3, Panel Report, pp. 126-7.)

GAO Characterization

Status

Implemented.

The College has established a Phase II course of instruction that complies with the Panel's guidance. Actions taken under this recommendation are also discussed in recommendation number 3.



| Recommendation Number 14 | |
|----------------------------------|--|
| Length of Phase II Curriculum | Considering the required curriculum and the time necessary for "affective" learning to be successful the Phase II course should be about 3 months in length, longer if necessary. (Chapter IV, No. 4, Panel Report, p. 127.) |
| GAO Characterization | Implemented. |
| Status | The length of the course of instruction at the College has been legislatively mandated, and the Department of Defense is in compliance. No plans exist at this time to lengthen the curriculum beyond 3 months. |
| Recommendation Number 15 | |
| Standards for Joint Education | Schools that provide joint specialist education should meet four standards: |
| | (a) A curriculum that focuses on joint matters as defined in Chapter III. |
| | (b) A faculty with equal representation from each military department. |
| | (c) A student body with equal representation from each military department. |
| | (d) Control exercised by the Chairman, JCS. (Chapter IV, No. 7, Panel Report, p. 127.) |
| GAO Characterization | Partially Implemented. |
| Status | The College's Phase II curriculum meets the Panel's standards for joint matters and is taught from a joint perspective. Each seminar is taught by a team of three teachers, representing each of the three departments. |



As of October 1991, the College had 52 faculty members with unequal service representation. As stated earlier, the College does not control the number of faculty members assigned to the College. In addition, the student body representation is also unequal. The MEPD specifies a proportional student mix. While the College does not control the student mix, it does monitor the mix through informal coordination with the Joint Staff.

Finally, the Chairman, JCS, exercises control over the College's joint PME activities not only through the policy document, but also through regularly scheduled military education conferences. These conferences are attended by representatives of the PME schools and provide a forum to discuss joint PME issues.

Recommendation Number 16

Focus on Operational Level of War

Based on the panel's understanding of the World War II Army-Navy Staff College and of the needs of the joint and unified commands, the new AFSC curriculum should address war primarily at the operational level. It should concentrate on how to develop the joint force concept, both operationally and logistically. It should also build on the education in joint matters, specifically knowledge of other services and of joint processes and procedures, taught in service schools. (Chapter IV, No. 8, Panel Report, p. 127.)

GAO Characterization

Status

Implemented.

About 82 percent of the curriculum focuses on operational art.² College officials stated that the service and joint school commandants and presidents have taken steps to ensure that Phases I and II build on each other and duplication is minimized. For example, Phase I teaches joint matters to the knowledge level, which emphasizes comprehension of the curriculum. In addition, joint matters are taught from the individual service perspective. Phase II, on the other hand, de-emphasizes service doctrine and teaches to the application level.



 $^{^2}$ The employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.

| Recommendation Number 17 | | |
|---|--|--|
| Participants in Joint Doctrine Development | The Chairman, JCS, should use the joint schools to help develop and assess joint doctrine and related knowledge. (Chapter IV, No. 9, Panel Report, p. 127.) | |
| GAO Characterization | Implemented. | |
| Status | Actions taken under this recommendation are discussed in recommend tion number 5. | |
| Recommendation Number 18 | | |
| Military Faculty Mix | The military faculties of the joint schools should continue to have equal representation from each of the three military departments. (Chapter IV, No. 10, Panel Report p. 127.) | |
| GAO Characterization | Partially Implemented. | |
| Status | Actions taken under this recommendation are discussed in recommendation number 6. | |
| Recommendation Number 19 | | |
| Recruiting Competent Joint School Faculty | The most difficult task will be recruiting joint school faculty competent to teach joint matters at a level above that of service intermediate and senior colleges. The faculty should include some relatively senior officers with outstanding records and broad operational and joint experience. Substantial numbers of the military faculty should have poten- | |



Page 24

tial for further promotion. In time, military instructors would ideally come from the Jso ranks. To be competent the faculty must be large

enough to develop joint materials for study and use in the classroom. (Chapter IV, No. 12, Panel Report, p. 128.)

GAO Characterization

Partially Implemented.

Status

The College attempts to select the best qualified individuals from among the list of faculty nominees sent by the services. The Commandant indicated an overall satisfaction with the qualifications and performance of the school's faculty. In addition, two-thirds of the military faculty are joint specialty officers possessing the requisite operational and joint experience. The present faculty meet most of the following requirements; that is, they

- · are graduates of an in-residence intermediate or senior service school,
- · have graduate degrees,
- · have joint experience,
- · are graduates of the College, and
- have prior teaching experience.

While most of the above requirements have been met, we note that the faculty promotion rates lagged behind those of officers in operational and functional areas. On the basis of 1 year of promotion data since June 1990, we found that 7 percent of faculty members eligible for promotion had been selected. By contrast, the service-wide promotion rate identified in the Panel report—35 to 50 percent over a 5-year period—suggests that military faculty may not be as competitive as other officers are.

Recommendation Number 20

Student Mix

The student bodies of the joint schools should continue to have equal representation from each of the three military departments. (Chapter IV, No. 13, Panel Report, p. 128.)

GAO Characterization

Partially Implemented.

Status

Actions taken under this recommendation are discussed in recommendation number 8.



Recommendation Number 21

Student Ranks

The new AFSC should accept students at the major/Navy lieutenant commander and lieutenant colonel/Navy commander grades. During transition and as needed later, AFSC could provide colonels/Navy captains a senior rourse. (Chapter IV, No. 15, Panel Report, p. 128.)

GAO Characterization

Implemented.

Status

The College has both an intermediate and senior level curriculum. The intermediate program is attended by officers at the ranks of major/Navy lieutenant commander and lieutenant colonel/Navy commander. The senior program accepts officers at the rank of colonel/Navy captain.

Recommendation Number 22

Responsibility for Joint Education

Under the overall authority of the Secretary of Defense, the Chairman, JCS, should control both the National Defense University (NDU) joint schools and the joint portions of the service schools. Making the Chairman responsible for all joint education should maintain a service-responsive school system, retain diversity in the overall education system, and yet ensure that officers have an adequate understanding of joint matters and are fully prepared for joint duty. (Chapter IV, No. 16, Panel Report, p. 128.)

GAO Characterization

Implemented.

Status

The Chairman, JCS, exercises control of joint education through MEPD. For additional details, see recommendation number 9.



Recommendation Number 23

Phase II Course Length

A major challenge will be to resist pressures to shorten the length of the Phase II course at AFSC. The Phase II course should be long enough to meet the requirements of recommendation 3 "[see recommendation number 13 on page 21.]", in particular for increasing student understanding of the other services and developing joint attitudes and perspectives, often referred to as "socialization" or "bonding." Considering these requirements, the Phase II course should be about 3 months long, as was the World War II Army-Navy Staff College, or longer if necessary. (Chapter IV, No. 18, Panel Report, pp. 128-9.)

GA() Characterization

Implemented.

Status

Actions taken under this recommendation are discussed in recommendation number 14.

Recommendation Number 24

Focus of Phase II Course

A related challenge is to keep the relatively short AFSC Phase II course free of material that should be covered in the service schools' Phase I. There will be pressures to have AFSC teach descriptive matter both about other services and about joint processes, using the argument that AFSC can do a better job. The service Phase I courses should cover both of these subjects in depth. (Chapter IV, No. 19, Panel Report, p. 129.)

GAO Characterization

Implemented.

Status

Actions taken under this recommendation are discussed in recommendation numbers 1, 10, 12, and 13.



Recommendation Number 25

Student Exchange Periods

Brief student exchange periods with other services should be considered as an adjunct of the revamped AFSC and National War College courses. (Chapter IV, No. 35, Panel Report, p. 132.)

GAO Characterization

Not Implemented.

Status

College officials do not plan to implement this recommendation. The Panel report states that the recommendation is intended to increase the knowledge and appreciation of the other services' doctrine, procedures, capabilities, and limitations. It would also contribute significantly to developing the joint perspective of joint specialist nominees.

College officials indicated that the unique billeting arrangement allows members of different services to live, eat, and work together for the duration of the course. They said this arrangement fosters greater interservice discussion over a broad range of military subjects. They also stated that this environment contributes more to the joint perspective than do short exchange tours.

Recommendation Number 26

Recruiting and Maintaining Quality Faculty

Faculty is the key element in determining the quality of education in PME schools. To develop an outstanding faculty, the impetus must start at the top. The Chairman, JCS, and the service chiefs must place a very high priority on recruiting and maintaining highly qualified faculty to teach at both joint and service PME colleges. (Chapter V, No. 1, Panel Report, p. 167.)

GAO Characterization

Implemented.

Status

The College actively seeks high quality faculty from the pool of officers nominated by their respective services. Furthermore, the Commandant



is authorized to approve or disapprove nominees. The College has rejected about 30 percent of the faculty nominations.

The College also has a formal faculty development program. Through this program, all faculty members acquire a thorough understanding of the entire curriculum. They also refine their knowledge of educational concepts and teaching and testing techniques. In addition, the faculty are expected to augment the program through individual research and information exchanges with faculty at other PME schools.

Recommendation Number 27

Specialists/Career Educators

GAO Characterization

Status

The military faculty should include three groups: officers with current, credible credentials in operations; specialists in important functional areas; and career educators. Incentives must exist to attract outstanding military officers in each of these groups. (Chapter V, No. 2, Panel Report, p. 167.)

Partially Implemented.

The College's faculty includes members representing all three groups recommended by the Panel. The faculty possesses credentials in operations and functional areas, including intelligence, foreign area specialists, international politico-military affairs, and special forces. Although some members of the military staff are experienced instructors, the College does not have career tenured military educators. College officials believe that military faculty with current operational experience are better suited than career educators to teach the war-fighting curriculum.

The College attracts outstanding military officers by offering incentives such as the prestige of a teaching assignment and the quality of life. When it comes to promotion potential and quality follow-on assignments, however, the College is limited in what it can offer. Such decisions are made by the services; the College itself has no direct influence on promotion potential. College officials stated that increased faculty promotion rates, follow-on assignments to key billets, and joint duty assignment credit would serve as useful incentives.



Recommendation Number 28

Faculty Development Program

The services should develop programs to qualify military faculty members to ensure they are prepared professionally. These programs could include prior graduate education, faculty conferences, and sabbaticals at other institutions. Those military faculty who lack education or teaching experience need the opportunity to participate in a faculty development program to enhance their knowledge and teaching skills prior to assuming responsibilities in the classroom. The panel opposes the widespread practice of retaining graduating officers as faculty for the following year. Graduating students should have additional experience prior to teaching. (Chapter V, No. 4, Panel Report, p. 167.)

GAO Characterization

Implemented.

Status

The College has a formal faculty development program attended by every faculty member. The program includes new faculty orientation as well as ongoing professional training in curriculum content and teaching techniques. Because the Phase II curriculum is 12 weeks long and the College is a temporary-duty assignment for student officers, the College does not retain graduates as faculty. However, a few faculty members occasionally participate as students to prepare to become fully qualified instructors.

Recommendation Number 29

Student/Faculty Ratios

The student/faculty ratios at the professional military institutions should be sufficiently low to allow time for faculty development programs, research, and writing. The panel envisions a range between 3 and 4 to 1 with the lower ratios at the senior schools. The panel also recommends that additional faculty, principally civilian, be provided to the National Defense University schools and that the Secretary of Defense, with the advice of the Chairman, JCS, assure the comparability of the joint and service school student/faculty ratios. (Chapter V, No. 12, Panel Report, p. 168.)



GAO Characterization

Partially Implemented.

Status

Actions taken under this recommendation are discussed in recommendation number 11.

Recommendation Number 30

Commandant Selection

The commandant and president positions are so critical that only a service chief or the Chairman, JCS, (for a joint school) should make the selection, including determining the tour length of those selected. (Chapter V, No. 14, Panel Report, p. 168.)

GAO Characterization

Implemented.

Status

A service chief selects general/flag offi ers to serve as the commandant or president of a PME school. The decision also requires the concurrence of the other service chiefs. Although the present Commandant was selected by the Army service chief, the selection was also known by the former Chairman, JCS. The established tour length is about 3 years.

Recommendation Number 31

Commandant's Tour Length

The commandants or presidents of senior and intermediate PME schools should serve a minimum of 3 academic years. During periods of major change in scope, curricula, or purpose at PME schools, commandants should stay longer, perhaps 4 or 5 years. (Chapter V, Nc. 15, Panel Report, p. 168.)

GAO Characterization

Implemented.



Status

The present Commandant was assigned to the College in June 1989. His 3-year tour length has not yet been completed. According to the Commandant, any tour length extension beyond 3 years would be detrimental to an officer's military career. Promotion opportunities decline for officers removed from operations for a lengthy period.

Recommendation Number 32

Attributes of a Commandant

Ideally, the commandants or presidents should be general/flag officers with promotion potential, some expertise in education, and operational knowledge. They should become actively involved in teaching the student body. (Chapter V, No. 16, Panel Report, p. 168.)

GAO Characterization:

Implemented.

Status

The present Commandant is a brigadier general in the Army with promotion potential. He is a graduate of both an in-residence intermediate and senior service school. Although the Commandant does not have formal expertise in education, his operational experience and functional area expertise are augmented by joint staff experience. Such assignments as battalion commander have afforded him informal officer training and educational opportunities. The Commandant is also active in all aspects of the College's curriculum. For example, he participates in curriculum development, seminar discussions, and joint planning exercises and plays the role of Chairman, JCS, during the war game. Throughout the program, contact is maintained with faculty and students, both formally and informally.

Recommendation Number 33

Student Selection

The services should establish policies to ensure that highly qualified officers are selected to attend PME schools. Each service should have a formalized selection board process at the intermediate and senior school



level to ensure that its most deserving officers with clear future potential are designated to attend PME. Such a board process will ensure that the future military leadership is developed through resident PME. The boards, with general/flag officer membership, should be empowered to recommend officers for specific school attendance. Thus, the leadership of the service should determine who attends PME, not assignment officers or detailers acting independently. Although it may require some restructuring of the selection process, consideration should also be given to making commandants and presidents of the PME schools active participants in the process of designating students for specific institutions. (Chapter V, No. 17, Panel Report, pp. 168-9.)

GAO Characterization

Implemented.

Status

Student selection is performed by the individual services without direct input from the College. Each service has a formal selection process to identify candidates for intermediate and senior service schools. The specifics of how they operate vary from service to service. Generally, however, senior military personnel meet and review officer qualifications and designate candidates as appropriate. As such, the services are responsible for ensuring that highly qualified officers are selected to attend PME schools. Consideration was given to making the Commandant an active participant in selecting students. However, the Commandant does not want the College involved in student selection, stating that the College should concentrate on educational matters. He strongly maintains that student selection is a service prerogative. The Commandant would, however, discuss student qualifications with the Joint Staff if a negative trend were perceived. Furthermore, he is satisfied with the current selection procedures, including the overall quality of students attending the College.

Recommendation Number 34

Active/Passive Instruction

The Chairman, JCS, and service chiefs should review the current methods of instruction at PME schools to reduce significantly the curriculum that is being taught by passive methods (e.g. lectures, films). PME education should involve study, research, writing, reading, and seminar activity—-and, in order to promote academic achievement, students



should be graded. The commendably low 10-percent passive education for the Army Command and General Staff College sets a goal for the other schools. (Chapter V, No. 23, Panel Report, p. 169.)

GAO Characterization

Implemented.

Status

Approximately 94 percent of the College's curriculum is taught using active methods. This exceeds the Panel's recommended goal of 90 percent. Moreover, the percentage of active learning increased when the curriculum was expanded from 9 to 12 weeks. Students participate in practical exercises and case studies during which they apply their knowledge of the subject matter. They also research and write joint operational plans and documents and frequently lead seminar discussions. In addition, the final course is a computer-based war game that synthesizes joint war-fighting concepts learned during the entire curriculum.

Recommendation Number 35

Rigorous Performance Standard

The Chairman, JCS, and each service chief should establish rigorous standards of academic performance. The panel defines academic rigor to include a challenging curriculum, student accountability for mastering this curriculum, and established standards against which student performance is measured. (Chapter V, No. 24, Panel Report, p. 169.)

GAO Characterization

Partially Implemented.

Status

Actions taken under this recommendation are discussed in recommendation number 2.



Recommendation Number 36

Evaluation of Examinations and Papers

All intermediate- and senior-level PME schools should require students to take frequent essay type examinations and to write papers and reports that are thoroughly reviewed, critiqued, and graded by the faculty. Examinations should test the students knowledge, his ability to think, and how well he can synthesize and articulate solutions, both oral and written. (Chapter V, No. 25, Panel Report, pp. 169-70.)

GAO Characterization

Partially Implemented.

Status

Actions taken under this recommendation are discussed in recommendation number 2.

Recommendation Number 37

Distinguished Graduate Program

All PME schools should have distinguished graduate programs. These programs should single out those officers with superior intellectual abilities for positions where they can be best utilized in the service, in the joint system, and in the national command structure. (Chapter V, No. 26, Panel Report, p. 170.)

GAO Characterization

Not Implemented.

Status

The MEPD states that the establishment of a distinguished graduate program is optional, and the College does not plan to establish such a program. College officials believe such a program would be counterproductive to their goal of fostering a joint perspective and teamwork. In addition, given the varied ranks, knowledge, and experience levels of officers attending the school, it would be difficult to accurately differentiate among students.



Glossary

Active Instruction

Teaching method that incorporates such things as reading, researching, writing, and attending seminars, thereby requiring the student's participation. This is in contrast to passive instruction, which refers to auditorium lectures, panels, symposia, and films.

Intermediate Service School

This is generally the third level of an officer's formal PME, and officers with about 10 to 15 years of military experience attend one of the four intermediate schools. (These schools are the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas; the College of Naval Command and Staff in Newport, Rhode Island; the U.S. Air Command and Staff College, in Montgomery, Alabama; and the U.S. Marine Corps Command and Staff College in Quantico, Virginia.) An officer is usually at the major rank in the Army, Air Force, and Marine Corps or lieutenant commander in the Navy. At the intermediate level, the focus is on several branches of the same service as well as on the operations of other services.

Joint Professional Military Education

This education encompasses an officer's knowledge of the use of land, sea, and air forces to achieve a military objective. It also includes different aspects of strategic operations and planning, command and control of combat operations under a combined command, communications, intelligence, and campaign planning. Joint education emphasizes the study of these areas and others from the perspectives of the Army, Navy, Air Force, and Marine Corps services.

Joint School

Joint PME from a joint perspective is taught at the schools of the National Defense University located at Fort McNair in Washington, D.C., and another location in Norfolk, Virginia. For the most part, officers attending a joint school will have already attended an intermediate and/or senior service school.

Joint Specialty Officer

An officer who is educated and experienced in the formulation of strategy and combined military operations to achieve national security objectives.

Operational Art

The employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.



| Phase I | That portion of joint education that is incorporated into the curricula of intermediate and senior level service colleges. Phase I joint education is taught from the perspective of the four services: Army, Navy, Air Force and Marine Corps. The Phase I program is 10 months long, with the academic year usually starting in August and ending in June of the following year. |
|-----------------------|---|
| Phase II | That portion of joint education that complements Phase I and is taught at the Armed Forces Staff College. Phase II joint education is taught from a joint perspective in terms of integrating employment and support of all services in the pursuit of national objectives. |
| Senior Service School | This level is normally attended by lieutenant colonels and colonels in the Army, Air Force, and Marine Corps and by Navy commanders and captains with about 16 to 23 years of military service. The senior service schools generally offer an education in strategy. (The four senior level schools are the Army War College at Carlisle Barracks, Pennsylvania; the College of Naval Warfare in Newport, Rhode Island; the Air War College in Montgomery, Alabama; and the Marine Corps Art of War Studies Program in Quantico, Virginia.) |
| Service School | One of the individual Army, Navy, Air Force, or Marine Corps intermediate or senior PME institutions. |
| Strategy | National military strategy is the art and science of employing the armed forces of a nation to secure the objectives of national policy by applying force or the threat of force. National security strategy is the art and science of developing and using the political, economic, and psychological powers of a nation, together with its armed forces, during peace and war, to secure national objectives. |



Related GAO Reports

Professional Military Education (GAO/T-NSIAD-91-4, Feb. 5, 1991).

Marine Corps: Status of Recommendations on Officers' Professional Military Education (GAO/NSIAD-91-88FS, Feb. 12, 1991).

Air Force: Status of Recommendations on Officers' Professional Military Education (GAO/NSIAD-91-122BR, Mar. 13, 1991).

Army: Status of Recommendations on Officers' Professional Military Education (GAO/NSIAD-91-121BR, Mar. 21, 1991).

Navy: Status of Recommendations on Officers' Professional Military Education (GAO/NSIAD-91-124BR, Mar. 25, 1991).

Department of Defense: Professional Military Education at the Four Intermediate Service Schools (GAO/NSIAD-91-182, June 13, 1991).

Department of Defense: Professional Military Education at the Three Senior Service Schools (GAO/NSIAD-91-202, June 20, 1991).

Military Education: Curriculum Changes at the Armed Forces Staff College (GAO/NSIAD-91-288, Sept. 19, 1991).



Ordering Information

The first copy of each GAO report is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary: Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office P.O. Box 6015 Gaithersburg, MD 20877

Orders may also be placed by calling (202) 275-6241.

BEST COPY AVAILABLE