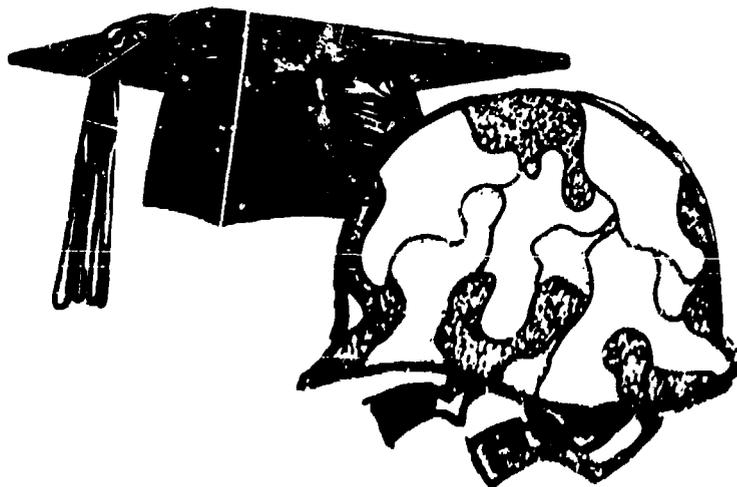


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HEADQUARTERS DEPARTMENT OF THE ARMY
WASHINGTON, D.C.

A Review of Education and Training for Officers



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VOLUME 2 OF 5 CAREER PROGRESSION

- ANNEX C -- PRECOMMISSIONING
- ANNEX D -- THE FIRST 10 YEARS OF SERVICE
- ANNEX E -- MAJORS AND LIEUTENANT COLONELS
- ANNEX F -- SENIOR OFFICERS

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX C

PRECOMMISSIONING

1. PURPOSE. This Annex examines the precommissioning milieu, with primary focus upon the Reserve Officer Training Corps (ROTC).

2. DISCUSSION.

a. Change. Examination and analysis revealed urgent requirements for change -- change in the way officer aspirants are selected into programs leading to a commission, change in the form and substance of the ROTC, and change in the requirements which all cadets/candidates must master before they receive the gold bars of a second lieutenant.

b. Focus. The Review of Education and Training for Officers (RETO) focus was upon ROTC, underscored by the assumption that the ROTC would provide the bulk of the line officer accessions into the Army's Active and Reserve Components in the foreseeable future.* In 1978, for example, ROTC met 67 percent of line officer accessions; United States Military Academy (USMA) and Branch Immaterial Officer Candidate Course (BIOCC) provided 19 and 13 percent, respectively.

c. Assessment Centers. The major factor which led to the concept of Assessment Centers was the total lack of initial measurements of aptitude, motivation, physical fitness and leadership potential of persons gaining entry to the ROTC program. This lack of initial measurement devices, and the subsequent and predictable entry of unqualified personnel to ROTC, led to high attrition during the early years of ROTC. With 3 of every 4 students entering college as freshman eventually graduating, and with less than 3 of every 10 ROTC students completing the ROTC program, additional qualitative standards were indicated. The Assessment Center concept is described in the paper titled "The Precommissioning Screening System," at Appendix 1.

*Cadet population at USMA is established by law at about 4,000, with 900-950 graduates annually; BIOCC, the elastic source of officers, expanding and contracting along supply-and-demand curves, now provides 750 graduates annually.

d. ROTC Alternatives. Extremely high ROTC attrition rates during the first 2 years of the ROTC experience, coupled with increasing costs and a limited market (about 60 percent of the 4-year colleges are untapped by the current ROTC presence), also led RETO analysts to consider alternatives to the current program. Those alternative programs are described in "The ROTC Program" paper at Appendix 2.

e. ROTC Scholarships. There were several facets of the ROTC scholarship program which can be modified to improve that program.

(1) The absence of any control over the academic disciplines being pursued by scholarship students resulted in a few ROTC graduates with disciplines of no reasonable direct application to the military environment. Providing scholarship winners a list of academic majors from which to choose and thereafter channel their academic endeavors, would provide a better link between precommissioning education and known Army requirements.

(2) Introducing a "pay-back" option into the default clause for ROTC scholarships should alter considerably the emasculated condition of the default clause which currently exists, to wit, that persons leave the program with virtual immunity.

(3) Increasing the number of ROTC scholarships permits the Army to draw its ROTC Active Army accessions almost exclusively from its scholarship contingent and dedicate a certain number of scholarships to the Reserve Components. This latter provision would insure the infusion of the highest caliber of officer from the college campus into the Reserve Components.

(4) These recommendations, and others involving the ROTC scholarship program, are described fully in "The ROTC Scholarship Program," at Appendix 3.

f. Military Qualification Standards. The lack of common standards for commissioning has created problems within the Army for years. Basic course learning becomes highly inefficient when it must be structured to fit the lowest common denominator of skills from among widely varying sources of commissioning, e.g., USMA, OCS and 280 ROTC detachments. The Military Qualification Standards (MQS) make mandatory for all commissioning sources the teaching of common military skills and knowledge prior to commissioning. The MQS concept, and its prerequisites for commissioning, are set forth in the paper "The Military Qualification Standards," found in the Annex of that name.

g. Reserve Components. Precommissioning implications for the Reserve Components, save for the dedication of some ROTC scholarships to those components, are explained in the Reserve Components Annex to the Report.

3. RECOMMENDATIONS.

a. Precommissioning Screening.

(1) That the United States Army move immediately to develop further the medical, physical fitness and mental Assessment Center concept for full implementation during FY 81.

(2) That the Department of the Army, ODCSPER, begin work to develop guiding directives and regulations for program management of Assessment Centers.

(3) That TRADOC be tasked to develop the Leadership Laboratory for Assessment Center use.

(4) That the Army Research Institute be charged to identify or develop the interview and paper/pencil instruments for determining motivation and interest in the military profession for precommissioning candidates.

(5) That all commissioning program applicants be processed through the Assessment Centers to aid respective selection processes and establish comparative norms.

b. ROTC Program.

(1) That a screening system be developed that incorporates academic, medical, physical fitness and mental testing for entry qualification to all precommissioning programs.

(2) Continue the 4-year ROTC program while simultaneously conducting a test of:

(a) A 2-year ROTC program involving junior and senior year students. Cadets matriculate through a 2-year ROTC curriculum on campus, and one 8-week summer camp. The program also includes qualifying applicants through Assessment Centers.

(b) A Platoon Leaders Course (PLC) program which involves junior and senior year students who achieve precommissioning qualification by attendance at 2 summer camps, totalling 16 weeks. Program contains no on campus instruction.

(c) A College Graduate Officer Candidate School program which acquires potential officers in the junior and senior year through Assessment Center qualification. Students, under contract, agree to attend basic training and the Branch Immaterial Officer Candidate Course after graduation, followed by a term of active duty.

(3) Develop and conduct the tests in (2)(a)(b)(c) above within the following guidelines:

(a) Test the 2-year ROTC program in at least one school currently administering the 4-year program plus at least one school with no current ROTC.

(b) Test other programs in that segment of the college market currently untouched by Army ROTC programs.

(c) Select, for test validation, both public and private colleges and universities of various student densities.

(d) Include at least one predominately Black college in each pilot test.

(e) Begin recruiting in selected schools during school year 1978-79, with the pilot tests beginning during school year 1979-80.

(f) Allocate a certain number of ROTC scholarships to test schools for recruiting incentives.

c. ROTC Scholarship Program.

(1) Develop a general list of academic disciplines which relate to Army requirements from which scholarship recipients must select a major course of study.

(2) Prescribe courses in communication skills (writing) and human behavior (psychology) as mandatory courses for all scholarship recipients.

(3) Revise the current scholarship contract that requires active enlisted duty for dropouts, by adding an alternative "pay-back" requirement to the government for all financial benefits received in connection with the scholarships for those students who default on the scholarship contract provisions.

(4) Increase the total number of fully funded ROTC scholarships from 6,500 to 12,000.

(5) Dedicate 1,000 ROTC scholarships annually to students who will elect to serve in the Reserve Components after an Active Duty for Training period.

(6) Encourage the Army National Guard and the US Army Reserve to explore additional college assistance programs to meet their accession requirements.

3 Appendixes

1. The Precommissioning Screening System, with 2 Inclosures
2. The ROTC Program, with 4 Inclosures
3. The ROTC Scholarship Program, with 8 Inclosures

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

THE PRECOMMISSIONING SCREENING SYSTEM

TO ANNEX C

PRECOMMISSIONING

I. Overview

1. The 3 major sources of line officer accessions into the United States Army are the United States Military Academy (USMA), the Reserve Officer Training Corps (ROTC), and the Branch Immaterial Officer Candidate Course (BIOCC). From the singular institutions at West Point and Fort Benning (the BIOCC), and from the 280 ROTC detachments across the United States flow the annual production of some 6,000 officers needed to fill Army requirements worldwide.

2. Upon commissioning, the only common bond these officers enjoy is their rank as second lieutenants -- and that is not enough. Funneled through eligibility gates of various description, and developed through disparate programs of military training, without common gauges of cadet performance, the new officers arrive at their basic officer course as unmeasured products of an uncommon system.

4. Another paper will discuss common standards for commissioning.

II. The Current Screening Process

1. The United States Military Academy seeks applicants who are:

a. Between the age of 17-22 and meet the academic, medical and physical qualifications that follow.

(1) Academic:

(a) Above average high school or college academic record.

(b) A strong performance on the American College Testing (ACT) or the Scholastic Aptitude Test (SAT). Each applicant must take one of these tests.

(2) Medical:

(a) Be in good physical and mental condition.

(b) Be able to pass a medical examination administered by the Department of Defense Medical Examination Review Board (DODMRB) within 1 year prior to enrollment. Exams by private physicians are not considered qualifying examinations.

(3) Physical:

(a) Must have above average strength, endurance and agility.

(b) Demonstrate adequacy on the USMA Physical Aptitude Examination (PAE). This exam consists of 4 events: Pullups, standing long jump, basketball throw, and shuttle run. A flexed-arm hang event substitutes for the pullup event when testing women candidates.

(4) Leadership measurement: Although not specifically designed as such, the Cadet Basic Camp, also known as "Beast Barracks," provides to some unstated degree a leadership stress test for all cadets. The Basic Camp is an intensive 8-week course that takes place during the summer preceding the freshman year at West Point. Its focus is on basic soldiering and cadetship and it is here that cadets are able to reevaluate themselves in a military environment. The current Basic Camp attrition rate is 10 percent. Attrition peaks at the mid-camp point, then dissipates rapidly.

b. References: AR 351-17 (21 Nov 73), AR 40-29 (13 Sep 74), and the current West Point catalog.

2. Reserve Officer Training Corps establishes eligibility for its program under the purview of AR 145-1 (15 Jan 75). There are specific distinctions made between scholarship-seeking applicants and non-scholarship applicants.

a. Age. Scholarship applicants must be between 17-25 years of age. Nonscholarship students may be 17-28 years of age.

b. Academic. Scholarship applicants must meet the same criteria as aspiring West Point Cadets. Nonscholarship students have no scholastic requirements for ROTC admission.

c. Educational. All ROTC cadets must be enrolled as full-time students at a school participating in the ROTC program. However, students from nonparticipating schools may enroll in ROTC at ROTC host institutions, providing they meet the eligibility criteria. Under this provision the student must be a full-time student pursuing a course of study leading to a baccalaureate degree. Once in the program ROTC cadets may pursue any academic discipline without restriction.

d. Medical.

(1) Scholarship applicants must pass the same medical exam required of West Point applicants, described in AR 40-29 and AR 40-501. Waivers of physical standards are permitted. ROTC Region Commanders have medical waiver authority.

(2) Nonscholarship enrollees must be certified by a doctor to be physically capable of participating in the ROTC program. This exam must be accomplished within 1 year prior to enrollment.

e. Physical. There is no physical aptitude requirement for any ROTC enrollee.

f. Leadership measurement. Although AR 145-1, the ROTC governing directive, emphasizes the importance of leadership potential as a critical factor for scholarship applicants, specific indicators of leadership are limited to "appearance, scholarship, and extracurricular activities." Similar leadership qualifications are expected of non-scholarship ROTC cadets.

3. Branch Immaterial Officer Candidate Course. Current eligibility requirements are set forth in AR 351-5 (23 Jan 75).

a. Age. Must be between 19 1/2 and 32 1/2 years of age.

b. Academic.

(1) Candidates must have completed 2 years of a 4-year college degree program or have achieved a 2-year college equivalency evaluation by Headquarters, Department of the Army.

(2) Score 110 or above on the Aptitude Area General Technical (GT) test. Females must score 115 or higher on the GT test.

(3) Score 115 or above on the Officer Candidate Test (OCT).

(4) Achieve a minimum composite score of 200 on the OCT and the Officer Qualification Inventory (OQI).

c. Medical.

(1) Pass a type "A" medical examination within one year preceding the scheduled BIOCC class.

(2) Meet procurement medical fitness standards prescribed in AR 40-501 (5 Dec 60).

(3) Possess a physical profile of at least 222221, unless a type "A" medical examination had been accomplished within 6 months prior to the date of the BIOCC application.

(4) Major commanders may approve medical waivers in accordance with appropriate regulations.

d. Physical fitness.

(1) Male applicants must score 300 points or above on the Advanced Physical Fitness Test (APFT), prescribed in FM 21-20.

(2) Female applicants must score 300 points or higher on the Physical Fitness Test in basic training, as set forth in FM 35-20.

(3) All physical fitness tests must be completed within 2 months prior to the installation interview.

e. Installation Interview Board. Each installation receiving through channels applications for admission to BIOCC must convene a board of officers to conduct an indepth inquiry of applicant qualifications, motivation and commitment. All board members must be commanders (company, battalion, brigade).* Each board member makes an independent appraisal. Installations forward applications, containing board results, through the appropriate military channels to the Military Personnel Center, where final selections take place.

f. Leadership measurement. As in the other programs, any measurement of leadership potential is done subjectively by those persons in the application process who recommend an affirmative or negative endorsement of the applicant.

III. The Need for Standardization

1. The qualifying screening procedures described in this paper vary considerably among the major sources of Army officer commissions.

*Boards interviewing female applicants must contain a woman officer.

Across a spectrum of screening devices labelled from difficult to lax, one could place USMA, BIOCC and ROTC respectively. Under current regulations, USMA imposes the most stringent screening devices over its applicants. BIOCC is equally precise, but the variety of waiver devices lessen the screening mechanism to something less than desired. The ROTC, except for its 4-year scholarship students (about 2 percent of ROTC freshman), imposes virtually no initial screening over its participants.

2. However, despite a variety of screening devices, restrictive or otherwise, significant attrition follows admittance to all programs (Table 1). Attrition may be attributed to numerous factors, from dissatisfaction with the specific program to personal problems creating disenrollment. Whatever the cause for the attrition, one thing remains clear: the cost-effectiveness of any program becomes increasingly suspect in the light of high attrition. Since program costs will continue to increase, if only through the normal inflationary spiral, other means must be explored and tested to reduce attrition without lowering standards.

ATTRITION DURING PROGRAM (BIOCC)
OR FIRST YEAR (USMA/ROTC)

ROTC	--	54%
USMA	--	24.9%
BIOCC	--	10.5%

TABLE 1

3. Improvements can be instituted now -- improvements which will identify better those applicants who are willing to commit themselves to the officer-making programs at USMA, BIOCC, and ROTC -- and succeed in higher percentages than exists today.

4. First, there is no institutional commonality among applicants. There should be common requirements among applicants to all pre-commissioning sources, without sacrificing the leavening effect the military community enjoys through the annual transfusion of new officers representing all elements of the democracy it serves.

5. If there are known characteristics of good cadets and candidates -- and there are -- those characteristics should be fully described and woven into the eligibility standards against which all, not some, applicants are measured. There are a few common applicant characteristics currently existant in Army regulations governing the pre-commissioning programs. These common traits deal with citizenship, loyalty, and character. Where uncommonality reigns, a decided laxity appears.

6. Through the regulations cited herein, those sections describing medical, physical and mental conditions are conspicuous by their lack of homogeneity. Granted that there are exceptions to every rule, and all qualifications should not be etched in concrete -- lest there be lost in the process the potential Patton or Eisenhower -- current standards, and their concomitant results, demand revision.

7. Consider the medical requirements, for example. Applicants for ROTC scholarships, USMA and BIOCC appointments must pass a standard medical examination. Waivers for certain physical defects are permitted. Contrast this requirement with nonscholarship applicants for ROTC, who need only have a licensed physician attest to the applicant's physical capacity for the ROTC program. There is no medical reference point, no standard bench marks upon which the doctor may gauge his judgment. They do not exist. Instead of a standard measuring device, he relies on his medical judgment in determining physical fitness for ROTC. The implications are plain. Nonscholarship ROTC freshman students currently (1978) number in excess of 32,000. The freshman attrition rate is 54 percent. Despite the protests of ROTC advocates who assert that high attrition is acceptable; who claim that medical standards are minimal in order to attract the widest number of freshman to ROTC, the facts suggest that there must be a better way.

8. Physical aptitude screening comes out no better than the medical screening devices. West Point applicants must demonstrate their physical fitness aptitude by achieving a passing score on the Physical Aptitude Examination (PAE). BIOCC applicants must meet certain levels on a physical fitness test appropriate to one's sex. ROTC applicants, scholarship or otherwise, have no physical fitness instrument against which measurement may be drawn.

9. Mental aptitude screening also suffers by comparison among pre-commissioning programs. There are minimal mental aptitude scores for BIOCC candidates, and these even vary between male and female applicants. ROTC 4-year scholarship applicants and USMA candidates indicate their mental aptitude for learning through achievement on the SAT or ACT tests. Once again, there is no initial mental aptitude standard for nonscholarship applicants to the ROTC.

10. In the arena of leadership potential, West Point and, to a lesser degree, BIOCC have measuring devices. At USMA, "Beast Barracks" serves as an unstated screening mechanism to identify leadership potential as well as to acquaint the cadets to soldiering in a stressful environment.

Although West Point officials highlight the military indoctrination and basic soldiering aspects of Cadet Basic Camp, they nevertheless admit that "Beast Barracks" serves another purpose: to assess the "worthiness" of cadets through this intensive physically and mentally challenging program. During this period West Point's Office of Institutional Research administers several hours of standard personality tests, though not for screening purposes. The tests are used for research only, to measure cadet behavior, motivation and values. Leadership potential is unmeasured for ROTC and BIOCC applicants, save for the subjective evaluations rendered by recommending officials in the chain of command and interview board members.

11. There is no means currently available in any precommissioning program to measure and assess personality and/or behavioral characteristics. Despite the presence of Item 42 (Psychiatric) on the SF 93, Report of Medical History, a component of all military-related medical examinations, and which USMA, BIOCC, and ROTC scholarship applicants undergo, the extent to which this entry is anything but an administrative rubber-stamp is questionable.

12. Clearly, then, the lack of common standards in the screening process of precommissioning program applicants underscores a series of double or triple standards which shout for reform. It points toward a need whose time has come: A need for common standards, for common assessment, for common programs of precommissioning unfettered by exception, waiver, and vague terminology.

IV. The Prescribed Screening Process. Incorporated herein are those procedures and standards which are necessary to move closer to the goal of common standards for all aspiring officers, be he interested in USMA, BIOCC, or ROTC.

1. Academic.

(a) Candidates for USMA, BIOCC, and ROTC should be required to demonstrate their aptitude for learning by taking either the Scholastic Aptitude Test (SAT) or the American College Testing (ACT) Assessment Program exam.

(b) BIOCC candidates should achieve a minimum of 2 years college.

2. Medical. Candidates for all programs will be required to pass a standard qualifying medical examination. Exceptions are not granted. The recommended examination is that currently administered to USMA applicants and ROTC scholarship seekers IAW Army Regulation 40-29.

3. Physical Fitness.

(a) Applicants for USMA and ROTC are required to take the Physical Aptitude Examination, a four-station event currently administered solely to USMA applicants. A description of the PAE is at Inclosure 1.

(b) Physical fitness requirements for BIOCC candidates remain unchanged. However, BIOCC applicants must be required to take the PAE for the development of comparative norms.

4. Psychological. At the time of medical examination, all applicants will undergo a behavioral assessment by qualified personnel. The assessment will consist of two parts: a preselection interview and a pen-and-paper instrument.

(a) The interview would be aimed at determining levels of maturity, stability and commitment. Additionally, the interview would permit an assessment of the interviewee's attitudes toward himself and his environment as well as his composure and ability to handle a communication situation.

(b) The pen-and-paper instrument, which might have to be developed, but might be structured similarly to the Armed Forces Aptitude Battery Tests, or the Strong-Campbell Interest Inventory, would be aimed toward the identification and elimination of those applicants with a low probability of doing well in a military environment. Put another way, the test would identify and qualify those individuals with high predictors of success in the military community.

5. Leadership.

(a) The USMA and BIOCC programs contain adequate leadership potential measuring devices. "Beast Barracks" and the policy of placing BIOCC candidates in leadership roles quickly measures leadership potential under stress.

(b) While it is impossible to duplicate the devices used for USMA and BIOCC candidates, DCSPER should develop for ROTC applicants a leadership laboratory package, using simulations and/or the Training Extension Course (TEC) Lesson Mode, to gauge the leadership potential of future ROTC officers. This exportable package would be developed in sufficient quantity for use at Armed Forces Entrance Examining Stations (AFES) within the Continental United States.

(c) The dimensions of leadership that should be included in the leadership laboratory package are: decisionmaking skills, forcefulness, mental ability, organizational leadership, supervisory skills, and other predictive indicators that measure success in the military.

V. The Screening Organization.

1. The USMA and BIOCC agencies for the preselection procedures should continue unchanged, except that USMA and BIOCC candidates would receive the precommissioning qualification tests, possibly at AFEES locations. (See below)

2. ROTC Assessment Centers.^{1/} This concept places the mental, physical, medical, and leadership components of ROTC prequalification under one roof. Assessment would be administered concurrently. That is, when an applicant was programmed into the Assessment Center, he would be administered all tests required for qualification to ROTC before returning home.

(a) Responsibility: ODCSPER. Specific policies and procedures necessary to implement this concept would have to be developed in conjunction with the U.S. Army Recruiting Command and the U.S. Army Training and Doctrine Command.

(b) Where located. Each Armed Forces Entrance Examination Station would also carry the designation as an Assessment Center. Other locations for testing would also be acceptable, providing that the basic philosophy for testing was not undermined.

(c) Programming input. Applicants would be programmed into the Center by coordination between the ROTC and the Center, except when scheduled under the provisions of AR 40-29. As is currently the case with USMA and ROTC scholarship students, each ROTC applicant reporting to the AFEES/Assessment Center would bear the expenses of his/her travel, food and lodging for the time to complete all test elements.

(d) Spaces. An impact statement would have to address additional space requirements, if any, which would be created to handle the increased examination requirements of the Assessment Center. Since AFEES stations currently process large numbers of enlisted applicants annually, the increase of 12-15,000 examinations annually throughout AFEES locations nation-wide should have a minimal impact.^{2/} However,

^{1/} For detailed descriptions of Assessment Centers and their possible application to the military, see "Behavioral Assessment of Leadership Skills," Kay Smith, ARI, Dec 1975; and "The Possible Use of Assessment Centers in the Marine Corps: A Critical Approach," Charles Geiger, Air Command & Staff College, Apr 1977.

^{2/} There are 66 Armed Forces Entrance Examination Stations currently spread throughout the United States, with one additional station planned to open in late 1978 at San Diego, California. AFEES stations expect to conduct some 783,000 medical examinations during FY 78, according to the Military Enlistment Processing Command, Fort Sheridan, Illinois.

the need to administer the psychometric component and the leadership potential lab would require the addition of three personnel to each AFEES station: One officer (O2-O3) for the leadership lab administration, one enlisted man (E4-E6) for psychometric testing and evaluation, and one civilian clerk for administration. Costs associated with the increased staffing is included below.

(e) Costs. Costing the Assessment Center is difficult. Cost increases from such a program would stem from the increased numbers of required examinations, the development of a Leadership Lab and psychometric tests, and increased staffing at AFEES stations. Preliminary costs indicate that the Assessment Centers can be established nation-wide for \$3 million. Cost computations are at Inclosure 2.

VI. Recommendations.

1. That the United States Army move immediately to develop further the Assessment Center concept for full implementation during FY 81.
2. That the Department of the Army, ODCSPER, begin work to develop guiding directives and regulations for program management of Assessment Centers.
3. That TRADOC be tasked to develop the Leadership Laboratory described herein.
4. That the Army Research Institute be charged to identify or develop the interview and paper/pencil instruments for behavioral testing of ROTC applicants.
5. That all commissioning program applicants be processed through the Assessment Centers to aid respective selection processes and to establish comparative norms.

2 Inclosures

1. The Physical Aptitude Examination (PAE)
2. Assessment Center Costs

The Physical Aptitude Examination (PAE)

Overall performance on the following physical tests constitutes the Physical Aptitude Examination of the Military Academy:

Pullups (For Men): From the arm hang position on a horizontal bar, palms away from the face, elevate the body until the chin is above the bar.

Flexed-Arm Hang (For Women): With arms fully flexed, grasp the bar with the palms of the hands away from the face, the thumbs under the bar, and chin over the bar. Hold this position for time.

Standing Long Jump: Jump for distance.

Basketball Throw: Throw a basketball overhand from a kneeling position for distance.

Shuttle Run: Run back and forth between two lines, 25 yards apart, to cover a distance of 300 yards.

The final Physical Aptitude Examination score is a total accumulated score for all items in a given examination series adjusted to a 200-800 scale. A low or high score on any one test item does not determine success or failure on the entire examination.

WEST POINT PHYSICAL APTITUDE EXAMINATION
Total Candidate Population for a Recent Class

	FLEXED ARM HANG		STANDING LONG JUMP		BASKETBALL THROW		300 YARD SHUTTLE*		PERCENTILE
	PULLUPS (MEN)	(WOMEN)	(MEN)	(WOMEN)	(MEN)	(WOMEN)	(MEN)	(WOMEN)	
TOP QUINTILE	19	30 sec	8'3"	7'11"	90'	62'	55 sec	60 sec	100%
	15	51 sec							
	13	45 sec			80'	54'			80%
	12	40 sec			75'	50'	56 sec	63 sec	
MIDDLE QUINTILE	11	36 sec			70'	47'	57 sec		60%
	9	34 sec			73"	68"			
		30 sec			67'	46'	58 sec	66 sec	
	8				65'	44'			40%
	7	28 sec			61'	42'	59 sec	67 sec	
	6	26 sec			72"	62"	61 sec	68 sec	
BOTTOM QUINTILE	5	22 sec			60'	39'	62 sec	69 sec	20%
	4	18 sec			55'	36'	64 sec	72 sec	
	3	16 sec			68"	59"			
	1	11 sec			58"	53"	65 sec	75 sec	
				58"	4'10"	68 sec	78 sec		

*run on a 25-yard course

ASSESSMENT CENTER COSTS

1. Examinations: <u>1/</u>	15,000 x 6.16	=	90,504
2. Psychometric Testing: <u>2/</u>	15,000 x 3.00	=	45,000
3. Leadership Labs: <u>3/</u>		=	<u>47,644</u>
	SUBTOTAL		183,148
4. Staffing: <u>4/</u>			
Officer:	67 x 21,395 (03)	=	1,433,465
Enlisted:	67 x 10,673 (E5)	=	715,081
Civilian:	67 x 11,000 (GS 5)	=	<u>737,000</u>
	SUBTOTAL		<u>2,885,546</u>
	TOTAL		3,068,694

1/ Costs were obtained from Mr. Paul Bautzmann, Resource Management Division, Military Processing Command, Fort Sheridan, IL. The \$6.16 represents current variable costs to administer the examining process to one applicant. Variable costs include the physician, consultative, expendable supplies, and other direct costs.

2/ Cost assumes that an off-the-shelf battery of exams is available without modification, because of the use made of such tests in the Fort Benning Assessment Center Test of 1973. For more information, see ARI Study "Behavioral Assessment of Leadership Skills," December 1975. If a new battery needs to be developed, the developmental cost is approximately \$60,000. Costs obtained from ARI.

3/ The developmental cost of a TEC lesson is \$9,100. Each lesson would then cost \$4.00 each. The test instrument, the Besseler QC device, costs \$580 apiece.

Cost components:	TEC Lesson Development:	9,100
	66 TEC Lessons x 4.00:	264
	66 Besseler QC x 58:	<u>28,380</u>
	TOTAL	47,644

4/ TRADOC cost model.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

THE ROTC PROGRAM

TO ANNEX C

PRECOMMISSIONING

I. The Current Program

1. The current Reserve Officer's Training Corps (ROTC) program is a 4-year on-campus program which enrolls students at the beginning of the freshman year and conducts Military Science (MS) classes in all 4 years. The curricula at the institutions vary greatly based upon the preferences of the ROTC Region Commanders and the desires of the Professors of Military Science (PMS). Training and Doctrine Command (TRADOC) has provided a basic curriculum and several modifications, any of which can be adopted based on the recruiting and retention requirements of the ROTC program at a particular college or university. Individual institution programs vary between no military science classroom activities in the Basic Course (MS I - Freshman year and MS II - Sophomore year) to programs with classroom instruction with university academic credit in the Basic Course. Most Advanced Courses (MS III - Junior year and MS IV - Senior year) provide for classroom instruction by the Military Science department but academic credit is dependent upon institution policy.

2. In addition to the academic portion of ROTC, the program has one 6-week Summer Camp which must be completed before commissioning. Cadets normally attend this Summer Camp between the MS III and MS IV years but, with justification, it can be completed after graduation. This camp normally exposes the cadet to military life, imparts some basic military skills, such as rifle marksmanship, and provides the Army with the opportunity to evaluate the potential of each cadet. The existing program provides for student lateral entry, but during the Basic Course only. Students with prior military or Junior ROTC experience can qualify for advanced placement; other students can either compress the Basic Course if the university offers such a program, or attend a Basic Summer Camp before enrollment in the Advanced Course.

3. The current program provides 6,500 scholarships and pays a subsistence allowance of \$100 per month to all Advanced Course students. The annual cost of the current program is \$125 million. ROTC provides the Army with approximately 6,000 commissionees each year.

II. Problems

1. Production

The FY 1979-83 Program Objective Memorandum (POM) has projected a requirement for 10,027 ROTC produced officers by 1981. The following table displays officer requirements from FY 1978-81.

<u>REQUIREMENT 1/</u>		<u>ENROLLMENT 2/</u>		<u>ATTRITION 3/</u>	<u>POTENTIAL PRODUCTION 4/</u>
FY 78	6,376	MS IV	6,827	5%	6,485
FY 79	7,983	MS III	7,660	5%	6,913
FY 80	9,025	MS II	12,620	37%	8,174 <u>5/</u>
FY 81	10,027	MS I	32,570	54%	9,517 <u>5/</u>

1/ Requirements - extracted from FY 1978-82 POM.

2/ Enrollment - extracted from TRADOC Opening School Year 1977-78 Enrollment Report.

3/ Attrition - historical percentages provided by HQ TRADOC.

4/ Potential Production - computed by applying attrition percentages to enrollment.

5/ Assumed 2-year program input of 1,000 added to computed potential production.

The above table shows that the ROTC program, based upon its historical performance, cannot meet the total requirements established by the POM. It is also possible that attrition rates may increase in the MS I and MS II years as recruiting efforts by TRADOC have recently increased the numbers of students enrolled in those years. An increase, in the attrition rates would obviously decrease the projected production rate. In further substantiation, a study completed at the U.S. Army War College in January 1978* concluded that "under current operating conditions ROTC detachments are not likely to meet projected officer goals, and they need outside help if the situation is to be reversed."

*ROTC in Transition, A new Potential For Leadership, US Army War College, Carlisle Barracks, PA, 4 Jan 1978.

In a survey of PMS** the average response was very strong disagreement with the statement "It is reasonable to expect that the number of cadets commissioned by ROTC can be doubled by FY 81."

2. Cost of the Program

(a) The current ROTC program costs \$125 million and it is projected to increase to \$132 million by 1981. Based upon budget trends, the Army must be able to find more efficient ways and means for meeting its officer accession requirements.

(b) The personnel resources of the ROTC program are as follows:

OFFICERS	1,500
ENLISTED	996
CIVILIAN	554
TOTAL	<u>3,050</u>

The Army has been and will be faced with reductions in personnel ceilings, and nearly 2,500 military personnel are assigned to the ROTC program. Based upon 1978 ROTC production there is one officer assigned to the ROTC program for every 4.3 officers produced by the program. A more efficient way to produce officers is needed.

3. Recruiting and Retention. Too many ROTC resources in terms of funds, personnel and training time are devoted to recruiting and retention activities.

(a) Funds - Recruiting young men and women into ROTC is, from the advertising standpoint alone, a \$6 million operation. One of the main purposes of national advertising, which amounted to \$4.3 million in FY 78, is to publicize the ROTC program to high school students, many of whom will not go on to college or will attend institutions which do not offer ROTC.

(b) Personnel - Based upon interviews with PMS, not less than 40 percent of the personnel resources of ROTC detachments are devoted to the recruiting and retention of cadets. Many detachments have a full time recruiting officer who coordinates recruiting efforts. Other detachment members are required to visit high schools and supervise extra curricular activities which are designed to promote ROTC.

** RETO sponsored survey conducted in Dec 1977. Of 280 surveys forwarded to PMS, 258 were returned. The survey dealt with a variety of subjects pertinent to ROTC.

(c) Training Time - Recruiting also entails a large percentage of the local ROTC detachment in time and effort. ROTC programs are, in many cases, designed to attract students from the standpoint of participation in fun-and-games-activities, rather than from an education and training aspect. Many of these programs devote the entire Basic Course in Military Science (Freshman and Sophomore years) to activities designed to attract and retain students into ROTC.

(d) Retention - As was mentioned previously, freshman college students who join ROTC attrite at the rate of 54 percent by the end of the freshman year. Of the 46 percent who remain in ROTC after the freshman year, 37 percent leave ROTC by the end of the sophomore year. Therefore, for every 100 students who join ROTC only 29 enter the Advance Course. It is difficult to justify \$6 million in advertising and 40 percent of detachment time for a retention rate of less than 30 percent.

4. POI Variances. The various authorized programs of instruction (POI) produce commissionees who have widely diverse levels of pre-commissioning education and training. Only the Advanced 6-week Summer Camp provides standard instruction to all cadets.* As was mentioned previously, a reason for the inconsistency in precommissioning training is the varied programs in the on-campus programs of instruction. The programs vary as a result of the emphasis being placed on recruiting and retention of ROTC cadets and because of the restrictions which have been placed on ROTC instructional programs by institutional administrators. These restrictions generally relate to the types of subjects which may be taught with academic credit as part of the institutions degree-granting programs or with credit towards the student's grade-point average. Academic credit in either of the above forms normally involves faculty as well as university administration approval; unless the course material and instructor credentials meet with the approval of the university's credit-approval agency, the course will not be accredited and may not even be authorized for presentation on the campus. There are currently three schools which will not allow any type of credit for ROTC courses (Carnegie-Mellon University, Princeton University, and Bowdoin University). With the 280 ROTC host institutions and 5 types of programs of instruction, there is the potential of having 280 different programs.

*The Advanced Summer Camps are located at Forts Bragg, Riley and Lewis.

5. Basic Course vs Basic Camp. The Basic Summer Camp is a 6-week Camp conducted at Fort Knox, Kentucky. The Camp serves as a substitute for the ROTC Basic Course, graduating about 1,000 cadets annually. The Basic Course and the Basic Camp POI are not equal in scope. The Basic Course features a Program of Instruction which requires 180 hours of on-campus instruction. There are five variations of the POI, all of which provide flexibility for the PMS to structure the Basic Course to suit the needs of his detachment and host institution. A comparison of the five variations of the POI is at Inclosure 1. An examination of these program variations shows that the Basic Course is primarily oriented towards academically oriented subjects. At Inclosure 2 is a listing of the Basic Camp POI. The thrust of this program is primarily field training oriented. Therefore, the Basic Camp which is billed as a substitute for the Basic Course in fact provides a very different orientation for the cadet before entry into the Advance Course.

6. Basic Camp Advanced Camp Redundancy

(a) The purpose and objective of the Basic Camp as stated in TRADOC Regulation 145-1 (21 May 1976) are:

(1) Purpose - To attract, motivate, and qualify additional host institution students for the advanced ROTC program by providing a Basic Camp course of instruction parallel to the regular on-campus ROTC Basic Course as an entry point for non-ROTC, nonprior service student volunteers who have 2 years of academic undergraduate or graduate work remaining and who --

- (a) Did not take MS I and II and now want to enter ROTC.
- (b) Are transferring from a non-ROTC institution.
- (c) Are junior college graduates entering a host institution.
- (d) Are graduate students in or entering a host institution.
- (e) Are high school graduates entering a military junior college.

(2) Objective - The Basic Camp objective is to teach discipline, spirit and certain basic military and leadership skills while challenging students both physically and mentally in order to motivate and qualify them for officer training and education.

(b) TRADOC Regulation 145-1 provides the following objectives for the Advanced Camp.

(1) Supplement on-campus instruction by providing practical experience in a field training environment.

(2) Provide an opportunity for the cadet to develop and demonstrate his leadership capabilities in various tactical situations with emphasis at the platoon level.

(3) Provide leadership opportunities in the form of problem analysis, decisionmaking, and troop-leading experiences.

(4) Challenge the cadet both mentally and physically.

(5) Provide the cadet with a practical introduction to Army life.

(6) Provide the PMS with an evaluation of the cadets' leadership ability and/or potential.

(c) The Basic Camp is designed for students who have not had ROTC training on-campus while the Advanced Camp trains students who have 3 years of ROTC on-campus instruction. An examination of the subjects taught at both camps (Inclosures 2 and 3) reveals that 70 percent of the time spent at the Basic Camp is repeated at the Advanced Camp. A listing of the redundant subject matter is at Inclosure 4.

7. On-Campus Recruiting. The degree of institutional support received by the ROTC detachments varies greatly. This support, or lack of support, affects not only the local program of instruction but another extremely important ROTC mission: recruiting. Some schools discourage recruiting on-campus. Others are passive. Still others actively support recruiting. University support, if only passive in nature, is essential to a productive program. The PMS survey shows a complete dissatisfaction with high school recruiting as a primary means of attracting students to join ROTC. And therefore, much more importance must be placed on on-campus recruiting. Furthermore, in a study conducted by the Army Research Institute (ARI), 53 percent of college freshman and sophomores surveyed, who were enrolled in ROTC at the time, responded that ROTC personnel had "very much" influence on them to join Army ROTC. "ROTC personnel" was one of

eleven influences listed in the survey and it received the highest rating in terms of recruiting importance. Thus, a need exists to garner the active support of all institutions which host ROTC.

8. The Untapped Market. The ROTC program is hosted by 280 colleges and universities; cross enrollment agreements exist with 422 other institutions. These agreements permit students enrolled in schools which do not offer ROTC to cross-enroll in ROTC host institutions. Since there are approximately 1,900 4-year colleges and universities in the United States, the Army ROTC program is not available to students in approximately 1,200 schools, some 63 percent of the 4-year degree-seeking institutions. Furthermore, in the ARI study referred to above, nearly 9 percent of nonenrolled ROTC students in an ROTC host institution stated that their reason for not joining ROTC was that they did not have sufficient information about the program. An even more startling statistic is the fact that in one ROTC host institution there are over 37,000 full-time students and only 215 enrolled in ROTC. This program cannot compare with a small college in New York State which has a student body of 2,138 and 306 enrolled in the ROTC program. The larger school will produce 36 officers in 1978 while the smaller school will produce 42. The smaller school is the exception as far as ROTC enrollment is concerned and there is much room for improvement in attracting more students to ROTC in the majority of host institutions.

III. Problem Summation

A summary of the 4-year program problems which have been identified are:

(a) The current program cannot meet required accession quantities beginning in 1979.

(b) The 4-year ROTC program is expensive in terms of funds and personnel.

(c) The Basic Courses at many universities are designed as recruiting and retention programs rather than education and training programs.

(d) Recruiting and retention of ROTC cadets is too expensive when compared to retention rates.

(e) The precommissioning education and training level of ROTC commissioned officers varies greatly based on the university attended.

(f) The Basic Camp, designed as a substitute for the Basic Course, is, in fact, very different.

(g) The Basic Camp and the Advanced Camp are more than 70 percent redundant in training subject matter.

(h) Some institutions restrict the amount of recruiting which can be accomplished on campus.

(i) Students in approximately 1,200 (about 63 percent of the total) colleges and universities are not being reached by ROTC programs.

(j) Many ROTC detachments have not fully recruited in their own host institutions.

The above problems underscore the need to revitalize the college pre-commissioning system. New ways of attracting and educating/training potential officers from the ranks of college and university students must be found. The current system has provided sufficient numbers to meet active duty requirements, however, current enrollment trends indicate that total Army requirements in the 1980's will not be met. In addition, the current program has inefficiencies and inconsistencies which require redirection.

IV. Alternatives. Described below are three alternatives to the current program - all of which will ease or resolve the problems identified with the 4-year program.

1. 2-year Program

(a) The Basic Course, as it currently exists, is primarily a recruiting device designed to attract students into ROTC and, by means of a variety of ROTC programs, retain the student until the Advanced Course. This alternative eliminates the Basic Course and, its substitute, the Basic Camp. Thus ROTC will become a true 2-year program. It will involve recruiting on the college campuses for students in the sophomore year who have proven that they have the ability and maturity to cope with a baccalaureate program. The program will consist of 2 years of training and education in Military Science and 1 8-week summer camp. This program involves a student government contract upon entry into ROTC. This proposal will foster the following advantages and improvements:

(1) A reduction in on-campus activities, i.e., MS I, MS II and high school recruiting, will reduce the detachment sizes, which typically amount to about 10 military and civilian spaces, to about 6. The exact detachment size would depend on local conditions. This savings can be used as ammunition to convince the Congress to increase the number of scholarships to 12,000*.

*The concept of increasing the scholarship program from 6,500 to 12,000 is explained in another RETO paper.

(2) Recruiting can be concentrated on the campus within the sophomore and junior classes. Students beginning the junior year would be the prime source for filling the Advanced Course, however, a compressed Advanced Course offered in the senior year and Summer Camp after the senior year would offer a student beginning his/her senior year the opportunity to obtain a commission through ROTC. Since these students have already demonstrated college ability, the problem of retaining those who joined ROTC is greatly reduced.

(3) The basic focus of ROTC is to recruit college students to serve as officers and to provide these students with military science training while enrolled in college. The current faculty attitudes on many college campuses limits the type and amount of military science courses which can be offered. A 2-year program which is academically structured so as to severely limit the quantity of subjects into a expanded Summer Camp of 8-weeks will provide the Army with a second lieutenant who has been exposed to the same types and quantities of military science courses. It will therefore relieve the problem of unequal precommissioning training.

(4) A preliminary costing survey conducted by the Office of Comptroller of the Army (COA) has indicated the cost of the 4-year ROTC program to be \$125 million while the cost of the proposed 2-year program is also \$125 million. Therefore, based on these preliminary estimates, a movement to this proposed program which includes an additional 5,500 scholarships and which produces an estimated 10,000 commissionees each year, will result in no additional costs over the current programs which produces 6,000 officers each year.

(5) The aforementioned increase in scholarships as well as the reduced student requirements will provide the recruiting incentives necessary to attract students to the program.

(b) Disadvantages to this program are:

1) The potential of resistance to change on the part of institution administrators and the ROTC community.

(2) Some conflict with student time will still occur.

(3) Congressional approval will be required.

2. Platoon Leaders Course (PLC)

(a) This alternative allows qualified personnel to be recruited from the vast number of colleges that have been untapped by current Army precommissioning programs. All precommissioning education and

training takes place at 2 summer camps; 1 6-week camp after the sophomore year and 1 10-week camp after the junior year. Students would not sign a contract until after the first summer camp as that camp will be used as a screening device for the attendees.

(b) Recruiting for the PLC becomes a function of the US Army Recruiting Command (USAREC). The attractiveness of the program will be based on scholarship increases (6,500 to 12,000) and a continuation of the \$100 per month subsistence allowance.

(c) Scholarships would be allocated as follows:

4,000 - 4 years
8,000 - 2 years

The 4-year scholarships would be allocated to insure that the Army remained competitive with the other services for outstanding high school graduates. 4-year scholarship winners would not be required to participate in military activities until the first summer camp.

(d) A preliminary cost estimate of this program conducted by the OCOA shows a program cost of \$116 million as compared to \$125 million for the current program. This alternative which includes 5,500 additional scholarships and which produces 10,000 commissionees each year, will result in savings of \$9 million over the current program which produces 6,000 officers each year.

(e) The PLC alternative provides features which eliminate the problems associated with the current program, however, the following disadvantages to the PLC are apparent:

- (1) There is the potential of resistance to change on the part of institutional administrators and the ROTC community.
- (2) The PLC disrupts 2 summers.
- (3) The military presence on campus will be eliminated on those campuses where ROTC detachments currently exist.
- (4) Congressional approval will be required.

3. College Graduate Officer Candidate School (OCS)

(a) The OCS alternative eliminates military instruction on-campus. It provides for a contract at any time after the beginning of the students junior year of college at which time the student will be paid \$100 per month. The contract will require the student to remain in good academic standing and will require the student to attend basic

training and OCS after graduation. Students who apply for this program will require processing through an Assessment Center prior to being offered a contract.

(b) Procurement managers for this program will be in USAREC. Recruiting incentives will be in the form of 12,000 scholarships (4,000 4-year and 8,000 2-year) and in the subsistence allowance. The Army currently offers a College Option OCS for 200 qualified applicants each year. USAREC has been able to meet the quota without actively recruiting for the program because interest among college seniors has been keen. The aforementioned financial incentives will make this alternative even more acceptable.

(c) Students who receive scholarships will be required to fulfill a 4-year active military commitment.

(d) The OCOA preliminary cost estimate for this alternative is \$113 million including scholarships. The cost of this program which includes an additional 5,500 scholarships, at a production rate of 10,000 officers per year will result in a savings of \$12 million when compared to the current program at a rate of 6,000 officers per year. Since Basic Combat Training (BCT) will be required for participants in this option an additional \$21.5 million must be added to total option cost.

(e) This alternative resolves problems identified with the current program but has the following disadvantages:

(1) There is the potential of resistance to change on the part of institution administrators and the ROTC Community.

(2) Military socialization of future officers will not take place during the college years.

(3) The military presence on campus will be eliminated at those campuses where ROTC detachments exist.

(4) Congressional approval will be required.

V. Consideration of the Alternatives. Each of the alternatives provides the means of producing the officers necessary to meet accession requirements. All of the alternatives are also attractive financially. There is no intent in any of the alternatives to alter the 4-year programs in the military colleges. However, abandoning the current system which is producing a sufficient quantity of acceptable officers for the Active Army in favor of any of the untried alternatives could jeopardize officer accessions for years.

VI. Recommendations

1. Retain the 4-year ROTC program while simultaneously conducting a test of:

- (a) The 2-year program.
- (b) The Platoon Leaders Course.
- (c) The College Graduate Officer Candidate School.

2. The ROTC program tests would be conducted by TRADOC within the following guidelines:

(a) Conduct the 2-year ROTC test in at least one school which currently has the 4-year program. Other tests should strive to reach the untapped college market.

(b) Select schools of various size, and including public, private and at least one predominately Black institution, to insure test validation.

(c) Begin recruiting in the selected schools during school year 1978-79 with the test commencing during school year 1979-80. The test should be conducted for at least 2 years to insure that the tests are afforded a fair trial.

(d) Allocate sufficient scholarships to the test schools to provide the necessary recruiting incentives.

4 Inclosures

- 1. Basic Courses POI
- 2. Subject Listing, Basic Camp POI
- 3. Subject Listing, Advanced Camp POI
- 4. Basic Camp - Advanced Camp Comparison Redundant Subjects

BASIC COURSE

PROGRAM OF INSTRUCTION

	<u>REGULAR PROGRAM</u>	<u>HRS</u>	<u>MODIFIED PROGRAM</u>	<u>HRS</u>	<u>DEVELOPMENTAL PROGRAM</u>	<u>HRS</u>
Freshman Year	US Defense establishment Leadership development Appropriate military subject (First aid, scouting and patrolling etc.)	30 30 30	US Defense establishment Leadership development Appropriate Academic Subj. (i.e., American Govt)		World Military history Fundamentals of leadership and management	30 30 30
TOTAL		90				90
Sophomore Year	American Military history Intro to tactics and OPNS Leadership development	30 30 30	American Military history Map and aerial photo reading Intro to tactics and OPNS Leadership development		National Security and concept of force Applied leadership and management	30 15 15 30
TOTAL		90				90
Basic Course						
TOTAL		180				180

<u>BRANCH MATERIAL</u>	<u>HRS</u>	<u>UNNAMED PROGRAM</u>	<u>HRS</u>
US Defense Establishment	30	Fundamentals of Leadership	30
Leadership development	30	and management	
Appropriate academic/military subject	30	Appropriate academic subject	65
TOTAL	90		90
Intro to engineer tactics and techniques (example)	30	Applied leadership and management	60
American military history	30	Appropriate academic subject	45
Leadership development	30		
TOTAL	90		105
Basic Course			
TOTAL			180

C 2-1-1-2

SUBJECT LISTING
BASIC CAMP POI
 (TRADOC REG. 145-1)

<u>SUBJECT</u>	<u>HOURS</u>
(1) Processing of students	16
(2) National holiday	8
(3) Role and mission of the US Army	3
(4) Significance of military courtesy, customs, and traditions	2
(5) Theory of basic rifle marksmanship and familiarization firing	16
(6) First aid	3*
(7) Drill, parades, and ceremonies	22
(8) Physical training	18
(9) Map reading and land navigation	21
(10) Operations and tactics	84
Individual tactics	(26)
Marches and bivouacs	(12)
Small-unit tactics	(46)
(11) Inspections and maintenance of clothing and equipment	9
(12) Professionalism	8
(13) Commander's time	13
(14) Discipline/leadership	5*
(15) Communications training	4
(16) Proficiency testing	11
Graded military skills training	(8)
Peer rating	(3)
TOTAL	240 (3)*

*One hour to be conducted as concurrent training in First Aid, 2 hours conducted as concurrent training in discipline and leadership.

SUBJECT LISTING
ADVANCED CAMP POI
 (TRADOC REG. 145-1)

<u>SUBJECT</u>	<u>HOURS</u>
(1) Processing cadets	16
(2) National holiday	8
(3) Drill, parades, and ceremonies	6
(4) Physical training	12
(5) Camp commander's time	10
(6) Chemical, biological, and radiological (CBR) indoctrination	2*
(7) Field sanitation, personal hygiene, safety and emergency first aid	2*
(8) Inspection of personal clothing and equipment	2
(9) Weapons	54
Theory of marksmanship and familiarization firing	(16)
Machine guns, Cal .45 pistol	(8)
Mortars and light artillery	(16)
Tanks	(4)
Antiararmor, grenades, recoilless weapons, mines, and flamethrowers	(8)
Air defense weapons	(2)
(10) Professional development activities	4
(11) Land navigation/orienteering	20
(12) Signal communications	4
(13) Tactics	112
Tactical training of the individual soldier	(30)
Leading small units in combat	(20)
Tactics (offensive and defensive)	(54)
Combined arms training	(8)
(14) Tactical Application Exercise	8
(15) Leaders' Reaction Course	6
(16) Military Stakes	4
TOTAL	270 (4)*

*To be conducted as concurrent training.

INCL 3

C-2-III-1

BASIC CAMP-ADVANCED CAMP COMPARISON
REDUNDANT SUBJECTS

Processing of students	16	16
National Holiday	8	8
Drill, parades and ceremonies	22	6
Physical training	18	12
Map reading/land navigation/orienteering	21	20
Operations and tactics	84	112
Inspection/maintenance of personal clothing and equipment	9	2
Commanders time	<u>13</u>	<u>10</u>
TOTALS	191	186

INCL 4

C-2-IV-1

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

THE ROTC SCHOLARSHIP PROGRAM

TO ANNEX C

PRECOMMISSIONING

I. The Current Program

1. The Army Reserve Officer Training Corps (ROTC) Scholarship Program as established by title 10 U.S. Code, is governed by the U.S. Army regulations and publications listed at Inclosure 1.

2. By section 2107, title 10 U.S. Code, the Army is authorized to provide financial assistance through scholarship to 6,500 ROTC cadets. Within this framework the Army has created 4 types of scholarships to enhance recruiting and to reward deserving ROTC cadets. The types and quantities of scholarships for school year 1977-78 are as follows:

<u>TYPE</u>		<u>QUANTITIES</u>
Four Year	-	2,699
Three Year	-	2,513
Two Year	-	1,032
One Year	-	256
TOTAL		6,500

3. AR 145-1 is the basic policy instrument that governs the ROTC and its scholarship program. This regulation places the managerial and operational responsibility on the Commander U.S. Army Training and Doctrine Command (TRADOC). DA establishes allocations of the types of scholarships for the coming school year. Inclosure 2 lists scholarships by type in effect in the four ROTC regions. These allocations, together with special program allocations, are included at Inclosure 3.

4. The scholarship program costs the Army in excess of \$13 million annually* in financial assistance, producing an average of 1,800

*TRADOC Message ATRO-RM DTG 3022092 Dec 77 advises that the annual average cost of a scholarship in FY 77 dollars is \$2,116. There are 6,500 scholarships in effect; therefore, the annual cost of scholarships is $\$2,116 \times 6,500 = \$13,754,800$.

commissionees each year. Program administration contains a detailed and somewhat cumbersome system of screening applicants and selecting winners. The eligibility criteria for the various types of scholarships has been charted at Inclosure 4. At Inclosure 5 is a description of the screening and selection processes.

5. The Scholarship Contract: All recipients of ROTC scholarships are required to enter into a contract with the Army. The contract imposes 17 restrictions, requirements, contingencies, etc., on the scholarship winner. The most significant of the above are a 4-year service obligation when commissioned; a 2-year enlisted service obligation if the recipient fails to meet the contract obligations in the Advanced Course (junior and senior years); and a 4-year enlisted service obligation for willful evasion of the contract terms during the Course. Recipients are allowed to discontinue the scholarships without penalty at any time during the Basic Course (freshman and sophomore years). A copy of the scholarship contract is at Inclosure 6.

6. Scholarship Benefits: Each scholarship recipient receives full tuition, related academic expenses such as lab fees and textbooks, subsistence in the amount of \$100 per month during the academic year (not more than 40 months during the entire ROTC program), and other expenses such as certain travel reimbursements. The average scholarship student receives approximately \$2,100 in benefits annually.

II. Problems with the Current System

1. Selection Process: The current selection process is laborious and painstaking. However, the importance of this system is a key factor in the identification of appropriate and deserving students and should in no way be relaxed.

2. Acceptance Rate: Based upon 1977 scholarship selection data, only 54 percent of the applicants originally selected as a 4-year ROTC scholarship winner actually accepted the scholarship. The chart at Inclosure 7 displays the reasons given by winners and alternates for not accepting. Many students who accept scholarships are, in fact, originally designated as alternates. This statistic shows that many highly qualified students apply for and actively seek as many financial assistance programs as possible. They then select, from those offered, the scholarship that best suits their needs. It may be logically concluded then, that many other scholarship programs are equally if not more attractive, than the Army ROTC scholarship.

3. Retention Rate: The retention of students who accept ROTC scholarships is approximately 65 percent which, although not high, is significantly higher than the Navy (50 percent) and Air Force (55 percent). The chart at Inclosure 8 provides a display of retention from the 1976-77 school year. There is no existing system for determining the reasons for scholarship discontinuance. Such a system, if existant, would identify program deficiencies and would provide the basis for program improvements.

4. Disciplines: There are no academic disciplines prescribed in the Army ROTC scholarship program. Thus, each year the Army commissions an average of 1,800 officers who have received financial assistance in academic fields which may or may not have application to the Army's requirements. Additionally, there is no ROTC requirement that students enroll in any courses which are highly desirable and translatable to the development of Army officers. Examples are communication and management courses, two subject areas which all officers need but are not required to take under current ROTC directives.

5. Contracts: The scholarship program contract allows students to discontinue financial assistance from the Army at any point in the first 2 years of college without penalty. The program has "teeth" in the contract only during the third and fourth years of college. Students who then fail to meet their contract requirements can be forced to serve in the Active Army in an enlisted status for up to 4 years. The Army, however, rarely exercises its option in this regard; most disenrolled students are released from their contracts. From 1969 to 1973, 78 students were ordered to active duty for willful evasion of scholarship contracts. Since 1973 only 5 have been so ordered.

6. ROTC Production: The Army must produce approximately 10,000 officers annually, beginning in 1981 to meet Army requirements.* ROTC is currently producing approximately 6,000 officers annually. Strenuous recruiting efforts to meet production goals have been made by the ROTC community, however reaching the requirement of 10,000 does not appear feasible under the current system. A Strategic Studies Institute study** conducted in 1977 concluded the the Army of 1995

*Requirement extracted from 1978-1983 POM.

**Strategic Studies Institute Futures Study, 1977, forecasts the 18-24 year old labor market reduced by 40 percent from current figures.

will be competing for officers in a much smaller labor market than currently exists. This projection, together with a draft Army Research Institute (ARI) study*** which identifies the financial benefits of ROTC, both scholarships and subsistence, as a major factor in enrolling in and continuing in the ROTC, identifies the need to provide additional incentives now to provide competitive advantages needed to meet officer accession requirements in the years ahead.

III. Improvement Considerations:

1. Acceptance Rate: The scholarship acceptance rate is unsatisfactory by any standard. When the stringent selection process for ROTC scholarship selection results in scholarship award acceptance by only one in two selected winners, something is amiss. Certainly, with the selection system currently employed and the importance that should be and is placed upon selecting students who possess those kinds of characteristics which are required of Army officers, actions should be taken to achieve a better payoff than current figures indicate. No one doubts that the Army is attracting the right kinds of applicants and that the evaluation process provides in the long term those students who want the Army and vice versa. Still, improvements can be tested which might improve significantly the scholarship acceptance rate. One improvement might be to develop standard questions and interview techniques for the Scholarship Interview Board. Through this device interviewers might be better able to distinguish, from many well-qualified applicants, those whose commitment and motivation levels are more predictive of success in a military environment than others. Too, those persons who are merely "hedging a bet" by making multiple scholarship application, might be identified. Another method might be the development of an ROTC Assessment Center concept, which would measure the physical, academic, medical, and behavioral development of ROTC applicants. (The Assessment Center is the subject of another RETO paper).

2. Disciplines:

(a) Based on statistics provided by ODCSPER, approximately 3 percent of 4-year scholarship students major in academic disciplines which are not even remotely connected with Army requirements. Drama and taxidermy are examples of such a mismatch. No matter how small this percentage, it is unsatisfactory. All 4-year scholarship students

*** ARI Study entitled Attitudes of Youth Toward ROTC; spring 1977, is being finalized and should be published by 1 June 1978.

should be preparing themselves in disciplines either specifically required by the Army or tangentially required in that there are certain academic disciplines, such as management and psychology, which have a direct relationship to needs of certain Army specialties. ODCSPER is scheduled to complete a study by May 1978 which will specify those disciplines which are related to Army requirements. The results of this examination should be included in the scholarship program as soon as possible.

(b) As an additional insurance measure, the Army should direct immediately that all 4-year scholarship students (and, where possible, scholarship students of lesser duration) complete a course in written communications and a public speaking course to blunt the charge that Army officers do not write or articulate well. Further, leadership and management courses should be considered essential to all ROTC academic programs.

3. Contracts: The current contract does not provide sufficient default options which would mutually benefit the student and the Army. A reimbursement clause in the contract would discourage students who accept the scholarship without serious commitment to the Army. It would also provide a realistic and equitable reimbursement to the Army for those students who fail academically or who change their mind about commitment to the Army. Under a "pay-back" clause, the first year of a 4-year scholarship would continue to be a year of consideration and adjustment for the student. No penalty or tuition "pay-back" would be involved if the student decided that the Army was not what he/she wanted. Beginning with the second year of the scholarship, any student who defaults his contractual agreement would be required to repay the government within 5 years for all financial benefits received prior to default. For those students who are unable to provide recoupment to the government enlisted service tours of 2 to 4 years should be enforced. LTC Robert D. Reese in a Research Report submitted in 1975 to the faculty of the Air War College examined the Canadian, Great Britain and Australian tuition assistance - commissioning systems. All three countries have tuition assistance programs which use recoupment as the sole means of enforcing contractual fulfillment. All three countries have experienced favorable results. LTC Reese's report deals only with Air Force precommissioning systems but the concepts of the tuition assistance programs are the same. LTC Reese reasoned that a recoupment clause in scholarship contracts would mean that "the student would incur an educational debt, a nearly normal state of affairs." A recoupment clause in the contract would also provide the Army and the student a logical alternative to enforced enlisted service.

4. Scholarships

(a) There are thousands of qualified applicants for 4-year ROTC scholarships who are not interviewed because they are not deemed competitive after an initial screening of applications by TRADOC. This screening selects the number of applicants which corresponds to approximately two-and-one-half-times the number of 4-year scholarships to be awarded (700 in 1978). Therefore, in 1978, over 5,000 applicants were rejected as non-competitive. Many of these, based on this superficial screening process and without the subjective evaluation of a board, are students who possess the qualifications desired. Many of these students will attend schools which do not offer ROTC. In all probability they will be "lost" to the Army. The number of potentially qualified applicants supports the contention that if additional scholarships were authorized, qualified awardees would be available to accept them.

(b) Prior to 1976, 1,000 4-year scholarships were awarded. In 1976 the number was reduced to 700 so as to provide scholarships to deserving cadets who had completed Military Science I (freshman year) and demonstrated a desire and the potential to make the Army a career.

(c) If additional incentives are needed now to give the ROTC a boost, and the discussion of ROTC production problems outlined in paragraph 6, Section II above underscores the growing need for increased incentives, more scholarships would serve that need.

(d) If, instead of 6,500 ROTC scholarships, 12,000 scholarships were provided,* the Army would be able to access some 5,000 scholarship commissionees annually. The distribution of scholarships would be 4,000 4-year and 8,000 2-year. Each year 1,000 4-year scholarships (an increase from 700) and 4,000 2-year scholarships would be awarded. Detached scholarships would result in the award of additional 2-year scholarships the following year. Each year the Army would commission about 5,000 scholarship holders. The chart below depicts the phase-in period. The "Year Four" column completes the phase-in period.

*Increasing scholarships would necessitate a change in the USC. Such an increase would cost \$11.5 million annually. DA, ODCSPER is currently preparing a proposal to increase the number of ROTC scholarships to 12,000.

SCHOLARSHIP COMMISSIONEES

<u>SCHOLARSHIP HOLDERS</u>	<u>YEAR ONE</u>		<u>YEAR TWO</u>		<u>YEAR THREE</u>		<u>FOUR YEAR</u>	
	4 yr	2 yr	4 yr	2 yr	4 yr	2 yr	4 yr	2 yr
FRESHMAN	1000		1000		1000		1000	
SOPHOMORE			1000		1000		1000	
JUNIOR		4000		4000	1000	4000	1000	4000
SENIOR				4000		4000	1000	4000
COMMISSIONS				4000		4000	1000	4000

That number would meet the Army's active duty requirement in the years ahead, where the shrinking labor pool will make competition even keener than today. In addition, scholarship commissionees would have a 4-year active duty commitment, reducing turnover and providing a much better base of well trained lieutenants.

5. Reserve Component Scholarships

(a) Accessing officers for the Reserve Components is becoming increasingly difficult. In 1978, Reserve and National Guard unit shortfalls will reach 2,300 and shortages are expected to increase. The Army must take immediate positive action to thwart the current recruiting trend. Individual states have initiated pilot programs to increase officer accessions (see below). Even if successful, however, improvement will occur within a few States; the national picture will remain bleak. The transfusion needed now by the Reserve Components is scholarships - awarded to qualified persons interested in pursuing the challenge of a commission, but not in an active duty status. For, if the "Total Army" concept is to become a reality, the notion of coupling the ROTC scholarship with an active duty commitment must be discarded. This proposal suggests that upwards of 1,000 scholarships could be awarded annually to attract high caliber individuals for eventual service with Reserve Component units. Without the dedication of a certain number of ROTC scholarships for the Reserve Components, the crucial officer problem in our Reserve units, and its associated cost in unit effectiveness, will continue in the years ahead.

(b) The States of Ohio and North Carolina are presently conducting tests wherein National Guardsmen receive tuition assistance from the State while they attend universities within the State and enroll in their Army ROTC programs. If this test is successful, it could be expanded to all interested States where programs could be established in order to meet Army National Guard accession requirements. The USAR could also establish a similar program with Federal funding to assist in meeting its needs.

IV. Conclusions. The ROTC scholarship program remains, even in its present form, a very attractive program for interested college students. However, as this paper has indicated, improvements need to be implemented to this already viable program to give the Army the numbers and kinds of officers it needs. Increased scholarships, coupled with a tightening of qualifications, should meet the expanded Army production needs of the future.

V. Recommendations

1. Develop a screening system that incorporates academic, medical, physical fitness and mental testing for scholarship qualification.
2. Develop a general list of academic disciplines which relate to Army requirements from which scholarship recipients must select a major course of study.
3. Prescribe communication skills and human behavior as mandatory courses for all scholarship recipients.
4. Revise the current scholarship contract by adding a "pay-back" requirement to the Government for all financial benefits received in connection with the scholarships for those students who fail to abide by the other contract provisions.
5. Increase the total number of scholarships from 6,500 to 12,000.
6. Dedicate 1,000 scholarships annually to the Reserve Components.
7. Encourage the Army National Guard and the U.S. Army Reserve to explore other college assistance programs to meet accession requirements.

8 Inclosures

1. Pertinent ROTC Laws, Regulations and Circulars
2. Current ROTC Scholarships
3. SY 78-79 Scholarship Allocations
4. Army ROTC Scholarship Eligibility Criteria
5. Army ROTC Scholarship Selection Process
6. Army Senior Reserve Officer Training Corps Student Contract
7. Reasons Given For Not Accepting Army ROTC Scholarships
8. Scholarship Retention Rates

PERTINENT ROTC LAWS, REGULATIONS AND CIRCULARS

TITLE 10 U.S. CODE

AR 145-1 - Reserve Officers' Training Corps, Senior Division Organization, Administration and Training, 15 June 1975.

AR 40-501 - Standards of Medical Fitness, 5 December 1960

AR 40-29 - Medical Examination of United States Service Academy and ROTC 4-year Scholarship Students, 13 September 1974

TRADOC Circular 145-5 - Army ROTC Scholarship Administrative Instructions, 13 June 1978

CURRENT ROTC SCHOLARSHIPS

<u>REGION</u>	<u>SCHOOLS</u>	<u>4YR</u>	<u>3YR</u>	<u>2YR</u>	<u>1YR</u>	<u>TOTAL</u>
I	105	932	938	374	100	2,344
II	67	623	588	231	66	1,508
III	62	454	639	246	49	1,388
IV	46	690	348	181	41	1,260
TOTAL	280	2,699	2,513	1,032	256	6,500

**SY 78-79 SCHOLARSHIP ALLOCATIONS
1978/1979 School Year**

	MALES	FEMALES	SPECIAL PROGRAM MALES*	FOUR YEAR PRO FEMALES	ACTIVE DUTY EM	TOTAL
Four Year						
First ROTC Region						
Second ROTC Region						
Third ROTC Region						
Fourth ROTC Region						
HQ TRADOC	600	100				700
TOTAL	600	100				700
Three Year						
First ROTC Region	105					
Second ROTC Region	67					
Third ROTC Region	62					
Fourth ROTC Region	46					
HQ TRADOC	520	175	120			
TOTAL	800	175	120			1095
Two Year						
First ROTC Region				105		
Second ROTC Region				67		
Third ROTC Region				62		
Fourth ROTC Region				46		
HQ TRADOC	37	13			50	
Basic Camp	113	12				125
TOTAL	150	25		280	50	505
One Year						
First ROTC Region						
Second ROTC Region						
Third ROTC Region						
Fourth ROTC						
HQ TRADOC						
TOTAL						
GRAND TOTAL						

*These scholarships are awarded to those institutions which showed the greatest increase in minority enrollment during the previous year.

ARMY ROTC SCHOLARSHIP ELIGIBILITY CRITERIA

	FOUR YEAR	THREE YEAR
CIVIC		
US Citizenship	Yes	Yes
Loyalty Oath	DD Form 4	DD Form 4
Security	Favorable NAC	Favorable NAC
MILITARY		
Strong Desire for Commission	Yes	Yes
Strong Desire for MIL Career	Yes	Yes
Army Officer Potential	Yes as evidenced by appearance - personality, scholarship and extra-curricular activities.	Yes as evidenced by appearance - personality, scholarship and extra-curricular activities.
AGE LIMITS	At least 17 when enrolling in ROTC and under 25 when eligible for RA Commission.	At least 17 when enrolling and under 25 when eligible for RA Commission.
USAR ENLISTMENT MEDICALLY QUALIFIED	Six years AR 40-501 (CH 2 & 5)	Six years AR 40-501 (CH 2 & 5)
ROTC		
Selected for scholarship	TRADOC Board	TRADOC Board
Contractual agreement <u>1/</u>	Executed by recipient or parent/guardian for minors	Executed by recipient or parent/guardian for minors
Enrollment	In 4-year ROTC host institution	In 4-year ROTC host institution or cross enrolled in same

ELIGIBILITY CRITERIA

YEAR	TWO YEAR	ONE YEAR
DD Form 4 Favorable NAC	Yes DD Form 4 Favorable NAC	Yes DD Form 4 Favorable NAC
	Yes	Yes
	Yes	Yes
as evidenced by appearance - personality, scholarship and extra- curricular activities.	Yes as evidenced by appear- ance - personality, scholar- ship and extra curricular activities.	Yes as evidenced by appear - ance - person - ality, scholar - ship and extra - curricular acti - vities.
At least 17 when enrolling in ROTC under 25 when eligible for RA Commission.	At least 17 when enrolling in ROTC and under 25 when eligible for RA Commission.	At least 17 when enrolling in ROTC and under 25 when eligible for RA Commission.
DD Form 40-501 (CH 2 & 5)	Six years AR 40-501 (CH 2 & 5)	Six years AR 40-501 (CH 2 & 5)
TRADOC Board	TRADOC Board	TRADOC Board
Executed by recipient or parent/guardian for minors	Executed by recipient or parent/guardian for minors	Executed by recipient or parent/guard- ian for minors
In 4-year ROTC host institution or cross enrolled in same	In 4-year ROTC host institution or cross enrolled in same 3/	In 4-year ROTC host inst- itution or cross enrolled in same 3/

2

Cadet Ranking

Upper third (W)

ACADEMIC

Enrollment

Must be accepted as a student in an approved 4-year Baccalaureate Degree producing program

Must be accepted as a student approved 4-year Baccalaureate producing program or cross enrollment in same

Course completion

Must have completed High School. Must have four academic years remaining in an approved Baccalaureate Degree program

Be able to complete all Baccalaureate Degree requirements in 3 years

Grade average

At least a "C" average

Achieve one of the following minimum qualifying scores

Cadet eval Batt -80
RQ -50
Scholastic aptitude -850
American College test -69

(W) Waiverable

- 1/ Scholarship selection criteria are identified in inclosure.
- 2/ Fifty 2-year scholarships are reserved for active duty EM; in addition to the requirements listed completed 1 year of active duty; must have completed 2 but not more than 2 1/2 years of college with score in General Technical aptitude.
- 3/ Exceptions granted to students enrolled in a class military junior colleges.
- 4/ Prior service members who qualify for advance ROTC placement may apply without enrolling in ROTC
- 5/ Exceptions granted to student enrolled in 5-year degree programs.

Upper third (W)

Upper third (W)

Upper Third
(W)

Must be accepted as a student in an approved 4-year Baccalaureate Degree producing program or cross enrolled in same

Must be accepted as a student in an approved 4-year Baccalaureate Degree producing program or cross enrolled in same

Be able to complete all Baccalaureate Degree requirements in 3 years 5/

Be able to complete all Baccalaureate Degree requirements in 2 years 5/

Be able to complete all Baccalaureate Degree requirements in one year 5/

At least a "C" average

At least a "C" average

At least a "C" average

Cadet eval Batt -80
RQ -50
Scholastic aptitude -850
American College test -69

Cadet eval batt -80
RQ -50
Scholastic aptitude -850
American College test -69

Cadet eval batt
- 80
RQ -50
Scholastic
aptitude -850
American
College test-69

In addition to the requirements listed above these recipients must have more than 2 1/2 years of college work; and must have at least a 115

score on SAT or ACT for senior colleges.

Applicants may apply without enrolling in ROTC but must enroll if scholarship is awarded.

ARMY ROTC
SCHOLARSHIP SELECTION PROCESS

I. 4-YEAR SCHOLARSHIP

The Selection Process for 4-year scholarships is administered by TRADOC Circular 145-5. The process involves seven basic steps.

1. Submission of Application
2. Administrative Screening
3. PMS Interview
4. Audit of Applicant Files
5. Medical Examination
6. Scholarship Board
7. Notification

a. Submission of Applications - Students prepare applications for scholarships and request that Scholastic Aptitude Test (SAT) or American College Test (ACT) scores be forwarded to TRADOC.

b. TRADOC screens applications to identify qualified persons. Screening involves examination of the applicants "whole person" score (WPS) which includes the SAT or ACT score, high school standing and extracurricular, athletic and leadership activities participation. The screening is accomplished by personnel assigned to the DCS, ROTC, HQ TRADOC. Based on the WPS, applicants are placed in an order of merit by computer. Applications for scholarships amounted to approximately 7,500 in 1978. Male and female applications numbered approximately 5,500 and 2,000 respectively. Those applicants, with a WPS of 570 for males and 595 for females (out of a possible 800) were selected for interview. The score of 570 was selected to insure that participants amounting to at least two-and-one-half times the number of scholarships to be awarded (700) were interviewed. Categories and scoring of the whole person score, and examples of 1,978 applicants are contained in Table 1.

c. Interviews. Those applicants selected for interview are advised by letter to contact one of the ROTC instructor groups which have been designated to conduct interview boards for an appointment. The interview boards, which are composed of three active duty officers, one of whom is or has recent PMS experience, evaluate applicants in regard to attitude towards the military service, appearance, poise, oral-expression, and leadership potential.

d. Audit of Applicant Files. After receipt of the interview results, TRADOC adds the interview score to the other factors to complete the WPS. A disinterested audit team of company grade officers examines all interviewed applicant files to insure that all factors have been considered and that scores have been properly computed.

e. Medical Examination. Applicants who have been selected for interview are scheduled for a medical examination by the DOD Medical Examination Review Board (DOD MERB). Applicants must meet the medical requirements established in AR 40-501. DOD MERB advises HQ, TRADOC of the examination results.

f. TRADOC Scholarship Selection Board. After the completion of the audit the Scholarship Selection Board, which is composed of one general officer and six colonels, including one female and minority officer, reviews each applicants' file including the whole person score, reference documents and photographs. The applicants are then categorized into the winners, alternates and nonwinners.

g. Notification. TRADOC notifies each applicant by letter of his/her final status; winner, alternate or nonwinner. Winners are asked to respond as to whether or not the scholarship is accepted and if not accepted, then the reason why. Alternates are asked to respond as to whether or not they desire continued consideration as an alternate.

II. THREE, TWO AND ONE YEAR SCHOLARSHIPS

1. TRADOC circular 145-5 states that scholarship recipients will be selected primarily on academic achievement, leadership potential and demonstrated motivation toward an Army career. In this regard, a "whole person" score is developed for each applicant as follows;

PMS Rank	35%
Academic Grade Point Average	25%
ROTC Grade Point Average	20%
Institutional Nomination Board	20%
TOTAL	100%

2. Each component of the "whole person" score is described below.

a. PMS Rank - Each PMS is authorized to submit up to 35 qualified male nominations for scholarships. These cadets must be ranked with the top cadet nominated receiving 35 points, the second cadet 34 points, etc.

b. Academic and ROTC Grade Point Averages (GPA) - Each nominated cadet receives a score in accordance with his GPA. A 4.0 GPA equates to 25 points; a 3.9 GPA receives 24 points; a 3.8 GPA of 4.0 equates to 20 points; 3.7 scores 19 points, etc.

c. Institutional Nomination Board: The PMS (chairman). One assistant PMS and two institution representatives designated by the college or university, president constitute the nomination board. The board evaluates each appli-

cant in regard to attitude, appearance, poise, oral expression and leadership potential and applies a score to each of the above qualities and forwards the results to HQ TRADOC.

3. Other Qualifying Requirements: Nominees must meet the medical requirements prescribed in Chapter 5, AR 40-501 and must meet all of the eligibility requirements specified in Inclosure 4.

4. TRADOC Selection: Applications are reviewed by DCSROTC, HQ TRADOC for completeness, accuracy and are placed in order of merit. The applications are then forwarded to the TRADOC selection board which is composed of officers involved with ROTC affairs. The board selects the best qualified applicants from each institution as winners. Each school is allocated 1 3-year and 1 2-year scholarship. The remaining applications are screened and the best qualified are selected as winners and next best as alternates. One year scholarships are based upon attrition in longer-term scholarships awards. Selection of winners of 1-year scholarship awards is accomplished on a nationwide best-qualified basis regardless of sex.

5. Female Scholarship Awards: Qualified female applicants compete separately from males for 3-year and 2-year scholarships. The process, however, is procedurally identical to that of male applicants.

Table I

WHOLE PERSON SCORING SYSTEM

<u>SAT/ACT SCORE</u>	<u>EXTRA CURRICULAR ACTIVITIES (E) /1</u>	<u>ATHLETICS (A) /1</u>	<u>LEADERSHIP POSITION (L) /1</u>	<u>INTERVIEW</u>
1600 SAT - 240 Points Maximum	72 Points Maximum	72 Points Maximum	96 Points Maximum	80 Points Maximum

EXAMPLES OF 1978 APPLICANTS

<u>OML RANK</u>	<u>SAT SCORE</u>	<u>E</u>	<u>A</u>	<u>L</u>	<u>INTERVIEW</u>	<u>RANK IN CLASS</u>
<u>MALES</u>						
1	1490 240 PTS	62	52	80	80	1 of 463 240
1565	1260 230 PTS	37	57	54	Not conducted yet	5 of 43 192
3000	1030 180 PTS	42	42	72	Not selected for interview	68 of 678 189
4500	1100 201 PTS	20	47	20	Not selected for interview	532 of 1083 150
<u>FEMALES</u>						
1	1440 240 PTS	62	62	64	80	2 of 400 231
199	1180 217 PTS	62	47	56	Not conducted yet	3 of 160 213
800	1060 189 PTS	62	27	20	Not selected for interview	13 of 670 213
1110	1220 225 PTS	20	20	20	Not selected for interview	162 of 359 153

- 1/ Credit for working after school is given in these categories.
- 2/ The cut off score for male applicants selected for interview was 570.
- 3/ The cut off score for female applicants selected for interview was 595.

Table I

WHOLE PERSON SCORING SYSTEM

<u>LEADERSHIP POSITION (L) /1</u> 96 Points Maximum	<u>INTERVIEW</u> 80 Points Maximum	<u>RANK IN CLASS</u> 240 Points Maximum	<u>WHOLE PERSON SCORE</u> 800 Maximum
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SAMPLES OF 1978 APPLICANTS

<u>INTERVIEW</u>	<u>RANK IN CLASS</u>	<u>WHOLE PERSON SCORE</u>
<u>MALES</u>		
80	1 of 463 240 PTS	754
conducted yet	5 of 43 192 PTS	570 <u>2/</u>
selected for	68 of 678 189 PTS	525
interview		
selected for	532 of 1083 150 PTS	438
interview		
<u>FEMALES</u>		
80	2 of 400 231 PTS	739
conducted yet	3 of 160 213 PTS	595 <u>3/</u>
selected for	13 of 670 213 PTS	511
interview		
selected for	162 of 359 153 PTS	438
interview		

is 570.
was 595.

2

ARMY SENIOR RESERVE ROTC TRAINING CORPS STUDENT CONTRACT

For use of this form, see AR 145-1; the proponent agency is MILPERCEN.

DATA REQUIRED BY THE PRIVACY ACT OF 1974**AUTHORITY:** Title 10 USC, Section 3012.**PRINCIPAL PURPOSE:** To explain obligation and participation requirements and to enroll student in ROTC Scholarship Program or the Advanced Course.**ROUTINE USES:** Record is to be maintained in the Military Personnel Records Jacket as confirmation of enrollment, obligation and participation requirements.**DISCLOSURE:** Disclosure of information requested in DA Form 597 is voluntary. However, applicable portions must be completed if applicant is to be enrolled in the ROTC Scholarship Program, the Advanced Course, or Flight Instruction.

STUDENT'S NAME (Last - First - MI)

SOCIAL SECURITY NUMBER

NAME AND ADDRESS OF INSTITUTION

DATE OF BIRTH

EXPLANATION TO STUDENT

After the Professor of Military Science has reviewed with you and explained to your satisfaction the terms of this Senior ROTC Contract, to include the additional service obligation you will incur by participation in the ROTC Scholarship Program, if applicable, you will be administered the Oath of Enlistment and be required to sign both the Enlistment Contract - Armed Forces of the United States (DD Form 4) and this document. Following completion of these forms, to include signature of your parent or guardian on this document if you are a minor, you will be furnished a copy of each form for your own records.

CONTRACT**PART I****AGREEMENT OF NON-SCHOLARSHIP CADET ENROLLING IN THE ADVANCED COURSE**

1. In consideration of my enlistment in the United States Army Reserve (USAR) with assignment to USAR Control Group (ROTC), my enrollment in the Advanced Course, and of a monthly subsistence allowance which the Army will pay me during the period of enrollment and satisfactory participation, I, as a student at the above named institution, hereby certify that I understand and agree to the following:

a. I understand that males who become members of an armed force prior to their twenty-sixth birthday incur by law a military obligation of six years, unless previously satisfied or sooner discharged by proper authority. Enlisted service for the period covered by ROTC Advanced Training is not counted towards fulfillment of this statutory military service obligation.

b. I will continue in the ROTC for the remainder of my course at this institution, completing prescribed military science courses, ROTC advanced camp and any other directed training as prescribed by the Secretary of the Army. In case I transfer to another institution at which the program is available, I will request transfer of my enrollment to the ROTC unit of that institution.

c. If, as a result of my willful evasion of the terms of this contract, as determined by a duly constituted board of officers, I do not complete the ROTC program or decline to accept an appointment when tendered, I may be ordered to active duty as an enlisted member of the Reserve for a period of 2 years and any unexpired portion of my 6-year enlistment obligation remaining after such active duty must be served in a Reserve component as otherwise prescribed in law or regulation.

d. My enrollment in the ROTC does not commit the Army to my continuance in the program or my appointment as an officer. Such appointment will be dependent upon my meeting requirements for appointment as established by law or regulation.

e. In connection with my graduation and completion of the ROTC program, I will apply for appointment as a commissioned officer in the Army, will accept such appointment if offered, and:

(1) (for non-prior service cadets) will serve as a commissioned officer for 6 years - to include an initial period of active duty of not less than 3 years - or, if the Army does not require my service on active duty, I will serve an initial period of active duty for training of 3 to 6 months and remain a member of and participate satisfactorily in the Reserve until the 8th anniversary of such appointment unless sooner relieved under other provisions.

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(2) (for prior service cadets) will serve or participate actively in the military service for a period of four years from the date of my commission plus any unexpired portion of my statutory service obligation. Dependent upon the requirements of the Army, such service will be performed either on active duty, active duty for training, in a Reserve Component, or in a combination thereof. The unexpired portion of my statutory service obligation runs concurrently with my four-year contractual obligation.

f. It is understood and agreed that my military obligation may be satisfied by active duty in the military service of the United States, or by participation in a troop program unit of a Reserve Component of the United States Army, as follows:

- (1) Participation in a troop program unit of the United States Army Reserve in an appropriate assignment, or
- (2) Acceptance of an Army National Guard assignment toward the fulfillment of my military obligation in the event an appropriate assignment in a troop program unit of the United States Army Reserve is not available and I am tendered an appropriate assignment in an Army National Guard unit.

g. If during the period of any military service obligation an appropriate troop program unit assignment is unavailable in either the United States Army Reserve, or the Army National Guard, I agree to participate as a member of the Individual Ready Reserve.

h. If commissioned in the Regular Army, and this commission is terminated before the conclusion of the period of service to which I am obligated under the terms of this contract or by law, I will accept an appointment as an officer in the Reserve, if tendered, and complete by service in that component.

i. As an enlisted member or commissioned officer in a Reserve Component of the Army of the United States or upon my transfer or assignment thereto, I may be ordered to active duty without my consent for the duration of a war or national emergency declared by Congress and for six months thereafter, or for 24 consecutive months during a national emergency declared by the President, or under any other conditions and for such periods of time as are presently or hereafter authorized by law. I further understand, as a statutorily obligated member of the Ready Reserve, that if I am not assigned to or participating satisfactorily in a unit of the Ready Reserve, and have not served on active duty for a total of 24 months, I may be ordered to active duty without my consent by order of the President until my total service on active duty equals 24 months, the terms of my enlistment notwithstanding.

j. If my enrollment in the ROTC should be terminated for other than willful evasion prior to completion of the program I will be discharged from the USAR unless I find a Reserve unit vacancy and am accepted to fill that vacancy within 60 days of termination.

k. If I am not assigned to or participating satisfactorily in a unit of the Ready Reserve and have not served on active duty for a total of 24 months, I, as a statutorily obligated member of the Ready Reserve, may be ordered to active duty without my consent by order of the President until my total service on active duty equals 24 months, the terms of my enlistment notwithstanding.

HOME ADDRESS (include ZIP Code)

SIGNATURE

DATE

PART II

CERTIFICATION OF STUDENT ACCEPTING DESIGNATION AS AN ROTC SCHOLARSHIP CADET (10 USC 2107)

(This certification will be executed in addition to Part I above if student is designated an ROTC Scholarship Cadet.)

2. In consideration of my designation as an Army ROTC Scholarship Cadet, and of the benefits which will accrue to me by reason of my participation in the ROTC Financial Assistance Program for a period of ___ years, I certify that I understand and agree to all provisions of this contract as cited in Part I above, with the following modifications and additions:

a. That so much of cited provisions as refer to "3 years" of active duty as an enlisted member or officer are changed to refer to "4 years" of such duty. However, should my participation in the ROTC Scholarship Program be terminated for any reason other than willful evasion, my training and service obligations, to include active duty period, will revert to those set forth in Part I.

b. That if I fail to maintain acceptable standards of academic or military (ROTC) achievement and personal conduct, I may lose my ROTC financial assistance. In the event I have not entered upon the advanced course at the time of my participation in the scholarship program is terminated, I will be given an honorable discharge from the USAR.

c. That the Secretary of the Army may release me from my obligation under this agreement and separate me from the ROTC program and/or the ROTC Financial Assistance Program at any time that in his opinion the best interests of the Army require such action.

d. That my participation in the ROTC Financial Assistance Program may be terminated on my own request and without prejudice at any time while I am enrolled in the ROTC basic course; in which event I will receive an honorable discharge from my enlisted status in the USAR: that termination of my participation at any time during my enrollment in the advanced course will not in itself result in or justify termination of my enlistment or of my enrollment in the ROTC.

e. That I may apply for and, upon completion of the academic and military requirements, accept an appointment as a second lieutenant in the Regular Army if tendered, or accept appointment (interim) in the United States Army Reserve if tender of appointment in the Regular Army is delayed, or, if not selected for appointment in the Regular Army, will accept appointment in a Reserve Component, if tendered.

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f. If commissioned in the Regular Army, and this regular commission is terminated before the sixth anniversary of my date of rank, I (both non-prior and prior service participants) will accept an appointment as an officer in the Reserve, if offered, and will not resign before that sixth anniversary.

HOME ADDRESS (Include ZIP Code)

SIGNATURE OF STUDENT

DATE

**PART III
AGREEMENT BY THE SECRETARY OF THE ARMY**

3. In consideration of the above named student's agreement to the terms of this ROTC Student Contract, the Secretary of the Army agrees as follows:

a. If enrolled under title 10, US Code 2104, to pay him subsistence allowance at the rate prescribed by law or regulation during his satisfactory participation in the advanced course, but not for more than 20 months following his enrollment and start of training, except for the period of advanced camp attendance; and to pay him for the 6-week period of camp at the rate of one-half the basic pay of a second lieutenant with two or less years' service, OR -

b. If enrolled as a scholarship cadet under title 10, US Code 2107, to pay for a period of _____ academic years all tuition, fees, cost of textbooks and all laboratory expenses in connection with his attendance at this educational institution (or any other institution at which an ROTC unit is maintained and in which he may subsequently be enrolled in pursuance of an approved program of undergraduate study leading to a baccalaureate degree); to pay cost of classroom material required in connection with pursuit of academic studies; and to pay subsistence allowance during his satisfactory participation at the rate prescribed by law or regulation beginning on the day he starts his first term of college work, except that for the period of advanced camp attendance he will be paid at the rate of one-half the basic pay of a second lieutenant with two or less years' service.

c. Should he be commissioned in the Reserve and his application for resident graduate or professional study be approved, to delay the commencement of his obligated period of active duty as a commissioned officer until the completion of the delay authorized.

**PART IV
CONSENT OF PARENT OR GUARDIAN TO ENROLLMENT IN THE ROTC AND ENLISTMENT IN THE UNITED STATES
ARMY RESERVE**

(To be completed if applicant is a minor at time of enrollment in the advanced course or in the ROTC Scholar Program.)

4. I certify that the above applicant has no other legal guardian than me, and that applicant's date of birth as shown above is correct.

5. I hereby consent to his enrollment in the Reserve Officers' Training Corps and to his enlistment in the US Army Reserve for that purpose.

6. I have read and thoroughly understand the above statements of terms under which he is being enrolled. I relinquish all claim to his service and to any wages or compensation for such service. I understand that he will be subject to all requirements and lawful commands of the officers who may from time to time be placed over him, and I certify that no promise of any kind has been made to me concerning his assignment to duty or appointment as an officer as an inducement to me to sign this consent.

SIGNATURE OF PARENT OR GUARDIAN

DATE

SIGNATURE OF WITNESS

DATE

**PART V
CONFIRMATION OF ENROLLMENT IN THE ADVANCED COURSE (NON-SCHOLARSHIP)**

7. On the basis of the above executed contract (Part I and, when applicable, Part II) and my personal evaluation of the student, I have selected and enrolled him in the ROTC advanced course under AR 145-1 on _____ (Date of Enrollment) and he is entitled to subsistence allowance at the rate fixed by the Secretary of the Army.

TYPED NAME AND GRADE OF PMS

SIGNATURE

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PART VI
CONFIRMATION OF ENROLLMENT AS AN ROTC SCHOLARSHIP CADET
(AND OF ENROLLMENT IN THE ROTC PROGRAM, IF NOT PREVIOUSLY ENROLLED)

8. On the basis of the above named student's selection for award of a ____ year Army ROTC Scholarship, the above executed contract, and my personal evaluation of the student, I have enrolled him in the Army ROTC Financial Assistance Program as an ROTC Scholarship Cadet on _____ and he is entitled to financial benefits as set forth in Part III, above.
(Date)

TYPED NAME AND GRADE OF PMS

SIGNATURE

REASONS GIVEN FOR NOT ACCEPTING FOUR-YEAR ARMY ROTC SCHOLARSHIPS

<u>REASON</u>	<u>ROTC SCHOLARSHIP WINNERS</u>	<u>ALTERNATES</u>	<u>TOTAL</u>
Accepted at USMA	74	146	220
Accepted at USAF Academy	45	133	178
Accepted at USCG Academy	6	4	10
Accepted at USNA	24	15	39
Accepted NROTC Scholarship	29	48	77
Accepted AFROTC Scholarship	45	30	75
Other	<u>101</u>	<u>80</u>	<u>181</u>
	TOTAL	456*	780

*175 of these applicants were offered four year Army ROTC Scholarships as a result of original winner declinations. The applicants also declined for the reasons given. The remaining 281 alternates declined further consideration as alternates when originally notified that they were selected as alternates.

SCHOLARSHIP RETENTION RATES

(School Year 1976/1977)

Four Year Scholarships

MS I to MS II	92.2%
MS II to MS III	77.1%
MS III to MS IV	90.5%

Three Year Scholarships

MS II to MS III	95.6%
MS III to MS IV	91.8%

Two Year Scholarships

MS III to MS IV	96.8%
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One Year Scholarships

Not available but considered to be well above 90%.

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REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

1. PURPOSE. This Annex examines officer education and training and the establishment of specialty qualification standards from pre-commissioning through the 10th year of Active Federal Commissioned Service (AFCS). The detailed examination of officer education and training and the establishment of specialty qualification standards is at Appendix 1 to this Annex.

2. DISCUSSION

a. Current Situation. The rapidly changing technology of war makes it imperative that officer education and training be the most effective possible. At the same time, however, resource constraints require that the Army make the most efficient use of all resources, to include those devoted to officer training. A major element in developing efficient training is the establishment of recognized standards of qualification upon which to base the training. The Review of Education and Training for Officers (RETO) has developed a system of Military Qualification Standards (MQS) to provide a method to qualify officers to perform the duties required of their specialty at a particular grade and to provide a framework which efficiently integrates the training and education efforts of the officer, his commander, and the Army School System.

b. The Philosophy of MQS. It is the responsibility of an officer to learn that which is necessary to perform his duties in an effective fashion. It is the responsibility of the Army to state the skills and knowledge which the officer should learn and to provide the basic wherewithal for him to learn. It is the responsibility of the officer's commander to provide the officer with the opportunity, the guidance, the example and the inspiration to learn and to become a qualified officer. MQS is designed to support the officer, the Army, and the officer's commander in fulfilling these responsibilities.

c. MQS Content. There are three levels of MQS: MQS I, Pre-commissioning; MQS II, Basic Course through 3 years AFCS; MQS III, 4 through 10 years AFCS. Each MQS is divided into two components:

Military Skills and Knowledge, those immediate skills and knowledge which an officer requires to perform successfully in his specialty, and Professional Military Education, the broader knowledges, skills and insights which form the basis for an officer's continuing professional development. Notional models of the Professional Military Education components of MQS I, II and III are at Appendix 9.

(1) MQS I: The purpose of MQS I is to provide the officer with the military skills, knowledge and education which are required of an officer to embark upon a successful career in the U.S. Army. MQS I is the same for all specialties. The Military Skills and Knowledge component consists of common skills and knowledge which should be possessed by all officers during their initial period of service. The Professional Military Education component provides the officer with a foundation upon which to develop the judgement, knowledge and conceptual skills necessary to perform at higher levels of responsibility. The major element is the baccalaureate degree supplemented by a college course in each of five fields of study which are important to professional military development: written communication skills, human behavior (Psychology), military history, national security policy and management. A notional model of MQS I is at Appendix 2 to this Annex.

(2) MQS II: The purpose of MQS II is to provide the officer with the skills and knowledge for initial specialty qualification and to continue to broaden and deepen his Professional Military Education. The Military Skills and Knowledge component consists of the following: individual specialty skills; collective specialty skills up to the platoon, or equivalent level; administrative and logistical skills necessary at the platoon, or equivalent level; and organizational effectiveness or human skills. In those specialties with a high percentage of troop leading positions, the content of MQS II will be focused on those skills and knowledge required to lead and manage troops. In other specialties, the contents of MQS II will be balanced between troop leading and staff specialty skills. The Professional Military Education component at MQS II consists of a single directed reading course. Officers who have not completed their five college course, or their baccalaureate degree in the case of enlisted Officer Candidate School (OCS) graduates, will continue to work on these requirements if time is available. Notional models for MQS II for specialties 11, 35 and 81 are found at Appendixes 3, 4 and 5, respectively, to this Annex.

(3) MQS III: The purpose of MQS III is to qualify the officer in his specialty at the intermediate level and to continue the broadening and deepening of his Professional Military Education. The Military Skills and Knowledge component will contain the same types of skills as found at MQS II. However, the mix of skills, their

nature, and their focus will be determined by the qualification requirements for captains in each specialty. In some specialties there will be a heavy focus on command-type skills. In those specialties in which only a few officers will command, the focus will be on staff skills, with only those officers who do command learning and validating command skills. The Professional Military Education component will consist of the following elements:

(a) A broadly focused, Directed Reading Program.

(b) The completion of the Pre-Combined Arms and Services Staff School (CAS³) Non-Resident Instruction (NRI) course and examination.

Notional models of MQS III for specialties 11, 35 and 81 are found at Appendixes 6, 7 and 8, respectively, to this Annex. An analysis of the proposed reshaping of the Advanced Course is at Appendix 10.

d. MQS Operation. Each MQS consists of an MQS booklet, which contains all the tasks necessary to develop the skills required of that MQS, and an MQS Qualification Card for recording the successful validation or accomplishment of each task.

(1) MQS I: Cadets enrolled in the United States Military Academy (USMA) or in the campus Reserve Officer Training Corps (ROTC) program will learn and validate the MQS I Military Skills and Knowledge component on campus, during the academic year, and during summer training. Cadets in the Platoon Leader Course (PLC) and OCS candidates will accomplish all learning and validation during PLC summer camp or OCS*. Upon arrival at their Basic Course, all newly commissioned officers will also take a diagnostic examination on MQS I to insure their ability to undertake MQS II level training. In regard to the Professional Military Education component, all USMA and ROTC cadets will be required to complete, as a minimum, the baccalaureate degree and undergraduate college courses in written communication skills and human behavior (Psychology) prior to commissioning. Completion of the three remaining undergraduate courses may be deferred, but the courses must be completed prior to the completion of MQS III. College option OCS candidates must complete the baccalaureate degree prior to commissioning, but may defer completion of the five undergraduate courses until completion of MQS III. Enlisted OCS candidates may be commissioned without completing the degree or the five undergraduate courses. However, the baccalaureate degree and the five courses must be completed prior to the completion of MQS III.

*In Annex C, RETO recommends that ROTC be tested in the Platoon Leader Course format and the Officer Candidate School format.

(2) MQS II: MQS II begins upon entry into the Basic Course where the officer learns the skills and knowledge required for MQS II and validates the performance of some of these skills. He then reports to his first assignment where he is expected to validate the remainder of the skills in the Military Skills and Knowledge component. The officer's commander is responsible for supervising the newly commissioned officer's development to include the validation of the required skills and any remedial learning which the officer must accomplish. The commander is given some latitude in conducting the validation to account for the wide variety of assignments to which new officers are posted. The commander also monitors the Directed Reading Program and discusses the books read with the officer. If there is time available, he encourages and assists the officer to complete any of the MQS I required college courses which the officer may have deferred. Once the officer has validated all of the tasks required by MQS II, he is certified as MQS II qualified by the battalion commander or equivalent field grade officer in the chain of command.

(3) MQS III: The majority of the MQS III learning takes place on-the-job (OJT) or in the unit, as opposed to the resident schooling mode. Commanders must become heavily involved in their officers' learning and validation while the Training and Education Specialty Proponents provide assistance through exportable training packages. This unit based learning could take such forms as correspondence courses, installation schools, supervised OJT, training extension course (TEC) lessons, instructional TV tapes, computer wargames and simulations, and commander/staff-conducted classes and seminars. The Training and Education Proponent in each Basic Entry Specialty develops short, functional TDY courses to teach the most critical skills required at MQS III or those skills which must be taught by highly qualified instructors. A company commander course attended by officers just prior to their assumption of command, is an example of this type of course. In regard to the Professional Military Education component, the commander is responsible for monitoring the Directed Reading Program, and the pre-CAS³ NRI course and examination. The commander also insures that the officer has completed any elements which were deferred from the Professional Military Education component at MQS I. As in MQS II, the battalion commander or equivalent field grade supervisor is responsible for certifying the officer as MQS III qualified upon validation of the MQS III requirements.

e. Local Administration of MQS. The record keeping involved in MQS is kept to the absolute minimum. Upon completion of MQS (or failure to complete within the prescribed time) the commander submits a letter to the U.S. Army Military Personnel Center (MILPERCEN)

certifying the officer's qualification at the respective level or explaining his failure to qualify. The officer maintains his own qualification card and his commander may maintain an informal progress log to assist him in his professional development responsibilities. No progress reports are submitted and no progress records are maintained by higher headquarters.

f. Central Direction of MQS. The two major actors in the development and administration of MQS are the Office of the Deputy Chief of Staff for Personnel (ODCSPER) and the U.S. Army Training and Doctrine Command (TRADOC). The ODCSPER, with its interest in both individual training and personnel management, provides the central guidance and general policy formulation for MQS. The ODCSPER also maintains proponentcy for the development of the Professional Military Education component of the MQS and for the development of the Military Skills and Knowledge component at MQS I. TRADOC, as the Army's trainer, is responsible for the development of the Military Skills and Knowledge component for MQS II and III. MILPERCEN provides advice on the military personnel aspects of MQS, while the DA Specialty Proponent provides advice on the interface of MQS with the other elements in the specialty.

3. RECOMMENDATIONS.

a. Task Analysis. That TRADOC complete a thorough and detailed front-end task analysis of all officer positions in the U.S. Army.

b. Precommissioning and MQS I.

(1) That the US Army require the following Military Qualification Standards for all newly commissioned officers:

(a) Validation of the standard minimum curriculum of common military skills and knowledge.

(b) Completion of a baccalaureate degree from an accredited institution, supplemented by a college course in each of the following five fields of study: written communication skills, human behavior (psychology), military history, national security studies, and management.

With approval, USMA and ROTC cadets may defer completion of the supplementary courses in military history, national security studies, and management until completion of MQS III. College option OCS candidates may defer completion of all five supplementary college courses until completion of MQS III. Enlisted OCS candidates may defer completion of the baccalaureate degree and the five supplementary college courses until completion of MQS III.

(c) Prior to attendance at the Basic Course, an officer must attain a satisfactory score on the Military Skills and Knowledge Diagnostic Examination.

(2) That the ODCSPER be tasked to develop the qualification standards for MQS I, based on the front-end analysis.

c. Basic Course and MQS II (0 through 3 years, AFCS)

(1) That the US Army require the following Military Qualification Standards (MQS II) of all officers prior to completion of their 3d year AFCS.

(a) Validation of a set of military skills and knowledge common to the officer's primary specialty.

(b) Completion of a Directed Reading Program.

(2) That the Training and Education Specialty Proponents be tasked to develop Military Skills and Knowledge qualification standards for each Basic Entry Specialty.

(3) That the ODCSPER be tasked to develop a Directed Reading Program for MQS II.

(4) That the ODCSPER be tasked to develop a program to coordinate the teaching of the prescribed college courses at locations convenient to Army installations.

(5) That the Training and Education Specialty Proponents be tasked to develop Basic Course COIs for each Basic Entry Specialty to teach the military skills and knowledge required for MQS II.

d. Advanced Course and MQS III (4 through 10 years AFCS)

(1) That the US Army require the following Military Qualification Standards (MQS III) of all officers prior to completion of their 10th year AFCS.

(a) Validation of a set of military skills and knowledge common to the officer's primary specialty.

(b) Completion of a Directed Reading Program.

(c) Completion of college courses specified in 3b(b) above if not previously accomplished.

(d) Completion of the pre-CAS³ NRI course and examination.

(2) That the Training and Education Specialty Proponents be tasked to develop Military Skills and Knowledge Qualification Standards at the MQS III level for each Basic Entry Specialty.

(3) That the ODCSPER be tasked to develop a Directed Reading Program for MQS III.

(4) That the Training and Education Specialty Proponents be tasked to develop COIs based on front-end task analysis for Company Commander courses and/or other short TDY functional courses required to teach critical MQS III specialty skills.

(5) That the Training and Education Specialty Proponents be tasked to develop exportable training material to assist the OJT learning of those MQS III skills not taught in TDY functional courses.

11 Appendixes

1. Military Qualification Standards
2. Notional Model of MQS I
3. Notional Model MQS II, Specialty 11
4. Notional Model MQS II, Specialty 35
5. Notional Model MQS II, Specialty 81
6. Notional Model MQS III, Specialty 11
7. Notional Model MQS III, Specialty 35
8. Notional Model MQS III, Specialty 81
9. Professional Military Education Components of MQS I, II and III,
with 8 Inclosures
10. Advanced Course Analysis
11. Transition to War

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

MILITARY QUALIFICATION STANDARDS

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

I. Introduction

With today's emphasis on constrained resources, we face the necessity of squeezing the last ounce of combat effectiveness out of every unit in the force. That means more effective weapons, more effective doctrine, more effective troops and more effective officers. That implies more effective training: better unit training, and better individual training.* It also implies the need to make better use of existing training resources (money, people, time, etc.) The solution is a more comprehensive training program, one that maximizes the use of comprehensive resources available for preparing units and individuals to fight and to support future battles.

The bases for such a comprehensive training program are a firm understanding of what it is we expect trained units and individuals to do, a systematic assessment of how well we expect them to do it, and a mechanism that can enable units and individuals to become qualified within the resource constraints imposed. The need for such a comprehensive approach is clear from a sample of the problem areas identified in regard to education and training at the pre-commissioning and company grade levels.

- There is no established commonality among the sources of commissioning in regard to the military skills and knowledge which their graduates should possess. As a result, officers arrive at the Basic Courses with varying levels of skills and knowledge which forces the Basic Courses to focus their training towards the lowest common denominator, resulting in redundancy for the better prepared officer. Though the Basic Courses have made some progress in reducing duplication by allowing officers to validate certain blocks of instruction through diagnostic exams, much remains to be done.

*The exact equation relating training to combat effectiveness awaits the results of the Army Training Study (ARTS).

- The only educational requirement common to ROTC, USMA, and the OCS College Option Program is the requirement for a baccalaureate degree from an accredited 4-year college. Many officers fail to take courses in college which could be of significant benefit to their continuing educational development in the Army.

- Individual initiative and self-study is discouraged because the cadet/officer candidate has no guidance as to the important skills and knowledge which he should learn during the precommissioning phase. The cadet/officer candidate intuitively realizes that some skills or knowledge are more important than others. Yet, because of his inexperience, he cannot make an informed judgement. Not knowing where to concentrate his efforts, he concentrates them nowhere, thereby surrendering his initiative and, perhaps, establishing a mind set against self-development which will carry into commissioned service.

- The new lieutenant should leave the Basic Course with all the skills and knowledge to perform in his first assignment; this does not happen today. In the past, new lieutenants could be sent to the field without all of the necessary skills because they could be expected to learn from the experienced E-7 platoon sergeant whose job included teaching young officers much of the specialty skills they had to know. Too often today, the experienced E-7 has disappeared and the new lieutenant is expected to teach his inexperienced E-6 platoon sergeant.

- Officer education and training during the period between the Basic Course and the Advanced Course is haphazard at best. All commanders realize their responsibility for the continued education and training of their junior officers. However, the press of time within the units and the lack of any system to encourage such development often insures that very little is done which is not directly related to the crisis (ARTEP, AGI, etc.) of the moment. Furthermore, the officer often lacks a thorough knowledge of what he should learn to insure his professional growth.

- Although a major purpose of the Officer Advanced Course is to prepare officers for command, many officers (presently almost 40 percent) command companies before they reach the course. Few of these officers will command companies again while others will not command until several years after the Advanced Course, when they have become rusty on the command skills taught in the Advanced Course. These problems are not the fault of the schools; they are the result of a necessarily imperfect assignment system and PCS policy.

Certain important elements of a comprehensive training program that would address these problems already exist. Explicit performance standards have already been established recently for Army units in the form of Army Training and Evaluation Programs (ARTEPs) which specify the tasks a unit must perform and the standard of performance it must attain. Equally important is the recent guide to enlisted individual training, the Soldier's Manual, which again is based on the determination of essential skills and the measurement of these skills against a standard.

The ARTEP and the Soldier's Manuals provide two props for a comprehensive training program, but one is currently missing which is essential if the program is to have stability. The missing element is a systematic officer training and education program: The identification of what officers must know and do, the establishment of performance standards, and mechanisms to assist officers in attaining acceptable levels of performance.

A device to provide the third leg of a comprehensive training program is the Military Qualification Standards (MQS). Based on an analysis of what officers do generally and what, as specialists, they do specifically, the MQS provides a framework for orderly and progressive training and qualification for each individual.

The MQS Program is a performance oriented method for qualifying officers to perform the duties required of their specialty at a particular grade. Derived from a task analysis of all officer positions in a particular specialty, at a particular grade, each Qualification Standard is an enumeration of the knowledge and skills which an officer must possess to be qualified in that specialty at that grade. The MQS is a "road map," which the officer follows to arrive at specialty qualification, and a framework which ties together the efforts of the officer, his commander, and the Army School System to produce an officer who is qualified in his specialty.

II. The Philosophy Behind MQS

It is the responsibility of officers to learn what they need to know to perform their duties; it is the responsibility of the Army, as an institution, first, to state clearly what it expects officers to know if they are to perform their duties and, second, to provide the basic instruction essential to initiate learning. It is the commanding officer's responsibility to provide the officer the opportunity, guidance and supervision necessary to allow and encourage him to gain qualification. MQS is ideally suited to this set of relationships.

The individual officer is responsible for his own qualification. MQS is essentially self-paced, in that an officer can proceed through the steps as rapidly as he wishes, within the constraints of his job and the availability of opportunities to demonstrate his ability to perform required skills. MQS serves as a guide to on-the-job training and experience, self-study, reading, and other individual learning activities.

The Army must tell the officer what he must do or be able to do to become qualified. Based on a job task analysis, specific statements of objectives, performances, or understandings are derived and standards of performance are established. This same job task analysis is the basis for formal, resident training such as the Basic Course. Such resident courses provide officers with essential theoretical knowledge of the systems with which they will work, to allow them to rapidly become productive members of their units and to immediately begin work on the balance of their MQS.

The MQS program emphasizes the role of the commander or supervisor as the trainer of his own subordinates. The battalion commander or the first field grade supervisor in an officer's chain of command is responsible for the supervision of the MQS program in his unit or section. He must monitor the progress of individual officers and insure that these officers have the opportunity to learn and demonstrate their ability to perform skills required for MQS qualification. He may delegate to intermediate commanders or supervisors the function of instructing their subordinates and validating the performance of the skills learned, but he retains the responsibility to assure himself of an officer's abilities before he certifies him qualified. (For those skills which are learned and demonstrated in service schools, ROTC or USMA, validation is performed by military faculty members or tactical officers).

The standards established for MQS are essential levels of performance; commanders are encouraged to exceed these standards and go beyond the tasks enumerated depending on the resources and time available. However, certifying officers must insure that cadets/officers are capable of meeting the required standards before providing additional tasks. Additional tasks should be those which relate to or build upon the basic Military Qualification Standards.

III. MQS Terminology

Certify. To confirm that an officer has completed (validated) all requirements established by the applicable MQS and is qualified in that specialty at that level.

Certifying Officer. The officer authorized to certify "qualification" through MQS. Usually a battalion commander or the first field grade officer in the qualifying officer's chain of command. This officer is responsible for the local administration of the MQS program of officers under his supervision.

Validate. To verify that an officer possesses a skill required by the MQS.

Validating Officer. The officer designated by the certifying officer that validates various specific requirements of MQS. This is usually a company commander or immediate supervisor.

IV. MQS Content

- MQS I Precommissioning
- MQS II Basic Course Through 3 years Active Federal Commissioned Service (AFCS)
- MQS III 4 through 10 years AFCS

Each MQS is divided into two components: Military Skills and Knowledge, and Professional Military Education. The Military Skills and Knowledge component consists of those skills and knowledge which an officer requires to perform successfully at the moment or in the immediate future in his specialty. Some of those skills will be common across the officer corps, while the majority will be peculiar to a single specialty or group of specialties. Professional Military Education, on the other hand, consists of the broader knowledges, skills, and insights which form the foundation for an officer's continuing professional development. Professional Military Education is required of all officers and does not vary by specialty.

A. MQS I: The purpose of MQS I is to establish the military skills, knowledge, and education which are required of an officer to embark upon a successful career in the US Army. In particular, MQS I provides the prospective officer with the common military skills and knowledge necessary to begin Basic Entry Specialty training upon entry into the Basic Course. MQS I also requires the attainment of a baccalaureate level education and at least an elemental grounding in five academic fields vital to an officer's professional development in an Army career. MQS I supports and interfaces with Military Qualifications Standards II (Basic Course through 3 years AFCS).

1. Military Skills and Knowledge. The Military Skills component contains common individual military skills which all soldiers must possess; common individual military skills and knowledge which all officers must possess; and collective skills, such as squad tactics, which are taught to provide a vehicle for leadership development and leadership evaluation. MQS I tasks are common to all specialties; they are skills and knowledge which should be possessed by all officers upon entry into the service. A notional model for the Military Skills and Knowledge component of MQS I is at Appendix 2 to this Annex. This model is based on an analysis of the USMA COI, ROTC COIs, the BIOCOS COI, Basic Course COIs, USMC Basic School and OCS COIs, Soldier's Manuals, SQTs, and the RETO Duty Module Signatures. Some revision may be required when results of the TRADOC front-end task analysis are available.

2. Professional Military Education: Rather than preparing the officer for the Basic Course and his initial assignment, this component of MQS I provides the officer with a foundation upon which to develop the judgement, knowledge and conceptual skills necessary to perform at higher levels of responsibility. The major element in the Professional Military Education component at MQS I is the baccalaureate degree. Along with the degree, there are certain specific areas of undergraduate knowledge which are particularly important in providing a foundation for continued professional development during a military career. Because of the relatively broad nature of this requirement, these standards are stated in terms of the successful completion of an appropriate college course in each of five fields of study: human behavior, written communication skills, military history, national security policy, and management. Courses in the first two fields must be completed prior to commissioning (officers commissioned through OCS may defer this requirement). Though cadets are strongly encouraged to complete all five requirements before commissioning, the latter three may be deferred. All deferred requirements must be completed before the end of the 10th year AFCS. See Appendix 5, Professional Military Education components of MQS I, II and III.

B. MQS II. The purpose of MQS II is twofold: first, to qualify the officer in his specialty by providing him with the technical and human skills and knowledge necessary to perform the most demanding jobs required of a lieutenant in that specialty; and second, to continue the development of those qualities, abilities and knowledge essential for professional growth. MQS II is a logical follow-on from MQS I and provides the basis for MQS III (4 through 10 years AFCS). Because MQS II covers the officer's first 3 years on active duty, the emphasis is placed on the Military Skills and Knowledge component to provide a high assurance that the officer will succeed in his early years.

1. Military Skills and Knowledge: The Military Skills and Knowledge component contains the following: Individual specialty skills; collective specialty skills up to the platoon, or equivalent, level; administrative and logistical skills necessary at the platoon, or equivalent level; and organizational effectiveness or human skills. Individual and collective specialty skills include not only those required by the officer himself, but many of those required by his subordinates. Subordinates' individual and collective specialty skills are included on the grounds that the junior officer should be able to perform the important skills required of his soldiers and subordinate leaders. For example, the Ground Surveillance Platoon Leader in Specialty 35 (Tactical/Strategic Intelligence) must be able to place into operation the Ground Surveillance Radar, AN/TPS-5, although this is not his normal function within the platoon. By the same rationale, the Rifle Platoon Leader in Specialty 11 (Infantry) should possess the collective skills necessary to maneuver a squad, although in combat that function will be performed by his subordinate leaders. In many specialties, such as Specialty 11, virtually every lieutenant will have an opportunity to serve as a platoon leader or in another position closely related to troops. In these specialties, therefore, the content of MQS II will be heavily focused on those skills and knowledge required to lead and manage troops. Other specialties, such as Specialty 35, have fewer opportunities for assignments with troops. In these specialties, the content of MQS II will be balanced between troop leading skills and staff specialty skills. Although an officer may never function as a troop leader or commander, he should be familiar with the basic skills required to perform that fundamental military function. The extent to which an MQS II contains skills required by Specialty Skill Identifiers (SSIs) within that specialty will be determined separately for each specialty. In the case of Specialty 11, for example, MQS II will contain skills required by officers holding either Mechanized Infantry (11A) or Light Infantry (11B) SSIs. As long as Infantry officers can be assigned to either Mechanized or Light Infantry units, qualification in Specialty 11 must include the skills required in both types of units. In Specialty 35, on the other hand, the content of the Military Skills and Knowledge component at MQS II is heavily focused on the 35A (Tactical Intelligence) SSI, with the addition of some Ground Surveillance (35C) skills. At the lieutenant level, the Tactical Intelligence SSI represent the mainstream of Specialty 35 in terms of numbers of officers and in terms of foundation skills required for professional development in Specialty 35. Those officers with 35B and 35C SSIs are required to learn and validate the 35A skills to qualify in Specialty 35. The skills which are peculiar to 35B (Strategic Intelligence) and 35C (Image Interpretation) are not included in MQS II for Specialty 35 because of the small number of officers who hold these SSIs and the highly specialized nature of

the skills involved. Notional models for the Military Skills and Knowledge component of MQS II for Specialties 11, 35 and 81 are at Appendixes 3, 4 and 5 respectively. These models are based on an analysis of Basic Course COIs, Soldier's Manuals, SQTs, ARTEPs, and the RETO Duty Module Signatures. Significant revision may be required when results of the TRADOC front-end task analysis are available.

2. Professional Military Education: This component consists of a single part, a directed readings course. During the first 3 years of their careers, most officers are kept busy mastering the basic skills and knowledge of their specialty. With that in mind, this requirement is kept light - on the average no more than two to three books per year or a total of eight books. The goal of the MQS II directed reading program is to introduce the officer to some of the fundamental works of his profession, to face him with some of the continuing and important issues of the profession, to encourage reading and discussing what he has read with military colleagues, and to establish a habit of professional reading early in his career. A final, not unimportant, consideration is to make professional reading a pleasure, hence much care must be taken with the development of the various lists. An informed dialogue between officers on some of the important issues of their profession is encouraged by requiring the junior officer to discuss his reading with his company or battalion commander. See Appendix 9, Professional Military Education components of MQS I, II and III.

C. MQS III. The purpose of MQS III is again twofold: first to qualify the officer in his specialty at the intermediate level; and, second, to broaden and deepen his professional development. MQS III builds and expands upon the basic specialty foundation developed at MQS II to produce an officer who is qualified in command and/or in increasingly responsible staff positions in his specialty. At the same time, the officer's overall professional development is broadened and deepened to prepare him for wider ranging jobs outside his primary specialty.

1. Military Skills and Knowledge: As in MQS II, the Military Skills and Knowledge component at MQS III will contain a mix of the following skills: Individual specialty skills, collective specialty skills; administrative and logistical skills, and organizational effectiveness or human skills. The mix of skills, their nature, and their focus will be determined by the qualification requirements for captains in each of the Basic Entry specialties. For example, in Specialty 11, and in most of the Combat Arms specialties, company or battery command is considered by the specialty proponent as essential to qualification in that specialty. The content of MQS III in these

specialties, therefore, is heavily, but not exclusively, focused towards command-type specialty skills. Staff-type specialty skills are also required in MQS III for these specialties to qualify these officers to serve on staffs or in other noncommand positions as a captain. Although command is essential in these specialties, an officer will spend the majority of his time as a captain in a non-command position. In the Combat Support and Combat Service Support Basic Entry Specialties, the situation is reversed. In these specialties only a minority of officers will command at the company level. While it is important that these commanders learn and validate the specialty command-type skills, it is neither cost-effective nor professionally necessary to require noncommanders to learn and validate these skills to become specialty qualified. These officers, as well as those who command, will learn and validate specialty skills required for service on the appropriate level staffs, depending upon the specialty. Thus in each Combat Support and Combat Service Support Basic Entry Specialty, there will be one MQS III for all officers and a second command MQS III for those officers who are selected for, or desire to be selected for command. Notional models for the Military Skills and Knowledge component of MQS III for Specialties 11, 35 and 81 are at Appendices 6, 7 and 8 respectively. These models were developed from an analysis of Advanced Course COIs, ARTEPs, and the RE^{TO} Duty Module Signatures. Significant revision may be required when results of the TRADOC front-end task analysis are available.

2. Professional Military Education: The Professional Military Education component contains a directed reading program similar to that developed in MQS II, though with a broader focus. The officer will be required to read and discuss 16 books during the period of his MQS III qualification. These books would be drawn from both Army-wide and specialty reading lists. See Appendix 9, Professional Military Education components of MQS I, II and III.

V. MQS Operation

Each MQS consists of an MQS Booklet and an MQS Qualification Card. The booklet contains all of the tasks, accomplishment of which will produce the skills required for that MQS. Task standards are criterion referenced and the booklets contain lists of applicable references for self-study or review. The MQS Qualification Card is constructed to show each task with a space where the commander/supervisor "signs off" to indicate that the officer has successfully validated that task.

A. MQS I: Upon entry into precommissioning training, cadets/officer candidates will be oriented on the MQS program and will receive their MQS I Booklets and their MQS I Qualification Cards. In the case of USMA and most ROTC programs, some learning and validation of skills will take place on the campus during the academic year, with the remainder of the skills being learned and validated during summer training. In the case of PLC and OCS, all learning and validation will take place during summer camp or in Officer Candidate School. Successful validation will be entered in the cadet/officer candidate's Qualification Card by either a designated military faculty member or a tactical officer. Certification of completion or "qualification" in MQS I is done by the student's battalion commander at the branch school to which the officer is assigned for the Basic Course. To provide a basis for certification in MQS I, each newly commissioned officer will take a diagnostic examination in MQS I skills upon arrival at his Basic Course (one element of this diagnostic will be a standard civilian-produced achievement test in English composition). Officers who demonstrate satisfactory knowledge will be certified as "qualified in MQS I," and will immediately begin the Basic Course. Remedial self-study materials to be accomplished during the Basic Course will be available for those officers who demonstrate minor weaknesses on the diagnostic examination. Officers who do poorly in the diagnostic examination will not be allowed to begin the Basic Course but will be required to undertake an intense program of remedial instruction. Serious deficiencies might be cause for the officer's commission to be withdrawn. (Some ROTC cadets in the campus program may be unable to learn and validate all MQS I tasks because college or academic constraints mitigate against acquiring military subjects on campus. These cadets will be commissioned and assigned to their Basic Course schools where they will undertake a short course to complete MQS I and the diagnostic exam prior to the Basic Course.) In regard to the Professional Military Education component, USMA, ROTC, and PLC cadets enroll in college courses that satisfy requirements in the five designated fields of study as their academic schedules permit. Cadets will choose specific courses to fulfill these requirements from lists approved at each institution by the Superintendent (USMA), Professor of Military Science (ROTC), or Military Liaison Officer (schools not affiliated with ROTC units). As noted above, officers may, with approval of the officer designated above to approve courses, defer completion of a portion of their MQS I required coursework. Deferral of the required college courses will not be a bar to commissioning; however, the courses must be completed prior to the officer becoming qualified at MQS III and NLT 10 years AFCS. Officers who are commissioned through enlisted OCS must complete the required college courses and their baccalaureate degree prior to completion of MQS III and NLT 10 years AFCS.

B. MQS II: Upon entry into the Basic Course, the newly commissioned lieutenant receives his MQS II Booklet and the MQS II Qualification Card. The ideal sequence for the Military Skills and Knowledge component of MQS II is the acquisition of the essential knowledge at the Basic Course and validation of the resulting skills in later on-the-job performance. In practice, some of the MQS II skills, particularly individual and collective subordinate skills, will best be validated in the Basic Course to reduce the validation load when the officer reaches his unit. Each Training and Education Specialty Proponent will determine which skills are best validated at the Basic Course and which skills are best validated in the units. Since all officers will not serve in initial duty positions which will allow validation of all MQS II skills as an integral part of their duties, certifying officers must be given latitude in selecting the means by which the officer validates the task. For example, an officer in Specialty 11 who is assigned to a Training Center Battalion may validate the task "plan and conduct a platoon raid" by means of a tactical exercise without troops (TEWT) under the supervision of his company commander rather than an actual raid for which there are no trained troops available. The commander's role is particularly important in MQS II and becomes critical in MQS III. It is incumbent upon the Training and Education Specialty Proponent to do everything possible to support the commander in this role. A Commander's Manual for MQS II (and MQS III) will include simulations and exercises which can be used by the commander in validating his subordinates MQS II skills. In regard to the Professional Military Education component, the certifying officer monitors the reading program and the discussion of the books read. Since the MQS reading lists are relatively small, many of the books will be located at the battalion, or equivalent, level, or at the special service or post library. (Officers who have not completed the MQS I college courses or the baccalaureate degree may enroll in off-duty college courses as time allows.) Once the officer has satisfactorily validated all of the tasks required by MQS II, he will be certified by the battalion commander as MQS II qualified and will be issued the MQS III Booklet and Qualification Card. Normally, the officer should achieve MQS II certification prior to the completion of his third year AFCS. This deadline may be extended if reasons beyond the officer's control have significantly impaired his ability to validate the MQS II skills. Authority to extend the MQS II completion date will be held by the next senior officer above the certifying officer. For example, in an Infantry battalion, the MQS II certifying officer is the battalion commander; the brigade commander would thus have the authority to extend the MQS II deadline. Such an extension would necessitate a letter to MILPERCEN for the officer's file explaining the circumstance which precluded his completion of MQS on schedule.

C. MQS III: Unlike MQS II (in which almost all of the Military Skills and Knowledge component is learned in the Basic Course) only a relatively few MQS III Skills are learned in a resident mode. The Training and Education Specialty Proponent will develop short, functional TDY courses to teach the most critical skills or those which cannot be learned in the unit. However, the majority of MQS III learning will take place in the unit or on-the-job. A company command course is one example of a TDY functional course which is appropriate for all specialties which have company command billets. Ideally, officers would be selected and scheduled for this course by their local commander, to attend just prior to their assumption of command. In a similar fashion, other TDY functional courses should be tied to specific billets which make use of the critical skills taught by these courses. The unit based learning, on the other hand, may take many forms: Correspondence courses, installation schools, supervised OJT, TEC lessons, instructional TV tapes, computer wargames and simulations, commander/staff-conducted classes and seminars, and simple home study to name a few. The important role which the commander plays in supervising learning as well as validating skills will necessitate an extensive Commander's Manual. As in MQS II, once the officer has learned the task, his commander or supervisor validates his ability to perform the task and makes the appropriate entry on the qualification card which the officer maintains. Since all officers will not serve in positions which allow validation of all tasks as an integral part of their duties, commanders must again be given some latitude in the means by which they validate the officers performance. The key to an officer's success at MQS III is the partnership which exists between the officer and his commander/supervisor. The officer is responsible for learning the task; the commander is responsible for monitoring his progress, for providing the means and the opportunity for learning, and for validating his accomplishment. In short, the commander is responsible for the professional development of his subordinates.

VI. Local Administration of MQS

Records relating to qualification of individuals are maintained locally under the supervision of the commander authorized to certify qualification. Only upon completion of MQS (or failure to complete in the prescribed time) are reports submitted to MILPERCEN. When the commander has satisfied himself that the officer has properly validated all elements of the MQS, a letter report is submitted directly to MILPERCEN to certify that the officer is "MQS Qualified in Specialty ____." Letter reports are also submitted to explain the circumstances surrounding an officer's failure to complete the MQS in the prescribed time.

In addition to the officers own qualification card, units may wish to maintain progress charts to aid in administration of the program. None are required, however; the aim is to avoid unnecessary administrative burdens. No progress reports (to include specific discussion of progress in efficiency reports) are appropriate -- MQS is a go/no-go indicator and to be an effective training tool must remain so.

VII. The Central Administration of MQS

As a framework for individual officer professional and specialty development, MQS has obvious training functions, but in addition, there are important personnel management implications. The notion of attaining "Qualification" as a career benchmark will inevitably find utility among both professional development and career managers. The program administration must, therefore, involve both trainers and those concerned with career and specialty management. These considerations suggest that:

-- ODCSPER, with its interest in both individual training and personnel management, must provide the central guidance and general policy formulation for MQS. In addition, the ODCSPER is responsible for the Professional Military Education component of each MQS.

-- TRADOC, as the Army's trainer, will be responsible for the Military Skills and Knowledge component of MQS development.

-- MILPERCEN, because of the personnel management and professional development implications of MQS, is a vitally interested factor, with whom Military Qualification Standards and the use of those standards would have to be coordinated.

-- The current specialty proponency network -- DA*, MILPERCEN and training proponents -- is a viable model for MQS coordination. The central administration and implementation of MQS would be conducted and organized as indicated in Figure 1.

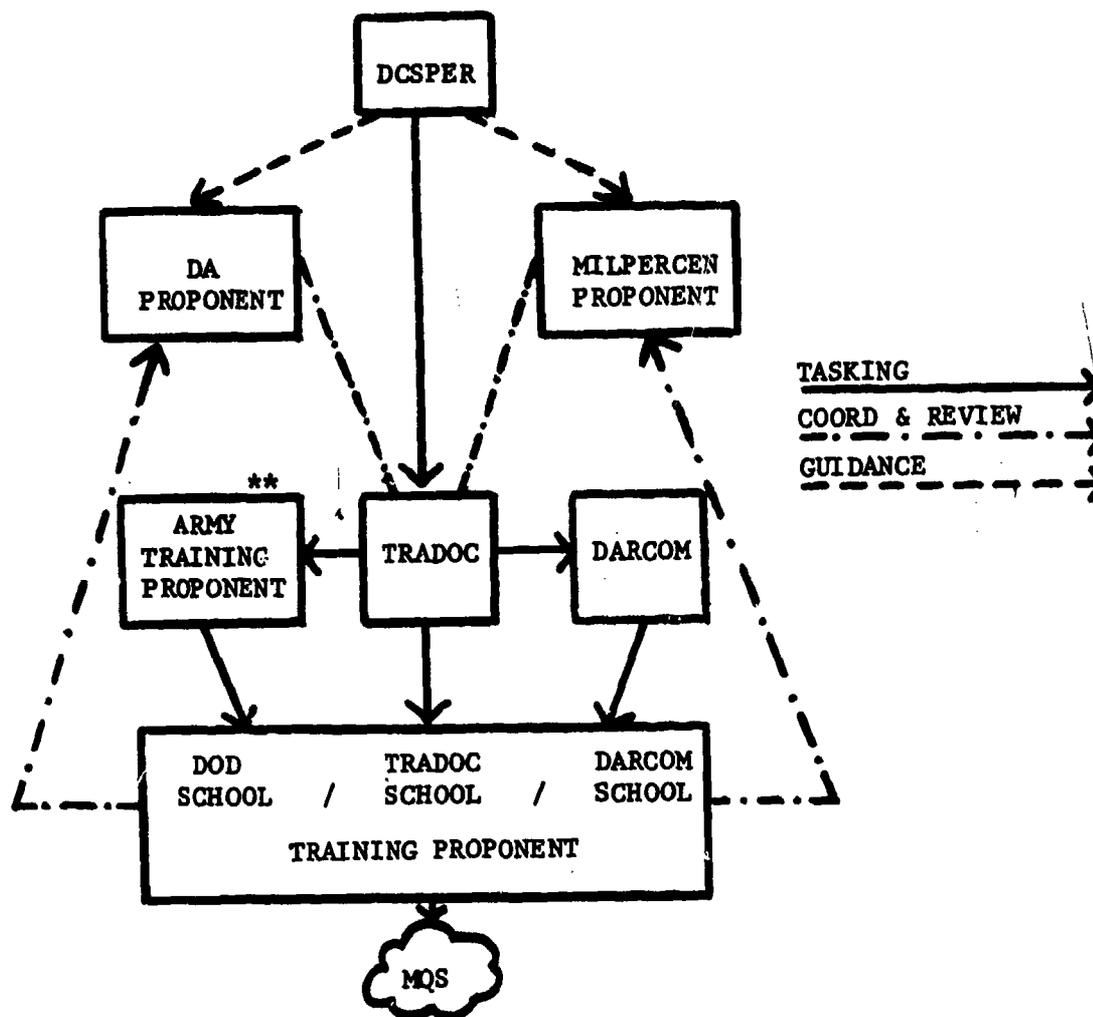


FIGURE 1

*The DA proponent for the Specialty Development Standards of the MQS could be in the person of the current DA Specialty Proponent or an alternative such as a General Officer Proponent. For Professional Military Education Standards, ODCSPER would retain (or delegate) DA proponenty as appropriate.

**Currently DOD Schools are a prime source of training for Army training proponents in only two specialties, Public Affairs and Atomic Energy. Because these are advanced entry specialties no MQS requirements are anticipated. If TRADOC tasking were necessary, however, it would occur through the specialty training proponent: Public Affairs - US Army Training Development Element, Defense Information School, Atomic Energy - ODCSOPS.

In this scheme ODCSPER provides general guidance and policy to all agencies and directs TRADOC to prepare the MQS. TRADOC in turn tasks the appropriate Training and Education Specialty Proponent to complete the necessary task analysis and to produce a draft MQS.*** (Army Schools, other than TRADOC Schools, are tasked thru their respective HQ; where DOD Schools are used, the Army training proponent would be tasked, whether that is an Army element in the school or staff activity). The draft is then coordinated with MILPERCEN and the appropriate DA Proponent who returns the draft and comments and assures consistency among the various MQSs produced. The proponent school resolves conflicts with the reviewing agencies and HQ TRADOC, and publishes the MQS. Changes and revisions would follow the same pattern.

This organizational structure would insure essential coordination between interested agencies and yet delegate responsibility (and authority) to the lowest workable level.

VIII. Summary

Military Qualification Standards provide a framework for a total officer training program in which resident training, OJT, and self-study are combined together in a coordinated effort at attaining more rapid and more complete officer qualification in the general and specialty areas in which they must perform. A Military Qualification Standard:

-- Represents, by virtue of the manner in which it is prepared, a composite between the collective experience of a cross-section of subject matter experts and reference documentation.

-- Emphasizes the role of the commander as the trainer of his officer subordinates.

-- Is a go or no-go measure.

-- Is in essence, the detailed guidance that an experienced commanding officer would give a junior officer if he had unlimited time to personally outline every facet of the learning assignment.

***On a one-time basis, TRADOC has established a project to perform a complete front-end task analysis of all officer positions in the Army, with priority to company grade positions.

-- Provides a specific framework upon which to organize resident instruction, particularly the formal precommissioning and Basic Courses. As such, MQS coordinates the formal schooling experience with later on-the-job self-study, and other forms of learning.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

A NOTIONAL MODEL FOR MQS I

TO ANNEX D

**OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS**

**This Appendix contains a notional list of tasks to support the
Military Skills and Knowledge component of MQS I.**

MOS I MILITARY SKILLS AND KNOWLEDGE

PROFESSIONAL STANDARDS

Explain the requirement for standards of conduct within the officer corps.

Identify the standards of conduct and behavior expected of an Army officer.

Explain the development of these standards through American Military History.

Demonstrate the standards of conduct required by an officer at all times.

MQS I MILITARY SKILLS AND KNOWLEDGE

MISSION AND ORGANIZATION OF THE U.S. ARMY

Identify the mission of the US Army.

Explain the organization of the US Army to include DA, FORSCOM, TRADOC, USAREUR, DARCOM and the Reserve Components.

Explain the Officer Personnel Management System (OPMS), the 46 Army Officer Career Specialties and career plans and opportunities in these specialties.

Explain the chain of command, the role of the commander and the role of the general and special staff.

Identify the basic organization of the following type units:

Armored Division
Mech Infantry Division
Airborne Division
Combat Brigade
Tank Battalion
Infantry Battalion
Field Artillery Battalion

Identify the basic arms into which the Army is organized and explain how these arms function together to perform the combat mission.

Identify current Army combat vehicles, aircraft, and weapon systems.

MOS I MILITARY SKILLS AND KNOWLEDGE

ORGANIZATION AND MISSION OF THE DEPARTMENT OF DEFENSE

Explain the organization and mission of the Department of Defense, the Joint Chiefs of Staff, and the Unified Commands and the relationship of the US Army to these organizations.

Explain the organization and mission of the US Air Force.

Explain the organization and mission of the US Navy.

Explain the organization and mission of the US Marine Corps.

Explain the organization and mission of the North Atlantic Treaty Organization.

MQS I MILITARY SKILLS AND KNOWLEDGE

PHYSICAL TRAINING

Identify the elements of a personal physical fitness program.

Develop a personal, progressive physical fitness program.

Execute conditioning drills 1, 2, & 3, rifle drill, grass drill, guerrilla exercises, circuit interval training, relays, and 1 mile run.

Lead a platoon in conditioning drills 1, 2, & 3, rifle drill, grass drills, guerrilla exercises, circuit interval training, relays, and 1 and 2 mile runs.

Successfully complete Army Physical Fitness Test.

MOS I MILITARY SKILLS AND KNOWLEDGE

DRILL AND COMMAND

Perform individual drill.

Perform manual of arms.

Drill a squad.

Conduct platoon drill.

Conduct company drill.

Conduct an in-ranks inspection.

Conduct an informal guard mount.

Conduct in-barracks standby inspection.

Identify the purposes, procedures, and conduct of interior guard.

MOS I MILITARY SKILLS AND KNOWLEDGE

BASIC INDIVIDUAL TECHNIQUES

Move as a member of a fire team.

Move under direct fire.

React to indirect fire.

React to flares.

Move over, through and around obstacles.

Estimate range.

Call for/adjust indirect fire. (Using grid coordinate method of target location and bracketing method of adjustment.)

MOS I MILITARY SKILLS AND KNOWLEDGE

TACTICS

Identify the nine principles of war.

Describe the characteristics of the modern battlefield.

Analyze the fundamentals of offensive combat.

Analyze the fundamentals of defensive combat.

Employ the basic troop leading steps in tactical planning.

Make an estimate of the situation.

Prepare a squad operation order.

Perform squad movement.

Plan and conduct a rifle squad defense.

Plan and conduct a rifle squad movement to contact.

Plan and conduct a dismounted squad reconnaissance patrol.

Explain the fundamentals of Infantry platoon tactics, mechanized and dismounted.

Explain the fundamentals of combined arms tactics at the company level.

Analyze the effect of terrain and weather on military operations.

Organize a tank hunter/killer team.

Employ a tank hunter/killer team.

MOS I MILITARY SKILLS AND KNOWLEDGE

COMMUNICATIONS

Maintain field telephones (TA-1 and TA-312)

Install/operate field telephones (TA-1 and TA-312)

Maintain tactical FM radios (AN/PRC-77, AN/VRC-64, AN/GRC-160 and AN/VRC-47).

Prepare/operate tactical FM radios (AN/PRC-77, AN/VRC-64, AN/GRC-160 and AN/VRC-47).

Use a CEOI extract to determine call signs, frequencies, suffixes, visual signals, switch-board designators.

Authenticate transmissions and encrypt/decrypt numbers and grid zone letters using KAL61 w/DTC 1400 Numerical Code.

Encode and decode messages using a tactical operations code, KTC-600.

Establish and enter or leave a radio net.

Transmit or receive a radio message.

Employ electronic countermeasures against electronic warfare.

Identify the five means of communications to include relative order of security.

MOS I MILITARY SKILLS AND KNOWLEDGE

UNIT/MATERIEL READINESS

Explain the purpose and operation of The Army Maintenance Management System (TAMMS).

Determine the category of maintenance for a specific repair function.

Determine tabulated data, basic issue items, and maintenance actions accomplished at each level of maintenance.

Determine type of maintenance inspection to conduct.

Inspect a wheeled vehicle for maintenance deficiencies.

Inspect equipment log books and determine usage data, equipment status, availability and reliability, and possible maintenance deficient areas.

Inspect a completed Unit Materiel Readiness Report (DA Form 2406).

Perform a serviceability inspection of selected Nuclear, Biological and Chemical (NBC) equipment.

Perform a serviceability inspection of a ground power unit.

Perform a serviceability inspection of field mess equipment.

Perform a serviceability inspection of a tent.

MOS I MILITARY SKILLS AND KNOWLEDGE

SECURITY AND INTELLIGENCE

Use challenge and password.

Process known or suspected enemy personnel.

Collect/report information- SALUTE

Conduct day and night surveillance without the aid of electronic devices.

Recognize vulnerabilities of enemy armor to individual (M16A1 and M203) and crew served (M60) weapons.

Identify threat vehicles and weapons.

Enforce noise, light and litter discipline.

Emplace/recover field expedient warning devices.

Emplace/recover pyrotechnic early warning devices.

Emplace/recover electronic anti-intrusion devices.

Safeguard classified material.

Demonstrate survival, escape, and evasion techniques.

MQS I MILITARY SKILLS AND KNOWLEDGE

LOGISTICS

Explain the principles and functions of the Army logistics system.

Explain the organization and operation of the Army supply system.

Identify procedures for unit property records and supply accountability.

Prepare, use, and dispose of supply forms at platoon/company level.

Coordinate the logistical support of a platoon size unit.

Coordinate the logistical support of a company size unit.

Supervise the provision of food service support to company/battalion sized units.

Explain the procedures for relief from pecuniary liability.

MQS I MILITARY SKILLS AND KNOWLEDGE

MILITARY LAW

Outline the background, development and purpose of military law; how the UCMJ has been influenced by US civil law; why there is a need for a separate system of law for the military services.

Employ the jurisdiction of the Military Justice system over persons, places and crimes and apply it to case studies.

Outline the fundamental concept of due process and individual rights in the criminal process; be able to define the rights of a suspect, including permissible questioning, right to remain silent and right to counsel and requirement for expeditious processing of the case.

Outline the structure and composition of military courts-martial, maximum punishments and general procedural rules, including non-judicial punishment; be able to recommend action in a case study.

Apply the legal concept of search and seizure and distinguish inspections and inventories in a case study.

Outline the sources of the law of land warfare, its development and the influence of treaty-made law such as The Hague and Geneva Conventions.

Apply the basic provisions of these treaties to case studies.

Identify violations of these treaties by enemy and friendly forces.

Outline the source and development of the Code of Conduct; state the requirement for it.

Apply the general provisions to case studies; relate these provisions to violations of the UCMJ.

MOS I MILITARY SKILLS AND KNOWLEDGE

PERSONNEL

Evaluate a soldier using the enlisted evaluation system.

Identify the major elements of the enlisted MOS system.

Analyze officer and enlisted personnel records.

Select the appropriate adverse administrative personnel action for an enlisted soldier.

Counsel an enlisted soldier on the Army Enlisted Evaluation Report form. (EER and SEER)

Explain the Army reenlistment system.

Rate a subordinate officer using the Officer Evaluation Report form.

Use SIDPERS reports as a management tool.

Inspect a duty roster.

Prepare a casualty feeder report.

Determine the functions required to complete an administrative action.

Analyze the operation of Joint Uniform Military Pay System (JUMPS) as it applies to both officer and enlisted personnel.

Review a request for hardship/dependency discharge.

MOS I MILITARY SKILLS AND KNOWLEDGE

TACTICAL VEHICLES - WHEELED VEHICLES

Drive a wheeled vehicle cross-country.

Drive a wheeled vehicle on the road, in vehicle parks and in built-up areas.

Drive a wheeled vehicle using blackout drive/night vision devices.

Start a wheeled-vehicle engine using auxiliary power.

Perform an Equipment Serviceability Criteria (ESC) inspection on a wheeled vehicle.

Maintain required TAMMS records on a wheeled vehicle.

Perform operator maintenance on a wheeled vehicle.

Qualify as Army wheeled vehicle driver-M151A2.

MOS I MILITARY SKILLS AND KNOWLEDGE

TRAINING

Explain the Army system of training, to include ARTEPs, SQTs, and MOS.

Discriminate between performance oriented training and other types of training.

Describe training resources and techniques used to conduct training.

Determine the individual, leader, and subunit tasks necessary to train for an ARTEP mission.

Prepare and conduct performance oriented training.

MQS I MILITARY SKILLS AND KNOWLEDGE

MEDICAL SUBJECTS

Apply the four life-saving measures.

Apply first aid measures for burns.

Plan and enforce preventive measures to minimize respiratory, gastrointestinal, or insect-borne disease at platoon level.

Treat and prevent climatological injuries at platoon level.

Identify the principles of proper field hygiene.

MOS I MILITARY SKILLS AND KNOWLEDGE
CAMOUFLAGE, COVER, AND CONCEALMENT

Camouflage/conceal self and individual equipment.

Camouflage/conceal equipment.

Camouflage/conceal defensive positions.

Select temporary battlefield positions.

Construct individual defensive positions.

Clear fields of fire.

Supervise/evaluate construction of rifleman's defensive position.

MOS I MILITARY SKILLS AND KNOWLEDGE

NIGHT VISION DEVICES

Maintain AN/PVS-2 (Night Vision Sight).

Conduct surveillance using an AN/PVS-2.

MOS I MILITARY SKILLS AND KNOWLEDGE

CBR

Identify chemical agents and determine their effects on personnel.

Maintain protective mask and accessories.

Put on a protective mask.

Implement a chemical mission-oriented protective posture (MOPP).

Protect against a chemical attack.

Detect the presence of a chemical hazard and post warning signs.

Cross a chemically contaminated area.

Decontaminate personnel and equipment.

Unmask.

Administer first aid to a chemical casualty.

Assume a protected posture for a nuclear detonation

Plan for and determine the presence of nuclear radiation and total dose of exposed personnel.

Operate an IM-174A/PD Radiac Meter.

Employ the M-8 Automatic Chemical Agent Alarm System.

Prepare and submit NBC-1 Report.

Prepare and submit NBC-4 Report.

Report nuclear radiation exposure.

Apply the information contained in a fallout prediction.

Take protective action following a nuclear detonation.

MQS I MILITARY SKILLS AND KNOWLEDGE

LAND NAVIGATION

Use the marginal information on a map.

Explain why and how the military grid reference system is used on a map.

Determine the grid coordinates of a point on a military map to within 10 meters.

Measure map distance and convert it to ground distance to within 10 meters.

Determine the back azimuth in degrees, to within one degree.

Measure and plot an azimuth on a map, to within one-half degree.

Employ declination diagram to accurately convert azimuths.

Locate unknown points to within 10 meters using polar coordinates, intersection, resection & modified resection.

Construct and use the point designation grid system on a vertical aerial photograph.

Determine the scale of an aerial photograph.

Use the scale of an aerial photo to determine map distance or ground distance.

Employ the picto map as a supplement to the topographic map.

Identify and locate the five basic natural terrain features.

Determine direction using field expedients.

Determine the elevation of a point.

Navigate using dead reckoning in daylight.

Preset an azimuth on a compass and arrive at correct location at night.

Navigate to a point at night using offset method.

Detour around obstacle while navigating at night.

Locate and use North Star to navigate at night.

Navigate over terrain at night with a compass.

Orient a map to the ground by terrain association.

Orient a map using a compass.

MOS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - M-16A1 RIFLE

Maintain an M-16A1 rifle, magazines and ammunition.

Load and unload an M-16A1 rifle magazine.

Load, reduce a stoppage, unload, and clear an M-16A1 rifle.

Zero an M-16A1 rifle.

Engage targets with an M-16A1 rifle.

Prepare and use aiming and firing stakes for the M-16A1 rifle.

Mount/dismount AN/PVS-2 on M-16A1 rifle.

Zero AN/PVS-2 when mounted on M-16A1 rifle.

Engage a target with a rifle using AN/PVS-2.

Disassemble and assemble the M-16A1 rifle.

Identify the six standard rifle marksmanship firing positions.

Inspect an M-16A1 rifle for proper operator maintenance.

Qualify with M-16A1 rifle.

MOS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - CALIBER .45 PISTOL

Maintain a caliber .45 pistol and ammunition.

Load, reduce a stoppage, unload, and clear a caliber .45 pistol.

Engage targets with a caliber .45 pistol.

MOS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - M203 GRENADE LAUNCHER

Maintain an M203 grenade launcher and ammunition.

Load, unload, and clear an M203 grenade launcher.

Zero an M203 grenade launcher.

Engage targets with an M203 grenade launcher and apply immediate action to reduce a stoppage.

Prepare and use aiming and firing stakes for the M203 grenade launcher.

MQS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - M-60 MACHINE GUN

Load, reduce a stoppage, unload and clear an M-60 machine gun.

Engage targets with an M-60 machine gun.

Use aiming and firing stakes for the M-60 machine gun.

Construct M-60 machine gun position.

Maintain M-60 machine gun ammunition.

Zero an M-60 machine gun.

Prepare a range card for an M-60 machine gun.

Disassemble and assemble the M-60 machine gun.

Set and read direction and elevation readings.

MQS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - LIGHT ANTI-TANK WEAPON (LAW)

Prepare an M72A2 LAW for firing, restore M72A2 LAW to carrying configuration.

Engage targets with an M72A2 LAW.

Apply immediate action to correct a malfunction of an M72A2 LAW.

Determine correct sight picture for armored targets at various ranges and angles.

Control employment of M72A2 LAWs.

MOS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - DEMOLITIONS

Prepare and detonate a demolition charge (electric and nonelectric).

MOS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - HAND GRENADES

Maintain hand grenades.

Engage enemy targets with hand grenades.

MQS I MILITARY SKILLS AND KNOWLEDGE

WEAPONS - MINES

Install/recover an electrically armed Claymore Mine.

Fire a Claymore Mine.

Detect enemy mines.

Emplace and recover M-16A1 AP and M-21 AT mines.

Destroy a mine in place.

Install/recover a mechanical ambush.

MQS I MILITARY SKILLS AND KNOWLEDGE

LEADERSHIP

Explain the theories of motivation.

Explain the contribution of professional competence, high personnel standards and integrity to the effectiveness of a leader.

Analyze the relationship of the following personal values and characteristics to a military leader's effectiveness.

- Accountability
- Responsibility to duty
- Personal example
- Loyalty
- Respect
- Obedience
- Self-confidence

Analyze the direct correlation between a leader's standard of readiness and the corresponding level of subordinates' motivation and morale.

Explain the necessity for and the contribution of habits of formality, standard procedures, and established check-lists to professionalism and combat readiness.

Explain the importance of goals, objectives, priorities, and follow-through to effective group action in task accomplishment.

Analyze the importance of inspection, training, recognition and discipline and their collective impact on individual and unit integrity and morale.

Identify the potential and limitations of the use of reward and punishments to influence individual and group behavior.

Explain the effects of perceptions, attitudes, value orientations, and informal group processes on individual and team performance.

Analyze how informal organizations and their activities can influence the effectiveness of formal organizations.

MOS I MILITARY SKILLS AND KNOWLEDGE

LEADERSHIP (CONT'D)

Explain how the following factors influence the effectiveness of a leader in achieving organizational goals:

- Use of authority
- Chain of command
- Degree of delegation and decentralization
- The officer-enlisted relationship
- Technological complexity of the task
- Workgroup maturity and cohesion
- Availability of resources

Counsel subordinates effectively.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

A NOTIONAL MODEL FOR MQS II - SC 11

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

This Appendix contains a notional list of tasks to support the Military Skills and Knowledge component of MQS II, Specialty 11. Those tasks designated (BC) are those which are validated at the Basic Course. All other tasks are validated by the officer at his first assignment.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - PLATOON TACTICS

Plan and conduct a platoon movement to contact, mounted and dismounted (ARTEP mission)

Plan and conduct a rifle platoon defense (ARTEP mission)

Execute a platoon defense against aircraft (ARTEP mission)

Plan and conduct a hasty attack (ARTEP mission)

Plan and prepare a platoon strong point (ARTEP mission)

Plan and conduct a platoon deliberate attack (ARTEP mission)

Execute the platoon mission as part of a company team in the high risk delay (company ARTEP mission)

Execute the platoon mission as a part of a company team in the night attack (company ARTEP mission)

Execute the platoon mission as a part of a company team disengaging under pressure

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - OPERATIONS IN BUILT-UP AREAS

Analyze and identify military aspects of a built-up area

Explain the methods of clearing enemy held buildings

Task organize a platoon for attack of built-up area

Develop a platoon scheme of maneuver for attack of a built-up area, given company OPORD

Develop a fire support plan for platoon attack of a built-up area, given company OPORD

Conduct platoon attack of a built-up area

Task organize platoon for defense of a built-up area

Identify the types of defensive positions used by squads and platoons in defense of a built-up area (BC)

Given a company OPORD, plan the defense of a platoon sector of a built-up area

Conduct platoon defense of built-up area (ARTEP mission)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - EMPLOYMENT OF SUPPORTING FIRES

Call for/adjust a coordinated HE and illumination mission (BC)

Call for/adjust a screening mission (BC)

Call for/adjust indirect fire using the creeping method (BC)

Identify the types of supporting artillery and their capabilities (BC)

Plan fires in the defense

Plan fires in the offense

Explain the capabilities of close air support

Request close air support

Direct close air support

Explain the capabilities of helicopter gunships

Request and direct helicopter gunships

MOS 11 MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - AIRMOBILE OPERATIONS

Mark helicopter landing zones

Control helicopter landing zones

Determine aircraft sortie requirements for rifle platoon

Determine availability/capacity of pick-up zones/landing zones

Prepare load for external sling transport by helicopter

Instruct unit on safety procedures for utilizing Army aircraft

Load TOW weapons system with ammo and crew aboard helicopter

Load 81MM mortar with ammo and crew aboard helicopter

Develop a platoon ground tactical plan for airmobile operation

Develop platoon portion of company loading plan

Develop a landing plan for an airmobile operation

MDS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - SQUAD TACTICS

Control fire team movement (BC)

Determine/implement light Infantry squad movement techniques when not in contact with enemy (BC)

Plan and direct fire and maneuver of a light Infantry squad against an enemy position (BC)

Supervise preparation of a squad defensive position (BC)

Establish a listening post/observation post (BC)

Designate primary fighting positions for squad members. (BC)

Designate alternate and supplementary positions for squad members (BC)

Prepare a defensive sector sketch (BC)

Direct squad fire in the defense (BC)

Supervise combat loading of personnel and equipment in APC

React to indirect fire while mounted

React to direct fire while mounted

Select/control occupation of an APC overwatch position

Determine/direct fire and maneuver of a mechanized squad against an enemy position (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - PATROLLING

Plan and lead a squad reconnaissance patrol (ARTEP mission) (BC)

Plan and lead a squad ambush patrol (ARTEP mission) (BC)

Plan and lead a rifle platoon raid (ARTEP mission)

Plan and lead a rifle platoon reconnaissance patrol (ARTEP mission) (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - ANTI-TANK TACTICS

Develop anti-tank portion of company tactical SOP

Reconnoiter and select TOW and DRAGON firing positions

Plan disposition and employment of TOW and DRAGON weapons

Coordinate employment of TOW and DRAGON weapons

Identify vulnerable areas and limitations of Soviet armored vehicles (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - SPECIAL OPERATIONS

Plan and conduct area reconnaissance mission (scout platoon ARTEP mission)
Plan and conduct a route reconnaissance mission (scout platoon ARTEP mission)
Prepare a route reconnaissance overlay
Prepare a bridge reconnaissance report
Plan and conduct a screening mission (scout platoon ARTEP mission)
Plan and conduct a zone reconnaissance (scout platoon ARTEP mission)
Plan and conduct a rear area security mission (scout platoon ARTEP mission)
Plan and conduct a squad anti-armor ambush (ARTEP mission)
Plan and conduct a platoon anti-armor ambush (ARTEP mission)
Employ REDEYE team attached to mechanized or light Infantry platoon
Employ passive air defense measures for mechanized or light Infantry platoon
Explain the Army role in civil disturbance operations (BC)
Identify the restrictions governing the use of deadly force
Employ a platoon in riot control operations

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 11

OPERATIONS AND INTELLIGENCE

Analyze the training of the individual Soviet soldier (BC)

Analyze the organization, weapons, equipment and vehicles of Soviet assault squad, platoon and company (BC)

Analyze the tactical doctrine and tactics employed by a Soviet motorized rifle company and battalion (BC)

Analyze the effects of the supporting weapons available to the Soviet motorized rifle company and battalion (BC)

Identify the strengths and weaknesses found in the Soviet ground forces (BC)

Explain the graphics of a battalion level map overlay

Identify selected sensors (BC)

Identify objects using night vision goggles AN/PVS-5 (BC)

Place metascope AN/PAS-6 into operation (BC)

Plan a stano mix (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - M-60 MACHINE GUN

Mount/dismount an AN/PVS-2 (Starlight Scope) on an M-60 machine gun (BC)

Zero an AN/PVS-2 (Starlight Scope) on an M-60 machine gun (BC)

Qualify with M-60 machine gun (to be accomplished in unit)

MOS 11 MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - CALIBER .50 MACHINE GUN

Maintain a caliber .50 machine gun and ammunition (BC)

Target/confirm targeting on a caliber .50 machine gun (BC)

Load, reduce a stoppage, unload, and clear a caliber .50 machine gun (BC)

Engage targets with caliber .50 machine gun (BC)

Set headspace and timing on a caliber .50 machine gun (BC)

Disassemble and assemble the caliber .50 machine gun (BC)

Mount and zero the AN/TVS-2 night vision device (BC)

Engage targets with caliber .50 machine gun at night using AN/TVS-2 (BC)

MOS 11 MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - M202A1 ROCKET LAUNCHER

Prepare the M202A1 rocket launcher for firing (BC)

Perform misfire procedures for the M202A1 rocket launcher(BC)

Engage targets using the M202A1 rocket launcher (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - EC 11

WEAPONS - DRAGON

Inspect and maintain DRAGON system (BC)

Perform preoperational checks on DRAGON tactical system (BC)

Prepare range card for DRAGON (BC)

Engage targets and perform misfire procedures with DRAGON (BC)

Prepare MAW position (BC)

Camouflage/conceal MAW position (BC)

Operate DRAGON training equipment(BC)

Place the target set into operation and charge the monitoring set (BC)

Qualify with DRAGON (to be accomplished in unit)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - TOW

Maintain TOW weapons system

Load, correct malfunctions, unload, clear TOW (BC)

Engage targets with TOW (BC)

Make a TOW launcher self-test and preoperational inspection (BC)

Prepare a range card for a TOW (BC)

Construct TOW position

Camouflage/conceal TOW position

Control TOW squad fires

Plan and control TOW section fires

Qualify as TOW gunner (to be accomplished in unit)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - 81MM MORTAR

Place 81MM mortar into action (BC)

Boresight 81MM mortar (BC)

Perform safety checks on 81MM mortar (BC)

Lay mortar for deflection and elevation(BC)

Prepare 81MM mortar ammunition for firing (BC)

Inspect and maintain 81MM mortar and associated fire control equipment (BC)

Remove a misfire from 81MM mortar (BC)

Engage targets without FDC (BC)

Refer sight and realign aiming posts (BC)

Reciprocally lay mortar using M2 aiming circle and place out aiming posts (BC)

Manipulate mortar for traversing and searching fires (BC)

Adjust fire without an FDC (BC)

Lay mortar for direction using direct alignment method (BC)

Lay mortar for direction using M2 aiming circle (BC)

Lay mortar for direction using M2 compass (BC)

Supervise squad during conduct of fire mission (BC)

Prepare M16 plotting board for operation (BC)

Determine initial firing data and process subsequent FO corrections (BC)

Determine data for sheaf adjustment(BC)

Prepare FDC order (BC)

Record information on firing sheets (BC)

Declinate M2 aiming circle (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - 81MM MORTAR (CONT'D)

Boresight mortar for deflection using M2 aiming circle (BC)

Boresight mortar for elevation using M2 compass (BC)

Prepare target lists, fire plans, overlays

Maintain accountability/request ammunition (BC)

Determine the type of mortar ammunition and fuze to be employed in attacking enemy targets

Determine the method of engaging enemy targets with mortars

Employ training devices for training the 81MM mortar platoon (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

WEAPONS - TECHNIQUES

Complete the hand grenade assault qualification course (BC)

Select the most effective method of battlefield illumination to assist direct fire weapons engagements (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

PERSONNEL

Explain the role of the chaplain (BC)

Counsel a soldier and assist him in solving personal problems

Identify Army agencies which can assist soldiers and dependents with personal problems

Identify local Army and civilian assistance agencies (learn in unit)

Explain the Army system of dependent health care (to include CHAMPUS) (BC)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 11

TRAINING

Identify the training responsibilities of the Infantry platoon leader

Identify the training responsibilities of platoon NCOs

Identify purpose of various training publications and the relationships among them (BC)

Determine the current level of individual or unit training proficiency (squad and platoon)

Develop a training plan to integrate EIB training and SQT training

Identify the soldier tasks in the three components of the SQT (BC)

Qualify as a range officer (to be accomplished in the unit)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

MAINTENANCE MANAGEMENT

Determine if logbook forms are maintained IAW TM 38-750

Determine the required forms for a given item of equipment

Determine when a PM service is due or has been performed

Determine if parts are on order

Determine if operator is performing maintenance services and recording in logbook and DA Form 2404

Determine Nonoperational Ready, Supply (NORS)/Nonoperational Ready, Maintenance (NORM) days for item of equipment

Determine the appropriate TM for a given maintenance task

Inspect platoon weapons for serviceability

Inspect PLL computer printouts

Determine source of supply for a repair part

Inspect a DA Form 2064, Document Register, for supply actions

Inspect a Request for Repair Parts, DA Form 2763

Inspect a DA Form 3318, Record of Demand - Title Insert Card

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

LOGISTICS

Prepare a report of survey

Prepare an Inventory Adjustment Report (IAR)

Issue and account for individual clothing and equipment (BC)

Secure ammunition and weapons

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

MILITARY ENGINEERING

Employ demolition techniques to construct anti-armor obstacles (BC)

Employ demolition techniques against enemy personnel (BC)

Employ demolition techniques to breach enemy obstacles(BC)

Utilize the bridge-vehicle classification system (BC)

Record standard pattern and hasty protective minefields (BC)

Emplace a hasty protective minefield (BC)

Employ obstacle breaching techniques (BC)

Employ minefield breaching techniques (BC)

Arm/disarm US mines (BC)

Recover a hasty minefield (BC)

Take action when boobytrapped area is encountered (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

COMMUNICATION

Construct a field expedient whip antenna (BC)

Construct a field expedient vertical half-rhombic (uni-directional) antenna (BC)

Construct a field expedient ground plane antenna (BC)

Construct a field expedient one-quarter wave vertical antenna (BC)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 11

MILITARY LAW

Outline the procedure for a preliminary inquiry; using case studies, conduct the investigation; outline the nature and purpose of an investigation under Article 32, UCMJ.

Advise an accused on his rights and safeguards, including right to remain silent (Article 31), right to counsel and right to expeditious processing of the case.

Apply the law of search and seizure in a case study; distinguish authorized command inspections and inventories.

Outline the composition and jurisdiction of military courts-martial; apply maximum punishment schedule in a case study. (BC)

Identify the elements of common offenses, including unauthorized absence, larceny, failure to obey an order, disrespectful conduct, and assault and battery using case studies. (BC)

Prefer charges in a case study and make/recommend appropriate disposition. (BC)

Administer Article 15, UCMJ (Nonjudicial Punishment) and dispose of offenses in case studies. (BC)

Outline the nature and types of administrative elimination proceedings, including EDP.

Take action in a case study applying applicable Army regulations.

Outline the rights and entitlements of soldiers and their dependents to personal legal services provided by the staff judge advocate.

Counsel a soldier and identify problems requiring legal help using case studies.

Outline the rights and entitlements of a soldier to file a claim for loss or damage to personal property.

Counsel a soldier who has suffered a loss which is cognizable under the Military and Civilian Employee Claims Act using case studies.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

MOUNTAINEERING AND SURVIVAL

Explain the characteristics, uses and maintenance of ropes and basic military mountaineering equipment (BC)

Tie basic mountaineering knots (BC)

Employ seat-hip rappel and Australian rappel (BC)

Construct a one-rope bridge (BC)

Construct a two-rope bridge (BC)

Explain basic military mountaineering techniques (BC)

Identify the basic individual and small unit techniques for artic/cold weather operations (BC)

Identify the basic individual and small unit techniques for tropic/jungle operations (BC)

Determine the four cardinal directions (BC)

Obtain potable water (BC)

Construct an improvised shelter (BC)

Prepare and use emergency/expedient signal devices (BC)

Demonstrate methods of building a fire (BC)

Demonstrate construction of snares and traps (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

MATERIEL READINESS - TRACKED VEHICLES

Explain the theory of diesel engines (BC)

Explain the functioning of the major components of the M-113A1 as part of the total system (BC)

Perform a complete ESC on M-113A1

Perform all operator maintenance tasks on the M-113A1.

Inspect and determine the serviceability of all major components of an M-113A1

Perform before - during -- and after - operation checks and services on an M-113A1

Start M-113A1 engine using auxiliary power

Drive M-113A1 utilizing combat driving techniques for all types of terrain

Drive M-113A1 with night vision devices, infrared equipment and blackout drive

Prepare/inspect an M-113A1 for waterborne operations

Operate M-113A1 in water

Recover an M-113A1 using APCAT

Recover a mired M-113A1 using M-35 truck with winch

Recover a mired M-113A1 using M-578

Recover a bellied, disabled M-113A1

NOTE: Those officers who are on orders to light Infantry units will verify all of the above tasks at the basic course.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

CBR

Plan and conduct platoon level CBR training

Decontaminate mechanized platoon vehicles and equipment

Inspect platoon CBR equipment for serviceability

- Decon apparatus
- IM-174 series radiac instruments
- IM-93 radiac instrument
- M-17 series protective mask.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

PHYSICAL TRAINING AND COMBATIVES

Pass the APFT with a score of 400 or higher

Complete a 5-mile road march

Complete a 10-mile road march

Complete a 25-mile road march

Perform Instinctive Rifle Bayonet System (BC)

Perform coordinated offensive and defensive movements of the Instinctive Rifle Bayonet System (BC)

Execute the slash series and defensive movements of the Instinctive Rifle Bayonet System (BC)

Execute the attack movement of the Instinctive Rifle Bayonet System (BC)

Execute the following hand to hand combatives (BC)

- Basic right/left fall
- Advanced right/left fall
- Rear fall
- Right/left hip throw
- Overhead throw
- Shoulder throw
- Cross-Hock takedown
- Rear takedown
- Rear strangle takedown
- Counter to a side headlock
- Counter an overhead grip
- Counter a rear strangle hold

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

LEADERSHIP

Identify the subsystems, the interactions and the processes within a platoon/
company level organization (BC)

Identify procedures necessary to conduct an assessment and obtain assessment
data (BC)

Identify objectives and methods to improve organizational processes at
platoon and company level (BC)

Utilize communication improvement skills (BC)

Identify methods for determining the success or failure of an OE operation (BC)

Explain follow-up of an OE operation (BC)

Identify situations appropriate for the use of an OE staff officer (BC)

Define the duties of an NCO

Discriminate between the duties, responsibilities and authority of NCOs
and officers

Develop the proper work relationship between officers and NCOs

Assign tasks to subordinates

Supervise subordinates

Develop a personal philosophy of leadership

Analyze the motivation and nature of the modern soldier

Practice the principles and procedures for effective counseling

Develop a course of action that will minimize and/or control the disruptive
effect of alcohol and drugs.

Recognize instances of discrimination

Take appropriate action on complaints of discrimination

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 11

COMMUNICATIVE SKILLS

Identify the basic formats for military writing (BC)

Write a military letter (BC)

Present a 10-minute extemporaneous speech (BC)

Write a staff study on a problem area selected by your company commander

Present the completed staff study to your company commander in a formal briefing.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 4

A NOTIONAL MODEL FOR MQS II - SC 35

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

1. This Appendix is a notional list of tasks to support the Military Skills and Knowledge component of MQS II - Specialty 35. Those tasks designated (BC) are those which are validated at the Basic Course. All other tasks are validated by the officer at his first assignment.
2. This model has been prepared on the assumption that the officer in Specialty 35 is detailed* to the combat arms for his first two years of commissioned service, to include the combat arms Basic Course. While on the combat arms detail, the officer in Specialty 35 is required to complete a modified version of MQS II for the combat arms specialty to which he is detailed. The modified combat arms MQS is not included in this model which accounts for the absence of tasks in certain common areas, e.g., military law, maintenance, and material readiness.

*The recommendation that officers in Specialties 35, 36 and 37 be detailed to the combat arms for 2 years is one of the OPMS changes which RETO has recommended for consideration.

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 35

FUNCTIONS/RESPONSIBILITIES OF THE INTELLIGENCE OFFICER

Explain the responsibilities and duties of the tactical intelligence staff officer at the battalion/brigade level.

Prepare an analysis of the area of operations at the battalion/brigade level.

Prepare an intelligence estimate at the battalion and brigade level.

Prepare a collection plan at the battalion and brigade level.

Identify the capabilities and limitations of available collection agencies and sources. (BC)

Identify tactical SIGINT/EW support available at battalion and brigade level. (BC)

Recommend missions for aerial reconnaissance and surveillance assets.

Prepare a surveillance plan at battalion and brigade level.

Prepare a surveillance annex/appendix to a battalion/brigade operations order.

Record intelligence information utilizing situation map, map overlay, intelligence journal, journal file and intelligence journal, journal file and intelligence workbooks at the battalion/brigade level.

Process order of battle information at battalion/brigade level.

Evaluate and interpret order of battle information at battalion/brigade level.

Define committed and reinforcing forces and supporting artillery.

Compute enemy forces in terms of committed and reinforcing forces and supporting artillery.

Prepare intelligence reports at battalion/brigade level.

Prepare the order of battle annex to a battalion/brigade operations order.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

FUNCTIONS/RESPONSIBILITIES OF THE INTELLIGENCE OFFICER (CONT'D)

Prepare the intelligence annex to a battalion/brigade operations order.

Supervise interrogation operations.

Insure proper processing of PWs, captured documents and material.

Review tactical interrogation reports.

Supervise the operation of a functional filing system.

Identify the role of intelligence in internal defense operations at battalion/brigade level.

Identify the peculiarities of planning, collecting, processing, and disseminating intelligence during internal defense operations.

Identify the indicators of insurgent activity which must be considered in collection planning for internal defense operations.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

COMBAT SURVEILLANCE

Identify the organization, capabilities and limitations of Armored Cavalry units. (BC)

Prepare a ground surveillance employment plan. (BC)

Recommend employment of the remote sensor (REMS) system. (BC)

Employ REMS. (BC)

Select REMS for a given mission.

Analyze sensor activations and provide intelligence from these activities.

Plan the employment of REMS and analyze target data.

Plan for and supervise the setting up of a sensor monitoring site.

Arm and emplace remote sensors.

Establish records pertaining to employment of a sensor string. (BC)

Plan for and supervise the employment of radio link sensors, the portatable AN/GSQ-46, sensor receiver antennas, the antenna coupler, and basic monitoring techniques.

Plan for and supervise the proper emplacement, operation, and displacement of the AN/PPS-5A ground surveillance radar (GSR).

Plan for and supervise the proper target detection effort of the AN/PPS-5A GSR against intelligence collection requirements.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

INTELLIGENCE FUNDAMENTALS

Explain the historical evolution of American intelligence (BC)

Differentiate between tactical and strategic intelligence (BC)

Identify the components of strategic intelligence (BC)

Identify the agencies responsible for tactical and strategic intelligence (BC)

Explain the fundamental principles and techniques involved in battlefield intelligence. (BC)

Distinguish between intelligence and information (BC)

Plan and recommend the tactical OPSEC functions of analysis, countermeasures, surveys, and training.

Explain the components of EW (BC)

Explain SIGINT and differentiate between the three components (BC)

Define and describe the components of the Army HUMINT system (BC)

Identify the mission, functions, and jurisdiction of CI personnel and units (BC)

Identify the capabilities and limitations of: (BC)

- Remote sensors (3 families)
- Ground surveillance radar
- Night observation devices

Identify the aerial surveillance and reconnaissance assets available (BC)

Define the functions and responsibilities of the tactical surveillance officer

Define the responsibilities and duties of the tactical intelligence staff officer at division level and below

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

INTELLIGENCE FUNDAMENTALS (CONT'D)

Explain the relationship between the intelligence officer and the tactical commander

Explain the content and format of STANAG Form 2003 (BC)

Demonstrate techniques used to conduct a reconnaissance patrol debrief.

Identify the responsibilities, activities and general methods of operation of the U.S. national intelligence agencies, their inter-relationships and chain of command (BC)

Assess the information gathering capabilities of the combat, combat support, and combat service support units of the division (BC)

MDS II MILITARY SKILLS AND KNOWLEDGE - SC 35

INTELLIGENCE SECURITY

Identify the security services available to the commander (BC)

Explain the principles of effective security management (BC)

Utilize communications to reconstruct a unit's order of battle and echelons of command (BC)

Define the relationship between the SIGINT community and the supported organization (BC)

Explain EW doctrine in support of the field command (BC)

Describe EW responsibilities and applications (BC)

Identify the components of SIGSEC (BC)

Describe available SIGINT support (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

ENEMY THREAT

Analyze Soviet radio electronics combat tactics and capabilities (BC)

Explain the organization, composition, disposition, strengths, and weaknesses of the Soviet Armed Forces (BC)

Identify the tactical principles practiced by the Soviet Armed Forces (BC)

Recognize Soviet equipment and weapons and identify the neutralization, destruction and defensive techniques utilized against such equipment (BC)

Identify the following Soviet ground force operations and know the intelligence indicators associated with them: (BC)

- Meeting engagement
- Attacks against prepared positions
- Exploitations and pursuit
- Artillery operations
- Defense
- Water obstacle crossing
- Night operations
- NBC operations
- Logistics

Explain the nature of the Soviet aerial reconnaissance and surveillance threat (BC)

Be able to analyze and interpret tactical situations using Soviet doctrine and organization (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

TACTICAL OPERATIONS

Explain the difference between command authority and responsibility and staff authority and responsibility

Identify the five functions common to all staffs

Identify the three types of staff groups

Identify the general functional areas of responsibilities of the following:

- Assistant division commanders
- Chief of staff/XO
- Five coordinating staff officers

Develop the commander's estimate

Develop company and battalion-level operations orders (BC)

Prepare a warning order and a frag order (BC)

Identify the organization and equipment of the following type units:
(BC)

- Tank company
- Light Infantry company
- Mechanized Infantry company
- Tank battalion
- Light Infantry battalion
- Mechanized Infantry battalion

Plan an Infantry company night attack (BC)

Identify the fundamentals of airmobile operations (BC)

Plan a light Infantry company airmobile operation (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

TACTICAL OPERATIONS (CONT'D)

Plan a tank company attack (BC)

Plan a mechanized Infantry battalion attack (BC)

Plan a mechanized Infantry battalion defense (BC)

Plan a mechanized Infantry battalion defense (BC)

Plan a tank battalion attack (BC)

Explain the fundamentals and the employment of retrograde operations (BC)

Identify the structure of the five types of U.S. Army divisions (BC)

Identify the organization of the division base (BC)

Identify the units organic to a division that can provide intelligence information and explain their capabilities in this regard (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

FIELD ARTILLERY/AIR DEFENSE ARTILLERY/TACTICAL AIR SUPPORT

Define the Soviet artillery threat (BC)

Identify US Field Artillery standard tactical missions and organization for combat (BC)

Perform fire support coordination and artillery fire planning procedures (BC)

Graphically portray, identify, and label fire support measures (BC)

Explain the artillery counterfire mission and mission support provided by all source intelligence agencies (BC)

Analyze an artillery shell crater (BC)

Define the Soviet air threat

Identify US Army air defense weapons and be familiar with their capabilities and limitations

Explain the basic principles of Air Defense Artillery tactical employment

Explain the organization and functional operation of the joint Army Air Ground System (AAGS) and the Air Force Tactical Air Control System (TACS)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

COMMUNICATION

Identify the mission and function of the division signal battalion (BC)

Explain the division communication system (BC)

Complete the Joint Message Form DD-173 (BC)

Define the electro-magnetic environment (BC)

Define amplitude modulation (AM), frequency modulation (FM) and single side band transmission (SSB) and specify the advantages and disadvantages of each (BC)

Identify the four types of common tactical antennas and the characteristic radiation pattern of each (BC)

Define multichannel communications (BC)

Explain transmission security and identify SIGSEC support personnel relationship

Identify transmission security vulnerabilities in view of enemy SIGINT capabilities

Identify appropriate transmission security procedures to minimize vulnerabilities

Describe the types of SIGSEC support available

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

COMMUNICATIVE SKILLS

Present a briefing on a terrain analysis

Present an intelligence situation briefing

Present an intelligence estimate briefing

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

TRAINING

Determine the current level of intelligence training proficiency in a unit (company or battalion)

Analyze techniques for individual and unit intelligence training

Develop a tactical unit intelligence training plan

Explain the interface between the intelligence staff officer and the operations staff officer in relation to training management and training resources

Identify the types of intelligence training exercise

Develop the basic documents and intelligence scenarios for a training exercise

Control exercise activities to accomplish commander's training objective

POS II MILITARY SKILLS AND KNOWLEDGE - SC 35

LEADERSHIP/OE

Explain the intent and operation of OE

Explain the role and functions of the OESO

Explain the OE techniques of:

- Action planning
- Interpersonal communications
- Management by objectives

Understand workgroup communication skills

Identify and develop a personal leadership style

Identify work group needs, roles, and processes as a function of leader behavior

Identify and explain the effectiveness of the different styles of leadership in varying types of situations

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 35

COUNTERINTELLIGENCE

Identify the objectives of the personnel security program (BC)

Identify U.S. Army Counterintelligence (CI) responsibilities in terms of objectives and manner of accomplishment

Discuss the nature, purpose, and scope of CI special operations (BC)

Identify the measures necessary to deny the enemy knowledge of planned, on-going, or completed military operations (BC)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 35

CRYPTOLOGIC/ELECTRONIC INTELLIGENCE

Discuss the Soviet REC concept, capabilities, and tactics (BC)

Explain the U.S. concept of tactical SIGINT/EW support (BC)

Explain and discuss the functions of the ATSE and its relationships with the supported commands (BC)

Differentiate between COMINT, ELINT and TELINT (BC)

Differentiate between COMSEC and ELSEC (BC)

Describe the relationship between the National Security Agency and INSCOM (BC)

Identify the components of SIGINT (BC)

Describe the mission and function of Signal Security Support organizations and their relationship to other CI agencies (BC)

List the basic types of communications of interest to the COMINT collection effort (BC)

Operate tactical crypto equipment (BC)

Encrypt and decrypt using practice edition of an operations code

Encrypt and decrypt using numerical codes

Explain the insecurities which result from the use of unauthorized codes

Explain procedures for obtaining special purpose and emergency codes

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 5

A NOTIONAL MODEL FOR MQS II - SC 81

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

This Appendix is a notional list of tasks to support the Military Skills and Knowledge component of MQS II - Specialty 81. Those tasks designated (BC) are validated by the officer while in attendance at the Basic Course. All other tasks are validated by the officer at his first assignment.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

MILITARY LAW

Outline the procedure for a preliminary inquiry; using case studies, conduct the investigation; outline the nature and purpose of an investigation under Article 32, UCMJ.

Advise an accused on his rights and safeguards, including right to remain silent (Article 31), right to counsel and right to expeditious processing of the case.

Apply the law of search and seizure in a case study; distinguish authorized command inspections and inventories.

Outline the composition and jurisdiction of military courts-martial; apply maximum punishment schedule in a case study. (BC)

Identify the elements of common offenses, including unauthorized absence, larceny, failure to obey an order, disrespectful conduct, assault and battery using case studies. (BC)

Prefer charges in a case study and make/recommend appropriate disposition. (BC)

Administer Article 15, UCMJ (Nonjudicial Punishment) and dispose of offenses in case studies. (BC)

Outline the nature and types of administrative elimination proceedings, including EDP.

Take action in a case study applying applicable Army regulations.

Outline the rights and entitlements of soldiers and their dependents to personal legal services provided by the Staff Judge Advocate.

Counsel a soldier and identify problems requiring legal help using case studies.

Outline the rights and entitlements of a soldier to file a claim for loss or damage to personal property.

Counsel a soldier who has suffered a loss which is cognizable under the Military and Civilian Employee Claims Act using case studies.

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PERSONNEL

Explain the role of the chaplain and the inspector general (BC)

Counsel a soldier and assist him in solving personal problems

Identify Army agencies which can assist soldiers and dependents with personal problems (BC)

Identify local Army and civilian assistance agencies (learn in unit)

Explain the Army system of dependent health care (to include CHAMPUS) (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

TRAINING

Identify the training responsibilities of the platoon leader

Identify the training responsibilities of platoon NCOs

Identify purpose of various training publications and the relationships among them

Determine the current level of individual or unit training proficiency (squad and platoon)

Develop a training plan for SQT training

Identify the soldier tasks in the three components of the SQT

Qualify as a range officer (to be accomplished in the unit)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

LOGISTICS

Prepare a report of survey

Prepare an inventory adjustment report (IAR)

Issue and account for individual clothing and equipment

Secure ammunition and weapons

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 81

MAINTENANCE MANAGEMENT

Determine if logbook forms are maintained IAW TM 38-750

Determine the required forms for a given item of equipment

Determine when a PM service is due or has been performed

Determine if parts are on order

Determine if operator is performing maintenance services and recording in logbook and DA Form 2404

Determine Nonoperational Ready, Supply (NORS)/Nonoperational Ready, Maintenance (NORM) days for item of equipment

Determine the appropriate TM for a given maintenance task

Inspect platoon weapons for serviceability

Inspect PLL computer printouts

Determine source of supply for a repair part

Inspect a DA Form 2064, Document Register, for supply actions

Inspect a Request for Repair Parts, DA Form 2763

Inspect a DA Form 3318, Record of Demand - Title Insert Card

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

COMMUNICATIVE SKILLS

Identify the basic formats for military writing (BC)

Write a military letter (BC)

Present a 10-minute extemporaneous speech (BC)

Write a staff study on a problem area selected by your company commander

Present the completed staff study to your company commander in a formal briefing.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PHYSICAL TRAINING AND COMBATIVES

Pass the APFT with a score of 400 or higher

Complete a 5-mile road march

Complete a 12-mile road march

Execute the following hand to hand combatives (BC)

- Basic right/left fall
- Advanced right/left fall
- Rear fall
- Right/left hip throw
- Overhead throw
- Shoulder throw
- Cross-Hock takedown
- Rear takedown
- Rear strangle takedown
- Counter to a side headlock
- Counter an overhead grip
- Counter a rear strangle hold

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 81

LEADERSHIP

Identify the subsystems, the interactions and the processes within a platoon/
company level organization (BC)

Identify procedures necessary to conduct an assessment and obtain assessment
data (BC)

Identify objectives and methods to improve organizational processes at
platoon and company level (BC)

Utilize communication improvement skills (BC)

Identify methods for determining the success or failure of an OE operation (BC)

Explain follow-up of an OE operation (BC)

Identify situations appropriate for the use of an OE staff officer (BC)

Define the duties of an NCO

Discriminate between the duties, responsibilities and authority of NCOs
and officers

Develop the proper work relationship between officers and NCOs

Assign tasks to subordinates

Supervise subordinates

Develop a personal philosophy of leadership

Analyze the motivation and nature of the modern soldier

Practice the principles and procedures for effective counseling

Develop a course of action that will minimize and/or control the disruptive
effect of alcohol and drugs.

Recognize instances of discrimination

Take appropriate action on complaints of discrimination

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

CBR

Plan and conduct platoon level CBR training

Plan and conduct a decontamination exercise of platoon vehicles and equipment

Inspect platoon CBR equipment for serviceability

- Decon apparatus
- IM-174 series radiac instruments
- IM-93 radiac instrument
- M-17 series protective mask

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

MATERIEL READINESS - WHEEL VEHICLES

Explain the theory of diesel engines (BC)

Explain the functioning of the major components of the 2 1/2 and 5 ton trucks as part of the total system (BC)

Perform a complete ESC on a 2 1/2 ton truck and a 5 ton tractor (BC)

Perform all operator maintenance tasks (BC)

Inspect and determine the serviceability of all major components of 2 1/2 and 5 ton trucks (BC)

Perform before - during - and after - operation checks and services on a 2 1/2 ton truck and a 5 ton tractor (BC)

Drive a 2 1/2 ton truck and a 5 ton tractor and trailer (BC)

Drive a 2 1/2 ton truck and a 5 ton tractor at night using blackout drive (BC)

Recover a 5 ton truck using a winch (BC)

Recover a mired 2 1/2 ton truck using a 5 ton wrecker (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PETROLEUM LABORATORY

Determine the location of laboratory facilities, the types of test required, reasons for quality surveillance program and Defense Fuel Supply Center functions. (BC)

Maintain logs, process samples and report the results. Establish maintenance and supply procedures for the laboratory. (BC)

Determine physical and chemical properties from a specification, determine and locate test methods from TM 10-1165 and use limits from MIL-HDBK-200. (BC)

List the types and effects of contamination and deterioration. Determine reclamation procedures for products not suitable for use. (BC)

Apply the proper procedures for obtaining a petroleum sample. (BC)

Evaluate laboratory test results and determine if the product meets specification and/or use limits. Determine if the product is contaminated or deteriorated. Recommend disposition or use of product. (BC)

Perform the API Gravity and Color Tests and report the results, explain the significance of the test (ATSM D287, D1500, and FTMS 791 Method 103.5) API Gravity, ASTM Color, and Hellige Color. (BC)

Perform the distillation and Reid Vapor Pressure Test and report the results. Explain significance of the test (ASTM D86 and D323) Distillation and Vapor Pressure of Petroleum Products. (BC)

Perform flash, bottom sediment, and water test and report the results. Explain the significance of the test (ASTM D93, ASTM D2709, ASTM D1796) Pensky-Marten Closed Cup and Sediment by BS&W. (BC)

Perform particulate contaminate test, calculate and report the results. Explain significance of the test (ASTM D2276) Particulate, Contamination in Aviation Turbine Fuels. (BC)

Perform the Water Separation Characteristics and Water Reaction in Aviation Fuel Tests, report the results and explain the significance of the Water Separation Characteristics (ASTM D2550) and Water Reaction (ASTM D1094). (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PETROLEUM LABORATORY (CONT'D)

Perform laboratory procedures following established rules of personal conduct and safety. (BC)

Perform physical tests of light distillates and report results (D3-7 through D3-11). (BC)

Evaluate all test results performed and explain significance of each test result.

Perform Fuel System Icing Inhibitor Test, calculate the results. Explain significance of the test (FTMS 791A, Method 5327.3) Fuel System Icing. (BC)

Perform Existent Gum Test, report the results. Explain the significance of the test (ASTM D381) Existent Gum. (BC)

Perform the Corrosion, Copper Strip Corrosion, Doctors, and Sulfides Tests; report the results. Explain the significance of the test (ASTM D130) Copper Strip Corrosion, Doctors Test and Sulfides Test. (BC)

Perform Lead in Fuel Test, report the results. Explain significance of the test (ASTM D26) Lead in Gasoline. (BC)

Apply the procedures for conducting the Thermal Stability Test and explain significance of the test (ASTM D1660). (BC)

Perform the Kinematic Viscosity Test, report the results and explain significance of ASTM Method 455, Kinematic Viscosity Test. (BC)

Perform physical and chemical tests and report results (D3-15 through D3-21). (BC)

Evaluate all test results performed and explain significance of each test result. (BC)

Unpack, inventory, set up, perform tests, and repack the kit. (BC)

Perform the Freezing Point Cloud and Pour Point Tests, report the results and explain significance of ASTM test methods D2386, D2500 and D97. (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PETROLEUM HANDLING EQUIPMENT

Inspect stock status and inventory level cards, detect and correct errors, determine correct handling and storage of package products and fuels; and compute the number of cargo vehicles required to ship a given quantity of package products and fuels.

Perform operational checks on tank vehicle pumps and filter separator; determine when tank vehicle interior tanks need cleaning and the cleaning method required; verify shipment and receipt documentation and sealing on 1,200 gallon tank vehicles and 5,000 gallon semi-trailers and current discrepancies; fill and dispense fuel from tank vehicle; and select the proper vehicles for aircraft fueling.

Apply the procedures for installing component parts of the FSSP, inspect installed parts for fitness and make repairs if required.

Perform operator maintenance checks on tank and pump unit pump and filter separators; fill and dispense product from the tank and pump unit.

Perform operator maintenance checks on can and drum cleaning machine; select cleaning agents to be used; inspect and classify 5 gallon cans and 55 gallon drums; and replace gaskets and closures.

Explain processes of filter separators pertaining to filtration and water coalescing; identify filter separators used in supply and distribution points; inspect filter separators to determine inlet pressure, outlet pressure and pressure differential; and perform operator maintenance.

Operate the 50 GPM and 100 GPM pump and perform operator maintenance. Perform maintenance checks; make temporary repairs, issue and receive fuel using the 500 gallon collapsible drum.

Inspect tank cars for suitability of use, proper documentation and sealing; fill, empty, and gage rail tank cars. (BC)

Detect errors in an aircraft refueling operation involving an M49 refueler; set up an operational 2 point FARE system.

Operate communications equipment and determine communication equipment for controlling petroleum operations.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

PETROLEUM HANDLING EQUIPMENT (CONT'D)

Apply the meter correction factor in determining the correct volume of fuel; determine the requirements for meter calibration.

Apply the procedures for cleaning oil spills.

Select a site for Class III operations; write an operations order to facilitate the establishment of a Class III supply point.

Set up, operate and disassemble the fuel system supply point.

Inspect both an inside and an outside package petroleum storage area at DGSC.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

GENERAL PETROLEUM

Determine the characteristics and advantages and disadvantages of the various modes of bulk petroleum distribution to include pipelines, tankers, barges, rail tank cars, tank trucks and trailers; describe the petroleum organizations normally found in a theater of operations. (BC)

Apply procedures used to control ignition sources; apply first aid procedures for casualties resulting from petroleum handling; determine the type extinguisher required for different classes of fire and extinguish a petroleum fire.

Solve basic mathematical problems normally encountered in petroleum operations.

Calculate the volume of fuel corrected to 60° F, the equivalent weight of fuel, the equivalent volume of fuel, the velocity of flow, the equivalent pressure expressed in pounds per square inch, equivalent pressure expressed in feet of head. (BC)

Perform a bulk petroleum inventory; prepare bulk petroleum accounting documents; determine allowable and actual losses and determine adjustment actions required as a result of losses.

Compute small unit "type" organizational problems requirements.

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

TERMINAL EQUIPMENT

Select equipment and pipe for minor terminal repair; mark equipment; and perform operator maintenance on valves, oil eliminator and strainer. (BC)

Select storage containers for given situations and describe their employment to include site selection and preparation. (BC)

Explain the methods of vapor freeing bolted steel bulk storage tanks; interpret explosimeter readings; and apply the procedures for cleaning bulk storage tanks.

Gage bolted steel tanks; take temperature readings and compute volume corrections. (BC)

Make manifold setting to receive and dispense product. (BC)

Operate the transfer/feeder pump; and perform operator maintenance checks. (BC)

Describe the method for laying the assault hoseline; determine the spacing of hoseline pumping units; and explain the method of evacuating the hoseline.

Provide feeder information to Bulk Petroleum Terminal Report (DD Form 1788); Bulk Petroleum Terminal Message Report (RCS: DSACM) 1884 (DFSC); and the Annual Terminal Facilities Report (DD Form 1891). (BC)

Distinguish between ship and shore responsibilities; determine minimum equipment and facilities required to discharge vessels and operate a facility by receiving product into the base terminal. (BC)

PIPELINE EQUIPMENT

Determine pump discharge head, brake horsepower, efficiency and required engine speed. (BC)

Select and operate pumps; perform operator maintenance checks; and prepare maintenance forms and records. (BC)

Discuss procedures to launch and retrieve scraper and clean scraper stations and sandtraps. (BC)

Apply the principles of operating a pump station, to include putting the pump on line and taking the station off line; apply the principles of operating pumps to achieve a uniform flow rate; and describe the major causes of abnormal pump station operating pressures. Launch and retrieve scrapers. (BC)

Demonstrate the various devices used for low pressure pipeline repair. (BC)

MQS II MILITARY SKILLS AND KNOWLEDGE - SC 81

BASIC QUARTERMASTER FUNCTIONS

Explain the basic responsibilities of the Army Mortuary Affairs Program. (BC)

Set up and place into operation a mobile textile repair activity. Inspect equipment and operational procedures for adherence to maintenance policies. Prepare for unit dislocation by loading trailers and striking tentage. (BC)

Select poles and pins for pitching GP medium tents. Pitch tents following workbook directions. Inspect, strike and fold tents and properly store tents. (BC)

Set up the single trailer laundry unit; inspect and perform before operation maintenance on laundry unit; perform closedown operation and secure for movement. (BC)

Set up, inspect, and operate the 8 Showerhead Bath Unit; close down and secure field bath equipment; adhere to maintenance procedures and implement sanitary standards. (BC)

Determine the best location for a supply point. Plan the layout for a Class I, IV and VII supply point. (BC)

Plan, execute, and evaluate convoy operations at the unit level. (BC)

Identify basic helicopters used in external transport operations and their characteristics and limitations, characteristics and limitations of the airdrop equipment and cargo slings used, and storage maintenance and inspection criteria used for this equipment. (BC)

Identify ground signaling procedures, safety equipment precautions and procedures. Recognize hook-up and release procedures used during helicopter sling loading operations. (BC)

Recognize rigging techniques, and field expedient measures and identify in-flight stability criteria for external loads lifted by helicopter. (BC)

Rig and attach supplies and equipment for helicopter external lift. (BC)

MOS II MILITARY SKILLS AND KNOWLEDGE - SC 81

BASIC QUARTERMASTER FUNCTIONS (CONT'D)

Evaluate preparation and serving of food. Implement corrective action for noted discrepancies. (BC)

Evaluate storage of subsistence items. Implement corrective action for noted discrepancies.

Analyze duties and responsibilities of food service personnel. Coordinate with supporting agencies at the installation to insure effective food service operation.

Verify entries on headcount forms. Safeguard and control Cash Collection Book. Audit DA Form 3980-R, Dining Facility Account Card; detect and correct errors.

Conduct sanitation inspection of facility and personnel. Determine requirement for food handler's examination.

Apply the principles of site selection for establishing a forward and rear area kitchen. Determine the type of equipment required to set up a forward and rear area kitchen. Evaluate a forward and rear area feeding operation.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 6

A NOTIONAL MODEL FOR MQS III - SC 11

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

This Appendix is a notional list of tasks to support the Military Skills and Knowledge component of MQS III, Specialty 11. The following symbols identify the validation requirements for the tasks included in this component of the MQS:

- X - Validated prior to selection for command
(precommand skill)
- XX - Taught at TDY Company Command Course, validated
while in command (command skills)
- XXX - Validated at anytime during MQS III (staff skill)

The RETO preliminary analysis upon which this model is based identified only one required TDY course, the Company Command Course. This does not preclude the Training and Education Specialty Proponent from establishing other TDY functional courses which are indicated as necessary by the detailed front-end task analysis or by other analysis.

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 11

OPERATIONS-BATTALION LEVEL

Prepare planning guidance for a mechanized task force operation.	XXX
Develop courses of action for a mechanized task force operation.	XXX
Prepare and justify a staff recommendation for a mechanized task force operation.	XXX
Prepare the commander's decision and concept.	XXX
Prepare the task organization for the OPORD.	XXX
Prepare a complete mechanized task force OPORD.	XXX
Prepare a complete operation overlay for mechanized task force OPORD.	XXX
Develop a frag order to change a previously issued OPORD.	XXX
Prepare a list of actions to be accomplished after issuing task force OPORD and before the operation.	XXX
Plan and coordinate a battalion task force passage of lines.	XXX
Plan a mechanized battalion task force river crossing operation.	XXX
Plan a mechanized battalion task force tactical road march.	XXX
Plan for a mechanized battalion task force defense in an economy-of-force area.	XXX
Plan the employment of the GSR section.	XXX
Plan the employment of the REDEYE section.	XXX
Plan the employment of the TOW platoon.	XXX
Plan the employment of the scout platoon.	XXX
Plan the employment of the heavy mortar platoon.	XXX
Explain the roles and capabilities of Cavalry units.	XXX
Plan the employment of Air Defense assets at battalion/task force level.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

OPERATIONS-BATTALION LEVEL (CONT'D)

Plan passive air defense measures at battalion/task force level.

XXX

Organize a battalion or brigade TOC.

XXX

Prepare an operations estimate.

XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - COMPANY LEVEL

Plan and conduct a mechanized company team movement to contact.	XX
Plan and conduct a mechanized company team hasty attack.	XX
Plan and conduct a mechanized company team deliberate attack.	XX
Plan and conduct a mechanized company team night attack.	XX
Plan and conduct a mechanized company team defense	XX
Plan and conduct a mechanized company team delay (HIGH RISK).	XX
Plan and prepare a mechanized company team strongpoint.	XX
Plan and conduct a mechanized company team disengagement (UNDER PRESSURE).	XX
Plan and conduct a mechanized company team defense of a built-up area.	XX
Plan and conduct a light Infantry company movement to contact/hasty attack.	XX
Plan and conduct a light Infantry company deliberate daylight attack.	XX
Plan and conduct a light Infantry company defense.	XX
Plan and conduct a light Infantry company delay.	XX
Plan and conduct a light Infantry company night withdrawal (ARTEP)	XX
Plan and conduct a light Infantry company night attack (ARTEP)	XX
Plan and conduct a light Infantry company airmobile assault (ARTEP)	XX
Plan and conduct a light Infantry company defense of a built-up area.(ARTEP)	XX
Plan and conduct a company attack of a built-up area.	XX
Explain the principles for employing Armor.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

CIVIL DISTURBANCE OPERATIONS

Describe the role of the Army in civil disturbance operations. XXX

Determine the most appropriate military action to use in
dealing with a civil disturbance. XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

AMPHIBIOUS OPERATIONS

Analyze the characteristics of amphibious warfare.	XXX
Determine procedures in staging, embarking, enroute training, ship to shore movement, and maneuver ashore.	XXX
Plan a battalion amphibious assault.	XXX
Determine procedures in planning, requesting, and controlling tactical air and naval gunfire support.	XXX
Analyze the organization, capabilities, and functioning of an amphibious task force.	XXX
Analyze the Fleet Marine Force organizational structure.	XXX

MJS III MILITARY SKILLS AND KNOWLEDGE - SC 11

LEADERSHIP & MANAGEMENT

Develop plans to minimize/control disruptive effect of alcohol and drug abuse.	X
Analyze commander's role in race relations/equal opportunity affirmative action plans.	X
Analyze a company level organization in terms of the subsystems which make up that organization.	X
Develop a plan to control the commander imposed element of one's own work environment.	X
Develop a plan to control the organizational-imposed element of one's own work environment.	X
Develop a proper functioning chain of command.	X
Apply the decisionmaking process.	X
Direct the efforts of a subordinate	X
Analyze the application of OE techniques to a company-level organization.	X
Identify requirements for effective management of an OE implementation	X
Evaluate the success of an OE operation at company level and be able to follow it up.	X

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

CBR

Identify the CBR threat (classified).	XX
Develop a company CBR training program.	X
Organize and employ an NBC team.	X
Evaluate company and battalion CBR SOP.	X
Prepare orders for individual and unit protection from nuclear weapons effects.	X
Calculate radiation exposure guide.	X
Identify decontaminates and organize the decontamination of a company/team.	X
Identify nuclear targets.	XXX
Construct a simplified fallout prediction plot.	XXX
Employ radiological calculations.	XXX
Identify chemical targets.	XXX
Evaluate the chemical hazard.	XXX
Determine the results of an enemy nuclear attack on friendly dispositions.	XXX
Determine the mission oriented protective posture (MOPP)	XXX
Prepare an NBC-3 (Chemical) Report.	XXX

MDS III MILITARY SKILLS AND KNOWLEDGE - SC 11

PERSONNEL

Use the SIDPERS reports as a personnel management tool.	X
Prepare a letter of sympathy to deceased soldier's next-of-kin.	X
Prepare a recommendation for an award (DA Form 638).	X
Dispose of personal effects of a deceased soldier.	X
Determine the requirements for security and evacuation of PW's.	XXX
Determine the requirements for personnel management at the battalion level.	XXX
Determine the disposition of stragglers at battalion level.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

TACTICS - BATTALION LEVEL

Plan a mechanized battalion task force movement to contact (ARTEP)	XXX
Plan a mechanized battalion task force hasty attack (ARTEP).	XXX
Plan a mechanized battalion task force deliberate attack (ARTEP).	XXX
Plan a mechanized battalion task force exploitation (ARTEP)	XXX
Plan a mechanized battalion task force night attack (ARTEP)	XXX
Plan a mechanized battalion task force defense (ARTEP).	XXX
Plan a mechanized battalion task force delay (HIGH RISK) (ARTEP).	XXX
Plan a mechanized battalion task force disengagement under pressure (ARTEP)	XXX
Plan a mechanized battalion task force defense of a built-up area (ARTEP)	XXX
Plan a light Infantry battalion movement to contact/hasty attack (ARTEP)	XXX
Plan a light Infantry battalion deliberate daylight attack.	XXX
Plan a light Infantry battalion defense (ARTEP)	XXX
Plan a light Infantry battalion delay (ARTEP)	XXX
Plan a light Infantry battalion night withdrawal (ARTEP)	XXX
Plan a light Infantry battalion night attack (ARTEP)	XXX
Plan a light Infantry battalion airmobile assault (ARTEP)	XXX
Plan a light Infantry battalion airborne assault (ARTEP)	XXX
Plan a light Infantry battalion defense of a built-up area (ARTEP)	XXX
Plan a light Infantry battalion breakout from an encirclement. (ARTEP)	XXX
Plan a light Infantry battalion air assault delay in sector (ARTEP)	XXX
Plan a light Infantry battalion air assault reconnaissance in force (ARTEP)	XXX
Plan a mechanized battalion task force defense of a river line.	XXX
Plan a demolition guard mission.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

MISCELLANEOUS

Analyze the duties and responsibilities of a troop level staff officer.	XXX
Explain the Army functional file system.	XXX
Analyze the internal operation of a staff section.	XXX
Explain information processing at the battalion level.	XXX
Identify military correspondence and formats.	X
Explain the procedures for operation of a unit fund.	X
Explain the operation of the Inspector General system.	X
Determine the environmental conditions that characterize desert areas and their effect on military operations, personnel and equipment.	X
Determine the environmental conditions that characterize arctic/cold weather areas and their effect on military operations, personnel, and equipment.	X
Determine the environmental conditions that characterize tropic/jungle areas and their effect on military operations, personnel and equipment.	X
Determine the composition and functions of a quartering party.	X
Determine the internal organization of a battalion headquarters.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

LOGISTICS

Analyze the organization for logistic support within the division.	XXX
Analyze the logistic system within the battalion.	X
Describe the system of property accountability within the battalion and company.	X
Analyze the management of property and accountability.	X
Obtain relief from property responsibility.	X
Determine the applicability, use, and disposition of AR 15-6 Investigations, when used to fix pecuniary liability.	X
Obtain relief from a pecuniary charge.	X
Analyze the battalion and company level management of the Army food service system.	XXX
Explain the system of accounts, budgeting, and forecasting P-2M funds at the battalion level.	XXX
Analyze the requirements involved in providing logistical support to attached units.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

FIRE SUPPORT PLANNING

Determine the responsiveness and characteristics of Artillery fire support available to maneuver units.	XX
Determine appropriate techniques for Artillery engagement of a target.	XX
Plan Artillery fire support at the company/team level.	XX
Plan Artillery fire support at the battalion/task force level.	XXX
Coordinate Artillery fire support at the company/team level.	XX
Coordinate Artillery fire support at the battalion/task force level.	XX
Plan and coordinate tactical air support at the battalion/task force level.	XX
Identify the functions and responsibilities of forward air controllers/ground commander team.	XX
Identify the characteristics, capabilities and limitations of USAF tactical ordnance.	XX

MCS III MILITARY SKILLS AND KNOWLEDGE - SC 11

MEDICAL SUBJECTS

Analyze heat and cold injury prevention within a unit.	X
Analyze respiratory disease prevention within a unit.	X
Analyze gastrointestinal disease prevention within a unit.	X
Analyze insect-borne disease prevention within a unit.	X
Analyze venereal disease prevention within a unit.	X
Determine the capabilities of company level medical support.	X
Determine the medical support capabilities at battalion and above.	XXX
Analyze the medical problems involved in nuclear or chemical mass casualties.	X

MOS III MILITARY SKILLS AND KNOWLEDGE -- SC 11

OPERATIONS - COMPANY LEVEL

Plan the use of available time.	X
Write a rifle company/mechanized team warning order	X
Select personnel to be present on leaders reconnaissance and to receive company/team operations orders.	X
Plan the occupation of an assembly area for a rifle company/mechanized team.	XX
Coordinate a passage of lines.	XX
Plan the employment of attached and organic anti-armor weapons in the offense and defense	XX
Plan a company relief operation.	XX
Plan a company river crossing operation.	XX
Plan the employment of active and passive air defense at the company/team level.	XX
Prepare a company OPORD.	X

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

AIRBORNE/AIRMOBILE OPERATIONS

Explain the role of airborne forces in a mid-intensity warfare environment.	XXX
Identify the fundamental aspects of airborne operations.	XXX
Plan a battalion airborne operation.	XXX
Prepare a company basic planning guide.	XXX
Prepare a battalion consolidated basic planning guide.	XXX
Plan a battalion air movement.	XXX
Plan the use of helicopters for airmobile operations.	XXX
Plan the employment of attack helicopters in an anti-armor role.	XXX
Plan a company airmobile operation.	XX
Plan a battalion airmobile operation.	XXX
Identify the function and organization of the military airlift command.	XXX
Identify the three types of airlift.	XXX
Explain the capabilities and limitations of the strategic and tactical airlift fleet.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

UNIT/MATERIEL READINESS

Analyze a company maintenance program.	X
Develop a company maintenance program.	X
Prepare a Materiel Readiness Report (DA Form 2406).	XXX
Prepare a current status Materiel Readiness Report (DA Form 2406)	XXX
Compute an Equipment Status Profile (ESP).	XXX
Inspect a unit's completed Materiel Readiness Report (DA Form 2406)	XXX
Analyze a unit's completed Materiel Readiness Report (DA Form 2406)	XXX
Complete a Unit Readiness Report (DA Form 2715)	XXX
Inspect company equipment for serviceability.	X

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 11

COMMUNICATIONS

Plan the use of communications equipment available at the company and battalion level.	X
Develop a communications plan to support Infantry company offensive operations.	X
Develop a communications plan to support Infantry company defensive operations.	X
Plan the use of communications equipment which supports the brigade.	XXX
Employ electronic counter-countermeasures against electronic support measures.	XXX
Employ electronic counter-countermeasures against electronic countermeasures.	XXX
Employ electronic countermeasures and electronic support measures against enemy communication systems.	XXX
Plan the use of electronic warfare equipment against threat communication systems.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

ENGINEER OPERATIONS

Analyze divisional Engineer support capabilities.	XXX
Analyze the fundamentals of Engineer employment.	XXX
Analyze nondivisional Engineer support.	XXX
Employ natural obstacles.	XXX
Employ artificial obstacles.	XXX
Develop an obstacle plan.	XXX
Utilize reserved demolition target planning procedures.	XXX
Employ standard pattern minefields.	XXX
Plan the employment of scattermine munitions.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

INTELLIGENCE

Analyze the effects of weather on the tactical situation.	X
Analyze terrain as it affects the tactical situation.	X
Select avenues of approach.	XXX
Analyze tactics, organization, and doctrine of an opposing force.	XXX
Compute enemy strength.	XXX
Portray enemy situation.	XXX
Analyze indicators of opposing force activity.	XXX
Identify normal opposing force courses of action portrayed by indicators.	XXX
Determine the opposing force's most probable course(s) of action.	XXX
Determine the support capabilities available to the opposing force.	XXX
Determine opposing force vulnerabilities.	XXX
Prepare an intelligence estimate.	XXX
Determine the essential elements of information.	XXX
Determine the enemy situation.	XXX
Analyze the effects of weather and terrain on courses of action.	XXX
Analyze the organization, weapons, and equipment of the Soviet motorized rifle battalion.	X
Analyze the organization, weapons and equipment of the Soviet tank battalion.	X
Analyze the tactical doctrine and tactics employed by Soviet motorized rifle battalion and tank battalion.	X
Analyze the tactical doctrine and tactics employed by Soviet forces at regiment and division level.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

INTELLIGENCE (CONT'D)

Determine the tasks, capabilities and responsiveness of tactical air reconnaissance.	XXX
Determine the basic capabilities of air reconnaissance sensors and USAF reconnaissance aircraft.	XXX
Plan and coordinate ground surveillance radars for intelligence purposes.	XXX
Determine battlefield intelligence requirements and sources to fulfill these requirements.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

TRAINING

Prepare commander's training guidance at the company level.	X
Determine the current level of unit and individual training within a company.	X
Analyze training responsibilities within the battalion.	X
Analyze training responsibilities within the company.	X
Determine the individual, leader, and subunit tasks necessary to perform a selected ARTEP mission.	X
Determine training resources available to the company commander.	X
Determine the sequence of priorities for training.	X
Develop training programs for specific Infantry weapons.	X
Develop a company training program.	XX
Prepare commander's training guidance at the battalion level.	XXX
Determine the current level of unit and individual training within a battalion.	XXX
Analyze the training system and training responsibilities within a division/installation.	XXX
Develop a battalion training program.	XXX
Determine the requirements for a formal ARTEP evaluation for an Infantry battalion at level 1.	XXX
Determine the requirements for a company level OJT program.	X

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 11

MILITARY LAW

Conduct a preliminary inquiry, using case studies, and prepare a recommendation for disposition of the case; determine advisability of investigation under Article 32, UCMJ. XX

Outline the rights and safeguards of the accused, determine their applicability in the case study and recommend the nature of restraint appropriate under the circumstances. XX

Determine the requirement for a lawful search, outline the common pitfalls and set forth the procedure for conducting the search. XX

Determine the appropriate level of court-martial tribunal; based upon the facts of the case study, discuss composition, jurisdiction and maximum penalties which may be adjudged; outline elements of the offense and possible legal defenses. XX

Outline the responsibilities of the commander following disposition of the accused by the court-martial; discuss confinement and unit administration. XX

Dispose of a case under Article 15, UCMJ by reviewing the facts and determining level of Article 15 (company/field-grade); outline the procedure which must be followed by the unit commander. XX

Outline procedures for common administrative elimination actions; recommend appropriate disposition of an individual in a case study. XX

Determine advisability of administrative action versus judicial (military justice) action and outline primary considerations in an EDP discharge. XX

Identify unlawful command influence, understand its sources and outline common infractions of the law. XX

Outline penalties/consequences of unlawful command influence. XX

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 7

A NOTIONAL MODEL FOR MQS III - SC 35

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

This Appendix is a notional list of tasks to support the Military Skills and Knowledge component of MQS III - Specialty 35. The following symbols identify the validation requirements for the tasks included in this component of the MQS:

XX -- Taught at Company Command Course validated while in command (command skill)

XXX - Validated at anytime during MQS III (staff skill)

The RETO preliminary analysis upon which this model is based, identified only one TDY course, the Company Command Course, which is required to teach critical skills within the MQS. This does not preclude the Training and Education Specialty Proponent from establishing other TDY functional courses which are indicated as necessary by the detailed front-end task analysis or by other analysis. There are TDY courses which teach skills related to the MQS. The skills taught by these courses are not part of MQS III - SC 35 because of their narrow focus and the small number of positions in the specialty which require the skills. Some of these courses are shown below:

<u>COURSE</u>	<u>LENGTH</u>	<u>ASI</u>	<u>PROPONENT</u>
Imagery Interpretation	10 wks	35C	USAF
Area Intelligence	13 wks	35B	CIA
Intelligence Indications and Warning	2 wks	35B	DIA
Joint Intelligence Orientation	4 wks	ALL	DIA

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

STAFF SUBJECTS

Describe the staff organization and command relationships at the division level	XXX
Identify the functions and responsibilities of the division G-1 section	XXX
Identify the functions and responsibilities of the division G-2 section	XXX
Identify the functions and responsibilities of the division G-3 section	XXX
Explain the coordination between the division G-2 and G-3 sections	XXX
Describe the composition, layout, operation and communication capabilities of the division TOC.	XXX
Identify the functions and responsibilities of the division G-4 section	XXX
Identify the functions and organization of the DISCOM	XXX
Explain the format and normal content of the ADMIN/LOG order	XXX
Identify the functions and responsibilities of the division G-5	XXX
Identify the functions and responsibilities of the division special staff	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

TACTICAL OPERATIONS

Apply the command and staff planning sequence for operations at the brigade level.	XXX
Apply the estimate of the situation to develop courses of action, to analyze the courses of action, and to develop a staff recommendation (brigade level).	XXX
Prepare an operations order to include task organization for a brigade level operation.	XXX
Apply control measures, military symbols, and prepare an operations overlay at brigade level.	XXX
Describe the combat service support system within the division, its capabilities and limitations, and the interface with the combat and combat support systems within the division.	XXX
Describe the fundamentals of offensive operations at the brigade and division level.	XXX
Apply the five types of offensive operations and the three forms of maneuver to offensive operations at the brigade and division level.	XXX
Plan offensive operations at the brigade and division level.	XXX
Plan reconnaissance and security operations for an Armored Cavalry squadron.	XXX
Identify the characteristics, principles and schemes of maneuver in defensive and retrograde operations at brigade and division level.	XXX
Plan the active defense, delay, and withdrawal at the brigade and division level.	XXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 35

ELECTRONIC WARFARE

Identify and describe staff responsibilities of the G2, G3 and CE officer.	XXX
Apply electronic warfare countermeasures (ECM) in support of the tactical mission	XXX
Apply electronic warfare counter-countermeasures (ECCM) in support of daily operations and the tactical mission	XXX
Describe how electronic warfare support measures (ESM) support ECM and ECCM missions	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

COMBAT SURVEILLANCE

Identify the capabilities and limitations of ground surveillance systems at division and corps level.	XXX
Plan for employment of ground surveillance radar at the division/corps level.	XXX
Identify the capabilities and limitations of remote sensor (REMS) systems employed by the division and the corps.	XXX
Analyze raw data derived from REMS systems	XXX
Plan for the employment of REMS systems at division and corps level.	XXX
Identify the capabilities, limitations, and planning considerations for the employment of the Mohawk sensor systems	XXX
Use size, shape, shadow, shade and surroundings to identify objects seen on vertical aerial imagery	XXX
Identify the capabilities and limitations of the following reconnaissance/surveillance means:	XXX
- Visual reconnaissance	
- SLAR	
- Photographic coverage	
- INFRARED	
- Airborne personnel detector	
Request appropriate reconnaissance/surveillance missions	XXX
Prepare the surveillance appendix to the intelligence annex of the division/corps operations order	XXX
Identify the terminology, capabilities, limitations, management, tasking and intelligence products derived from strategic overhead collection systems	XXX
Identify capabilities, limitations, and intelligence products of current USAF reconnaissance assets	XXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 35

FUNCTIONS/RESPONSIBILITIES OF THE INTELLIGENCE OFFICER

Understand the responsibilities and duties of the tactical intelligence staff officer at the division/corps level	XXX
Prepare an analysis of the area of operations at the division/corps level	XXX
Prepare an intelligence estimate at the division/corps level	XXX
Prepare a collection plan at the division/corps level	XXX
Be familiar with the principles of tactical targeting	XXX
Be familiar with the targeting responsibilities of the intelligence officer	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

ARMY MANAGEMENT

Prepare the Unit Readiness Report (DA Form 2715).	XX
Explain the basic capabilities and uses of ADP systems.	XXX
Interact with intelligence data handling systems.	XXX
Identify common security threats to ADP systems.	XXX
Describe operations research/systems analysis (ORSA) problem solving techniques.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

CBR

Organize the company NBC team.	XX
Organize the company damage control team and rescue squad.	XX
Develop a company CBR training program.	XX
Identify decontaminates and decontamination apparatus.	XX
Organize decontamination of a company.	XX
Determine mission oriented protective posture (MOPP) and its effect on personnel.	XX
Supervise preparation of unit radiation exposure records.	XX
Select individuals/units for an operation based on RS category and expected exposure.	XX
Prepare company for defense against biological attack.	XX
Be familiar with the operation of unit NBC collective protection shelters.	XX
Prepare company for defense against chemical attack.	XX
Use simplified fallout prediction.	XX
Analyze potential point and area nuclear targets by the visual, index, and numerical methods.	XXX
Perform damage estimation.	XX
Compute residual radiation dose.	XXX
Compute effective downward message.	XXX
Be familiar with command and staff procedures in an NBC environment.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

TRAINING

Prepare commander's training guidance at the company level.	XX
Determine the current level of unit and individual training within a company.	XX
Analyze training responsibilities within the CEWI battalion.	XX
Analyze training responsibilities within the ground surveillance company.	XX
Determine the individual, leader, and subunit tasks necessary to perform a selected ARTEP mission.	XX
Determine training resources available to the company commander.	XX
Determine the sequence of priorities for training.	XX
Develop a company training program.	XX
Determine the requirements for a company level OJT program.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

MILITARY LAW

- Conduct a preliminary inquiry, using case studies, and prepare a recommendation for disposition of the case; determine advisability of investigation under Article 32, UCMJ. XX
- Outline the rights and safeguards of the accused, determine their applicability in the case study and recommend the nature of restraint appropriate under the circumstances. XX
- Determine the requirement for a lawful search, outline the common pitfalls and set forth the procedure for conducting the search. XX
- Determine the appropriate level of court-martial tribunal, based upon the facts of the case study; discuss composition, jurisdiction and maximum penalties which may be adjudged; outline elements of the offense and possible legal defenses. XX
- Outline the responsibilities of the commander following disposition of the accused by the court-martial; discuss confinement and unit administration. XX
- Dispose of a case under Article 15, UCMJ by reviewing the facts and determining level of Article 15 (company/field-grade); outline the procedure which must be followed by the unit commander. XX
- Outline procedures for common administrative elimination actions; recommend appropriate disposition of an individual in a case study. XX
- Determine advisability of administrative action versus judicial (military justice) action and outline primary considerations in an EDP discharge. XX
- Identify unlawful command influence, understand its sources and outline common infractions of the law. XX
- Outline penalties/consequences of unlawful command influence. XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

LEADERSHIP/OE

Develop plans to minimize/control disruptive effect of alcohol and drug abuse.	XX
Explain commander's role in race relations/equal opportunity affirmative action plans.	XX
Analyze a company level organization in terms of the subsystems which make up that organization.	XX
Develop a plan to control the commander imposed element of one's own work environment.	XX
Develop a plan to control the organizational imposed element of one's own work environment.	XX
Develop a proper functioning chain of command.	XX
Apply the decisionmaking process.	XX
Direct the efforts of a subordinate.	XX
Identify procedures necessary to conduct an assessment and obtain assessment data.	XX
Analyze the application of OE techniques to a company level organization.	XX
Identify requirements for effective management of an OE implementation.	XX
Evaluate the success of an OE operation at company level and be able to follow it up.	XX
Analyze the motivation and nature of the modern soldier.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

PERSONNEL

- Identify Army agencies which can assist soldiers and dependents with personal problems. XX
- Explain the Army system of dependent health care (to include CHAMPUS). XX
- Use the SIDPERS system as a personnel management tool. XX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 35

LOGISTICS

Analyze the logistic system within the battalion.	XX
Explain the system of property accountability within the battalion and company.	XX
Analyze the management of property and accountability.	XX
Obtain relief from property responsibility.	XX
Determine the applicability, use, and disposition of AR 15-6 Investigations, when used to fix pecuniary liability.	XX
Obtain relief from a pecuniary charge.	XX
Explain the system of accounts, budgeting, and forecasting P-2M funds at the company and battalion level.	XX
Prepare a report of survey.	XX
Prepare an inventory adjustment report (IAR).	XX
Describe the Army system for issuing and accounting for individual clothing and equipment.	XX
Secure ammunition and weapons.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

MAINTENANCE

Inspect PLL computer printouts.	XX
Determine source of supply for a repair part.	XX
Inspect a DA Form 2064, Document Register, for supply actions.	XX
Inspect a Request for Repair Parts, DA Form 2763.	XX
Inspect a DA Form 3318, Record of Demand - Title Insert Card.	XX
Prepare a company maintenance SOP.	XX
Prepare a company maintenance training program.	XX
Prepare a Materiel Readiness Report (DA Form 2406).	XX
Analyze a Materiel Readiness Report (DA Form 2406).	XX
Inspect company equipment for serviceability.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 35

MEDICAL SUBJECTS

Analyze heat and cold injury prevention within a unit.	XX
Analyze respiratory disease prevention within a unit.	XX
Analyze gastrointestinal disease prevention within a unit.	XX
Analyze insect-borne disease prevention within a unit.	XX
Analyze venereal disease prevention within a unit.	XX
Determine the capabilities of company level medical support.	XX
Determine the medical support capabilities at battalion and above.	XX
Analyze the medical problems involved in nuclear or chemical mass casualties.	XX

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 8

A NOTIONAL MODEL FOR MQS III - SC 81

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

1. This Appendix is a notional list of tasks which constitutes the Military Skills and Knowledge component of MQS III - Specialty 81. The following symbols identify the validation requirements for the tasks included in this component of the MQS:

- X - Validated prior to selection for command (precommand skill)
- XX - Taught at TDY Company Command Course, validated while in command (command skill)
- XXX - Validated at anytime during MQS III (staff skill)
- XXXX - Taught at TDY Functional Course, validated in assignment following TDY course (functional skill)

The RETO preliminary analysis upon which this model is based identified four TDY courses:

- Company Command Course
- Advanced Pipeline Operations Course
- Advanced Petroleum Terminal Operations Course
- Advanced Petroleum Distribution Course

The Company Command Course is followed by attendance at one of the three functional courses, depending upon the type of company which the officer is designated to command. For example, the officer selected to command a pipeline company attends the Company Command Course followed by the Advanced Pipeline Operations Course. Officers who are selected for staff positions requiring skills taught by one of the three functional courses may attend that course. For example, the officer assigned to USARJ as the Petroleum Staff officer requires

the skills learned at the Advanced Petroleum Terminal Operations Course and should attend that course. Officers who do not attend a functional course are still required to learn and validate certain key skills taught by that course because of the importance of those skills to specialty qualification.

2. The above analysis is preliminary and strictly for the purpose of illustrating possible courses which may be developed for SC 81. The Training and Education Specialty Proponent must await the results of the detailed TRADOC front-end task analysis to determine the exact nature of TDY functional courses for SC 81.

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

PETROLEUM DISTRIBUTION

Prepare a fire and safety SOP for a petroleum distribution system.	XX/XXX/XXXX
Prepare an environmental protection plan for a petroleum distribution system.	XX/XXX/XXXX
Interpret and evaluate laboratory analysis reports using automatic data processing system (SIMPLEX) procedures.	XX/XXXX
Perform the interpretation and evaluation of laboratory analysis results provided by the computer.	XX/XXXX
Evaluate laboratory analysis reports provided by computer.	XX/XXXX
Detect and correct the errors in completed slates.	XX/XXXX
Select the correct organization(s) to effectively and efficiently complete petroleum supply missions.	XX/XXX/XXXX
Compute the petroleum requirements for projected petroleum missions.	XX/XXX/XXXX
Compute allowable and actual losses; determine adjustment documents required, based on computations, to include gallon amounts.	XX/XXX/XXXX
Compute Peacetime Operating Stocks.	XX/XXX/XXXX
Detect and correct errors in completed DD Forms 1887 and 1888.	XX/XXXX
Detect and correct errors in completed DEIS Reports.	XX/XXXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

PIPELINE OPERATIONS

Compute Reynolds Number; compute head loss due to friction using the Darcy-Weisbach Equation; and determine the minimum acceptable flow rate for multiproduct operations.	XX/XXX/XXXX
Determine the friction loss in feet of head per mile of pipe using the friction loss graph and appropriate correction factors; and calculate the equivalent length of pipe for each fitting.	XX/XXX/XXXX
Detect and correct errors in completed DA Forms 10-236, 10-241 and 10-242.	XX/XXXX
Brief an emergency repair crew on the actions they must take to safely, efficiently and expeditiously complete required pipeline repairs.	XX/XXXX
Use the Darcy-Weisbach Equation to: compute the length of line that must be replaced with larger diameter pipe and compute the length of line that must be looped to achieve the new flow rate using existing pumps.	XX/XXXX
Use soils data such as texture analysis, PH factor or a resistivity survey to identify the areas of a pipeline that are most susceptible to external corrosion and describe the two methods used to prevent external corrosion.	XX/XXXX
Locate all required pump stations for a planned pipeline.	XX/XXX/XXXX
Calculate the required suction and discharge pressure for each pump station.	XX/XXX/XXXX
Compute the Hazen-Williams Corrosion Factor for the described pipeline; interpret the calculated factor; and state the two methods commonly used to reduce internal corrosion buildup and prevent its recurrence.	XX/XXX/XXXX
Detect and report pilferage devices and irregularities on a pipeline.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

PIPELINE OPERATIONS (CONT'D)

Recommend proper batching of fuels through a multi-product pipeline; prepare consumption graphs, a monthly pipeline schedule, a daily pumping schedule, a daily pumping record, a graphic progress chart and a daily pumping order.

XX/XXX/XXXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

TERMINAL OPERATIONS

Detect and correct errors in a completed DD Form 250 and 250-1 and a completed SF 361.	XX/XXXX
Detect and correct the errors in the terminal operations order.	XX/XXX/XXXX
Compute an estimate of the construction effort and the cost of a new petroleum facility.	XX/XXX/XXXX
Describe the steps required to calibrate a flow meter, using a prover tank and accessories; calculate a meter factor and meter error to within two tenths of one percent accuracy (.002), and apply the meter factor/meter error to adjust shipments of bulk petroleum.	XX/XXXX
Describe the separation or conversion process accomplished at each refinery facility.	XX/XXX/XXXX
Detect and correct errors in a completed DD Form 1788 and a completed Bulk Petroleum Message Report.	XX/XXX/XXXX
Assign identification markings to tanks, pumps, lines and valves and use these identification markings to indicate all valves to be opened for any specified operation.	XX
Detect and correct the errors in completed DD Forms 1155, 1149 and 1348.1.	XX/XXXX
Recommend types of tanks for terminal operations; compute tank firewall height and diameter requirements; and calibrate storage tanks and tank cars.	XX/XXX/XXXX
Detect and correct the errors in the completed SIOATH, DD Form 1886 and Terminal Release Order.	XX/XXXX
Identify inadequacies in a marine terminal facility and specify required corrective action.	XX/XXX/XXXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 81

TERMINAL OPERATIONS (CONT'D)

Detect and correct errors in completed DD Forms 1889 and 1891.	XX/XXXX
Detect and correct the errors in completed On Order but Undelivered Report and Distribution Plan Authorization Control Record.	XX/XXX/XXXX
Detect and recommend corrective action for contractual discrepancies.	XX/XXX/XXXX
Prepare a vessel loading/unloading operations order; and detect and recommend corrective action for errors in a depicted vessel loading and unloading operation.	XX/XXX/XXXX
Conduct a physical security and pilferage control survey of a petroleum terminal, report security deficiencies, and recommend corrective action for each deficiency.	XX/XXX/XXXX
Compare major items of petroleum equipment and organizations for bulk petroleum supply at the wholesale level among the Army, Navy, Air Force and Marine Corps.	XX/XXXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

LOGISTICS ORGANIZATIONS

Identify agencies of the Federal Government having direct influence on logistics and define the missions/ functions of OMB, GAO and DOD. XXX

Identify the organization of the United States Army and the logistical mission of the US Army Materiel Development and Readiness Command (DARCOM). XXX

Compare and contrast the organization of the United States Marine Corps and the structure and support of the Fleet Marine Forces with the logistical organization of US Army. XXX

Compare and contrast the organization of the United States Navy and the mission of the Naval Materiel Command (NMC) and the Naval Supply Systems Command (NAV SUP). Differentiate between the three echelons of supply support within the US Navy as compared to the logistical organization of the US Army. XXX

Compare and contrast the organization of the United States Air Force and the mission of the Air Force Logistical Command (AFLC) with the logistical organization of the US Army. XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

OPERATIONS

- Identify the major territorial subdivisions of a TOPNS, the major command located therein, mission and employment of major combat service support organizations responsible for providing combat service support within a theater of operations. XXX
- Position the corps within the theater of operations, structure the corps organization, structure the COSCOM organization and describe the working elements of the MMC and their relationship to the provision of logistical support to the corps. XXX
- Organize a storage activity in the COMMZ. XXX
- Organize a COSCOM support group in support of a four division corps, and solve situational MMC supply and maintenance problems. XXX
- Prepare and present initial and technical operational briefings, analyze GS storage activity documents and material flow; identify subsistence irregularities and recommend solutions; detect and correct errors on IARs; and evaluate DSU account performance. XXX
- Describe the command relationships and responsibilities of the landing force and the naval task force. Identify the amphibious ships, landing craft, and amphibious vehicles used in amphibious operations. XXX
- Request a logistical airdrop of Class III and Class V supplies. Estimate aircraft and air item requirements for a logistical airdrop. XXX
- Explain the organization, equipment, roles, and mission of the division support command. XXX
- Determine the types and methods of distribution of Class I in the division area, to include the utilization of prescribed load and division reserve. Determine the Class III storage and transportation capabilities within the division. Prepare a POL forecast and distribution system to support a division operation. Determine Class V quantities necessary

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

OPERATIONS (CONT'D)

to support a tactical operation. Delineate Class V resupply procedure and transportation responsibilities. XXX

Determine the Class III and Class V supply and equipment requirements necessary to establish a rearm/refuel point in the division area. Prepare a physical layout for the rearm/refuel point. XXX

Determine the factors involved in providing medical support to divisional units, illustrate the casualty evacuation system used by the division to include air ambulance evacuation, determine the factors to be considered in establishing and operating maintenance/salvage collection points. XXX

Identify the mission, basic policies and principles of employment, and the policies and principles governing the use of force by US Army forces engaged in civil disturbance control operations; identify special leadership requirements necessary during these operations. XXX

Graphically portray on overlays the MSRs and field locations for DISCOM units and activities. Explain rationale for the sites selected. XXX

Determine the supply and distribution methods for Class IV and Class V items to support the division barrier plan. Compute transportation requirements to move Class IV and V barrier materials. XXX

Identify the functions, capabilities, characteristics and limitations of selected subsistence and petroleum equipment. XXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 81

TACTICS

- Plan a position defense for a brigade of a mechanized Infantry division; conduct a mission analysis, perform map reconnaissance; identify key terrain and avenues of approach; develop a concept of operation; develop a counterattack plan; establish defensive areas; task organize the brigade; issue (written) the brigade OPORD, less paragraph 4; issue the operation overlay. XXX
- Apply the fundamentals, principles and techniques for selecting, planning and conducting position and mobile defenses and retrograde operations by Army divisions. XXX
- Plan a position defense by a mechanized Infantry division; conduct a mission analysis; perform map reconnaissance; identify key terrain and avenues of approach; develop a concept of operation; develop a counterattack plan; establish defensive areas; recommend employment of combat support elements; task organize the division; issue (written) the division OPORD, less paragraph 4; issue the operation overlay. XXX
- Task organize the DISCOM for conduct of a defensive operation. XXX
- Outline the responsibilities of the division staff and DISCOM commander concerning rear area protection. XXX
- Apply the fundamentals, principles and techniques for selecting, planning and conducting offensive operations by Army divisions. XXX
- Apply the principles and techniques necessary to plan and conduct tactical and logistical operations. XXX
- Plan a coordinated attack by a mechanized Infantry division; conduct a mission analysis; perform map reconnaissance; identify key terrain and select avenue(s) of approach; develop a concept of operation; recommend employment of combat support elements; task organize the division; issue (written) the division OPORD, less paragraph 4, and the operation overlay; task organize the brigade making the main task and issue the brigade OPORD, less paragraph 4, and operation overlay. XXX

MOS III MILITARY SKILLS AND KNOWLEDGE -- SC 81

TACTICS (CONT'D)

Compare purpose, capabilities and limitations of joint airborne and airmobile operations; describe the command relationships, coordination, duties and responsibilities of airmobile task force commanders and air mission commanders; specify planning sequence for joint airborne/airmobile operations; describe the fundamentals of ground tactical plan, air movement plan and loading plan. XXX

Plan an airmobile assault for a battalion task force, issue the OPORD, less paragraph 4, develop and graphically depict a company-sized unit loading plan; graphically depict the link-up plan. XXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 81

COMPANY/BATTALION OPERATIONS

- Prepare a unit Rear Area Protection (RAP) SOP, select personnel from within your unit to comprise a RAP platoon. Identify the equipment necessary to equip the reaction platoon and indicate equipment not available to your unit; recommend a training program and identify problem areas found in performing first four objectives. XX
- Prepare a unit loading plan for rail and air movement. XXX
- Plan and execute a motor convoy operation. XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

AUTOMATIC DATA PROCESSING (ADP)

Prepare, interpret, and evaluate punched cards and select the equipment to be used in a punched card system. XXX

Prepare a flow chart depicting the logic representative of processing documents received at an accountable supply distribution activity. XXX

Describe narratively and graphically the logical sequence and necessary equipment of an ADP system that supports given output requirements and identify program procedure errors. XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

PROCUREMENT

Identify legal authorities, procurement regulations and basic procurement policies and determine proper application of rules and policies of AR 600-50 governing gifts and conflicts of interest.	XXX
Apply the principles and procedures required for formal advertising and negotiation.	XXX
Review the various methods of small purchase procedure to accomplish various procurements.	XXX
Select the proper contracts to accomplish varying types of procurement. Apply procedures and principles to accomplish contract modifications when required. Institute and complete default actions whenever situations warrant. Describe contractor appeal procedures.	XXX
Identify and explain the missions of DCAS, DCAA, SBA, CAS Board, and ASBCA as they apply to DOD procurement.	XXX

MOS III MILITARY SKILLS AND KNOWLEDGE -- SC 81

BASE DEVELOPMENT

Identify the responsibilities, capabilities and functions of the Corps of Engineers in road, airfield, bridge, pipeline and cantonment construction; determine facilities and installation needed to support combat service support operations; estimate material, cost, and manhours required to complete construction. XXX

Compute an estimate of tonnages to be stored in the field depots, ammunition depots and rear petroleum facilities in support of Army troops in the combat zone; prepare estimates of the daily tonnages of dry cargo and bulk POL that must be moved into the combat zone, forward portion of the COMMZ, and rear portion of COMMZ. XXX

Compute the terminal capacity for reception, discharge, clearance, and throughput for dry cargo and bulk POL. XXX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

COMMON MANAGEMENT AREAS

Identify modes of transportation available to shippers and criteria used in mode selection; explain shipment documentation; describe the role of common-user transportation activities; and determine the impact of supply related decisions on transportation capability and resources.	XXX
Prepare and enter data for updating an automated property book; detect and correct errors on printouts.	XXX
Evaluate the impact of ecology and the energy crisis on military petroleum operations.	XXX
Coordinate civilian personnel actions and grievances. Process union requests.	XXX
Differentiate between the overall planning, programing, budgeting functions and implementation of military grant aid, foreign military sales, cooperative logistics and co-production.	XXX
Prepare, defend, review and analyze a budget.	XXX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 81

LOGISTICS

Analyze the logistic system within the battalion.	X
Understand the system of property accountability within the battalion and company.	X
Analyze the management of property and accountability.	X
Explain the means of obtaining relief from property accountability.	X
Determine the applicability, use, and disposition of AR 15-6 Investigations, when used to fix pecuniary liability.	X
Explain the means of obtaining relief from a pecuniary charge.	X
Understand the system of accounts, budgeting, and forecasting P-2M funds at the company and battalion level.	XX
Prepare a report of survey.	X
Prepare an inventory adjustment report (IAR).	X
Understand the Army system for issuing and accounting for individual clothing and equipment.	X
Know the procedures for security of ammunition and weapons.	X

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

MAINTENANCE

Inspect PLL computer printouts.	XX
Determine source of supply for a repair part.	XX
Inspect a DA Form 2064, Document Register, for supply actions.	XX
Inspect a Request for Repair Parts, DA Form 2763.	XX
Inspect a DA Form 3318, Record of Demand - Title Insert Card.	XX
Prepare a company maintenance SOP.	XX
Prepare a company maintenance training program.	XX
Prepare a Materiel Readiness Report (DA Form 2406).	XX
Analyze a Materiel Readiness Report (DA Form 2406).	XX
Inspect company equipment for serviceability.	XX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 81

MEDICAL SUBJECTS

Analyze heat and cold injury prevention within a unit.	XX
Analyze respiratory disease prevention within a unit.	XX
Analyze gastrointestinal disease prevention within a unit.	XX
Analyze insect-borne disease prevention within a unit.	XX
Analyze venereal disease prevention within a unit.	XX
Determine the capabilities of company level medical support.	XX
Determine the medical support capabilities at battalion and above.	XX
Analyze the medical problems involved in nuclear or chemical mass casualties.	XX.

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

TRAINING

Prepare commander's training guidance at the company level.	XX
Determine the current level of unit and individual training within a company.	XX
Analyze training responsibilities within the QM battalion	XX
Analyze training responsibilities within the company	XX
Determine the individual, leader, and subunit tasks necessary to perform a selected ARTEP mission.	XX
Determine training resources available to the company commander.	XX
Determine the sequence of priorities for training.	XX
Develop a company training program.	XX
Determine the requirements for a company level OJT program.	XX

MILITARY LAW

- Conduct a preliminary inquiry, using case studies, and prepare a recommendation for disposition of the case; determine advisability of investigation under Article 32, UCMJ. XX
- Outline the rights and safeguards of the accused, determine their applicability to the case study and recommend the nature of restraint appropriate under the circumstances. XX
- Determine the requirement for a lawful search, outline the common pitfalls and set forth the procedure for conducting the search. XX
- Determine the appropriate level of court-martial tribunal, based upon the facts of the case study; discuss composition, jurisdiction and maximum penalties which may be adjudged; outline elements of the offense and possible legal defenses. XX
- Outline the responsibilities of the commander following disposition of the accused by the court-martial; discuss confinement and unit administration. XX
- Dispose of a case under Article 15, UCMJ by reviewing the facts and determining level of Article 15 (company/field-grade); outline the procedure which must be followed by the unit commander. XX
- Outline procedures for common administrative elimination actions; recommend appropriate disposition of an individual in a case study. XX
- Determine advisability of administrative action versus judicial (military justice) action and outline primary considerations in an EDP discharge. XX
- Identify unlawful command influence, understand its sources and outline common infractions of the law. XX
- Outline penalties/consequences of unlawful command influence. XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

LEADERSHIP/OE

Develop plans to minimize/control disruptive effect of alcohol and drug abuse.	XX
Describe the commander's role in race relations/equal opportunity affirmative action plans.	XX
Analyze a company level organization in terms of the subsystems which make up that organization.	XX
Develop a plan to control the commander imposed element of one's own work environment.	XX
Develop a plan to control the organizational imposed element of one's own work environment.	XX
Develop a proper functioning chain of command.	XX
Apply the decisionmaking process.	XX
Identify procedures necessary to conduct an assessment and obtain assessment data.	XX
Analyze the application of OE techniques to a company level organization.	XX
Identify requirements for effective management of an OE implementation.	XX
Evaluate the success of an OE operation at company level and be able to follow it up.	XX
Analyze the motivation and nature of the modern soldier.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

CBR

Organize the company NBC team.	XX
Organize the company damage control team and rescue squad.	XX
Develop a company CBR training program.	XX
Identify decontaminates and decontamination apparatus.	XX
Organize decontamination of a company.	XX
Determine mission oriented protective posture (MOPP) and its effect on personnel.	XX
Supervise preparation of unit radiation exposure records.	XX
Select individuals/units for an operation based on RS category and expected exposure.	XX
Prepare company for defense against biological attack.	XX
Be familiar with the operation of unit NBC collective protection shelters.	XX
Prepare company for defense against chemical attack.	XX
Use simplified fallout prediction.	XX
Perform damage estimation.	XX
Compute residual radiation dose.	XX
Be familiar with command and staff procedures in an NBC environment.	XX

MOS III MILITARY SKILLS AND KNOWLEDGE - SC 81

PERSONNEL

Identify Army agencies which can assist soldiers and dependents with personal problems. XX

Explain the Army system of dependent health care (to include CHAMPUS). XX

Use the SIDPERS system as a personnel management tool. XX

MQS III MILITARY SKILLS AND KNOWLEDGE - SC 8J

STAFF SUBJECTS

Describe the staff organization and command relationships at the division level	XXX
Identify the functions and responsibilities of the division G-1 section	XXX
Identify the functions and responsibilities of the division G-2 section	XXX
Identify the functions and responsibilities of the division G-3 section	XXX
Explain the coordination between the division G-2 and G-3 sections	XXX
Describe the composition, layout, operation and communication capabilities of the division TOC.	XXX
Identify the functions and responsibilities of the division G-4 section	XXX
Identify the functions and organization of the DISCOM	XXX
Explain the format and normal content of the ADMIN/LOG order	XXX
Identify the functions and responsibilities of the division G-5	XXX
Identify the functions and responsibilities of the division special staff	XXX

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 9

PROFESSIONAL MILITARY EDUCATION COMPONENTS
OF MILITARY QUALIFICATION STANDARDS I, II AND III

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

1. General. The Professional Military Education (PME) component of Military Qualification Standards (MQS) I is designed to provide a foundation for the continued development of the knowledge, insight, and conceptual skill necessary for officers as they assume positions of increasing responsibility. At MQS II and III the PME components build on that foundation to further develop the officers' potential for a career of responsible service.

2. MQS I. The Professional Military Education component of MQS I consists of both degree and course requirements. The basic MQS I PME requirement is the completion of a baccalaureate. As an integral part of that undergraduate education, however, prospective officers are required to take at least one course in each of the following five fields of study: human behavior, written communication skills, military history, national security policy, and management. The baccalaureate and the courses in human behavior and written communication skills must be completed prior to commissioning. Course work in the other three fields may be deferred if completion of the requirement would require the student to carry an academic overload. (Officers commissioned through the college OCS option may defer completion of all five required courses; officers commissioned through the enlisted OCS route may defer both the degree and course requirements.) All officers, however, must complete any deferred MQS I PME requirements no later than the 10th year of Federal commissioned service. Cadets will choose specific courses to fulfill these requirements from lists approved at each institution. Approving authorities are: USMA - Superintendent; ROTC - Professor of Military Science; Schools without ROTC* - Military Liaison Officers.

*RETO has recommended a test of commissioning programs without on-campus ROTC units and activities.

(Coursework deferrals are granted by officers listed above who are authorized to approve course lists.) Lists illustrative of the kind of courses appropriate to satisfy these requirements are at Inclosures 1 through 5. (A note about these illustrative lists. Both recommended and alternative courses are shown. The recommended courses are of the type that directly fulfill the MQS requirement. Alternative courses bear less directly on the requirements, but, in the absence of recommended courses, or in light of specific course content, they can be listed to satisfy the requirements. Of course, the actual lists for on-campus use will have only one category - those courses that fulfill the MQS I requirements.)

3. MQS II. Professional Military Education at MQS II consists of a directed reading program designed to introduce officers to some of the fundamental and currently important works of their profession, and to encourage officers to develop the habit of reading and discussing with colleagues the literature of the profession. Officers will be required to read and discuss eight books. MQS readings will be drawn from a three-part Professional Military Reading List published annually as a DA Circular:

PART A: Military Classic Reading List

PART B: Contemporary Military Reading List

PART C: Specialty Reading List

Each part of the list serves a particular function.

a. The Military Classic Reading List contains a limited number of titles, selected not only for their significant contribution to military thought or history, but also for their readability. This list will likely change little from year to year. Titles should be added or deleted in a very deliberate manner. This list should contain 20 - 40 titles -- each of which (by the nature of the list) would likely be available already in all post and special service libraries. Units could also purchase these books on this list for unit libraries. Additionally, many are available in inexpensive paperback editions which officers themselves might buy. The Superintendent, USMA will create the list, review it annually, and make necessary additions to and deletions from the list. A notional list is at Inclosure 6.

b. The Contemporary Military Reading List is designed to stimulate constructive thinking concerning problems of prevailing and future military importance; and deepen comprehension and understanding of the significant role of the Army in world affairs. Such a list

currently exists under the United States Army Contemporary Reading Program. The list focuses on recent books and is revised substantially each year by the Commandant, US Army War College. A recent Contemporary Military Reading List is at Inclosure 7. All books on this list are currently purchased by the Army Library Service for Special Service Libraries.

c. Specialty Reading Lists will be created and reviewed by the Commandants of each service school offering an officer basic course. Each school would produce a single short list incorporating important new and old works dealing with one or more of the specialties under purview of the school. These reading lists could be said to represent the intersection of education and training at the service school level. Each of these lists will be relatively short - 10 to 15 titles - with a limited number added or deleted each year. The lists will be consolidated into Part C of the DA Circular but, in addition, could be published periodically in branch journals or newsletters.

d. Each officer's reading program will draw at least half of its titles from the Classic list and the balance from the Contemporary or Specialty lists (at least one title from each of the last two lists). Individual reading programs will be approved and supervised by the certifying officer* or the officer delegated this authority. (A battalion commander, for example, could delegate this authority to his company commanders.) Discussions would normally be between the officer and his unit commander or immediate supervisor. Because of time span involved and the changing nature of some lists, an individual's reading program should be built incrementally; no more than two or three titles should be approved at any one time.

e. The conduct of the reading program at the unit level lends itself to either a one-on-one or group discussion approach. The responsible officers may structure the program locally in any way they wish. To support the reading and discussion, school commandants will direct their respective military journals to publish review essays (preferably by senior officers - active or retired) of titles added to the list. The format of these reviews will be designed to guide reading and stimulate discussion. The journals of the Army War College and the Command and General Staff College will divide titles added to the Classics and Contemporary lists. Branch journals will cover titles added to the Specialty lists. For titles that remain on the lists for some time, reviews should be reprinted in Commanders Call or another appropriate format.

*In the MQS program the "certifying officer" has overall responsibility for the conduct of MQS. In troop units the "certifying officer" is the first field grade commander in the chain of command. In a staff the "certifying officer" is the first field grade officer in the rating chain.

4. MQS III. The directed reading program in MQS III is a follow-on to that of MQS II except that 15 additional books are required (over the longer period).

5. Administration of Professional Military Education. Despite the requirement to centralize to a degree the production and review of reading lists and review essays, the essence of the program resides with the individual officer and his commanders or supervisors. All efforts should be directed downward - no reports flow up the chain except the letter reports required by the overall MQS program (see Appendix 1, Annex D). The program will be administered at the local level.

6. Implementation. Implementation of PME degree and course requirements for MQS I occurs upon the start of that program - proposed for 1982. Implementation of the directed reading program of MQS II and III should occur in two stages: first, creation of a new Army Professional Military Reading Program and its associated reading lists as indicated in paragraph 3 above; second, upon implementation of MQS II and III PME reading requirements based on these lists would become effective.

a. The Army should immediately replace the current United States Army Contemporary Military Reading Program, with a new United States Army Professional Military Reading Program. AR 28-86 which governs the current program (see Inclosure 8) should be changed to reflect the somewhat broader nature of the new program and the new three-part organization of the reading list. Responsibility for the supervision of the new program remains as indicated in the AR except for the added responsibilities of the Superintendent, USMA, and the Commandants of the service schools (see paragraphs 3a and 3c above). As soon as the new reading lists are available, the military journals should begin to solicit and publish review essays. By 1983, a year ahead of the proposed implementation date of MQS II, reviews of all books on the lists should have been published, leaving only the continuing requirement to review additions to the lists.

b. Upon implementation of MQS II, the reading and discussion requirements based on the Professional Military Reading List will become effective. Coincidental with the publication of the 1983 reading list, the review essays previously published of books still on the list should be consolidated, reprinted and made available for use in the field.

c. In the current "Contemporary" reading program the Army Library Service purchases all the new books on the list for the Army-wide Special Service Library system. Expenditures for the 10-12 new titles added each year are about \$30,000. Assuming the replacement of 40-50 titles per year under the new program, the program cost would increase to approximately \$125,000. However, because most or all of the new titles on the list would have been purchased in any case the actual total increase in Army Library Service spending as a result of this program change may approach \$0.

8 Inclosures

1. MQS I, PME, Human Behavior
2. MQS I, PME, Management
3. MQS I, PME, Written Communication Skills
4. MQS I, PME, National Security Studies
5. MQS I, PME, Military History
6. MQS II and III, Notional Military Classic Reading List
7. DA Circular 1-47, 6 Apr 77, 1977 Contemporary Military Reading List
8. AR 28-86, 6 Mar 63, Welfare, Recreation, and Morale, USA Contemporary Military Reading Program

MQS I

Professional Military Education

HUMAN BEHAVIOR

REQUIREMENT: Gain a knowledge of human and societal development as a basis for an understanding of the human aspects of command, military operations and training, and combat and training developments.

STANDARD: Successfully complete one of the following type college undergraduate courses.

RECOMMENDED COURSES:

A General Psychology Course
A Sociology Course
An Anthropology Course
Ethics

ALTERNATIVE COURSES:

none necessary - it is anticipated that all 4-year institutions will offer courses that fall in the "recommended" category.

MQS I

Professional Military Education

MANAGEMENT

REQUIREMENT: Gain a knowledge of management, and management tools as a basis for an understanding of the management aspects of command, military operations and training, and combat and training developments.

STANDARD: Successfully complete one of the following type college undergraduate courses.

RECOMMENDED COURSES:

Management Science
Decisionmaking
Industrial Management
Analytical Testing for Decisionmaking

ALTERNATIVE COURSES:

Introduction to Computer Science
Management Information Systems
Introduction to Probability and Statistics
General Accounting

MQS I

Professional Military Education

WRITTEN COMMUNICATION SKILLS

REQUIREMENT: Develop the ability to communicate effectively in writing.

STANDARD: Successfully complete one of the following type college undergraduate courses.

RECOMMENDED COURSES:

Advanced English Composition
Creative Writing
Business Writing
Scientific Writing and Language
Writing for Mass Communications

ALTERNATIVE COURSES:

Linguistics
Logic

MQS I

Professional Military Education

NATIONAL SECURITY STUDIES

REQUIREMENT: Be acquainted with the formulation and execution of national security policy and important issues affecting US security.

STANDARD: Successfully complete one of the following type civilian college undergraduate courses.

RECOMMENDED COURSES:

National Strategy
National Security Affairs
National Defense
International Relations
American Foreign Policy
The Cold War
The Economics of War and Peace

ALTERNATIVE COURSES:

International Politics
Geopolitics
Comparative Political Systems
History of US Foreign Policy in the 20th Century*
Comparative Economic Systems
International Economics

*could not be used by students to satisfy the requirement in both National Security Studies and Military History (see Inclosure 5).

MQS I

Professional Military Education

MILITARY HISTORY

REQUIREMENTS: Be acquainted with the evolution of warfare, military theory, and the military profession, with particular emphasis on the American experience.

STANDARD: Successfully complete one of the following type civilian college undergraduate courses.

RECOMMENDED COURSES:

History of War

An American Military History Course that covers both WWI and WWII
American Military Affairs

ALTERNATIVE COURSES:

European Military History (19th and/or 20th Century)
History of US Foreign Policy in the 20th Century*
Armed Forces and Society

*could not be used by students to satisfy the requirement in both Military History and National Security Studies (see Inclosure 4).

MQS II & III
NOTIONAL MILITARY CLASSIC READING
LIST*

General.

Fuller, THE CONDUCT OF WAR 1789-1961

Sun Tzu, THE ART OF WAR (Griffith, trans.)

Mao Tse-tung, ON GUERRILLA WARFARE (Griffith, trans.)

Liddell Hart, STRATEGY

Clausewitz, ON WAR (Howard and Paret, eds.)

Huntington, THE SOLDIER AND THE STATE

Millis, ARMS AND MEN

Ropp, WAR IN THE MODERN WORLD

Weigley, HISTORY OF THE UNITED STATES ARMY

Biography.

Freeman, LEE'S LIEUTENANTS (any of the 3 vols)

Pogue, GEORGE C. MARSHALL (any of the 3 vols)

Henderson, STONEWALL JACKSON

19th Century Warfare.

Catton, THIS HALLOWED GROUND

Howard, THE FRANCO-PRUSSIAN WAR

Warner & Warner, THE TIDE AT SUNRISE: A HISTORY OF THE RUSSO-JAPANESE
WAR, 1904-1905

*This list is illustrative only and is not a proposed reading list.
Incl 6 to Appendix 9, Annex D.

World War I.

Barnett, THE SWORDBEARERS: THE SUPREME COMMAND IN THE FIRST WORLD WAR

Liddell Hart, THE REAL WAR

Remarque, ALL QUIET ON THE WESTERN FRONT (novel)

Tuchman, AUGUST 1914

World War II.

Addington, THE BLITZKRIEG ERA AND THE GERMAN GENERAL STAFF, 1865-1941

Greenfield (ed), COMMAND DECISIONS

MacDonald, COMPANY COMMANDER

Toland, RISING SUN: THE DECLINE AND FALL OF THE JAPANESE EMPIRE, 1936-1945

Tuchman, STILWELL AND THE AMERICAN EXPERIENCE IN CHINA, 1911-1945

POST-WORLD WAR II

Herring, WAR OF ATONEMENT

Circular)
)
No. 1-48)

Cir 1-48
DEPARTMENT
DEPARTMENT OF THE ARMY
Washington, DC, 15 May 1978

Expires 31 May 1979
ADMINISTRATION

1978 CONTEMPORARY MILITARY READING LIST

1. General. Department of the Army responsibilities, policies, and information on the availability of books for the Contemporary Military Reading Program are specified in AR 28-86. Inclusion of a book in the program does not imply an official Department of the Army indorsement of its views.

2. Reading List.

<u>Author</u>	<u>Title & Pages</u>	<u>Year</u>
*Atkins, G. Pope	LATIN AMERICA IN THE INTERNATIONAL POLITICAL SYSTEM. 448 Pages.	1977

A systematic and topically complete introduction to the international scene with respect to Latin America. Describes the political patterns and institutions resulting from the interaction of the various state bodies of the Latin American region. Analyzes Latin America as a regional subsystem of the total international political system. Considers the role of the US, the Soviet Union, China, and the nations of Western Europe, of international labor and business associations, the Catholic Church, and guerrilla organizations.

*Bailyn, Bernard; Davos, David Brian; Donald, David Herbert; Thomas, John L.; Wiebe, Robert H.; and Wood, Gordon S.	THE GREAT REPUBLIC: A HISTORY OF THE AMERICAN PEOPLE. 1270 Pages.	1977
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A lively new history of wide range and high quality. Five of the six authors are holders of Pulitzer or Bancroft Prizes. They retell the American story from pre-colonial days. Though the styles are individual, the six parts blend together well. Two basic themes are the constant testing of free political institutions and a continuing tension between general and particular interests.

*Basiuk, Victor	TECHNOLOGY, WORLD POLITICS & AMERICAN POLICY. 409 Pages.	1977
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Concentrates on modern technology, analyzing its present and future impact on international relations. Beginning with the socio-political influence on international relations, Basiuk examines aspects of future military (nuclear and "conventional") technology that will likely reinforce the growing stalemate between the US and the USSR. Surveys the

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|---|---|-------------|
| | integrative power of technology which is "shrinking" the modern world into global interdependence. Deals with many current questions that seek to throw a searchlight into the future. | |
| *Blair, John M. | THE CONTROL OF OIL. 482 Pages. | 1976 |
| | Investigates means, largely dominated by OPEC and the giant oil companies, for determining the price of oil. Holds that controls and the division of the market have been strengthened in recent years and explains the mechanism for control of the domestic supply. Outlines a specific program for dealing with the "energy crisis." | |
| Blumenson, Martin,
and Stokesbury,
James L. | MASTERS OF THE ART OF COMMAND.
393 Pages. | 1975 |
| | A study of the art of command in war that discusses how some of the great commanders in history functioned in battle. The profiles of personalities and their military problems are set in a framework of the changing nature of warfare from the wars of the Hittites to those of the present. | |
| *Braestrup, Peter | BIG STORY: HOW THE AMERICAN PRESS AND TELEVISION REPORTED AND INTERPRETED THE CRISIS OF TET 1968 IN VIETNAM AND WASHINGTON. 2 Volumes. 1446 Pages. | 1977 |
| | Covers major aspects of the Tet offensive and its aftermath and the way in which they were dealt with by the media. Tet was selected by Freedom House as an ideal case history for studying press and television performance under extreme stress. The result is a highly revealing study which throws light on the factors affecting media coverage. The complete texts of many of the discussed reports are included. | |
| Buchan, Alistair | THE END OF THE POSTWAR ERA. 334 Pages. | 1974 |
| | This book offers a penetrating, provocative discussion of the impact of change on the delicate balance-of-power equation and on the relations between the superpowers. The author, a prominent strategist, analyzes the multiple aspects of political, social, and economic power in today's rapidly evolving world. | |
| *Cline, Ray S. | SECRETS, SPIES, AND SCHOLARS: BLUE-PRINT OF THE ESSENTIAL CIA. 297 Pages. | 1976 |
| | A former top level CIA official analyzes the triumphs and disasters of American intelligence and urges realistic | |

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|---|--|-------------|
| | approaches to problems of espionage, counterintelligence, and intelligence work at various levels. Proposes ways in which the US intelligence system can be revitalized and restored to a place of honor. | |
| *Coffey, J. I. | ARMS CONTROL AND EUROPEAN SECURITY.
255 Pages. | 1977 |
| | A comprehensive work on the complex issues of security and arms control in Europe. Synthesizes the diplomatic negotiations and literature on the problems of the past decade and develops proposals for the future. | |
| *Collins, Arthur S., Jr. | COMMON SENSE TRAINING: A WORKING
PHILOSOPHY FOR LEADERS. 272 Pages. | 1978 |
| | A rich lifetime of experience in training for land combat is reflected in this advisory volume. General Collins identifies successful kinds of training, who should be held responsible, and when one should rest on one's training laurels (never). There is much of value to be digested by commanders from squad to division. | |
| Commoner, Barry | THE POVERTY OF POWER: ENERGY AND THE
ECONOMIC CRISIS. 314 Pages. | 1976 |
| | Perceives a basic defect in the design of modern society rather than a series of separate crises. Holds that coal and oil have been misused and that our nuclear power program represents a terrible danger both now and in the future. Science, business, and government must put aside their differences and unite their efforts to develop the use of solar energy. Only a rethinking of the way we live and coordination of our political and economic systems with a constructive energy policy can save us from ultimate impoverishment. | |
| *Conquest, Robert,
et. al., with an
introduction by
James R. Schlesinger | DEFENDING AMERICA: TOWARD A NEW ROLE
IN THE POST-DETENTE WORLD. 255 Pages. | 1977 |
| | A comprehensive assessment of America's changed position in the world since Vietnam in which fifteen scholars and defense experts take another look at the political, economic, military, and spiritual implications of detente. Their conclusion: while the Soviet Union has benefitted enormously, the US has allowed itself to fall dangerously behind, not only in military strength but in the power to take new political initiatives. The US is judged to have withdrawn from its former responsibility as the defender of the free | |

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|--|---|-------------|
| | world at the very time the USSR has launched on a new policy of political and military expansion. | |
| *Donovan, Robert J. | CONFLICT AND CRISIS: THE PRESIDENCY OF HARRY S. TRUMAN, 1945-1948. 473 Pages. | 1977 |
| | The first of two volumes on the Truman presidency covering the term he had begun as vice president. Donovan, a journalist who knows the period intimately from personal experience, presents a portrait of Truman that is evenly balanced between the adulatory trends of recent years and the smudged public image revealed by the polls at the end of his second administration. A balanced picture, also, of his foreign policy decisions, the origins of the cold war, and the dropping of the atomic bomb. | |
| Drucker, Peter F. | MANAGEMENT: TASKS, RESPONSIBILITIES, PRACTICES. 839 Pages. | 1974 |
| | A landmark study of management as an organized body of knowledge. It not only deals with the techniques of effective management, but also looks at management from the outside and studies its tasks and requirements, emphasizing needed accomplishments and results, including all relevant areas with which managers will have to cope. | |
| *Dupuy, Trevor N. | A GENIUS FOR WAR. 300 Pages. | 1977 |
| | Argues for and seeks to explain a generally superior performance of German armies during the wars of this century. Tracing the history of Prussian and German soldiers since the days of Scharnhorst, Dupuy holds that the general staff system developed by him and his associates and further perfected by the elder Moltke and Schlieffen served to institutionalize genius or excellence. Analyzes the essential qualities inculcated in German staff traditions and practice. | |
| George, Alexander,
and Smoke, Richard | DETERRENCE IN AMERICAN FOREIGN POLICY: THEORY AND PRACTICE. 666 Pages. | 1976 |
| | The only work on general (not merely nuclear) deterrence. Explores deterrence theory as it applies to theater and sub-theater confrontations. Includes ten case studies from 1948 to 1962. | |
| *Gompert, David C.,
et. al. | NUCLEAR WEAPONS AND WORLD POLITICS: ALTERNATIVES FOR THE FUTURE. 370 Pages. | 1977 |
| | Compares the nuclear age to an endless minefield. Failure properly to manage change in the quantities and numbers of nuclear weapons, as well as in the political relationships and institutions that provide for their control could exact human | |

<u>Author</u>	<u>Title & Pages</u>	<u>Year</u>
	suffering far surpassing failure in any other field of human endeavor. The study of the control of nuclear weapons must cover both the fine points of destructive technology and the fundamentals of political choice. The volume offers insights at both levels.	
*Hersey, Paul, and Blanchard, Kenneth H.	MANAGEMENT OF ORGANIZATIONAL BEHAVIOR: UTILIZING HUMAN RESOURCES. 3d Edition. 360 Pages.	1977

An examination of why people act as they do with suggestions on methods for predicting their future behavior and ways to direct, change, and control behavior. Among the topics discussed are motivation, motivating environment, leader behavior, ways to diagnose the environment, management for organizational effectiveness and planning, and implementing change.

Hill, Ivan, Editor	THE ETHICAL BASIS OF ECONOMIC FREEDOM. 427 Pages.	1976
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Twenty-one essays and commentaries by leaders from all branches and levels of American society. The purpose is to launch a national dialogue on the proposition that "nothing is more efficient than honesty" and that it is, in fact, the only policy that makes sense in a world where the capitalist system is under fire from so many quarters.

*Horrocks, Sir Brian	CORPS COMMANDER. 256 Pages.	1977
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The story of the war from the breakout in Normandy to and beyond the German surrender from the viewpoint and experience of a noted British corps commander. Particularly insightful on the Arnhem operation in which he played a major part. Horrock's story, as it proceeds from one phase of the war to another, is placed in larger perspective by chapters contributed by military historian Eversley Belfield. A study particularly useful in its elucidation of the problems of a corps commander.

Howard, Michael, and Paret, Peter, Editors	CLAUSEWITZ ON WAR. Introductory Essays by Howard, Paret, and Bernard Brodie; Commentary by Brodie. 717 Pages.	1976
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A prospectively definitive edition which returns to the original text, omitting changes that were often misleading. Paret traces the development of Clausewitz's thought and the stages of production of On War. Howard deals with the impact of On War in the 19th and 20th centuries. Brodie relates the book to contemporary strategic theory and supplies an interpretation of each chapter. There also are three brief statements by Clausewitz on his manuscript and one by his widow.

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|---------------------------|---|-------------|
| *Keegan, John | THE FACE OF BATTLE. 354 Pages. | 1976 |
| | Focuses on the common soldier in facing battle and on leadership on the junior level. The volume commences with severe criticism of traditional military history and concludes with thoughts on "the future of battle." The two-thirds of the book in between that serve to illustrate the author's views deal with Agincourt, Waterloo, and the Somme. | |
| *Kennan, George F. | THE CLOUD OF DANGER: CURRENT REALITIES OF AMERICAN FOREIGN POLICY. 234 Pages. | 1977 |
| | Reflections on the international scene and US policy by the distinguished diplomat and historian. Represents what he calls his first attempt to distill from various views something resembling a grand design for American foreign policy. Inevitably the emphasis is on US relations with the USSR. Examines possibilities for "breaking out of the straight-jacket of military rivalry and dissolve the cloud of danger now hanging over mankind." | |
| *Kinnard, Douglas | THE WAR MANAGERS. 216 Pages. | 1977 |
| | The record and analysis of the views of 111 American generals who commanded in Vietnam as ascertained in interviews and responses to a questionnaire. The results are significant for military history and for the comprehension of political and other factors which played a part. Displays a wide divergence of views except on the role and conduct of the media. Emphasizes a gap between civilian-military communications during the war. | |
| Kitcher, Helen,
Editor | AFRICA: FROM MYSTERY TO MAZE. 412 Pages. | 1976 |
| | Twelve specialists in African affairs outline the problems of Africa, the potentials of the continent, and US policy options. The book looks at these problems from the standpoint of the defense planner, the banker, the media, and other interested American quarters. Surveys probabilities in the developments of the next quarter century. | |
| *Laquer, Walter | TERRORISM. 277 Pages. | 1977 |
| | A cap to Laquer's intensive studies on terrorist activities and guerrilla warfare. Charts a history of political terror from the 19th century to the left and right wing and international forms of the current period. Examines the sociology of terrorism: funding, intelligence gathering, informers, countermeasures, and the role of the | |

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|---------------------------|---|-------------|
| | media. Deals with the doctrine of systematic terrorism, current interpretations, common patterns, motives, and aims. | |
| Levitan, Sar A., & Others | STILL A DREAM: THE CHANGING STATUS OF BLACKS SINCE 1960. 381 Pages. | 1975 |
| | This balanced, factual study traces social and economic changes over the past decade. Conclusions are that while definite advances have been made, much remains to be accomplished. | |
| Liddell Hart, B. H. | STRATEGY. 430 Pages. | 1967 |
| | A classic work on military strategy by one of the outstanding military authorities of our time. It is an outline history of decisive wars and great strategists from the Fifth Century B.C. to the Twentieth Century A.D., together with the summation of the author's theories on "the art of the general." | |
| *Myrdal, Alva | THE GAME OF DISARMAMENT: HOW THE UNITED STATES AND RUSSIA RUN THE ARMS RACE. 397 Pages. | 1976 |
| | A provocative but highly controversial presentation on the problem of disarmament by an author who has held high posts in Sweden and represented her nation in the UN and in India. Castigates the superpowers for failure to make progress on disarmament with a tendency often to assign more blame to the US. She holds that both allow the military-industrial complex too much power. The first of the book's two parts traces disarmament efforts from the end of World War II. The second deals with the main issues on which disarmament negotiations and debates have focused. A number of constructive proposals endeavor to remove roadblocks to progress. | |
| *Perlmutter, Amos | THE MILITARY AND POLITICS IN MODERN TIMES: ON PROFESSIONALS, PRAETORIANS, AND REVOLUTIONARY SOLDIERS. 335 Pages. | 1977 |
| | Offers a historical, comparative, and theoretical analysis covering some fifty countries over a span of 200 years. Stresses the political nature of civil-military relations and argues that military intervention is the political motivation of politically oriented officers. Thus takes issue with prevailing theories that attribute it to sociological, social, psychological, and organizational causes. Perlmutter breaks ground in analyzing the role of the revolutionary soldier as in Israel and China. | |
| Polk, William R. | THE UNITED STATES AND THE ARAB WORLD. 3d Edition. 478 Pages. | 1975 |

<u>Author</u>	<u>Title & Pages</u>	<u>Year</u>
	<p>This revised edition of a recognized standard work is an authoritative, perceptive, and readable survey of the historical and cultural backgrounds and current conditions of the Arab world, together with a clear analysis of US interests and involvement in the Middle East. In new chapters, the author assesses prospects for lasting peace in the area, examines current economic arrangements, and continues his account of Arab development and Arab-American relations into the 1970's.</p>	
*Reischauer, Edwin O.	THE JAPANESE. 443 Pages.	1977

Reischauer's unique experience of and familiarity with the Japanese scene gives this work a particular place among studies dealing with Japan. After placing Japan and its people in their historical and geographic setting, he weighs the paradoxes and particularities of contemporary Japanese society. There is a penetrating analysis of Japanese personality, identifying ways in which the Japanese differ from Westerners. Japan is evaluated as a world power. Its very strengths--strong self-image, exceptional homogeneity, close-knit society--are considered handicaps in foreign relations. Yet Japan is held to have an opportunity to lead the way toward a "global community" in the next century.

*Sampson, Anthony	THE ARMS BAZAAR: FROM LEBANON TO LOCKHEED. 352 Pages.	1977
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A report on the world arms trade which describes the development of the giant arms companies and analyzes their part in the arms race currently underway in the Middle East. Traces the proliferation of the arms trades from the late 19th century and examines such questions as whether the arms companies are really out of control, the degree of Western economic dependence on arms sales, and the effect of recent bribery scandals on US relations with client countries.

*Schandler, Herbert Y.	THE UNMAKING OF A PRESIDENT: LYNDON JOHNSON AND VIETNAM. 419 Pages.	1977
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An historical discussion and evaluation of the lessons taught concerning US political/military decisionmaking with respect to Vietnam during the Johnson administration. Takes issue with such "wrong lessons" as that not enough military force was applied quickly enough, that we should never have intervened there, or that we did not adequately supply the South Vietnamese. Although the study is a comprehensive one, the continuing focus is on Johnson's role as President and Commander in Chief. The role of key congressional leaders also receives considerable attention.

- | <u>Author</u> | <u>Title & Pages</u> | <u>Year</u> |
|----------------------|--|-------------|
| Shanor, Donald R. | SOVIET EUROPE. 245 Pages. | 1975 |
| | A study of Eastern Europe that describes the historical background--especially the last 30 years of Soviet influence--of Poland, East Germany, Czechoslovakia, Hungary, Rumania, and Bulgaria, as well as the varying political, economic, and social climates of each nation. Included are interviews with former officials and native intellectuals who convey the East European's view of problems, achievements, and hopes for the future. | |
| Smith, Hedrick | THE RUSSIANS. 527 Pages. | 1976 |
| | A penetrating look at the realities of Soviet society by the chief (1971-74) of the Moscow Bureau of <u>The New York Times</u> . | |
| *Starr, Richard F. | COMMUNIST REGIMES OF EASTERN EUROPE.
3d Edition. 302 Pages. | 1977 |
| | Surveys developments in all aspects of government throughout the eight East European countries with a separate chapter devoted to each. Recaps post-World War II history and deals with domestic and foreign affairs. Covers the Warsaw Pact, the Cominform, and intra-bloc political relations. Sixty-seven charts and tables deal with trends for military, economic, political, and other features. | |
| *Ulam, Adam B. | IDEOLOGIES AND ILLUSIONS: REVOLUTIONARY
THOUGHT FROM HERZEN TO SOLZENITSYN.
335 Pages. | 1976 |
| | Examines a hundred years of Russian revolutionary thought and the men who shaped or were caught up in it. Seeks to penetrate the Soviet mind and explain why the Russians signed a treaty with Hitler, built the Berlin wall, and do such things as rattle missiles, sign nuclear test-ban treaties, and foster detente. Ulam questions whether a communist-dominated world under men like Krushchev and Brezhnev can truly become poliocentric and explains Soviet policy as an intricate mixture of ideology, power politics, and historical experience. | |
| Urban, G. R., Editor | DETENTE. 368 Pages. | 1976 |
| | Detente is viewed from every angle by fifteen makers and students of policy, all of them persons of world stature. Changes in American thinking, the vulnerability of Western Europe, dangers of "Finlandization," national and ideological determinants of Soviet and Chinese political behavior, and the role of cultural and economic relations are examined. The contributions originated from a series of broadcasts by Radio Free Europe. | |

<u>Author</u>	<u>Title & Pages</u>	<u>Year</u>
*Vandiver, Frank E.	BLACK JACK: THE LIFE AND TIMES OF JOHN J. PERSHING. 2 Volumes. 1178 Pages.	1977

Few Americans have participated in so vast a sweep of their country's history as did Pershing. His colorful and sometimes controversial career paralleled the emergence of the US as a world power. His professional activities covered a span from campaigns against Geronimo to advising George Marshall in World War II. Pershing's stint as head of the Bureau of Insular Affairs and his fourteen years in the Far East receive much attention. His role as manager-organizer of the American Expeditionary Forces is treated as the capstone of his career. A fundamental theme is that Pershing, a builder rather than a wrecker, left his nation stronger by his life.

*Wilson, Dick, Editor	MAO TSE-TUNG IN THE SCALES OF HISTORY. 331 Pages.	1977
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A well-balanced collection of essays by various authorities on different aspects of the historic/legendary Mao, introduced and edited by Dick Wilson. The ten chapters deal with Mao as The Philosopher, The Marxist, The Political Leader, The Soldier, The Teacher, The Economist, The Patriot, The Statesman, The Chinese, and The Innovator. The author of each chapter is highly qualified in his field. Probably the best-rounded assessment of one of the most influential figures of the 20th century.

*Yergin, Daniel	SHATTERED PEACE: THE ORIGINS OF THE COLD WAR AND THE NATIONAL SECURITY STATE. 526 Pages.	1977
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Lacking access to Soviet documents, Yergin concentrates on the American side of the tangled events which led to the Cold War. Though holding that the Soviet Union posed no immediate military threat to the West, he avoids extreme "revisionist" positions. The Soviet Union is presented as a conventional imperialistic and somewhat cautious state. Critical of much in US policy but avoids a polemical tone.

(DAAG-MSL)

Cir 1-48

By Order of the Secretary of the Army:

Official:

BERNARD W. ROGERS
General, United States Army
Chief of Staff

J. C. PENNINGTON
Brigadier General, United States Army
The Adjutant General

Distribution:

Active Army, ARNG, USAR: To be distributed in accordance with DA Form 12-9A requirements for DA Circulars, Administration - C.

D-9-VII-11

WELFARE, RECREATION, AND MORALE

UNITED STATES ARMY CONTEMPORARY MILITARY READING PROGRAM

	Paragraph
General.....	1
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Responsibility.....	4
Availability of books.....	5

1. General. The complexities of modern warfare require that all military leaders keep themselves currently informed on military affairs, as well as matters of national and international interest. The voluntary reading of authoritative, provocative, and timely books in these fields is an important adjunct to more formal training towards this objective. The U.S. Army Contemporary Military Reading Program has been established to assist Army personnel by calling attention to, and making available, books of professional value and interest. It is emphasized, however, that the selection of a book for inclusion in the program does not imply an official indorsement by the Department of the Army of the views contained therein.

2. Purpose. This Army-wide program is designed to stimulate constructive thinking concerning problems of prevailing and future military importance; encourage Army personnel to engage in a systematic program of voluntary reading to improve their professional competence; deepen comprehension and understanding of the significant role of the Army in world affairs; furnish guidance in the selection of reading materials through publication of an annual list of books written by outstanding authorities on military and allied subjects; and make copies of these books readily available for loan to military personnel.

3. Annual list. An annual reading list comprised of up-to-date titles in the fields of military

(AGPN)

science and world affairs will be published as a DA circular.

4. Responsibility. *a.* Under the supervision of the Deputy Chief of Staff for Personnel, The Adjutant General provides technical direction and staff supervision over all matters pertaining to the administration and operation of this program.

b. The Commandant, United States Army War College, reviews the annual list and recommends to The Adjutant General additions to and deletions from the list.

c. Commanders at all echelons are responsible for actions necessary to insure the success of this program. While the reading of recommended books is voluntary, promotional efforts should be directed toward stimulating personnel to read as many books as possible.

5. Availability of books. *a.* Copies of all books on the current annual list will be available for loan from Army installation libraries, an activity of Special Services.

b. Army personnel not having ready access to an Army installation library may arrange for loan of these books from the nearest Army installation library. For this purpose, direct correspondence between the individual and the post librarian concerned is authorized. Official envelopes or labels with the postage and fees paid indicia may be used for this purpose. See AR 341-10. Army personnel stationed at MAAGs and missions may arrange for direct loan of books by contacting the Special Services Office of the nearest overseas command.

AR 28-66

By Order of the Secretary of the Army:

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.

Distribution:

Active Army: To be distributed in accordance with DA Form 12-9 requirements for DA Regulations—Administration—A.

NG: None.

USAR: None.

D-9-VIII-2

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 10

ADVANCED COURSE ANALYSIS

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION
STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

As is clear from the other papers in this Annex, RETO is recommending a significant reshaping of a venerable Army institution, the Branch Advanced Course. Advanced courses have a long history, tracing their origin to the early 20th century and the establishment of such schools as the School of Fire for Field Artillery at Fort Sill (1911) and the School of Musketry at Fort Sill (1913). Virtually every line officer in the Army today above the rank of captain is an Advanced Course graduate and many consider their attendance to have been one of the most rewarding professional development experiences of their career. Because of these deeply held perceptions, it was considered appropriate to include a specific paper in the RETO final report which explained in detail the analysis and considerations which led RETO to recommend the reshaping of the Advanced Course.

RETO's purpose was to examine officer education and training as a continuous system rather than merely to look at the existing schools as discrete institutions whose existence was preordained. RETO analysts began by comparing the Specialty Duty Module Signatures* against the respective Basic Course COIs to determine if the Basic Courses were, in fact, teaching those skills which were required by lieutenants and which were best learned in resident military training. In general, they found a significant shortfall. Basic Courses are not teaching the skills and knowledge which must be taught to prepare the lieutenant for his first three to four years of service. For example, in one specialty, the Lieutenant Duty Module Signature showed 13 duty modules, 11 of which were best learned at the Basic Course. Six of these duty modules were either not covered in the Basic Course COI or were not covered in sufficient depth. Early on

*For a complete explanation of RETO methodology, to include Duty Module Signatures, see Annex G.

in the study, therefore, RETO became concerned about probable deficiencies in knowledge for lieutenants. Subsequent rigorous duty module signature analysis demonstrated that an expansion of the Basic Course is probably necessary.

Looking at the mid-career period, analysis of the Duty Module Signatures for captains and majors indicated that an important requirement for combined arms staff skills at field grade ranks is currently unfilled for one-half of our field grade officers! This, of course, led to the development of the Combined Arms and Services Staff School (CAS³) for all officers at approximately 11 years service. This also meant that some of these skills, now taught too early at the Advanced Courses, should, logically, be moved to CAS³.

When RETO analysts compared the Advanced Course COIs against the Duty Module Signatures for captains, two conclusions were apparent. First, relatively few totally new skills are introduced in the Advanced Course; many of the skills taught in the Advanced Course are introduced in the Basic Course and are merely taught at a higher or more complex level in the Advanced Course. Second, many of the skills required by captains are best learned on-the-job. Several examples illustrate these conclusions:

Example 1: A captain in this specialty requires some or all of the skills associated with 20 different duty modules. Of the 20, according to the Training and Education Specialty Proponent, only 12 (60 percent) are best learned in the Advanced Course. Of these 12, 6 are introduced to the officer in the Basic Course and then taught again at a higher level in the Advanced Course, and 6 are introduced in the Advanced Course. Thus only 30 percent of the duty modules, or skills, required by a captain in this specialty are unique to the Advanced Course. Another 30 percent are taught in the Advanced Course as more advanced skills from those taught earlier at the Basic Course. More surprising, 40 percent of the duty modules in this specialty at the grade of captain are best learned on-the-job, outside of any resident military schooling.

Example 2: A captain in this specialty requires 18 different duty modules. Of the 18, only 11 (61 percent) are best learned in the Advanced Course. Of the 11, 8 are introduced to the officer in the Basic Course, and then taught at an advanced level in the Advanced Course, and 3 are introduced at the Advanced Course. Thus only 17 percent of the duty modules required by a captain in this specialty are unique to the Advanced Course. Another 44 percent are taught in the Advanced Course as more advanced skills from those taught earlier at the Basic Course. Finally, 39 percent of the duty modules in this specialty at the grade of captain are best learned on-the-job, outside of any resident military schooling.

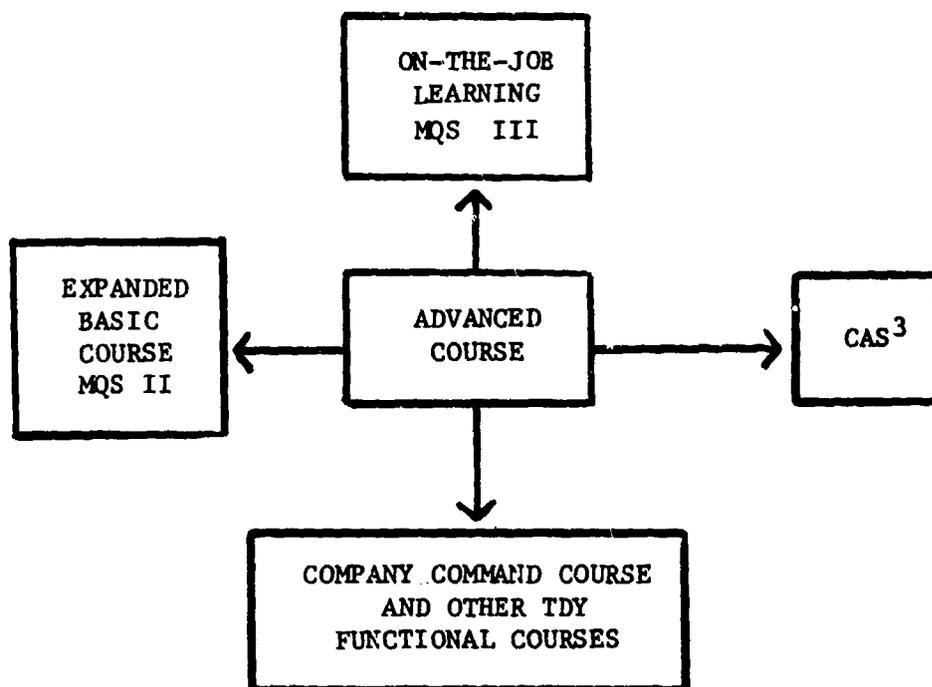
Example 3: A captain in this specialty requires some or all of the skills associated with 29 duty modules. However, according to the Training and Education Specialty Proponent, none of these duty modules are best learned in resident military schooling (the Advanced Course). All of these duty modules are best learned on-the-job or through self-study. Of the 29 duty modules, 23 are introduced at the Basic Course and 6 are encountered first at the grade of captain.

Many of the skills learned in the Advanced Course are extensions of the skills learned in the Basic Course. Some of these can be more effectively learned as a part of an expanded Basic Course which better prepares the officer for his first three to four years of service.

The Duty Module Specialty Signatures also highlighted, and the RETO Officer Survey confirmed, what many officers have known for some time: much of an officer's professional learning takes place outside the boundaries of Army Service Schools. Some officers would even argue that the most effective learning takes place out there, particularly if an officer serves under the commander or supervisor who takes the time and who possesses the knowledge and experience to guide the development of his subordinates. The program of Military Qualification Standards (MQS), explained in Appendix I to this Annex, will provide the continuous framework, the support, and the direction to allow the Army to take advantage of this learning potential which is present on-the-job and in the units. Many of the skills now taught in the Advanced Course can be effectively learned in this fashion.

There are, of course, some skills in each specialty which, because of their critical nature or the expertise required to teach them, must be taught in a resident mode by highly qualified instructors. This is recognized in the company commander courses and the other TDY functional courses which will be established by the Specialty Proponents. Officers will attend these courses just prior to assuming command or assuming the duties which require the skills taught by the functional course. Officers should be highly motivated to learn at these courses and their learning should be solidly reinforced by immediately serving in the position for which they have been trained.

As a result of the above analysis, RETO recommended the Advanced Courses be reshaped as shown by this schematic:



Very simply, the skills now taught in the Advanced Course will be split out four ways. Some will be taught earlier in the Basic Course, while some will be taught later in CAS³. The majority, however, will be taught in company command courses and other TDY functional courses or will be learned on-the-job, in the unit, as an integral part of MQS III.

Throughout the RETO analysis, the team was privileged to receive comments and observations from a number of senior officers in the Army. Those which concerned the Advanced Course are examined below:

Time for Reflection/Exchange of Ideas: Many senior officers pointed out that the Advanced Course provided an important opportunity for officers to reflect on their military experience and to exchange ideas with their contemporaries. RETO recognizes these benefits; however, the reduction of the Advanced Course from 35 weeks to 26 weeks has already significantly reduced this benefit. The further reduction resulting from RETO recommendations will be compensated by the longer tours which will result from removing the Advanced

Course as a cause of PCS moves. The loss of close relationships with Advanced Course classmates will be balanced by the closer relationships developed with contemporaries and commanders in units. At the same time, the system of Military Qualification Standards will make these unit associations more professionally rewarding, while encouraging professional reflection on a continuous basis where it counts - in the units. Finally, the TDY company command and functional courses will still allow cross-fertilization in a service school atmosphere.

The Family Year: Senior officers also reminded the team of the opportunity which the Advanced Course provided to officers to become reacquainted with their families after several years of demanding troop duty. This is a valid consideration, but, again, some of the Advanced Course attraction in this regard has been lost by the reduction of the course to 26 weeks.

Resident Schooling: Several officers advanced the proposition that resident service schooling is superior to anything which can be done in units. While RETO recognizes that resident schooling is necessary for some skills, the team does not accept the premise that commanders cannot develop their subordinates effectively. While officer education and training in units may require the rearranging of some priorities, RETO believes strongly that the result will be a better trained and educated officer. Then too, the fact that the Advanced Course would not be dropped until after MQS has been firmly established puts its demise in the late 1980s. By then, the increased professionalism the Army seeks to instill in the noncommissioned officer corps and a decade of EPMS ought to produce NCOs who are ready and willing to shoulder more day-to-day responsibilities -- thereby providing precious time for the commander to attend to developing his subordinates.

Personnel Assignments: Increasing the importance of on-the-job experience will increase the importance of each assignment to the officer concerned. This may require more effort by the personnel managers, but RETO believes it will be time well spent if it results in the better matching of officers and assignments. Many senior officers argued strongly for disciplining the personnel management system. RETO has made a number of recommendations along those lines (See Annex X). RETO believes many of the perceived management rough spots will be smoothed as OPMS matures.

In summary, the reshaping of the Advanced Course is a significant change involving the loss of a career benchmark which was emotionally as well as professionally enriching. However, RETO is confident that this change will better prepare the officer corps for the challenges of the future.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 11

TRANSITION TO WAR

TO ANNEX D

OFFICER EDUCATION, TRAINING AND MILITARY QUALIFICATION STANDARDS, PRECOMMISSIONING THROUGH 10 YEARS AFCS

1. PURPOSE. This Appendix describes the changes in the professional development of the officer corps from precommissioning through 10 years AFCS during the transition to a war footing through full or total mobilization.

2. GENERAL.

a. Increased demands for officer assets in all specialties during mobilization will necessitate changes in the way officers are accessed and trained. Under full mobilization to a 24-division force structure, or a total mobilization of the nation's military manpower, every focus must be directed toward the most efficient means of organizing available manpower for delivery in the shortest time and with the greatest force against the enemy. This means that, of necessity, training time must be shortened. Economies in training must be accomplished, however, without severely impacting on the efficiency of the military force. In effect, then, officers should be prepared under mobilization timeframes with premobilization efficiencies.

b. Such was also the case in World War II. With the beginning of mobilization in 1940, the War Department shortened all officer courses. Courses were not permitted to exceed 12 weeks, conforming to the guiding principle that it was "...out of the question to expect the Army School System to complete the individual instruction of any personnel prior to arrival at his organization."^{1/} That principle holds for officer training under mobilization scenarios today.

^{1/} Robert Palmer, Bell Wiley, and William Keast, The Procurement and Training of Ground Combat Troops: The United States Army in World War II, Department of the Army, Washington, D.C., 1948, pp 26-61.

c. During mobilization, the Military Qualification Standards (MQS) continues to provide the framework for officer training. However, the focus changes from one of developing officers for a full term career to developing officers for immediate deployment into combat. As a result, the Professional Military Education component of MQS will be suspended for the duration of the mobilization, and commanders will concentrate their officers efforts on qualifying in the Military Skills and Knowledge component prior to their deployment into combat. If time is not sufficient for complete qualification, commanders may concentrate their officers efforts in those skills most important for their success in combat. TRADOC and the Specialty Training and Education Proponents will be required to increase the supply of MQS - supporting exportable training material, particularly to the newly activated Reserve Component units.

3. MOBILIZATION EFFECTS. Recommendations for the harnessing of officer accessions and specialty development under either a total or full mobilization are listed below.

a. Precommissioning (MQS I)

(1) United States Military Academy (USMA)

(a) Commission seniors immediately, send them to their Basic Course enroute to unit assignments.

(b) Commission USMA cadets at the end of their junior year. Revise USMA curriculum so that graduating juniors complete essential elements of MQS I and MQS II and assign them directly to units upon graduation.

(c) Reduce USMA to a 3-year Mobilization Course of Instruction (COI) which incorporates the essential elements of MQS I and MQS II. Upon graduation from USMA, assign them directly to units.

(2) Reserve Officer Training Corps (ROTC)

(a) Commission seniors immediately, process identically to USMA seniors.

(b) Activate ROTC juniors, send them to Basic Combat Training (BCT) for military skills and the socialization to a military environment. Upon successful completion of BCT, send them to Officer Candidate School for MQS I and II skills. Commission upon completion of OCS and assign to units.

(c) As was done during World War II, disestablish ROTC for the duration of the mobilization. The long lead-time required to commission officers through ROTC runs counter to the mobilization requirement to provide large numbers of officers in a short period of time.

(3) Officer Candidate School

(a) Disestablish the Branch Immaterial Officer Candidate Course at Fort Benning, Georgia.

(b) Establish specialty-specific Officer Candidate Schools. Schools would teach a COI of less than 20 weeks duration, incorporating MQS I and MQS II skills required by a lieutenant in that specialty.

(c) Expand the OCS facilities to meet the demands of entry specialties.

b. Company Grade

(1) MQS II. As soon as the USMA and ROTC accessions have been graduated from the Basic Courses, these courses will be disestablished. The teaching of essential MQS II Military Skills and Knowledge will be moved to the specialty-specific Officer Candidate Schools and USMA and combined with MQS I to deliver trained officers to units with minimal delay.

(2) MQS III.

(a) The Company Command Course would be shortened, if possible, without losing the essential command skills necessary for the employment of units during wartime. A significant increase in capacity will be required for the Company Command Course.

(b) Only those TDY functional courses deemed by Department of the Army to be combat essential would be continued. Maximum use would be made of these courses to upgrade staff training rapidly particularly for Reserve Component units.

(c) Accelerate the MQS III exportable training packages to all units of the Reserve Components so that they may be able to train continuously in MQS III subjects up to and beyond their activation period.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

1. PURPOSE. This Annex describes the training and education for field grade officer development principally in the grade of major (but including some training for lieutenant colonels), for service after such training/education in the grades of major, lieutenant colonel, and colonel. It does not include training/education received by the officer in the grade of colonel, nor does it discuss Senior Service College (SSC) attendance by lieutenant colonels, which is found in Annex F (Senior Officer Education and Training).

2. APPENDICES. There are six Appendices to this Annex, covering the following specific subjects:

- a. Preparing Field Grade Officers (Appendix 1).
- b. Skills and Knowledge Common to all Majors and Lieutenant Colonels (Appendix 2).
- c. Combined Arms and Services Staff School (CAS³), (Appendix 3).
- d. U.S. Army Command and General Staff College (USACGSC), (Appendix 4).
- e. Expansion for War: USACGSC and CAS³ (Appendix 5).
- f. Specialty/Assignment-relevant Training and Education for Majors and Lieutenant Colonels (Appendix 6).

3. FIELD GRADE OFFICER DEVELOPMENT TRAINING AND EDUCATION SYSTEM. The proposed system of education and training for field grade officer development is explained in detail in the Appendices to this Annex.

a. Appendix 1 discusses how the Army should train and educate its officers during the important transition phase between narrowly focused company grade responsibilities and broader, more diverse responsibilities at the field grade level. The Review of Education and Training for Officers analysis concluded that all field grade officers need staff training and approximately 20 percent require an intensive education in higher order skills and advanced knowledge. The present system fails to meet Army requirements because

it does not provide staff training for 60 percent of the field grade officers. A Combined Arms and Services Staff School (CAS³) will provide staff training for all majors. A reduction of USACGSC attendance to 20 percent of each year-group will meet Army requirements. Appendix 1 highlights the RETO analysis, discusses the alternatives, and details the rationale of why only 20 percent require a year-long USACGSC education.

b. As shown in Appendix 2, the career of a field grade officer is devoted mainly to staff duty. Command positions are exceptions to this pattern, but are few in number and infrequent even in the career of the officer who commands. Staff duty is the common experience for all, ranging from battalion level to Headquarters, Department of the Army.

c. For optimum efficiency of utilization, staff training should be given before promotion to major or early in that grade. As described in Appendix 3, all officers would be permitted, upon promotion to captain, to enroll in a 120-hour nonresident (NRI) Combined Arms and Services Course offered by the Combined Arms Center, Fort Leavenworth, Kansas. Completion of this course, culminating in a 6-hour, locally proctored examination, would be a prerequisite for:

- (1) Promotion to major,
- (2) Attendance at CAS³, and
- (3) Consideration for selection to USACGSC.

Shortly after selection for promotion to major, all officers who have completed the NRI course would be programmed into the resident 297-hour CAS³, on TDY and then return to their units of assignment. The course, a follow-on to the 120-hour nonresident course, would stress staff techniques at the battalion and brigade level, including combining of arms and services in the division.

d. For the minority of officers who require higher order skill training and advanced education, the USACGSC would admit approximately 20 percent of each year-group of new majors. This percentage has not been determined arbitrarily; rather, it reflects the total number of majors needed to be trained in each specialty, for higher level principal staff officer duties in the grades of major/lieutenant colonel/colonel (see Inclosure 1, Appendix 4). The 42-week USACGSC curriculum, described notionally in Appendix 4, would be a follow-on to the 120-hour nonresident course and would include the substance of CAS³ in its early portion. The new USACGSC would be more intensive than the current USACGSC, by virtue of

both preparation in the nonresident course and a more highly selected student body. Graduates of USACGSC would be allocated to the major commands of the Army on a basis of each command's needs for higher order skilled officers in each specialty. A maximum of 200 Active Army and 200 Reserve Component officers would be allowed to take a nonresident version of USACGSC annually, on a competitive basis, as is now the case in the U.S. Army War College (USAWC) "Corresponding Studies Program."

e. The impact of expansion for war has also been considered in the design of the new training and education system. As demonstrated in Appendix 5, both CAS³ and USACGSC can be expanded sufficiently, within existing facilities, to accommodate foreseeable levels of wartime force expansion.

f. Finally, various specialty and assignment-relevant training courses (and graduate civilian education) would be continued for majors and lieutenant colonels, at about the current level. Existing training courses are listed in Appendix 6.

4. ALLIED OFFICER PARTICIPATION. Allied officers may attend the resident CAS³ course after completing the 120-hour nonresident course and examination. A maximum of 13 (one per section) Allied officers can be programmed for each resident CAS³ course. A total of 56 Allied officers would be programmed into each USACGSC course, with the NRI course and examination being completed as part of the four-week Allied Officer Preparatory Course. Total annual Allied officer enrollment in USACGSC and CAS³ will be 108.

5. SUMMARY. The new training and education system for field grade officer development has been comprehensively designed with regard to all aspects of the Army's needs for trained and educated majors and lieutenant colonels (and colonels who do not attend a Senior Service College). It is also part of an overall training and education system for the entire officer corps. For this reason, the field grade officer development training and education system should not be viewed in isolation but as part of the whole—the total system of professional development for Army officers.

6. RECOMMENDATIONS. It is recommended that:

a. A CAS³ be established at the Combined Arms Center, Fort Leavenworth, Kansas, to train all Active Army and Reserve Component majors for service as staff officers with the Army in the field.

b. The 9-week resident course be preceded by a nonresident 120-hour pre-CAS³ course and a 6-hour locally proctored examination.

(1) The resident CAS³ be designed to accommodate 600 students per course, 4 courses per year, with normal attendance of 500 Active Army, 72 Reserve Component officers and a maximum of 13 Allied officers per course.

(2) A nonresident CAS³ be developed for Reserve Component officers who do not attend the resident course.

c. All Active Army officers not selected for USACGSC attend the resident CAS³ in a TDY and return status prior to the end of their 12th year of service.

d. Completion of the nonresident pre-CAS³ course and examination be a part of Military Qualification Standards. (Recommended in Annex D).

e. CAS³ graduates be considered for all duty positions (including command and high level staff) commensurate with grade, experience and specialty qualification.

f. An actual or implied prerequisite of graduation from USACGSC, Armed Forces Staff College (AFSC), or equivalent be explicitly removed from the selection process for battalion command and SSC once CAS³ graduates have achieved the appropriate rank and years of service to compete for selection.

g. The 42-week USACGSC course at Fort Leavenworth be modified to include CAS³ and be continued for centrally selected officer students in all specialties between their 10th and 12th years of service:

(1) Reduce attendance at the resident course to approximately 20 percent of a year-group.

(2) Determine USACGSC class composition by specialty to meet Army needs for officers trained in higher order staff skills and possessing advanced knowledge in various commands.

(3) Reduce Allied officer enrollment from 94 to 56 in each USACGSC course (a maximum of one per workgroup).

(4) Increase Reserve Component spaces at USACGSC from 4 to 14 annually (one per section).

(5) Discontinue the current resident 18-week Reserve Component course at USACGSC.

h. Sister service and foreign staff college attendance be continued for centrally selected Army officers and that they be CAS³ graduates prior to attendance.

i. The current USACGSC nonresident program (design based on the 18-week RC course) be replaced with one that centrally selects 200 Active Army and 200 Reserve Component CAS³ graduate applicants annually for a 2-year "Corresponding Studies Program" based on the full academic year regular course along the lines of the current USAWC program.

j. The Army recommend to the Joint Chiefs of Staff a complete review of the curriculum at the current 22-week permanent change of station AFSC course with a view toward creating short, functional, TDY courses for Army CAS³ and USACGSC graduates enroute to joint assignments. Additionally, AFSC should develop NRI packages.

k. The current AFSC not be considered equivalent to USACGSC and those officers (about 20 percent) selected for higher order skill training and advanced knowledge education not attend AFSC until after completion of USACGSC or other service staff college and until they are enroute to a joint assignment.

l. The Army create a comprehensive faculty development program for the USACGSC which insures:

(1) Subject matter experts.

(2) Sufficient numbers to allow at least 50 percent of the instruction to be small-group, instructor-led seminars.

(3) Tenured and extended-tour faculty.

(4) A student to faculty ratio of about 5 to 1.

m. DA Pamphlet 600-3 include a more precise statement of Army policy concerning the purpose and role of OJT and TDY functional and specialty courses; and include a more accurate list of courses available both in the "Specialty Development Guide" and in a separate annex of DA Pam 600-3.

n. Office of the Deputy Chief of Staff for Personnel and Military Personnel Center formally monitor the status of specialty/assign-

ment-relevant training and education courses including the annual input and inventory of officer assets in coordination with the DA Specialty Proponent and the training and education proponent.

6 APPENDIXES

1. Preparing Field Grade Officers
2. Skills and Knowledge Common to all Majors and Lieutenant Colonels
3. Combined Arms and Services Staff School (CAS³)
4. Command and General Staff College
5. Expansion for War: USACGSC and CAS³
6. Specialty/Assignment-Relevant Training and Education

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

PREPARING FIELD GRADE OFFICERS

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

With increased rank come greater responsibility and broader horizons. The relatively narrow, primary-specialty-specific, troop-oriented focus of most company grade officers changes at the rank of major to include the integration of diverse functions and organizations. The purpose of this Appendix is to discuss how the Army should train and educate its field grade officers during this important transition phase of their careers.

The crucial question in designing a system to train and educate field grade officers to meet Army requirements is one of proportion. How much training do all field grade officers need? Is there some minority who require broader and more intensive education to prepare them for high-level staff duties? If so, how many should receive this education and of what should it consist? Finally, what are the implications of a system that differs from the current one?

COMMON FIELD GRADE TRAINING

The basis for determining what training and education is required for all field grade officers is the nature of the duties to be accomplished by those officers. Analysts examined the significant duty modules (clusters of tasks) for field grade officer positions in all CPMS specialties. The criterion for significance used was that an officer should have at least a 40 percent chance of performing the duty module while serving in a particular grade. The majority of significant duty modules were found to involve staff and management activities of a general nature, and majors and lieutenant colonels spend most of their time in such staff duties. This led to the conclusion that, regardless of specialty, the field grade officer needs staff training soon after selection for promotion to major. Further, all the evidence studied indicated that this conclusion would be valid for the 1980's and 1990's as well.

As an officer progresses from the company grades to the field grades the balance between technical, human and conceptual skills shifts. A large proportion of company grade training is technical in nature. The field grade middle-manager needs a broader understanding of human and conceptual skills than he did as a captain. The RETO proposal to restructure the current career course, coupled with the establishment of Military Qualification Standards will lead to a more technically proficient captain, and it shifts the requirement for the more sophisticated learning to the field grade years. On selection for promotion to major then it becomes essential that all officers acquire the fundamentals of Army staff procedures and expand their basic knowledge of the doctrinal basis for combined arms employment.

The role of field grade officer training in the Army's Officer Personnel Management System (OPMS) was likewise examined.

Under OPMS, each officer selects a secondary specialty by his 8th year of service, in which his assignments will alternate with his primary specialty thereafter. Officers are not only expected to gain qualification in each specialty, but to increase their proficiency in both, because of the legitimate Army requirements for all officers in all specialties. In addition, these field grade billets grow increasingly complex and the demands more rigorous by grade. In short, once an officer has qualified in his primary specialty at the grade of captain, he can plan on alternating between his primary and secondary specialties, primarily in staff positions, at all levels of the Defense Establishment, for the remainder of his career. This is true for all officers.

Given that there are a number of "significant duty modules" for field grade officers and that they apply to both specialties in which the officer will serve, what are the essential skills and knowledge required for all field grade officers? Analysis indicated that the skills needed are Army-relevant, middle-management abilities in the training, equipping, supplying, maintenance, administration, and tactical employment of combined arms and services on the modern battlefield. Additionally, there is a recognized requirement for effective communications and interpersonal sensitivity.

This necessary training is not provided to all field grade officers today. The current system allows 40 percent of the officer corps to attend the 42-week USACGSC course. A variety of functional or specialty courses (most of short duration) are provided in preparation for specific billets. This system clearly fails to meet the need for all field grade officers to acquire the staff skills identified by the analysis.

ALTERNATIVES

If the Army could afford it, perhaps all officers should attend the 42-week USACGSC course as soon as possible after selection to major. RETO considered this option. It was rejected as too expensive, in terms of operating costs, investment costs, and time lost from Army units. Further, the lack of student selectivity in such a system would limit the level of sophistication available in the educational process.

Also considered was providing staff training to all officers in a reduced content 22-week version of the USACGSC course. This, too, proved far more costly than the current system and failed to meet requirements to impart the broadening and higher order skills needed by at least a minority of the officer corps to serve in the most demanding high level field grade positions.

After considering all feasible options, it was concluded that the training and education requirements for field grade officers could best be met by the creation of a Combined Arms and Services Staff School (CAS³) for all field grade officers, with attendance shortly after selection for promotion to major. A preliminary curriculum analysis completed by USACGSC led to the recommendation for a 9-week TDY course as a resident follow-on to a 120-hour non-resident (NRI) (equivalent to four weeks of resident instruction) preparatory package. The officer would complete the NRI phase while a captain, as part of the RETO recommended system of Military Qualification Standards. CAS³ would focus on troop staff procedures incident to the employment of combined arms at the battalion, brigade, and division level, and would satisfy the Army's fundamental requirements for trained staff officers. It would also insure that every field grade officer would be trained in standardized staff procedures and in the same doctrinal concepts, thereby achieving procedural and doctrinal unity throughout the Army to a degree never before attained.

Finally, it should be added that many officers would continue to require specialty or functional courses in preparation for specific staff positions. While the basic staff procedures would be learned at CAS³, specialty-unique and job-specific skills would continue to be offered at relevant short courses and in nonresident self-study modes.

HOW MANY -- HOW MUCH -- OF WHAT?

In the process of establishing that all field grade officers need training in staff fundamentals, it was also determined that some proportion needed to be educated more intensively in higher

order skills and to be provided a broader foundation for continuing professional growth.

The pressures placed on the military establishment are ever increasing. The international situation demands forces-in-being at an unprecedentedly high state of readiness. This situation requires that the officer corps -- prepared by a thorough system of professional development -- maintain an even greater standard of excellence than that which laid the groundwork for the victories of World War II and served so well during the Cold War era. This must be done in the face of severe budgetary constraints and rapid inflation. Simply put, the Army must have some number, as yet undetermined, of officers intensively trained in complex, higher-order staff skills.

As a basis for determining how many field grade officers need a more intensive professional education, a list of higher-order staff skills was compiled using duty modules from field grade positions Army-wide. These skills were more complex and difficult to master. Some of these skills were required in virtually all field grade positions, and were prioritized by weighting each higher-order duty module, in order of complexity. By comparing and weighting the relative frequency with which various higher-order duty modules occur in each specialty and in the Army as a whole, about 20 percent of each year-group entering field grade ranks were determined to require advanced training in these skills. Since officers will serve about half their time in each of their two specialties, and since all specialties have some requirement for higher-order skills at all field grades, a methodology to determine the appropriate percentage in each specialty who required more intensive education was also developed. This methodology and its implication for determining USACGSC class size and specialty mix is discussed in Appendix 4 of this Annex.

A detailed analysis of the current curriculum of the US Army Command and General Staff College, in light of expected requirements and the fact that all officers to attend either CAS³ or USA CGSC will have completed the pre-CAS³ nonresident package, led to the recommendation that the 20 percent centrally selected for more intensive education should attend a course at USACGSC for a full academic year.

The fundamental purpose of the USACGSC course would be to educate and train selected officers in the higher order skills necessary for the coordination and integration of combined arms formations, and the necessary high level staff skills of personnel management, all-source intelligence collection and evaluation, and logistics on the modern battlefield. The course would also educate

officers more effectively in resource management, training management, coalition warfare, analytical techniques, conceptual skills, and communicative arts.

IMPLICATIONS

There are some definite advantages for the Army in this proposal. Today, some 40 percent of all majors are selected for extended training at USACGSC. However, 100 percent of the field grade officers need staff training to perform effectively as field grade officers. This proposal meets that requirement as well as providing specialty or functional training as needed.

Since the training comes within a year after selection to major it is timely, as well as directly relevant, to what the officer will do during his field grade service.

This systems approach to determining requirements, identifying skills, and training to maximize previous on-the-job and institutional learning in a career-long development program is a logical step in the implementation of OPMS. It insures that the right number of officers receive the right kind of training to meet both current and mobilization requirements. Training and education are matched precisely to force requirements over the long haul. Reserve Component resident training is increased by 50 percent over current levels and a more realistic basis for qualifying for promotion to major is provided.

COSTS

Under RETO's proposals, costs for field grade officer training and education increase only \$6 million dollars and 153 man-years annually after 1985. This was the smallest increase of any of the alternatives examined. But what is bought for that price is invaluable — staff and tactical/logistical doctrinal training for all field grade officers and intensive, higher-order education for selected officers in proportion to the Army's needs.

CONCERNS

There have also been concerns expressed about the motivational impact of these proposals.

Opportunity for as many as possible for as long as possible is a fundamental tenet within the officer corps of the American Army. It is alleged that selecting only 20 percent to attend the 42-week USACGSC course will pre-determine the future competitiveness of that small minority, whereas the current system of 40%/60% allows for "late bloomers" and is therefore more "equitable."

In fact, the reverse is the case. Using projections of future promotion rates (provided by ODCSPER), it appears that the selection rate from major to lieutenant colonel will be around 70 percent and from lieutenant colonel to colonel around 50 percent. If one postulates that most USACGSC graduates will be promoted and if 40 percent of all majors attend USACGSC (current system) and 35 percent of all majors (70 x 50) go on to make colonel, the non-USACGSC 60 percent are effectively excluded from promotion to colonel and thereby demotivated for further service. But if only 20 percent needed attend USACGSC (RETO proposal), a significant proportion of the remaining 80 percent (all CAS³ graduates) have a chance to make colonel, thereby sustaining the professional motivation by the entire 80 percent. For a recent analysis by Trevor Dupuy of the impact on performance and morale following the enlarging of the German Staff Corps, see Inclosure 1.

Moreover, RETO proposes that selection for command be absolutely uncoupled from attendance at USACGSC. Independent selection for command will produce CAS³ as well as USACGSC graduates to command battalions and brigades, all of whom will be further trained at functional precommand courses.

The number who attend Senior Service College (SSC) is currently far fewer than the number who attend USACGSC and it would remain so under our proposal. However, our proposal is that USACGSC is not a prerequisite for SSC thus holding the door open for the "late bloomer," and reinforcing the aim of OPMS of "many paths to the top."

The "uncertainty" impact of all these changes on the officer corps will be eased by the way the transition to the new system is made. It will be carefully explained, incrementally implemented over a period of 6 years and reinforced by careful adherence by selection boards to picking the "best qualified."

The ultimate result will be genuine implementation of OPMS, which places the right people in the right jobs and then allows a path to the top for those who serve the Army best.

On balance, the proposed system for educating and training field grade officers that RETO has developed meets the Army's needs and provides the greatest opportunity for professional growth to the largest number of officers.

1 Incl

1. Preparing Field Grade Officers

Preparing Field Grade Officers

1. The well known and widely respected military historian and analyst, Colonel Trevor N. DuPuy, (USA RET), Executive Director of the Historical Evaluation and Research Organization, recently published a monograph for the President's Committee on National Command Structure entitled "The German General Staff". It is a follow-on to his compelling book, A Genius for War: The German Army and General Staff, 1807-1945, published in 1977.

2. One of the sections of the monograph is of particular significance to RETO in its efforts to determine what percent of the majors should attend USACGSC and the long range effects of any change from the current 40 percent. This is the section of the monograph which describes the impact on the morale of German officer corps after increasing the General Staff Corps from one percent to five percent.

The following extract describes the "Command Structure Implications" of the recent German experience (found on pp. 28-29):

"The Staff Officer Corps

a. The method of selecting and training has been evolving since 1955. Officers are now selected as the result of a 3-month course at Hamburg in the Führungs-Akademie (Command Academy), the modern version of the old War Academy.

b. This short course is attended at about age 30-51 by all officers, at senior captain level. They have had company command experience (or equivalent) for about three years. The course is designed so as not to give advantage either to combat arms experience or to memorizing capability. As a result of his performance during this course, an officer's future career is settled. About 5-8% are selected for General Staff training, and will attend the regular Command Academy course. (This is two years and three months in length.)

c. The relatively high percentage of General Staff officers (about 5-7%) has created serious, unanticipated problems.

F-1-I-1

Incl 1

(1) In the past, there were only three General Staff officers in a division (I-A, I-B, and I-C--or G-2, G-3, G-4) and usually only two. Now it is: Chief of Staff, G-1, G-2, G-3, G-4, plus the G-3 and G-4 in each of three brigades, or a total of eleven. Yet in each division there are only four command positions below the division commander. In the old days, with two or three General Staff officers, there were five or six brigade level command positions below the division command.

(2) Thus, in the past there was some opportunity for promotion to command for non-General Staff officers. (As noted above, Kluck was an example; so was von Senger und Etterlin.) Now there is virtually none. This has created great unrest and unhappiness in the officer corps. Those near the cut-off point are particularly bitter. In the past such officers could keep trying, and sometimes achieve; now it is virtually impossible. After battalion commander it is the end of the line for non-General Staff officers. In the past, General Staff officers were respected and admired and copied, and not much envied. There was no argument about competence. It is quite different now.

(3) Of the current twelve division commanders, eleven are General Staff officers. The one who is not is not really as competent, but was selected by direct order of the Minister of Defense. Of the current brigade commanders, 33 of 34 are General Staff officers.

(4) This situation has seriously degraded initiative and motivation of non-General Staff officers. One General Staff officer fears that this could destroy the modern version of the General Staff."

DuPuy goes on (P. 32) to describe "Implications of US National Command Structure" with the following paragraph.

"The most significant new implication for the United States Command structure is the evidence which seems to suggest that there were no seri-

ous problems when the rest of the officer corps with an elite of about 1%, but that there are serious problems when the elite group is more than 5%. Obviously this deserves much more study."

3. It would appear that if an organization ascribes special qualities or treatment to too large a portion of its members, then the rest see no means to satisfy their aspirations since they have been placed in the position of being noncompetitive. To maintain motivation in an organization there must be more opportunities available than "special" members.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

SKILLS AND KNOWLEDGE COMMON TO ALL MAJORS AND LIEUTENANT COLONELS

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

INTRODUCTION

This appendix addresses the skills and knowledge common to majors and lieutenant colonels in terms of what most officers in these grades will do and what they need to perform effectively. No attempt is made to prescribe the methods by which those officers will gain the required skills and knowledge.

ANALYSIS

1. To assist in establishing common skills and knowledge, it is first necessary to determine the types of duties performed by majors and lieutenant colonels. The duties for this analysis are extracted from a data base created from field inputs, which relates duties performed to the various officer specialties and permits the determination of significant duties performed by officers in each grade across all specialties. For purposes of this appendix, the following conditions apply in determining which duties are considered important:

(a) Officers typically serve in two assignments in each grade.

(b) Each assignment (job) can be analyzed and described in terms of duty modules developed by the Army Research Institute for the Behavioral and Social Sciences (ARI). A duty module consists of several tasks; a typical job might contain 5-10 duty modules, each of which might contain 5-20 tasks. This analytical method is particularly useful in this study of common skills/knowledge where we desire to isolate significant job components without actually having to compare specific positions for commonality.

(c) Significant duty modules are defined as those which an officer has at least a 40 percent chance of performing while in grade. 40 percent represents the point at which it has been deter-

mined to be more economical to train all officers to perform a specific duty than to try to selectively train them.

2. Table 1 lists the significant duty modules by alpha-numeric code, short title and applicability to each grade. Inclosure 1 contains excerpts from the ARI duty module catalog listing the tasks included within each module. Examination of Table 1 reveals that 14 of the 21 significant major or lieutenant colonel duty modules are common to both grades.

3. The majority of common duty modules for majors and lieutenant colonels involve staff and management activities of a general nature. Table 2 describes the skills and knowledge found in these duty modules.

(a) The skills and knowledge common to majors and lieutenant colonels involve more intellectual processes such as problem solving and reactions to all kinds of military, economic, political and social situations, than specific hard skills such as fire support planning and weapons employment.

(b) The intellectual nature of the skills and knowledge does not mean that hard technical skills have become unimportant when the officer reaches the field grades. He must always apply technical leadership to whatever organization he belongs. In this sense, the skills are oriented toward Army-relevant administration, supply, maintenance, training, and employment of troops on the battlefield. This seems to be particularly true in the grade of major where 10 of the significant duty modules require application of technical leadership skills.

(c) The knowledge elements associated with the skills are heavy in concepts and procedures rather than specific details or individual facts. Obviously some specifics must be known (e.g., how the personnel system works, the Army Authorization Document System) to be able to apply the concepts. However, specific facts have a limited life while the concepts associated with problem solving, management, and articulation of ideas usually change very slowly.

(d) Much of the data in the skill and knowledge areas has been extracted from civilian-oriented sources and cross-checked against various military (Army, Air Force, Marine Corps) sources. It appears that the needs of people in the staff and management areas whether military or civilian, have a high degree of commonality. Significant variations arise in the area of technical leadership where the skills are more oriented to specifics than to

concepts. One observes also that certain other skills such as personnel management and programming require some knowledge of specifics that are unique to the service or to the DOD.

CONCLUSIONS

1. Majors and lieutenant colonels have a considerable number of common duties that are best described as staff, administrative or managerial. These duties are supported with executive skills requiring both broad conceptual knowledge and specific technical knowledge.
2. Since all field grade officers must have the sorts of common skills and knowledge outlined above, the education system for field grade officer development should respond to the requirement. Appendices 1, 3, and 4 of this annex point out that only about 40 percent of these officers now receive the education and training needed to acquire executive skills. Since all officers require the knowledge associated with the skills, it makes sense to offer the education and training to more majors and lieutenant colonels. To do this will require tradeoffs in the field grade officer training and education system such as those proposed in Appendix 3 for the Combined Arms and Services Staff School (CAS³) and Appendix 4 for the US Army Command and General Staff College (USACGSC). Under those concepts, about 20 percent of majors will attend the 42-week USACGSC and the other 80 percent will attend the 9-week CAS³. Each course will include a common core that will accommodate the common knowledge elements discussed above. The USACGSC course will include, in addition, more advanced and broader knowledge elements oriented toward operation at a higher staff level than CAS³.
3. The commonality of the skills and knowledge within and between the grades of major and lieutenant colonel means that education and training should be given early in the grade of major so the Army will derive full benefit from its investment. Periodic updating may be needed for the specifics, but the broad concepts and procedures will be relevant until career end.

TABLE 1. COMMON DUTY MODULES FOR
MAJORS AND LT COLONELS

CODE	TITLE	APPLICABILITY	
		MAJ	LTC
A 1	Performs unit administration	X	
A 2	Performs general administration	X	X
A 5	Supervises a staff section, detachment or office	X	X
A 6	Performs headquarters management staff functions	X	
A 7	Performs special staff administrative and adjutant type functions	X	
A 8	Directs, coordinates and supervises a staff	X	X
A 10	Counsels and evaluates subordinates as troop leader and takes action on personal problems	X	X
A 11	Supervises troop appearance, care and maintenance of materiel and facilities in unit	X	X
A 12	Performs overall programming evaluation and reviews staff work	X	X
A 13	Performs management analysis staff functions	X	X
B 1	Performs manpower management staff functions	X	X
B 2	Performs personnel management staff functions	X	X
D 1	Performs operations staff functions in a general staff or other coordinating staff	X	X
D 2	Performs operations planning staff functions in a general staff or other coordinating staff	X	X
E 1	Trains troops and/or civilian employees in units and activities	X	X
E 2	Performs training staff functions	X	X
F 1	Performs supply operations at consumer unit level	X	
F 2	Performs supply staff functions	X	
F 7	Performs general logistics staff functions	X	
I 1	Performs program and budget staff functions		X
W 4	Performs unit liaison activities	X	X

TABLE 2. COMMON SKILLS AND KNOWLEDGE REQUIRED
OF MAJORS AND LIEUTENANT COLONELS
APPLICABLE
DUTY MODULES

SKILL AREA	SKILL ELEMENTS	MAJ	LTC	KNOWLEDGE AREAS
Written Communication	Information collection; information organization; precise, clear, balanced presentation; use of appropriate methods; use of appropriate formats.	A1, A2, A5, D1	A2, A5, D1	Use of sources; problem identification techniques; logic; analysis; research methods; grammar, punctuation, sentence and paragraph structure; standard Army formats.
	Same as written communication plus function as conference attendee; function face to face; function via electronic means; function as discussion leader; instruction.	A13 D1 F7 W4	A13 D1 W4	Use of sources; problem identification techniques; logic; analysis; research methods; conference techniques; briefing techniques; audio-visual methods; listening; presentation formats; instructional techniques.
Oral Communication	Relation of broad policies to detailed operations; identification of significant relevant information in a mass of data; problem identification; identification of alternatives; recommendations/decision; consideration of all relevant views.	A1 A2 A8	A2 A8	Modeling techniques; estimating techniques; problem identification techniques; decision analysis concepts; data collection and organization; automation; techniques of creative thinking.
Analysis and Conceptual Development				

Interpersonal Relations:

Team work; cooperation in reaching organizational objectives; support-unit objectives/decision; assistance to co-workers; diplomacy; persuasion; negotiation.

A5
D1
D2

Human behavior; organizational behavior; leadership principles and techniques; conference committee techniques; officer ethics; principles and concepts of command.

Coordination

Direction of coordination with people and organizations; conduct of coordination with people and organizations; consideration of internal/external factors in decision making; insight.

A8
W4

Line and staff organization; principles of staff management; liaison techniques; staffing formats; internal organizational relationships; Army management systems; environmental factors; programs; objectives; resources; relationships among Army, other DOD, and Federal agencies.

R-2-6

Planning, Programming
Organization, and Control

Forecasting future; recognition of organizational objectives/resources; establishment of program goals and plans within objectives/resources; programming and budgeting; adjustment of programs, plans; organization/direction of personnel in accomplishing mission; delegation of authority; regulation of product quantity/quality using money, manpower, material; reviewing results.

A5
A8
A12
A13

Resource analysis; DOD PPBS; systems analysis; organization theory and practice; estimating techniques; forecasting techniques; management information systems; management systems and techniques; review and analysis procedures; Army management system; automation.

**Management to
Organizational Goals**

Decision-making; application of management systems and techniques; development of management systems & techniques; direction/supervision of organizations; accomplishment of major projects under heavy work loads.

A5
A8
A12
A13

Decision analysis; resource analysis; systems analysis; management theory and practice; DOD management policy and programs; organizational behavior; management systems; management information systems; automation; principles of military organization.

Personnel Management

Establishment of effective, economical personnel positions; personnel selection; supporting career management goals with training/development opportunities; personnel performance appraisal; supervision of personnel performance; correction of personnel misassignment; personnel counseling.

A5
A10
A11
B1
B2

OPMS; EPMS; civilian personnel system; human behavior; leadership techniques; counseling techniques; reporting systems; career development programs; manpower policies; training programs; appraisal techniques; code of conduct; discipline and morale.

Technical leadership

Organizational administration; simple logistics management; training management; integration of firepower/maneuver/logistics; headquarters management.

A1
A2
A11
E1
E2
F1
F2
F7
A6
A7

Training policies and procedures; functions of Army organizations; military customs/courtesies/ceremonies; security of classified documents and equipment; Army maintenance system; Army document system; Army supply system; tactics.

EXTRACTS OF ARI DUTY MODULES

This inclosure consists of direct extracts from ARI Report "Duty Module Methodology for Officer Career Management System Development Catalogue of Army Officer Duty Modules," October 1976.

The extracts provide the titles of the duty modules and lists of tasks included within the modules.

More information on the duty module concept can be obtained from:

Army Research Institute
ATTN: PERI-IS
500 Eisenhower Avenue
Alexandria, VA 22333

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Date: **October 1975**

Code: _____

DUTY MODULE O-A-1 Performs unit administration	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0001 Prepare administrative SOPs and instructions for unit.						
0002 Monitor unit security of classified documents.						
0003 Prepare and review administrative correspondence, memoranda, and reports.						
0004 Prepare and review unit journal, historical records and morning report (or change reports for centralized systems).						
0005 Administer unit funds.						
0006 Establish and monitor arrangements for collection and distribution of mail within unit.						
0007 Establish and operate unit message center.						
0008 Screen incoming correspondence and distribute for action or information.						
0009 Establish and operate unit suspense system.						
0010 Authenticate orders and official correspondence for commander.						
0011 Establish and post unit files, records, and regulations.						
0012 Review, interpret and apply directives and information.						
0013 Prepare daily bulletin or similar publication.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks

2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%

3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical

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DUTY MODULE O-A-2 Performs general administration	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0014 Prepare administrative SOPs and instruction.						
0015 Monitor security of classified documents.						
0003 Prepare and review administrative correspondence, memoranda, and reports.						
0016 Establish and operate a distribution system for messages, correspondence, and documents.						
0008 Screen incoming correspondence and distribute for action or information.						
0017 Establish and operate suspense system.						
0018 Authenticate orders and official correspondence.						
0019 Establish and post files of records and regulations.						
0012 Review, interpret and apply directives and information.						
0020 Schedule appointments, conferences, and other such activities.						
0021 Provide for reproduction and duplication services.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several tasks	(3) Majority of tasks	(4) All of tasks
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Trifical	(4) The most critical
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

E-2-I-3

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Code: _____

DUTY MODULE O-A-5 Supervises a staff section, detachment, or office		(6) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0027	Gather, interpret and apply pertinent directives and information.						
0028	Organize personnel and other resources into functional elements to accomplish mission.						
0029	Prescribe standing operating procedures for internal functioning.						
0030	Schedule and allocate work, assign priorities, issue guidance.						
0031	Monitor, review and evaluate work.						
0032	Operate a system for filing, retrieval, display and reporting of information.						
0033	Provide for office services and clerical support.						
0034	Monitor safeguarding classified information and other aspects of internal security.						
0035	Motivate, evaluate, and counsel subordinates.						

	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
1. DO MODULE AND TASKS APPLY TO YOUR POSITION							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE 0-A-6 Performs headquarters management staff functions	(5) Direct	(4) Supervise	(3) De and supervise	(2) Do	(1) Assist	(0) Not applicable
0036 Advise commander and staff on headquarters management.						
0037 Control headquarters elements not assigned or attached to other units.						
0038 Coordinate arrangement and movement of headquarters.						
0039 Arrange for headquarters facilities and support services.						
0040 Plan and control local security for headquarters.						
0041 Allocate and coordinate transportation assigned to headquarters.						
0042 Process and accommodate visitors to headquarters.						
0043 Control POW custody and evacuation activities for headquarters.						
0044 Control custody and disposition of stragglers and casualties.						
0045 Inspect personnel, equipment, and facilities of headquarters elements.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Priority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB:	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE O-A-7 Perform special staff administrative and adjutant-type functions	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0046 Authenticate and issue orders and official correspondence.						
0047 Operate office of record.						
0048 Establish, post and operate registry of regulations, circulars and similar directives.						
0049 Establish and operate a distribution system for messages, correspondence and publications.						
0050 Provide general administrative services such as filing, utilizing computers records management.						
0051 Advise commander and others on administrative matters.						
0052 Publish daily bulletin or similar publication.						
0053 Perform adjutant-type ceremonial functions.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB.	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE 0-A-B Directs, coordinates and supervises a staff		(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0054	Issue guidance for establishment and operation of headquarters command post, and Tactical Operations Center.						
0055	Formulate policies and SOP for staff operation.						
0056	Transmit and interpret command guidance to staff.						
0057	Assign and coordinate work of staff by issuing instructions to principal staff officers and monitoring results.						
0058	Review studies, plans, orders, reports and correspondence prepared by staff and approve or disapprove or refer to commander with recommendation.						
0059	Arrange and control liaison with other headquarters.						
0060	Conduct specialized staff training and professional development.						
0061	Monitor performance of command and take action to deal with problems.						
0062	Inform and advise commander in matters of concern to him.						
0063	Conduct staff conferences.						
0064	Represent commander and act for him in his absence.						
0065	Arrange for reception of visitors.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		

E-2-I-7

Date: October 1975

Code: _____

DUTY MODULE 0-A-10 Counsels and evaluates subordinates as troop leader and takes action on personal problems	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0076 Interview, consult, and counsel subordinates concerning personal problems, performance and career development, or for other leadership purposes.						
0077 Investigate and seek information to counsel, advise, or assist subordinates.						
0078 Pursue follow-up actions to help resolve personal problems of subordinates, coordinating with any other authorities concerned.						
0079 Evaluate subordinates.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

Date: October 1975

Code: _____

DUTY MODULE 0-A-11 Supervises troop appearance and care and maintenance of materiel and facilities in unit	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0080 Operate "motor stables" or similar activity for care and maintenance of vehicles, aircraft and associated equipment.						
0081 Monitor care and maintenance and security of weapons and other equipment.						
0082 Monitor care, security and maintenance of facilities, grounds, and installation property in unit custody.						
0083 Monitor dress and appearance of subordinate personnel and care and maintenance of their individual uniform clothing and equipment.						
0084 Perform maintenance record administration in unit.						
0085 Inspect troops, equipment and facilities.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

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Code: _____

DUTY MODULE 0-A-12 Performs overall programming evaluation and review staff work	(5) Direct	(4) Supervise	(3) De and Supervise	(2) De	(1) Assist	(0) Not applicable
0086 Define objectives for project.						
0087 Define key events and activities and establish "milestones."						
0088 Develop network plans, sequence key events and activities, connect interdependent networks, and identify critical paths.						
0089 Establish time requirements and develop master schedule.						
0090 Develop budgets and cost estimates for overall project and each included work package.						
0091 Plan assignment of work packages to organizational elements.						
0092 Operate or employ management information system for the project.						
0093 Arrange for computer services and programming support.						
0094 Review project work progress in relation to network plans, schedules and costs, and identify and analyze problems.						
0095 Modify and up-date plans, schedules and budgets on basis of program evaluation and review.						
0096 Prepare and present briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks

2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%

3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB

- a. In actual or simulated combat operations and support?
- b. In garrison and other than a?

(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical

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DUTY MODULE 0-A-13 Performs management analysis staff functions		(6) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not performing
0097	Advise superior and others on a management system in being.						
0098	Conduct studies and surveys of organizations, manpower, space and equipment to assist in management improvements.						
0099	Develop plans, programs, and directives concerning organization, manpower, and management systems.						
0100	Develop and implement a management improvement program.						
0101	Develop and implement management analysis methods, standards of performance and procedures for work measurement and simplification.						
0102	Design and control formats for recurring reports and statistical summaries of operations.						
0103	Coordinate management analysis and improvement activities within staff and with higher, lower and supporting units.						
0104	Prepare and present briefings concerning management analysis matters.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION. a. In actual or simulated combat operations and support? b. In garrison and other than a?	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE a. In actual or simulated combat operations and support? b. In garrison and other than a?	(0) Not applicable	(1) 1-2%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB a. In actual or simulated combat operations and support? b. In garrison and other than a?	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		

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DUTY MODULE 0-B-1 Performs manpower management staff functions	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0105 Advise superior and others concerning manpower management.						
0106 Establish and operate system of records and reports pertaining to manpower.						
0107 Prepare personnel loss and gain estimates.						
0108 Operate a manpower control system using ADP.						
0109 Allocate bulk personnel replacements in accordance with approved authorizations and priorities.						
0110 Conduct manpower surveys and recommend strength allocations.						
0111 Prepare studies, plans, reports and correspondence on manpower management.						
0112 Prepare and present manpower briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE 0-B-2 Performs personnel management staff functions	(3) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0113 Advise superior and other concerning management of personnel.						
0114 Prepare personnel management policy directives and SOPs.						
0115 Establish, post and employ a system of personnel records and related files.						
0116 Coordinate procurement and assignment of military personnel as individuals.						
0117 Coordinate personnel selection, testing, pay, and career development.						
0118 Monitor civilian personnel management.						
0119 Recommend individual assignments to key positions.						
0120 Coordinate personnel aspects of casualty handling and reporting.						
0121 Coordinate personnel aspects of POW handling and reporting.						
0122 Control personnel management operations of subordinate personnel section or special staff.						
0123 Prepare studies, plans, reports and correspondence pertaining to personnel management.						
0124 Prepare and present personnel management briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE 0-D-1 Performs operations staff functions in a general staff or other coordinating staff	(5) Direct	(4) Supervise Directly	(3) Supervise Indirectly	(2) De	(1) Assist	(0) Not Applicable
0234 Advise superior and others concerning operations.						
0235 Prepare operations policy directives and SOP.						
0236 Prepare and publish operation estimates and orders.						
0237 Monitor execution of operations plans and orders and make changes as situation warrants.						
0238 Recommend task organization, missions, and areas of operations.						
0239 Organize and operate tactical operation center or operations element of command post.						
0240 Determine operational readiness requirements and readiness status of unit.						
0241 Recommend allocation of and authority for use of critical command resources such as replacements, special ammunition and aircraft.						
0242 Coordinate overall security of command.						
0243 Conduct or arrange operational readiness inspections and tests and deal with problems.						
0244 Prepare studies, reports, records, and correspondence pertaining to operations.						
0245 Prepare and present operations briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB:	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code: _____

DUTY MODULE 0-D-2 Performs operations planning staff functions in general staff or other coordinating staff	(9) Direct	(14) Supervise	(13) Do not supervise	(12) Do	(11) Assist	(10) Not applicable
0246 Advise superior and others concerning operations planning.						
0247 Prepare operations planning policy directives and SOP.						
0248 Prepare and publish operations estimates and plans.						
0249 Integrate into plans the supporting planning instruments of other staff sections.						
0250 Evaluate plans of subordinate units and take action to deal with deficiencies.						
0251 Prepare studies, reports and correspondence pertaining to operations planning.						
0252 Coordinate operations planning within staff and higher, lower, and supporting organizations.						
0253 Prepare and present operations plans briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical
a. In actual or simulated combat operations and support?					
b. In garrison and other than a?					

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DUTY MODULE O-E-1 Trains troops and/or civilian employees in units and activities		(5)	(4)	(3)	(2)	(1)	(0)
		Direct	Supervise	Do and supervise	Do	Assist	Not applicable
0277	Prepare training schedules in accordance with training programs and directives.						
0273	Prepare lesson plans for training.						
0279	Arrange for training areas, training materials and aids.						
0280	Teach formal classes by lecture.						
0281	Conduct group instruction.						
0282	Conduct demonstrations.						
0283	Conduct individual on-the-job training.						
0284	Conduct practical applicatory team training.						
0285	Manage range firing.						
0286	Conduct physical training.						
0287	Conduct unit operational training exercises.						
0288	Monitor and inspect training.						
0289	Test and evaluate training status and proficiency.						
0290	Post training records, training publications, and submit training reports.						

	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
1. DO MODULE AND TASKS APPLY TO YOUR POSITION:							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:							
a. In actual or simulated combat operation and support?							
b. In garrison and other than a?							
	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

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Date: October 1975

Code: _____

DUTY MODULE 0-E-2 Performs training staff functions	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0291 Advise superior concerning training.						
0292 Formulate training goals and policies.						
0293 Prepare training objectives, programs, SOP, and related ammunition and controlled training aids.						
0294 Determine requirements for and allocate training ammunition and controlled training aids.						
0295 Coordinate use of training areas, ranges, and other training facilities.						
0296 Plan and coordinate training exercises.						
0297 Prepare budget estimates for training and field exercises.						
0298 Disseminate information on current and projected training activities.						
0299 Monitor, inspect, and evaluate training performance and status.						
0300 Plan and coordinate training tests and operational readiness tests.						
0301 Post training records and submit training reports.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

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DUTY MODULE O-F-1 Performs supply operations at consumer unit level	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0309 Prepare supply SOP and directives for unit supply.						
0310 Determine unit requirements and prepare requisitions.						
0311 Arrange for drawing and turn-in of supplies, equipment, and weapons.						
0312 Store, secure, control, and issue unit supplies, equipment, and weapons.						
0313 Prepare unit property and supply records and reports.						
0314 Prepare individual clothing and equipment records.						
0315 Inspect condition and verify quantities of organizational equipment, weapons, and supplies.						
0316 Prepare reports of survey and droppage certifications.						
0317 Process items for repair and salvage.						
0318 Arrange for laundry and dry cleaning services and footwear repair.						

	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
1. DO MODULE AND TASKS APPLY TO YOUR POSITION:							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE:	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-85%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB:	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

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Code:

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DUTY MODULE 0-F-2 Performs supply staff functions	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0319 Advise commander and others concerning supply matters.						
0320 Prepare supply policy directives and SOP.						
0321 Determine supply authorizations, availabilities, and requirements.						
0322 Plan and coordinate establishment and operation of supply, storage, and distribution facilities.						
0323 Issue guidance for and monitor requisition, movement, security, storage, and issue of supplies.						
0324 Allocate controlled supplies.						
0325 Operate a management information system pertaining to supply						
0326 Coordinate supply matters within staff with higher, lower, and supporting organizations.						
0327 Prepare supply portions of logistics annexes to operations plans, and orders.						
0328 Prepare studies, reports and correspondence pertaining to supply.						
0329 Evaluate supply performance and take action to deal with problems.						
0330 Conduct or arrange supply inspections.						
0331 Prepare supply budgetary and cost data.						
0332 Prepare and present supply briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

Date: October 1975

Code:

Identification No. _____

DUTY MODULE O-F-7 Performs general logistics staff functions	(5) Direct	(4) Supervise	(3) Do and supervise	(2) Do	(1) Assist	(0) Not applicable
0380 Advise superior and others concerning logistics.						
0381 Prepare, coordinate and publish logistics policy directives and SOPs, and monitor execution.						
0382 Obtain and analyze information concerning logistics.						
0383 Prepare plans for logistics support units and activities.						
0384 Evaluate logistics activities and security of government property.						
0385 Prepare studies, reports, records and correspondence pertaining to logistics.						
0386 Analyze requirements for and availability of future logistics resources.						
0387 Coordinate activities of staff agencies having logistics support responsibilities.						
0388 Conduct or arrange inspections and tests of logistics activities, and initiate corrective action.						
0389 Prepare and present logistics briefings.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION:	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE.	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

	(5)	(4)	(3)	(2)	(1)	(0)
	Direct	Supervise	Do and supervise	Do	Assist	Not applicable
DUTY MODULE 0-I-1 Performs program and budget staff functions						
0541 Advise superior and others on program and budget matters.						
0542 Interpret, coordinate and disseminate program and budget guidance from higher headquarters.						
0543 Develop plans, policies and procedures to execute command budget activities, including break-out of funds.						
0544 Prepare directives for development and preparation of command operating program and budget and concomitant budget execution review.						
0545 Recommend program and budget priorities.						
0546 Provide authority for use and distribution of funds in execution of budget within prescribed constraints.						
0547 Develop methods for preparation of budget statistics.						
0548 Design procedures and factors for preparation of cost analysis and cost estimates within command.						
0549 Analyze program and budget performance to focus on rates of obligations and expenditures, impact, and trends.						
0550 Recommend fund redistribution to priority activities after budget reviews to achieve optimum fund utilization.						
0551 Prepare budgetary impact statements for submissions to higher headquarters.						
0552 Conduct special studies as a basis for planning, programming and budgetary decisions.						
0553 Prepare and present briefings concerning program and budget matters.						

1. DO MODULE AND TASKS APPLY TO YOUR POSITION.	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

AIR Duty Module Survey Form (Rev 1974)

Date: October 1975

Code:

Identification No. _____

DUTY MODULE D-W-4 Performs unit liaison activities		(5)	(4)	(3)	(2)	(1)	(0)
		Direct	Supervise	Do and supervise	Do	Assist	Not applicable
0862	Provide personal contact between parent headquarters and other organizations.						
0863	Advise visited commander and staff of operational matters in representation of parent unit.						
0864	Keep abreast of requirements, capabilities, operational situation and actions, and progress of both parent and visited units.						
0865	Make reports to parent unit.						
0866	Coordinate and transmit information, operational instruments and instructions among commanders and staffs of parent and visited units.						
0867	Make records of actions, events and reports.						
0868	Prepare and present briefings concerning liaison activities.						

	(0) Not applicable	(1) Little applicability	(2) Several of tasks	(3) Majority of tasks	(4) All of tasks		
1. DO MODULE AND TASKS APPLY TO YOUR POSITION?							
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
2. PERCENT OF TOTAL TIME SPENT ON THIS DUTY MODULE	(0) Not applicable	(1) 1-9%	(2) 10-29%	(3) 30-49%	(4) 50-69%	(5) 70-89%	(6) 90-100%
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							
3. RELATIVE CRITICALITY OF THIS PART (MODULE) TO ENTIRE JOB	(0) Not applicable	(1) Least critical	(2) Average	(3) Critical	(4) The most critical		
a. In actual or simulated combat operations and support?							
b. In garrison and other than a?							

E-2-I-22

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

COMBINED ARMS AND SERVICES STAFF SCHOOL (CAS3)

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

1. PURPOSE: The purpose of this appendix is to describe the mission, functions, program of instruction, selection of students, graduate utilization, resource requirements, and implementation of the Combined Arms and Services Staff School (CAS3).

2. BACKGROUND:

a. The Army selects 40 percent of each year group to attend the resident US Army Command and General Staff College (USACGSC), or its equivalent. After completing the 10-month educational experience, the graduate is normally assigned to high level staff positions or other "priority" assignments.

b. While the USACGSC selectee is receiving education and later serving in high level staff positions the non-selected, or yet to be selected, officer is "running the Army." He is serving on battalion, brigade/DISCOM, division staffs, training center/school staffs, or combat/training development staffs involved in the daily operations, planning, training, and readiness of the Army in the field. This officer's last formal military training, generally the advanced course, did not adequately prepare him for field grade staff assignments. He learns to be a staff officer through on-the-job training, trial and error, and self study. This "learn when you can" preparation for approximately 60 percent of all field grade officers is not adequate to meet the needs of a technologically complex Army.

c. The United States Army saw the need to prepare large numbers of staff officers during World War II. By 1944, USACGSC was graduating 5,000 officers annually to meet Army requirements in both theaters. This output of officers with "basic general staff training" was achieved by conducting a total of 34 General Staff and Service Staff classes of 9 weeks each between December 1940 and October 1945. Gradual mobilization and geography allowed the Army to meet its requirements for trained staff officers once the Allies took the initiative.

d. The Army cannot expect to have the time for such preparation in the 1980's and 1990's. We must develop and maintain a corps of trained, effective staff officers to meet the Army's requirements in peace and war. This can be accomplished in a small peacetime force only by providing staff training for all field grade officers with subsequent service in staff assignments. Staff training, for those not selected to attend USACGSC, should be provided in a Combined Arms and Services Staff School (CAS³). To achieve maximum benefit from a short, intensive staff school the officer must acquire certain basic skills and knowledge prior to attendance. This can be achieved by participation in a nonresident (NRI) course and successful completion of a common basic staff skills examination. Successful completion of the NRI course and the examination are also prerequisites for consideration for selection to USACGSC.

3. MISSION: The mission of the Combined Arms and Services Staff School (CAS³) is to train all majors of the Active and Reserve Components for service as field grade staff officers with the Army in the field, in peace or war.

4. FUNCTIONS (train officers to):

a. Prepare battalion and brigade level estimates, plans, orders, analyses, directives, integrating organic and divisional combined arms and services.

b. Prepare training programs for individuals and units and supervise implementation.

c. Manage efficiently the resources of manpower, equipment, money and time.

5. PROGRAM:

a. General - CAS³ is a three phase program; nonresident pre-CAS³ instruction (NRI), qualification, and resident course. The NRI course and examination must be completed prior to consideration for attendance at CAS³ or USACGSC. Allied officers must complete the NRI course and examination prior to attending CAS³. The CAS³ resident course is also available in a nonresident mode.

b. Pre-CAS³ Course — The nonresident pre-CAS³ course is a 120-hour course designed to bring all officers to a common level of understanding of basic organizations, functions, doctrine and techniques (see Incl 1 for notional COI).

c. Examination — Upon completion of the nonresident course, the officer must successfully pass a proctored examination. This 6-hour examination will test the student's knowledge of the common basic professional subjects covered in the pre-CAS³ nonresident course. This is a "go-no-go" examination only.

d. CAS³ resident — The CAS³ resident course is an intensive 9-week (297 hour) TDY course designed to prepare the student to perform as a field grade staff officer at battalion, brigade, and division level, and with on-the-job training, at corps and higher levels. The student applies his experience and knowledge in group learning seminars, map exercises and computer assisted wargames. The officer learns and applies unit-level tactical doctrine, retail logistics, interoperability, training management, and effective oral and written communications. (See Incl 2 for notional COI). The resident course will be conducted at Fort Leavenworth 4 times per year, with 500 Active Army, 72 Reserve Component officers and a maximum of 13 Allied officers per course.

e. CAS³ nonresident — The CAS³ nonresident course imparts the same skills as the resident course. The course will be approximately 300 hours. There will be no Leavenworth resident portion of this course.

6. SELECTION:

a. All active duty officers, except those selected to attend the Command and General Staff College, must complete the resident CAS³ course. Medical and Dental Corps officers will attend CAS³ or USACGSC as determined by The Surgeon General.

b. The active duty officer can apply for enrollment in the pre-CAS³ NRI course after promotion to captain. He must complete the NRI course and the examination prior to beginning the 11th year of service. After selection for promotion to the rank of major, the officer is selected for attendance at either the Command and General Staff College or CAS³. The JAS³ selectee will attend the resident course in a TDY status.

c. After completing the pre-CAS³ NRI course and the examination, the Reserve Component officer will be selected to attend either the Command and General Staff College, the resident CAS³ course, or the nonresident CAS³ course.

7. GRADUATE UTILIZATION: The CAS³ student will attend in a TDY status and return to his unit. Subsequent assignments to higher level command and staff positions are based on Army requirements

by grade and by specialty. CAS³ graduates will compete for these positions based on duty performance, potential, and specialty qualification.

8. RESOURCES REQUIRED:

a. Additional faculty required for CAS³ is 153 authors and instructors (Incl 3). During implementation of CAS³, the authors and instructors will be assigned to a CAS³ implementation group (para 9 below). Upon implementation of CAS³, they will be integrated into existing USACGSC instructional departments.

b. Annual CAS³ OMA mission costs are \$413,000. (Incl 4 para 3c).

c. Annual CAS³ OMA BASOPS costs are \$2,400,700. (Incl 4 para 3c).

9. IMPLEMENTATION PLAN:

a. The present USACGSC faculty must continue to concentrate their efforts on the conduct and improvement of USACGSC. These same people can not adequately develop and implement CAS³, therefore a separate CAS³ faculty must be assigned to USACAC for the sole purpose of planning, programming, preparation, coordination, and implementation of CAS³. For a phase-in of CAS³ commencing in 2d quarter, FY 81, and full implementation of CAS³ in 3d quarter, FY 85 the following timetable of personnel assignments to CAS³ must be followed.

(1) The CAS³ director (O6 with brigade command and division staff experience) must be assigned during 3d quarter, FY 79 with a minimum of a 5-year stabilized tour. The director; with 10 author/instructors, 2 enlisted personnel, and 5 civilians, must design CAS³, prepare facilities and budgets, develop and supervise study contracts, and prepare CAS³ instructional programs.

(2) The full complement of CAS³ faculty (152 officers, 2 IM) and the additional civilians required in various USACAC agencies must be assigned in the following increments:

<u>TIMEFRAME NLT</u>	<u>OFFICERS</u>	<u>CIVILIANS</u>
para 9 a above	11	5
3d quarter, FY 80	14	10
3d quarter, FY 81	5	15
3d quarter, FY 82	12	10
3d quarter, FY 83	<u>111</u>	<u>21</u>
TOTAL	153	61

b. A new wing on Bell Hall must be completed by March 1986. Cost of construction is \$3,001,763 (Incl 5).

c. Total one-time costs of implementation (including construction costs) are \$3,321,407 (Incl 4, para 3d).

10. SUMMARY: To meet future Army requirements, the education and training system must insure the development of a corps of trained active duty and Reserve Component staff officers. The Combined Arms and Services Staff School (CAS³) allows the Army to train 100 percent of its active duty field grade officers and a higher percentage of Reserve Component officers. Proposed resource commitments to staff training for all career officers will significantly increase total force readiness.

11. RECOMMENDATIONS:

a. That a Combined Arms and Services Staff School (CAS³) be established at Fort Leavenworth, Kansas to train all majors of the Active and Reserve Components for service as field grade staff officers with the Army in the field.

b. That a three phase CAS³ program be developed; a nonresident pre-CAS³ course of approximately 120 hours, a 6-hour nonresident examination, and a 9-week resident (or equivalent nonresident) CAS³ course. The resident course must be designed to accommodate at least 600 students per course to allow for expansion. The course will be conducted four times annually with 500 active duty, 72 Reserve Component officers, and a maximum of 13 Allied officers per course. The resident course must be developed in a nonresident package for Reserve Component officers who do not attend the resident course.

c. That Department of the Army policy is established requiring:

(1) All officers to complete the nonresident pre-CAS³ course and examination prior to selection for promotion to major and subsequent attendance at USACGSC or CAS³.

(2) That all active duty officers not selected to attend the U.S. Army Command and General Staff College will attend the resident CAS³ course in a TDY and return basis prior to the end of the 12th year of service.

(3) That CAS³ graduates will be considered for all duty positions, to include command and high level staff, commensurate with grade, experience, specialty qualification, and that they be considered for attendance at a senior service college.

NOTIONAL PRE-USACGSC/CAS3 NRI COI

<u>SUBJECT</u>	<u>HOURS</u>
<u>Organization of the Army in the Field</u> (Introduction) Includes structure, CSS concept actual "in being" units, Reforger and Round-out concepts, Reserve Components.	20
<u>Functioning of the "G" and "S" Staffs</u> (Introduction) Who, what, who does what to whom, responsibilities, limitations.	30
<u>Introduction to Threat</u> Echelonment, Tactics	10
<u>Introduction to Tactics</u> FM 100-5, 71-1, 71-2	20
<u>Introduction to Logistics</u>	10
<u>Introduction to Battlefield Calculus</u> Introduction to wargame language and techniques; combat power calculations, kill/loss probabilities, reading battle.	20
<u>Case Study</u> Battle of Schmidt, Duffer's Drift	10
TOTAL	120

NOTIONAL CAS³ COI

<u>SUBJECT</u>	<u>HOURS</u>
<u>Tactical Scenario</u> (Thought: Forward deployed division; European setting; initial situation of round out unit (+) activated because of heightened tensions for deployment; Time Phased Force Deployment List (TPFDL); integrated CSS aspects; initial defensive problem with subsequent offense; play of battalion/brigade with USAF and fire support (FS); simulation play; interoperability.)	100
<u>Commander and Staff</u> (Thought: Assume basic knowledge of staff duties by pre-CAS ³ NRI; quick review of individual players, possibly by role-playing; simple staff coordination exercise to result in a staff estimate/recommendation; tactical contingency planning; introduction of fire support planning, including FA, ADA, USAF; role of Engineer and Signal; introduction to NBC/EW principles; JAYHAWK-type problem; CAMMS/CATTS; introduction to THREAT; evaluation of writing/briefing integrated.)	68
Professional Ethics	6
Training Management	15
Logistics Management	12
Management - Quantitative Concepts/JOPS-POM	24
Reserve Components	6
Personnel Management	3
Military Law	9
Group Dynamics	6
Organizational Effectiveness	<u>12</u>
Total Instructional Hours	261
Inprocess, Outprocess, Graduation	18
Guest Speakers	<u>18</u>
Total CAS ³ COI Hours	297

NOTE: No examinations scheduled. Each training module has its own qualifying standards. Each student will achieve the standards, with remedial training if necessary.

CAS³ FACULTY REQUIREMENTS

Four iterations X 565 per class

Thirteen sections X 45 per section

Thirteen classrooms

	<u>Academic Hours</u>	<u>MOI</u>	<u>Instructor Contact Hours</u>
Tactical Scenario	100	80WG 20Sim	4,160 2,080
Commander and Staff	74	14Sec 50WG 10Sim	182 2,600 1,040
Group Dynamics	6	WG	312
Professional Ethics Seminar	6	WG	312
Training Management	15	WG	780
Management	30	10Sec 20WG	130 1,040
Reserve Components	6	Sec	78
Personnel Management	3	Sec	39
Military Law	9	Sec	117
Organizational Effectiveness	<u>12</u>	WG	<u>624</u>
TOTAL	261		13,494
Total Instructor Contact Hours (13,494 X 4)		=	53,976
Total Instructors (53,976 ÷ 400 contact hours per instructor per year)		=	135
Total CAS ³ Authors =			18
			<hr/>
TOTAL CAS ³ AUTHOR/INSTRUCTORS			153

COST IMPLICATIONS

1. The purpose of this inclosure is to compare current AFSC and Leavenworth costs with CAS³/USACGSC recommendation. Where revised staffing costs can be attributed to either CAS³ or USACGSC they are separated.

2. Army costs connected with AFSC are as follows:

- a. PCS Moves (4 X 85) = 340 annual PCS moves.
- b. Two classes X 85 students X 22 weeks = 78 man/years THS.
- c. Staff and Faculty = 25 officers, 12 enlisted.

3. The following are CAS³/USACGSC costs:

a. Manpower (CAS³/USACGSC)

CAS³/USACGSC Staffing Requirements

	<u>Current*</u>	<u>CAS³ A/I</u>	<u>USACGSC A/I</u>	<u>Overhead</u>	<u>Total</u>	<u>+/-</u>
Officer	240	153	151	92	396	+156
EM	59	0	4	45	49	- 10
Civilian	219	0	0	225**	225	+ 6

* TDA 0378(P) Requirements - best factual data to operate USACGSC Not yet approved by TRADOC. Same factors were used to determine CAS³/USACGSC requirements.

** Does not include 55 additional civilian spaces for BASOPS costed in paragraph 3c below.

b. OMA Mission. Current: \$3,041,700

Revised Staffing

CAS³/USACGSC Additional Costs

CAS³ Extension Course:

Civilian positions, 16 \$193,600

Supplies and transportation 27,000

Faculty support costs 71,500

CAS³ Resident Course:

Civilian spaces, 10 121,000

Total \$413,100

c. OMA Base Operations (Direct Funding). Current: \$18,345,200

Agency

Additional Costs
CAS³/USACGSC

Total

Security Division:

Civilian space, 1 \$10,000 \$10,000

TASO:

Civilian spaces, 5 \$91,000

Supplies 20,000 \$111,000

Print Plant:

Civilian space, 1 \$16,000

Commercial printing 1,652,900

Supplies 93,350 \$1,762,250

DIO:

Civilian spaces, 20 \$334,150 \$334,150

Housing:

Housing reimbursement \$100,000

Utilities 50,000

Civilian spaces, 2 33,370 \$183,370

Total Additional Costs \$2,400,770

d. One Time Costs:

<u>Item</u>	<u>Cost</u>
TASO supplies	\$60,000
Bus, 44-passenger, 2 each	53,300
DIO storage (1500 sq. ft.)	8,000
BOQ furniture	194,844
BOQ washers and dryers	3,500
Bell Hall wing construction (6 classrooms, 40 officers, 1 small auditorium)	<u>3,001,763</u>
Total One Time Costs	<u>\$3,321,407</u>

4. Cost savings realized are:

- a. AFSC costs (see para 2 above).
- b. USACGSC PCS moves (2 X 400) = 800 annual moves
- c. USACGSC students (400 X 42 weeks) = 350 man/years THS

5. CAS³ student costs added are:

- a. TDY trips annually (travel) = 2288.
- b. TDY man years (2288 X 9 ÷ 48) = 429.

NOTES:

1. TASO Spaces must be filled 2 years before first CAS³ class starts.
2. No final decision should be made prior to completion of an environmental assessment.
3. Four hundred and sixty-four fewer grade school children (22 percent) may necessitate closing one on-post school.
4. There is an even greater requirement for the fieldhouse programmed for FY 81. Gruber and Flint Halls will be freed up for CAC utilization as offices/classrooms.

BUILDING SUPPORT - NEW WING

Six more standard size USACGSC classrooms

Forty more standard size offices

One conference/auditorium facility for 300

Classrooms 6 X 3,024 sq ft	=	18,144 sq ft
Offices 40 X 221 sq ft	=	8,840 sq ft
Conference/Auditorium 1 X 3,600 sq ft	=	3,600 sq ft
Plus hall factor	=	<u>X 1.2</u>
		36,700 sq ft
Standard Cost per sq ft	=	\$ 41.00
Plus air conditioning	=	<u>2.25</u>
Total Cost per sq ft	=	\$ 43.25
Building Costs	=	\$ 1,587,275.00
plus Site preparation	=	100,000.00
plus Utility hook-ups	=	250,000.00
TOTAL: (1978 DOLLARS)	=	\$ 1,937,275.00
X Inflation factors, 1983 COSTS	=	\$ 2,641,763.00
Plus Furnishing Costs	=	<u>360,000.00</u>
TOTAL COST OF NEW WING	=	\$3,001,763.00

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 4

COMMAND AND GENERAL STAFF COLLEGE

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

1. PURPOSE. The purpose of this appendix is to describe the mission, functions, program of instruction, selection of students, graduate utilization, and expansion contingencies of the U.S. Army Command and General Staff College (USACGSC).

2. ASSUMPTIONS. The appendix is based on six assumptions:

a. The number of active duty officers selected annually for promotion to major will be approximately 2,700 including OPMD, AMEDD, JAGC, and Chaplaincy. For the Reserve Components, that number will be approximately 5,400.

b. Selection for USACGSC will be geared to selection for promotion to major, i.e., selection for promotion to major triggers consideration for selection to attend the resident USACGSC course.

c. Students will represent the top files of the eligible year group(s) and include representation from all OPMS specialties, professional branches (AMEDD, JAGC, Chaplaincy), and the Reserve Components. Allied and US sister Services participation will continue.

d. All OPMD officers will have been assigned their alternate specialty and should have had some formal training and/or one tour of duty in their alternate specialty.

e. DA will implement the RETO recommendation for a 9-week TDY Combined Arms and Services Staff School (CAS³) which virtually all officers will attend shortly after selection to major. Additionally, the Army will continue to train officers against valid requirements for field grade officer development specialty-relevant TDY courses, graduate civilian education, and language training in preparation for specific Army billets.

f. Reserve Component officers will be provided increased resident and nonresident field grade officer development training and education opportunities to meet Total Force readiness requirements.

3. BACKGROUND.

a. The Command and General Staff College is one of America's oldest military institutions. It is located at Fort Leavenworth, Kansas, "the oldest post established by the United States west of the Mississippi which is still in existence." It began as the School of Application for Infantry and Cavalry in May 1881 at the direction of the Commanding General of the Army, General William T. Sherman. Mindful of the continuous evolution of our profession, General Sherman placed the school under the direction of a commandant rather than "an entrenched bureaucratic body that might be overly resistant to change."

b. And much has changed at Fort Leavenworth since the first class assembled in 1882. There have been physical changes as one might expect. The name of the school has changed seven times. Army units have come and gone. Principal course lengths have varied from 9 weeks to 2 years and the size of the student body has ranged from a handful to nearly 1,500 in a given class. Curriculum has constantly been molded to keep pace with new technology, doctrine, strategy, tactics, logistics, and the requisites of efficacy and economy brought about by wartime urgencies and peacetime priorities.

c. Over the past 30 years, major philosophical debates have centered on 3 main areas -- the balance of education and training, the notion of the field grade officer as generalist and/or specialist, and the scope of instruction and its center of gravity. In fact, notes one thoughtful observer on the impact of change at USACGSC, "the nature of these changes are important not only to Fort Leavenworth, but to the entire Army." It has been so from the beginning, and as he notes "the one unvarying constant, perhaps, has been the demand for and pursuit of excellence." The crucial nature of the curricula and the value of the experience have brought consistent praise from Leavenworth's distinguished graduates -- Pershing, Marshall, Eisenhower -- as well as national and foreign leaders. "Surely," observed a recent commandant, "Leavenworth is at the heart and soul of the Army."

d. The Command and General Staff College must continue to educate and train career officers:

(1) Who are imaginative, creative, reflective, and effective communicators.

(2) Who take pride in their professional curiosity and active intelligence.

(3) Who possess the professional technical competence to be successful commanders and general staff officers in peace and war.

(4) Who exude trust and confidence in their commitment to public service, self-improvement, sacrifice, and the morale courage to stand their ground for what is ethically right.

4. RECOMMENDATIONS. The recommendations which follow are not a break with the past; rather, they are part of a continuing "tradition in transition." The name of the Command and General Staff College does not change. No existing agencies move from Fort Leavenworth. The current 42-week length of USACGSC remains constant. This paper recommends against continued Army participation at the Armed Forces Staff College, on a PCS basis, while providing the option of continuing to send students to TDY functional courses in preparation for joint assignments. The number of Reserve Component officers who will have the opportunity for resident training and education annually at Leavenworth is increased by 50 percent (from 195 to 288 in CAS³ and from 4 to 14 in the 42-week USACGSC), while continuing the nonresident option. A reduction from 850 to 450 Active Army officers who will attend USACGSC annually is urged because it more closely parallels Army requirements and so that resources will be available for all majors to receive resident staff officer training at CAS³. Annual enrollment of Allied officers is reduced from 94 to 56, or one per USACGSC workgroup. Nonresident options are provided. Training and education at sister service staff colleges and foreign staff colleges remains. Cost comparisons are found in Inclosure 4 to Appendix 3 (CAS³), this Annex.

5. CURRENT USACGSC PROGRAM.

a. The mission of the Command and General Staff College is to provide instruction for officers of the Active and Reserve Components, worldwide, so as to prepare them for duty as field grade commanders and principal staff officers at brigade and higher echelons.

b. The USACGSC is a 10-month course (42 academic weeks) conducted once annually at Fort Leavenworth. Approximately 40 percent of the active duty Army officer corps is nominated for this resident instruction by a central selection board.

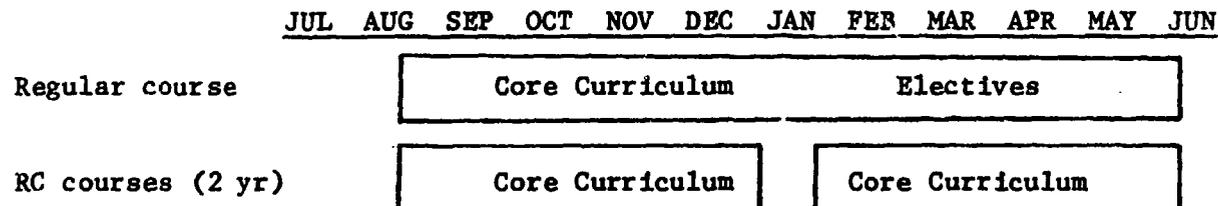
c. The student population for the regular course has been:

	<u>AY 1975-76</u>	<u>AY 1976-77</u>	<u>AY 1977-78</u>	<u>AY 1978-79 (Est)</u>
U.S. Army*	980	859	850	716
U.S. Air Force	14	40	40	40
U.S. Marine Corps	10	10	10	10
U.S. Navy	4	3	3	3
Allied Officers	94	93	94	94
	<u>1,102</u>	<u>1,005</u>	<u>997</u>	<u>863</u>

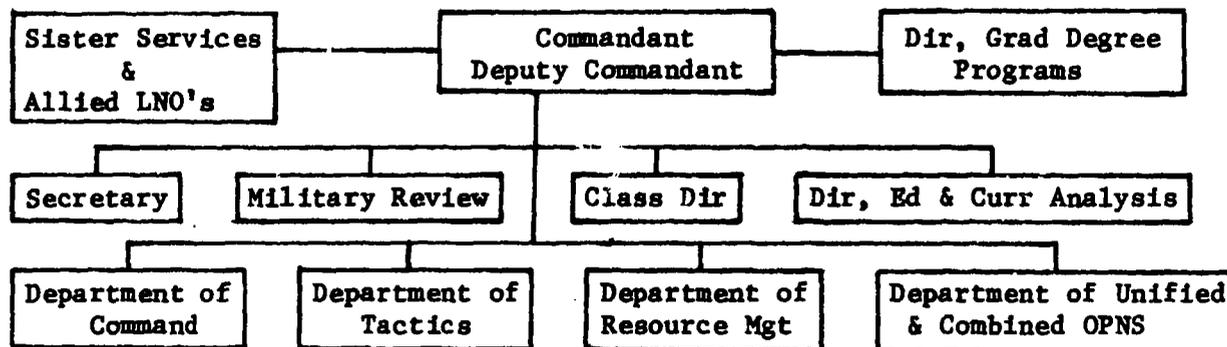
*Including Army Reserve Component participation (4 officers in AY 1977-78).

d. Two Reserve Component (RC) courses (18 weeks each - TDY) are conducted yearly, one starting in August and the second in January. Courses have been attended by approximately 170 students annually since 1975. These students receive the core curriculum of the regular USACGSC course. An RC officer must complete 50 percent of USACGSC to be eligible for promotion to lieutenant colonel and be a graduate (either resident or nonresident) to be promoted to colonel and gain federal recognition, as a lieutenant colonel.

e. Graphic Portrayal.



f. The College is organized along Interservice Procedures for Instructional Systems Design (ISD Model 76), somewhat modified. Current organization is as follows:



g. Curriculum.

For the coming academic year (AY 1978-79) there will be 203 academic days, during which USACGSC will conduct its Professional Development Courses (PDC-core curriculum), Advanced Professional Development Courses (APDC-electives program), Special Study Projects (SSP-individual or group projects), and Independent Student Research (ISR). The hours are allocated as follows:*

	<u>AY 1977-78</u>	<u>AY 1978-79</u>	<u>Change</u>
Accountable hours	1,624	1,624	0
PDC hours	736	765	+29
APDC hours	231	180	-51
SSP hours	33	30	- 3
Guest Speaker hours**	40	59	+19
Physical Training	160	164	+ 4
ISR and contingency hours	389	392	+ 3
Admin and Pre-Eval, Orient & Grad	<u>35</u>	<u>34</u>	<u>- 1</u>
Total Academic POI hrs (PDC + APDC + SSP + Guest Speakers)	<u>1,040</u>	<u>1,034</u>	<u>- 6</u>

*Source: USACGSC "Revised Planning Guidance, Regular Course, AY 1978-79, dtd 20 Jan 78.

**Planning number; not actual.

h. The following courses are offered:

Professional Development Courses (PDC)

Operation Jayhawk	Tactical Cmd & Control
Soviet Tactics	Nuclear, Biological & Chemical
Computer Terminal opns	Electronic Warfare
Management & Force Development	Staff Officer Techniques
Combined Arms Fundamentals	Logistics Readiness
Offensive opns	Logistics Prospectives
Defensive opns	Nat'l Security Decisionmaking
Forward Deployed Force opns	Pacific Assessment
Contingency Force opns	American Assessment
Fundamentals of CSS	NATO Planning & opns
Intro to Strategy	Theatre opns - Coalition War
Strategic Environment	North American Air Defense Command
USSR & PRC	Personnel Mgt & Systems
US Policy, Posture & Issues	Organizational Effectiveness
Evolution of US Mil Posture	Chain of command

Low Intensity Conflict
Writing Skills
Reserve Components
Training Mgt

Military History
Military Ethics
Background of the American Soldier

Advanced Professional Development Course (APDC)

<u>Major Category</u>	<u>No. of Electives</u>	<u>Expected No. Sections AY 1978-79</u>
Staff Operations	6	18
Management	9	26
Tactics	11	30
Combat Service Support	4	18
Military Strategy	9	26
Military History	8	12
Joint OPNS & Low Intensity Conflict	9	16
Sister Services	7	14
Profession of Arms (Includes writing)	9	34
Other (Research, Instructional Technology & Language Tng)	5	12

Additionally, more than 20 university contract courses (electives) are offered in support of the APDC program by five local colleges and universities. All courses award three semester hours of graduate credit.

j. Cooperative degree programs are available for students who do not hold advanced degrees. Participation requires MILPERCEN approval and the degree pursued must satisfy the educational requirements of one of the officer's OPMS specialties or an AERB validated discipline. Students take two or three university contract electives during the USACGSC school year and then complete the degree requirements with up to a 6-month period of full-time attendance at a civilian college immediately following USACGSC graduation. Approximately 96 students participate yearly.

j. The Master of Military Art and Science (MMAS) degree program is unique to USACGSC. Legislation enacted by the 93d Congress in July, 1974 authorized the degree and Leavenworth received full accreditation as a master's degree-granting institution by the North Central Association of Colleges and Schools in March, 1976. Admission to the program is by application only and limited to US students of the Regular Course. Once a student is selected he/she must maintain a "B" average, submit an acceptable thesis, and pass a comprehensive exam near the end of the academic year. Forty-two students were awarded the MMAS in June, 1977.

k. The nonresident program leading to USACGSC certification is offered in two modes. Study is based on the PDC curriculum in the Regular Course. The course can be completed by correspondence or by attending instruction presented in 90 USAR schools worldwide. Transfer between options is permitted. There is currently no Leavenworth resident phase offered for either option. The following chart indicated current (Feb 78) enrollment:*

	<u>USAR</u>	<u>ARNG</u>	<u>ACTIVE ARMY</u>	<u>SISTER SERVICES</u>	<u>ALLIED</u>
Correspondence Course	2,561	1,140	2,415	53	163
USAR Schools	<u>3,800</u>	<u>1,788</u>	<u>1,795</u>	<u>50</u>	<u>15</u>
SUB TOTALS	6,361	2,928	4,210	103	178

TOTAL: 13,780

The following is a summary of recent graduates by service component:

<u>YEAR</u>	<u>USAR</u>	<u>ARNG</u>	<u>ACTIVE ARMY</u>	<u>SISTER SERVICES</u>	<u>TOTALS</u>
1974	1,242	492	450	7	2,191
1975	970	476	522	8	1,976
1976	1,076	505	600	8	2,189

*Source. Department of Nonresident Instruction, USACGSC, February 1978.

1. Faculty.

Currently there are 147 members of the USACGSC faculty. Almost all military faculty members are graduates of a mid-level staff college. The bulk of the faculty are majors or lieutenant colonels, that is "near-peer" instructors. The normal teaching tour is three years. Roughly one-third of the teaching faculty changes annually. This is true of the staff and command group as well. There are no tenured positions on the staff or faculty. Officers are assigned to the Fort Leavenworth Combined Arms Center (CAC) and then reassigned to the Combined Arms Combat Development Agency (CACDA), Combined Arms Training Development Activity (CATRADA), or USACGSC based on mission requirements, expertise, and individual desires. There is virtually no Army-wide faculty recruitment program at USACGSC.

Over the past four years the number of teaching faculty members has been approximately halved due to TRADOC-wide reduced manning levels. The teaching faculty, however, have retained the responsibility for lesson design, development, presentation, and evaluation in a POI that has remained constant in hours and to a student body

that has only been reduced by about 15 percent. Meanwhile, USACAC has been given an increased number of important doctrinal and combat development tasks further stretching already scarce assets at Leavenworth.

There are several teaching methods used at USACGSC including lectures, lecture-conference, self-paced, group-paced, instructor-led small group instruction does not exceed 25 percent of the curriculum hours. Class size during the PDC phase is normally 50 students and electives are usually not offered unless a minimum enrollment of 20 students can be obtained.

In short, the college reorganization (as part of a broader USACAC plan) has resulted from an increase in tasks given to the USACAC at a time when training base reductions were already widening the student-faculty ratio. This has threatened continuation of the high quality educational experience that led to the outstanding reputation that USACGSC has properly enjoyed for decades. The distinguished civilian educators who comprise the USACGSC "Advisory Committee" visited the College in January 1978. In their report they praised the "talent, experience, and purposefulness" of the faculty and student body. Further they noted a "clear concern for good teaching and good lesson design." But in their observation on the "importance of faculty" they cautioned as follows:

"In the judgment of the committee, it appears that The College's approach to education reflects an almost obsessive concern with system, methodology, and classroom geography. It should be remembered that the quality of the faculty remains the most crucial variable in any school program. Indeed, it is faculty quality that is the real essence of greatness in any educational institution."

6. ARMED FORCES STAFF COLLEGE (AFSC)

a. Mission.

"The mission of the AFSC is to conduct a course of study in joint and combined organizations and operational planning, to include the supporting organizations and operations of the U.S. Military Services, to enhance the preparation of selected military officers for duty in joint and combined operations and planning in higher echelons of the Department of Defense and international military organizations."

b. The AFSC is a 22-week PCS course for officers of all services conducted at Norfolk, Virginia. The course is conducted twice annually beginning in August and January. Army students are centrally selected and receive equivalent credit with USACGSC graduates. A typical annual student population is:

<u>COMPONENT</u>	<u>NUMBER</u>
Army	175
Air Force	175
Navy	96
Marine Corps	36
Coast Guard	4
Civilian	32
Allied	<u>22</u>
	540

c. The curriculum is as follows:

Admin and Orientation	10 hours
U.S. Military Forces	95 hours
Environment and Strategy	42 hours
Defense Management	47 hours
Orgn & Cmd Relationships	36 hours
U.S. Joint Planning Process	241 hours
Communicative Arts	54 hours
Special Program and Graduation	<u>22 hours</u>
TOTAL	547 hours

d. There are 25 Army officers and 12 enlisted on this joint staff and the normal teaching method is small group (12-16) seminar. The faculty are all graduates of a mid-level staff college and most hold advanced degrees and have joint staff experience. There are no tenured positions and the normal tour is three years.

e. There is widespread agreement that what is taught at AFSC is well designed, delivered, and received. But is it truly equivalent with USACGSC in meeting the long range needs of its Army officer students or does it have a more specific short-term functional application to the joint arena and the JOPS? The absence of the logistics, tactics, and Army-specific leadership and management courses found in the USACGSC core and elective curriculum leaves little doubt that the courses are not equivalent for Army graduates. The proper role for AFSC, in light of the continuing requirements for JOPS trained Army officers would be to train CAS³ and USACGSC graduates who are on orders to joint billets. This is best accomplished by conducting short TDY resident courses and making NRI packages available.

7. PROPOSED USACGSC PROGRAM.

a. Mission. The mission of the Command and General Staff College is to educate and train selected majors of the Active Army and Reserve Components for service as field grade commanders and staff officers within the Defense Establishment, at all levels of command, in peace and war.

b. Functions. (Educate and Train Officers to):

(1) Prepare clear and concise estimates, plans, orders, analyses and directives, both oral and written.

(2) Prepare training programs for individuals and units and supervise their implementation.

(3) Manage efficiently the resources of manpower, equipment, money and time.

(4) Participate in the development of forces and doctrine to employ modern weapons systems in the conduct of combined arms, joint, combined and special operations.

(5) Understand the capabilities and limitations of military forces, their relationship in the national and international environment, and the tactics and strategies that have historically governed and continue to govern their employment.

(6) Commit themselves, and the skills and knowledge which they have attained, to continued professional development, public service, and the enrichment of military art and sciences.

(7) Communicate effectively.

c. The USACGSC course would continue to be a 10-month course (42 academic weeks) conducted once annually at Fort Leavenworth, Kansas. Approximately 20 percent of the Active Army officer corps would be nominated for resident instruction by a central selection board. This selection board could meet immediately after the "majors board" placing officers at USACGSC between their 10th-12th year of service. Approximately 525 officers would be selected annually to attend USACGSC, sister Service staff colleges, and foreign staff colleges. They would represent the top files in their year group(s) and include all OFMS specialties, AMEDD, JAGC, and Chaplain. A typical class at USACGSC would consist of approximately the following mix:

US Army	450
Sister Services	54
Allied	56
Reserve Components	<u>14</u>
TOTAL	574

d. The selection process would be the result of a careful system of determining what number of officers, in each specialty, require finely honed higher order staff skills to perform in the most demanding field grade positions.

A methodology was developed using the procedure outlined in Inclosure 1, "Determining Education Requirements for Field Grade Officer Development." The result of the application of this methodology indicated that approximately 20 percent of a given year group required extended education at USACGSC to sustain the necessary pool of officers. A more finite application to validate percentages by specialty will be possible as TRADOC completes the front-end analysis due to begin in FY 78.

e. Graduates would not be trained to fill specific positions since only a few require 100 percent of the higher order staff modules. We suggest instead that distribution be made by major command (see para 7, Inclosure 1). In the case of officers who will be directed to joint staff billets, they would be identified before the electives program begins, allowing them to tailor their program to acquire additional joint skills needed. While it is believed that USACGSC and CAS³ graduates can fill most majors' billets in the joint arena, it may be necessary for other reasons to retain Army input to AFSC. If this option is selected, AFSC students would attend the Combined Arms & Services Staff School (CAS³ - see para 2e) before going to Norfolk. AFSC courses should be re-oriented on short, job-specific, TDY, developmental courses for majors, lieutenant colonels and equivalent sister Services/civilian ranks enroute to designated joint staff positions. The Army currently sends officers to comparable training such as the Logistics Executive Development Course and the Program Management Course.

f. Allied officer enrollment would be reduced from 94 to 56. This will allow assignment of one Allied officer to each USACGSC work group. For the USACGSC Allied Officer student the pre-CAS³ NRI course and examination will be included in the Program of Instruction (POI) of the Allied Preparatory Course.

g. The two Reserve Component classes, currently allocated 195 students annually (18 weeks TDY), would be replaced by the allocation of 288 spaces in CAS³. While this represents a 5-week reduc-

tion in POI, it offers more opportunities (50 percent) for Reserve Component officers to attend resident training at Fort Leavenworth. The number of USACGSC allocations would be increased from 4 to 14. USACGSC would also continue to offer the following courses:

- Battle Captains Course
- Combat Division Refresher
- Separate Brigade Refresher
- USAR Instructor Orientation Course
- Allied Prep Course
- Bn Cmd Group (CATTs)
- Pre-Air Cmd & Staff College

h. Curriculum. The purpose of USACGSC would remain essentially the same. The core curriculum could be intensified and deepened thereby taking advantage of the 4-week (120 hour) NRI prep course and a more highly selected student body. There would be little change in POI hours. The MMAS and Coop Degree Programs would continue. More emphasis would be given to the following:

- Communicative Skills
- Training Management
- Joint, Unified and Combined Opns
- Coalition War
- High Level Staff Opns
- Force Development

The elective program (APDC) would be broadened to offer more:

- Personnel Management
- Human Skills
- Training Developments
- R & D
- Material Acquisition
- Financial Management
- Combat/Doctrine Development
- Maintenance and Supply Management
- Languages
- Contingency Planning

1. Nonresident Program (NRI): The USACGSC nonresident program would be substantially altered. A complete NRI program would be offered for CAS³. The USACGSC NRI course would be modeled after the one currently sponsored by the AWC. Officers not selected for resident USACGSC would be eligible to apply to a central selection board once they have completed CAS³. Four-hundred spaces (200 Active/200 RC) would be allocated annually. Students would have two years to complete the NRI subcourses. A 2-week resident phase

would be conducted each year. Four resident phases would be held annually. The curriculum would follow the USACGSC PDC courses and be approximately 400 hours. USACGSC equivalent credit would be given.

j. Faculty: The critical ingredient at USACGSC is the teaching faculty. No educational system, in the absence of good teachers, can insure a quality product. No student body can fully educate itself. Peer learning can reinforce, not replace, expert teaching. Not even an expertly designed course of instruction can overcome the absence of high quality faculty in sufficient numbers to create a favorable learning environment.

Moreover, institutional necessity is the first determinant of resource allocation. USACGSC, under either the current system or changed as we suggest, plays the pivotal role in career officer education. The experience, maturity, and service commitment brought to the USACGSC classroom by the student body, coupled with the awesome responsibilities required of USACGSC graduates, compels an institutional commitment to the thorough education of the officer student.

Of course, all Army jobs are important. Thus the Army-wide competition for qualified officers is keen. But Army leadership, management, program development and direction, force readiness, —the day-to-day efforts of career officers— are all dependent on the ability of officers to think clearly, reason soundly, make skilled professional decisions, and communicate effectively within and outside the institution. The purpose of CAS³ and USACGSC is to aid officers in gaining those skills. Without them the Army cannot do its job. The role of the Leavenworth faculty is crucial.

With these thoughts in mind the Army must insure:

(1) The timely selection, preparation, assignment, and proper utilization of subject matter experts (teachers of tactics, logistics, management, staff operation, leadership, military history, and strategy) for the Leavenworth faculty.

(2) Sufficient numbers to allow the best teaching method for each element of curriculum. Our proposal suggests that about half the instruction should take place in small group, instructor-led seminars.

(3) Stability to allow for continuity and faculty development. A program for a limited number of extended and tenured faculty is needed. Three such proposals have been made since 1968.

(4) A system of incentives to encourage officers (in all specialties required) who leave the "mainstream" to teach their profession.

In short, the Army has to recognize that career officers like Clausewitz, Jomini, Frunze, Foch, Fortesque, and Mahan wrote while members of a faculty. Their armies and navies were better for their efforts. It requires a commitment to excellence in education.

8. EXPANSION: Appendix 5 addresses expansion implications at Fort Leavenworth for both CAS³ and USACGSC. In short, under a gradual force growth, USACGSC could increase its student body with existing resources to a maximum of 726. Should force requirements necessitate larger numbers of staff officers, CAS³ student bodies and numbers of courses would be increased and course length marginally cut if necessary. As a last resort, numbers of USACGSC students might be decreased (but course length left untouched) in order to augment further CAS³ for wartime requirements.

9. RESOURCE IMPLICATIONS: A detailed breakdown of resource implications is found at Inclosure 4 to Appendix 3 (CAS³), this Annex. There are no faculty manpower savings. The increase in small group method (50 percent) in USACGSC, coupled with the overhead required for CAS³ (resident and nonresident), and a more faculty-intensive USACGSC NRI course, require about the same number of faculty currently at USACGSC (147). Substandard family quarters will be converted to BOQ's to house CAS³ students. There is a considerable reduction in PCS travel costs (800 moves) and THS man years (350). If Army support to AFSC is discontinued, additional savings would total 37 staff and faculty positions, 340 PCS moves, and reduction of the THS account by 78 man-years.

10. SUMMARY. There are several distinct components to the system by which each Army officer must be developed to the maximum limits of his potential. The purpose of this professional system is to develop a better officer for the Army while enhancing that officer's individual self-actualization. Such a system is equally applicable to the generalist and the specialist.

The Command and General Staff College is the fulcrum of the officer education system. To meet our Total Force needs in the coming decades, all field grade officers will require troop staff training and many will need to acquire the higher order of professional knowledge necessary for effective service in the most responsible positions in the Defense Establishment. Students will have to be carefully selected at the right time in their careers to maximize training effectiveness. The USACGSC educational experience will

achieve a higher standard of excellence as a result of the renewed institutional commitment to intellectual development. Finally, the Army must properly utilize the trained and educated assets.

The complexity of modern war, both in preparation and in execution, requires broader knowledge and more rigorous application than have been demanded in the past. We believe this proposal is a significant step in that direction.

11. RECOMMENDATIONS.

a. Continue the 10-month Command and General Staff College at Fort Leavenworth, Kansas (modified to include CAS³) and the centralized selection process of the Army officer student body.

b. Reduce the size of the active duty Army officer input to approximately 20 percent of a year group, insuring that all specialties are represented based on general staff requirements in those specialties in the grades of major, lieutenant colonel, and colonel.

c. Reduce Allied officer enrollment from 94 to 56 in each USACGSC course (a maximum of one per work group).

d. Discontinue the 18-week Reserve Component (RC) courses and provide 14 RC spaces annually at USACGSC (one per section) along with the 288 to CAS³.

e. Discontinue the current nonresident program (design based on the 18-week RC course) and substitute a "Corresponding Studies Program," based on the full academic year regular course along the lines of the current Army War College model, for centrally selected CAS³ graduates of the Active Army and Reserve Components. (200 Active/200 RC annually).

f. Nominate officers to attend USACGSC at or just following selection for promotion to major so that the schooling will occur between the 10th-12th year of service.

g. Continue the program of sending centrally selected Army students to sister service and foreign staff colleges (approximately 75 annually), but require that they be CAS³ graduates prior to staff college attendance. They should receive USACGSC equivalent credit.

g. Withdraw Army participation from the 22-week PCS AFSC course at Norfolk, Virginia. As required, send those CAS³ and USACGSC graduates nominated for joint assignments to Norfolk to attend functional TDY courses on the Joint Operations Planning System (JOPS) or World Wide Military Command and Control Systems (WMCCS).

i. The current AFSC not be considered equivalent to USACGSC and those officers (about 20 percent) selected for higher order skill training and advanced knowledge education not attend AFSC until after completion of USACGSC or other service staff college and until they are enroute to a joint assignment.

j. Create a comprehensive faculty development program for USA CGSC which insures:

(1) timely identification, selection, education and utilization of subject matter experts on the USACGSC faculty.

(2) a faculty large enough to allow at least 50 percent of the instruction to take place in small group, instructor-led seminars.

(3) a program for a limited number of extended tour and tenured faculty to allow for stability, continuity, and faculty/curriculum development.

(4) a student faculty ratio of about 5 to 1.

EDUCATION REQUIREMENTS FOR FIELD GRADE OFFICER DEVELOPMENT

1. PROBLEM. To find a logical system for determining how many officers of what specialties require field grade officer development education.

2. BACKGROUND. Although the field grade officer development training and education problem can be simply stated, the solution is particularly difficult. An overwhelming majority of the officer corps believes that the principal purpose of this training and education is to broaden the outlook of the officer in preparation for positions of increased responsibility. ^{1/} But if broadening is truly the principal purpose of development training, any attempt at quantitative justification seems to be fruitless. How do you quantify "broadening"? We approach the problem obliquely by observing that "broadening" really equates to improving a student's facility in certain skills commonly required by field grade officers in positions of unusual responsibility. However, these "certain skills" are not unique to the graduate of field grade training. To a certain extent, most field grade officers require some measure of them. And a very few field grade officers hold positions which absolutely demand incumbents whose facility in those skills is of the highest order.

It has been demonstrated that practicing skills sharpens them. Thus, on-the-job (OJT) is an essential part of any skill acquisition or improvement program. Nonetheless, we assert that some officers should be trained or educated in certain critical skills for these reasons:

o In any organization, there are always "crunch" points where the most capable efforts need to be applied. And neither the organization nor the Army can wait while somebody learns on the "crunch" point job.

o For the sizable number of people in any organization who are learning on the job, there is a high probability that skills will be learned improperly. Undesirable mutations of otherwise standard skills will evolve, unless there is some nucleus of trained professionals who will train others in the proper skills.

The nonresident mode of instruction is valuable but not the most viable option for acquiring increased facility at this level for many critical skills because the skills most in demand tend to be those which require an ability to integrate to influence, to guide, and to motivate others. Field grade officer development

^{1/} The officer survey conducted by RETO showed that 72 percent of the respondents chose the "broadening" response rather than to attain "specialty qualification" (1 percent) or get ready for command (3 percent) or even to get promoted (9 percent).

education typically involves heavy loads of practical drills as a team member rather than as a solo performer. In a sense, nonresident instruction for collective skills is like trying to learn to play football by reading a book about it. And relying on OJT for everybody is like suiting up for the big game without having had the drills and the practices beforehand.

It follows then that some officers should be educated at the field grade level so that they can acquire increased facility at certain skills. Once educated, they should be distributed in a way which ensures their special talents will be applied where most needed. And the distribution system must satisfy the nucleus requirement, recognizing that the educated asset is also a teacher for the many officers who must improve their skills on the job. But how many is some? What skills are critical? What distribution system could satisfy such criteria?

3. DEFINING THE SKILLS: The typical educated asset, at field grade level, may be thought of as an officer who is particularly adept at "General Staff" 2/ skills. We are on the horns of a dilemma, however, for there is no clear division between General Staff skills and non-General Staff skills. Indeed, the complexity of the problem is exacerbated by the fact that not all skills—even these higher order skills, if they could be defined—are easily categorized according to their importance. Ideally, we would prefer to list individual tasks normally associated with the performance of General Staff duties. But the task listing is a lengthy process and although now underway at the Army's Training and Doctrine Command (TRADOC) it is several years away from completion. We do have a position type by position type analysis, however, which breaks any single job into a set of duty modules 3/ —logical clusters of tasks. (For example a duty module might be: "Directs and controls foreign military sales activities." The tasks included in that duty module are: (1) Writes sales proposals and contracts, (2) Represents U.S. Army interests to foreign governments for specific systems, and (3) Coordinates Quality Assurance and delivery efforts to insure fulfillment of obligations.) We assert that a list of General Staff duty modules would be a reasonably precise definition of

2/ The use of the terminology "General Staff" has been adopted for shorthand purposes. RETO argues against creating an "American General Staff Corps". "General Staff" and higher order skills are used interchangeably.

3/ Most of the duty modules used by RETO were originally described by the Army Research Institute (ARI), though the original ARI list has been expanded significantly during our data collection effort.

critical skills, But how do you prepare such a list? We approach the problem via some insight into those things on which reasonably-- if not unanimously--solid agreement can be achieved within the Army. For example, we state that the Army does not have a General Staff Corps, nor do we recommend it. Yet, we observe that if there were such a thing as a General Staff Corps, it would surely be true that Division G-3's would be members. So too would Division Chiefs of Staff. List known duty modules, then, for these obviously 100 percent General Staffers and you already have a start toward the goal of a definitive list.

It then becomes a possible, though hardly simple, task for RETO analysts to peruse the remaining total Army duty module list to identify what additional General Staff Modules need to be added. It should be obvious to the reader that even such a conceptual list includes many duty modules sometimes associated with positions on which there is nearly unanimous agreement that such positions are not now and should never be thought of as General Staff-like. Isn't it true, then, that our conceptual list is already imprecise?

Not at all! The reason is a simple one. There is not a General Staff Corps in our Army, and there are very few positions which would absolutely demand General Staff incumbency if there were such a Corps. Rather, there is probably a bit of the General Staff type skill required of every officer, some more so than others as a function of the position each holds at any given time. So we don't have an imprecise list at all. We simply argue that General Staff type duty modules are a part of the whole list of duty modules for the Army for the rank of MAJ and above. Identifying the part is tantamount to listing General Staff skills. A more precise definition, though, should take note of the relative importance of such skills. Thus, we have chosen to list our selected duty modules in order of importance and then to assign values to each. (5 for those in the top 20 percent, 4 for the next 20 percent, and so on). Because the weighting process is necessarily a subjective one, a sensitivity analysis should ultimately be conducted to measure the extent to which variations in assigned weights would cause changes in conclusions. For consistency with certain mathematical formulations we have already devised for data analysis, a value of zero is assigned as the weight of a duty module not appearing on the "General Staff" list.

4. DEFINING THE ANALYTICAL TOOLS. A number of formulations are necessary for subsequent analysis. These are defined as follows:

a. The SIGNATURE(S) is a listing of the relative frequency with which particular duty modules occur in a group of position types.

For example, a value of .10 indicates that one tenth of the group requires that particular module. \underline{S} is a column matrix of 899 elements (because there are 899 duty modules). In symbols,

$$\underline{S} = \begin{bmatrix} \cdot \\ \cdot \\ \cdot \\ s_1 \\ \cdot \\ \cdot \end{bmatrix} \quad \text{where } 0 \leq s_1 \leq 1$$

b. The General Staff matrix (\underline{G}) is a listing of the General Staff weights assigned to each duty module. Symbolically,

$$\underline{G} = \begin{bmatrix} \cdot \\ \cdot \\ \cdot \\ g_1 \\ \cdot \\ \cdot \end{bmatrix} \quad \text{where } g_1 \text{ is } 0, 1, 2, 3, 4 \text{ or } 5.$$

Note that for any two corresponding elements in \underline{S} and \underline{G} , s_1 is the fraction of times a duty module occurs and g_1 is the value of the same module in the context of General Staff requirements.

c. The General Staff score (\underline{Z}) is the sum of the element to element products of \underline{S} and \underline{G} . Symbolically,

$$\underline{Z} = \sum_{i=1}^{899} s_i g_i$$

d. The maximum possible General Staff score ($\underline{Z}_{\text{MAX}}$) would occur when all officers in a particular group require all General Staff duty modules; in other words, if all elements in the signature were 1. Thus,

$$\begin{aligned} \underline{Z}_{\text{MAX}} &= \sum_{i=1}^{899} (1) g_i \\ &\quad \left(\text{since all } s = 1 \text{ in this case} \right) \\ \therefore \underline{Z}_{\text{MAX}} &= \sum_{i=1}^{899} g_i \end{aligned}$$

e. The number of positions in a particular group is N.

f. The percentage of a group is P.

5. DETERMINING THE NUMBER BY SPECIALTY WHO NEED FIELD GRADE OFFICER EDUCATION.

A fundamental concept upon which the following analysis depends is the recognition that there must be a rational distribution system for field grade educated officers. As alluded to in paragraph 2 above, each major organization should have a logically chosen share of field grade educated assets. These assets then will furnish the nucleus for improved OJT in the command for those not offered resident instruction. Stated simply, it is more effective and less costly to provide an organization a few officers with a high level of facility in all the General Staff duty modules than to provide them all required officers possessing a high level of facility in the few General Staff duty modules their specific positions might require. Of all MAJ's who need to have been educated at this level the percentage in Specialty X is determined as the ratio of the General Staff scores in Specialty X and the Army as a whole, weighted according to the number of positions in Specialty X and the Army as a whole. Symbolically,

$$P_{X-MAJ} = 100 \left[\frac{N_X \bar{z}_X}{N_A \bar{z}_A} \right]_{MAJ}$$

(Where subscript X is for Specialty X and subscript A is for the whole Army). Similarly, the percentages of LTC (P_{X-LTC}) and COL (P_{X-COL}) can be determined. Notice that these percentages reflect the steady state solution. That is, they reflect the proportion of field grade educated officers at each indicated rank who should be specialty X assets. (Rather than the proportion to be sent annually to field grade educational institutions).

6. DETERMINING TOTAL POOL TO BE PROVIDED FIELD GRADE EDUCATION

It should be obvious that the sum of individual specialty needs as determined above is sufficient to determine class size (except for a few special cases from certain low population specialties and from non-OFMS specialties, for which the usefulness of this type of analysis has yet to be determined). An approximate value for the steady state proportion of all MAJ's who should have been educated at field grade level is:

$$P_{A-MAJ} = 100 \left[\frac{N_A \sum A}{N_A \sum MAX} \right]_{MAJ}$$

Knowing the steady state proportion, however, is sufficient to determine the annual input of MAJ's to achieve steady state requirements at the ranks of MAJ, LTC, and COL. (Standard MILPERCEN calculations can determine class size (input) to maintain a steady state population of educated assets). The highest of the three annual inputs is then the requirement for educating officers at field grade level. (Using the highest of the three values takes into account the fact that the "General Staffishness" of one specialty may peak at a different career point than in another).

7. ASSIGNING THE EDUCATED RESOURCE. A subtle but significant implication of this analysis is that resources will not be trained to fill specific positions, even though it was originally position analysis which generated the data base. Is there then an inconsistency?

On the contrary. Recall our previous observations that only a very few positions in the Army require 100 percent General Staff modules, but there is something of the General Staff flavor in virtually every position. A costly approach might be to train virtually all officers in General Staff skills. But the more cost effective approach by far is to recognize that of all the functions performed in a particular organization (e.g., a staff headquarters, a brigade, etc.), a measurable percentage are General Staff type functions. The RETO system would train enough assets to keep that same percentage of total positions filled by USACGSC graduates.

Furthermore, we suggest that the distribution by major command can itself be determined by creation of major command signatures, a task RETO would pass on as part of the implementation plan. In the interim, an approximately correct solution is to assign a share of educated assets in proportion to total requirements at each rank. One serendipitous effect of this approach is that it puts control in the hands of major commanders where it rightfully belongs. The commander gets his fair share of field grade officer development training and education graduates, but he makes his own decisions about where and how he assigns them within his command.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 5

EXPANSION FOR WAR: USACGSC AND CAS³

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

1. INTRODUCTION.

a. This Appendix will examine the impact of force expansion on the U.S. Army Command and General Staff College (USACGSC) and the Combined Arms and Services Staff School (CAS³). It is based on the assumption that any school system designed for peacetime readiness must be readily convertible to a form suitable for wartime requirements. Entry into war of whatever intensity will not eliminate the need to continue training officers in staff procedures and skills.

b. Several wartime scenarios could be postulated which would result in force expansion of varying degrees. Rather than deal with specific situations, this Appendix will examine the potential impacts of expansion in terms of hypothetically augmented outputs of the two courses at Fort Leavenworth. Impacts will be examined in three areas -- course content, faculty size, and student work week.

2. ASSUMPTIONS.

a. Existing Physical Limitations:

(1) Physical characteristics of the schools, in terms of class rooms, computer support and housing, limit the size of the USACGSC to approximately 726 students per class and the size of the CAS³ to approximately 600 students per class. Thus at any given time, a maximum of 1,326 students can be given instruction.

(2) Peacetime class sizes are expected to be 574 for USACGSC and 585 for CAS³.

(3) There will be no expansion of physical facilities. Courses must be offered within the existing plant.

b. Other assumptions:

(1) CAS³ is of primary importance in wartime because it provides minimum essential training to the larger number of officers. It will absorb 100 percent of any increased training requirement attendant upon expansion.

(2) USACGSC provides education and training to a select minority of the Officer Corps. In case of expansion, it will retain its student load until such time as spaces are needed to absorb CAS³ overloads beyond maximum Leavenworth capacity.

(3) Nonresident instructional programs will continue for both.

(4) The preferred instructional mode will continue to be instructor-led small groups of about 10 students for USACGSC and CAS³.

(5) The USACGSC course content is about 1,000 hours. The CAS³ peacetime course content is 297 hours and the minimum wartime course is 240 hours. An effective classroom week for a student is 34 hours. The maximum classroom week is 40 hours. Approximately one hour of study outside of class is expected for every two hours in the classroom.

(6) The minimum annual course revision time for CAS³ is three weeks, to permit course adjustments, faculty leave and other administration.

3. ANALYSIS.

a. The results of applying the assumptions to CAS³ expansion are found in Table 1. The figures in Table 1 are bounded by the minimum and maximum work-weeks and minimum and maximum course content. All cases result in no reduction in the USACGSC student body or course content.

(1) Maximum CAS³ course content (297 hours) can be retained under two conditions. One condition retains the 34-hour classroom week and expands the course load to 3,000 students annually. The second requires a classroom week of 37.5 hours and results in expansion from 2,400 students per year to 3,600 students per year.

(2) Further expansion cases require reductions in CAS³ course content. The maximum student output (4800/year) is found at a 40-hour classroom week with 240 hours content and eight classes per year. It is at this point that greater expansion will require additional student spaces, probably taken from the USACGSC.

(3) It would be theoretically possible to add 800 students per year for every 100 students relinquished by the USACGSC course. This assumes that the physical facilities USACGSC will accommodate the CAS³ curriculum and student body; thus the school capacity for CAS³ would have a theoretical upper limit of about 10,600 students per year. However, this number is probably impracticable; a more realistic upper limit is around 8,000, based on capacity of the administrative facilities to handle student throughput.

(4) Table 1 also provides parameters for estimating the increase in faculty needed to accommodate each increment of students in CAS³. Expansion factors are derived from a faculty needed for 600 students attending 34 hours per week for four 9-week courses per year (base case). The factors were determined by calculating the faculty contact hours for each case and dividing by the contact hours for the base.

(5) Increases in student work week of 10-18 percent and reduction of CAS³ course content would necessitate adjustment of the curriculum. In one case, 20 percent of the curriculum must be sacrificed to provide a 4,800 student capacity. Priorities for reduction would be in subjects with uniquely peacetime applications. The thrust of the course would be toward the production of staff officers expected to operate in a combat environment soon after graduating.

b. Expansion will affect the USACGSC quite differently. Since primary wartime emphasis will be on CAS³ to provide trained field grade staff officers, the USACGSC is not expected to expand past its maximum projected size of 726. Rather, the course would be maintained in its 42-week configuration with a gradual increase to 726 students for the one class per year.

(1) As stated earlier, if CAS³ expands beyond physical capacity, USACGSC will be forced to relinquish spaces, but course length would not be affected. Spaces to be released would be in the following priority.

- (a) Allies -- 56
- (b) Sister Services -- 54
- (c) Reserve Components -- 14
- (d) Active Army -- 450

(e) Course cancellation would occur when the student body declines to fewer than 100 students.

TABLE 1. EFFECTS OF FORCE EXPANSION ON CAS3 COURSE CONTENT, STUDENT WORK WEEK, FACULTY SIZE

COURSE CONTENT (HRS)	STUDENT CLASS WEEK (HRS)	COURSE LENGTH (WKS)	NR CLASSES PER YEAR	STUDENTS PER CLASS	MAXIMUM STUDENTS PER YEAR ¹	FACULTY CONTACT HOURS	FACULTY EXPANSION FACTOR	COURSE REVISION PER YEAR (WKS)	REMARKS
297	34	9	4	600	2400	72,000	1.00	16	BASE CASE - PEACETIME
297	34	9	5	600	3000	90,000	1.25	7	25% INCREASE IN STUDENTS, SAME CONTENT, LESS COURSE REVISION TIME
297	37.5	8	6	600	3600	108,000	1.50	4	50% INCREASE IN STUDENTS, SAME CONTENT, INCREASED WORK WEEK, LESS COURSE REVISION TIME
280	40	7	7	600	4200	117,600	1.63	3	75% INCREASE IN STUDENTS, LESS CONTENT, INCREASED WORK WEEK, MINIMUM COURSE REVISION TIME
240	40	6	8	600	4800	115,200	1.60	4	100% INCREASE IN STUDENTS, MINIMUM CONTENT, INCREASED WORK WEEK

¹ MAXIMUM STUDENTS PER YEAR WITHOUT AFFECTING THE USACSSC COURSE.

(2) USACGSC would release instructors to CAS³ with the shift of students, at a rate around 20 instructors per 100 students.

(3) There is little point in reducing the class year for USACGSC, unless it is critical to reduce the amount of time officers are kept in school and thus away from unit assignments. Unless the course is reduced to a half-year (22-weeks), there will be no additional student capacity created. The course is designed as a 42-week intensive educational period to produce officers to serve in high level staff positions throughout the Defense Establishment. The necessary rigor and intensity of the experience argue for maintenance of course length.

(4) Options also exist for USACGSC support of CAS³ expansion with faculty. USACGSC will have about 8 weeks of revision time each year. As CAS³ expands, USACGSC faculty could be used to augment the CAS³ faculty in the following ways:

(a) Running an extra CAS³ section when USACGSC is not in session.

(b) Relieving CAS³ faculty members temporarily by using USACGSC members as substitutes.

(c) Transferring USACGSC faculty to CAS³ thereby increasing the USACGSC student to faculty ratio.

4. CONCLUSIONS.

a. CAS³ can be expanded to accommodate almost any level of mobilization or force structure expansion. The number of students per year can be doubled from 2,400 to 4,800 without affecting the USACGSC course.

b. Expansion of CAS³ can be accomplished by a marginal decrease in course content, an increased student classroom week, and an increase in faculty.

c. Increased attendance at USACGSC beyond the design maximum is not practicable. The USACGSC education is a long-term investment in officer development, while the needs created by wartime expansion are for increased numbers of field grade staff officers for immediate utilization.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 6

SPECIALTY/ASSIGNMENT-RELEVANT TRAINING AND EDUCATION

TO ANNEX E

TRAINING AND EDUCATION FOR FIELD GRADE OFFICER DEVELOPMENT

1. The purpose of this Appendix is to describe existing specialty/assignment-relevant training and education provided to Army majors and lieutenant colonels in addition to CAS³ and USACGSC, and to suggest the requirement for such training and education through the 1980's. The discussion is limited to consideration of courses of two weeks or longer duration. Most of these courses are authorized to award an Additional Skill Identifier (ASI) under the provisions of paragraph 1-8, AR 611-101.
2. The Field Grade Officer Development training and education subsystem of the proposed RITO system is based on the various skills and knowledge required by officers to serve effectively in command and staff positions Army-wide in the grades of MAJ/LTC (~10-20 YOS). These skills and knowledge are discussed in detail in Appendix 1 of this Annex. Army requirements have identified a need for all career officers to be trained in troop staff procedures in CAS³ and for approximately 20 percent to be more broadly and intensively educated at USACGSC (See Appendix 2 and 3 of this Annex). Both CAS³ and USACGSC come early (~10-12 YOS) in the officer's "majority" to provide requisite skills and knowledge in a timely way.
3. Many duty positions for field grade officers require additional specialty or assignment-relevant training and education in addition to CAS³ or USACGSC. The diverse nature of current Army requirements has led to the development of a wide variety of course offerings. Inclosure 1 contains a comprehensive list of TDY and PCS courses currently available for field grade officers. Attendance at these courses is managed cooperatively by MILPERCEN and the MACOMs, with only general monitorship by Headquarters DA. This arrangement is necessary in part because of the dynamic nature of requirements, in part to provide maximum flexibility to individual MACOM needs, and in part because of the current difficulty of correlating training requirements to specific duty positions. The last point is directly linked to an Army-wide program of accurately coding duty positions which must be defined to reflect actual needs in a given job by

grade, specialty and SSI. In addition, there is insufficient knowledge in the Officer Corps of what courses are available, desirable, or necessary, and of the methods for gaining attendance.

4. As the Army moves toward full implementation of OPMS, the need for short assignment/specialty-specific courses will probably increase. After the TRADOC front-end analysis is completed, more discipline will be added to the position coding procedure and training requirements will become more finite. This will enable personnel managers and specialty proponents to better understand the training and education needs of an officer about to be assigned to a specific billet and the best way to satisfy those needs. It suggests central monitoring at DA to better manage the inventory of officer skills, program training resources, and prevent unnecessary duplication. Finally, there should be a well-defined DA policy, understood by the Officer Corps, that officers will be sent to the right course, at the right time in preparation for field grade service in a specific duty position.

5. RECOMMENDATIONS.

a. As a follow-on to the TRADOC front-end analysis and subsequent position recoding, ODCSPER and MILPERCEN monitor the status of all specialty/assignment-relevant training/education courses to include the annual input and graduate inventory in coordination with DA specialty proponents and the training and education proponents.

b. Include in DA Pamphlet 600-3 a more precise statement of Army policy and a better description of the courses available by specialty, both in the "Specialty Development Guide" and in a separate annex.

<u>COURSE</u>	<u>LENGTH</u>	<u>MIN GRADE</u>	<u>SCHOOL</u>
Logistics Executive Development	19 wks	03	ALMC
Directorate of Industrial Operations	4 wks	03	ALMC
Materiel Command Instillational Management	3 wks	03	ALMC
Operations Research/Systems Analysis Executive	4 wks	04	ALMC
Materiel Acquisition and ILS Design Management	4 wks	03	ALMC
Mgt Techniques in ILS and Materiel Acquisition	2 wks	03	ALMC
Quantitative Techniques in ILS and Mat'l Acquisition	2 wks	03	ALMC
Army Installation Management	3 wks	04	ALMC
DARCOM Installation Management	3 wks	04	ALMC
Defense Advanced Procurement Management	3 wks	03	ALMC
Criminal Investigation Logistics Mgt Orientation	4 wks	03	ALMC
Operations Research/Systems Analysis Military Applications Program Management	12 wks	03, 04	ALMC
Industry Financial Management for Program Managers	20 wks	04, 05	DSMC
Mapping, Charting and Geodesy Senior Officer	2 wks	04, 05	DSMC
Organizational Effectiveness Staff Officer	3 wks	04	DMS
Engineer Construction Contracting	16 wks	03, 04	OETC
Facilities Engineering Management	2 wks	04	Engr
Management of Managers	4 wks	01*	Engr
Aviation Commanders Readiness	2 wks	04	AMETA
Rotary Wing Aviation Refresher	2 wks	04, 05	AvnC&S
Defense Security Assistance Mgt-Sr Off Overseas	4 wks	03, 04	AvnC&S
Defense Advanced Traffic Management	3 wks	05	DISAM
Defense Management Systems	3 wks	04	Trans
Military Comptrollership	4 wks	04	NPGS
Computer Orientation for Intermediate Executives	7 wks	04	USAIA
ADP Project Management	2 wks	04	DODCI
National Senior Intelligence	2 wks	03	DODCI
Joint Intelligence Orientation	14 wks	05	DIS
Professional Military Comptroller Course	4 wks	03	DIS
Electronic Warfare	8 wks	04	AirUniv
AFLC Materiel Management	2 wks	03, 04	CGSC
Logistics Management	18 days	03	AFIT/LS
Advanced Contract Administration	20 days	03	AFIT/LS
	13 days	03	AFIT/LS

1-6-1-1

* Normal grade is 04, 05

<u>COURSE</u>	<u>LENGTH</u>	<u>MIN GRADE</u>	<u>SCHOOL</u>
Communications-Electronics System Engineer	34 wks	03, 04	Keesler AFB
Foreign Area Officer Course**	21 wks	03	USAIMA
DA Inspector General Orientation	2 wks	03-06	DA Staff
Nuclear & Chemical Target Analysis	3 wks	03	USAFAS
Planning, Programming & Budgeting Systems Information Systems Officer	3 wks	03	USALA
Chaplain Field Grade Officer Refresher	4 wks	03	USALA
Dental Command and Staff	2 wks	04	CHCS
AMEDD Field Grade Officer Refresher	2 wks	04	AHUSA
Chief Nurse Orientation	2 wks	04	AHUSA
Health Care Assessment	2 wks	04	AHUSA

** Recommended for conversion to TDY courses for each SSI as required (see paper on SC 48).

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

ANNEX F

SENIOR OFFICER EDUCATION AND TRAINING

1. PURPOSE. The purpose of this portion of the study is to examine the development of senior field grade Army officers for performance of command and staff functions at levels of responsibility commensurate with their extensive experience and advanced rank.

2. OBJECTIVE. The objective of the officer education system at this level is to broaden and increase the professional competence of Army officers destined for assignment to senior executive positions (colonel and above) in which they will be expected to possess the experience, specific skills, knowledge, and abilities to make a meaningful, professional contribution in that capacity.

3. SCOPE. This Annex addresses three aspects of senior officer education and training: Senior Service Colleges, Battalion and Brigade Precommand Courses, and Continuing Education and Training for General Officers.

a. Following a review of the current Senior Service College (SSC) system, this portion of the study analyzes the Army's education and training needs at the executive level, taking special cognizance of the requirement for officers to perform their respective and integrative service roles under wartime conditions. There are several recurrent threads of consideration: position requirements for SSC graduates; the SSC curricula; the relationship and continuity between the US Army Command and General Staff College (USACGSC), and the US Army War College (USAWC); the educational methodology pursued; faculty acquisition, qualification, development, and tenure; and mobilization or expansion potential.

b. Following a review of the current battalion and brigade combat arms Table of Organization and Equipment Command Course, this portion of the study analyzes the training and education needs of centrally selected battalion and brigade commanders. The study focuses on the overall need for a precommand program, the wartime needs of commanders, the precommand curricula, the

relationship between battalion and brigade command and the need for precommand programs with instruction tailored for specific type commands -- combat arms, combat support, combat service support and training units.

c. Recommendations for an institutionalized program of continuing education and training for the Army's general officers are based upon the views of the general officers themselves as expressed through numerous interviews as well as selective analysis of current civilian industry, academic, sister service and foreign army management development philosophies and programs. These analyses suggest that any successful general officer development system should comprise: careful selection and assignment procedures, taking into consideration the Army's needs and the individual's special capabilities; transitional modules which support the general officer's interassignment needs; orientational programs designed to keep the senior executive updated with accurate, timely, useful information about his profession; and, developmental programs which enhance the continued growth of the general officer's skills and abilities through relevant education and training methodologies.

4. FINDINGS AND CONCLUSIONS.

- a. Senior Service Colleges - See Appendix 1.
- b. Battalion and Brigade Precommand Courses - See Appendix 2.
- c. Continuing Education and Training for General Officers - See Appendix 3.
- d. Transition to War - See Appendix 4.

5. RECOMMENDATIONS.

- a. Senior Service Colleges.

(1) Department of the Army (DA) analyze all positions authorized for Army colonels and general officers (including those serving outside the Army) to establish specific SSC level education requirements by curriculum orientation (Service, NWC, or ICAF).

(2) DA policy governing SSC selection and assignment to specific SSC courses of instruction be modified to accommodate a criterion that is based primarily on Army requirements and individual development needs which would take priority over the geographical location of the officer at the time of selection.

(3) Selection boards be instructed, based on existing DA criteria, to recommend granting constructive credit to exceptionally qualified officers.

(4) SSC eligibility criteria be modified to recognize as eligible those officers who are graduates of the Combined Arms and Services Staff School.

(5) Long-term, postgraduate utilization of Army SSC selectees be determined by DA and disclosed to officers before they begin the academic year at a senior service college, and their immediate postgraduate assignments announced early in the course of study.

(6) DA identify, through position analysis, requirements for short, TDY training/developmental courses oriented on specific assignment preparation for colonels, to be attended either in lieu of, or as a supplement to, SSC.

(7) DA expedite the development and publication of doctrine for combined arms and logistic operations above the division echelon to include joint and combined operations in a coalition warfare environment.

(8) The mission statement and objectives assigned to the USAWC be revised by Department of the Army to establish an increased instructional emphasis on the Army's wartime mission: the integrative aspects of joint and combined land warfare.

(9) The Commandant, USAWC, develop a curriculum based on stated Army requirements, mission and objective statements as well as structural guidance provided by DA.

(10) DA support the development and fund the requirements of an increased simulation and wargaming capability at the USAWC to support student instructional objectives and increased command and staff readiness of Army operational forces.

(11) Commandants, USAWC and USACGSC, continue the close coordination necessary to achieve the required measure of continuity between the two levels of instruction.

(12) DA recommend to the Joint Chiefs of Staff a revision of National Defense University (NDU) curricula so as to be more responsive to the Army's needs for graduates who can perform their respective and integrative service roles under wartime mobilization and operational conditions.

(13) USAWC prepare and make available to Army students at NDU and the other SSC a preparatory instructional module to assist them in achieving the necessary joint and combined land warfare competency.

(14) If the revision proposed in 5a(12) above proves impractical, withdraw Army SSC selectees from NDU to attend USAWC, and tailor the USAWC curriculum to meet the Army's identified needs for SSC graduates in joint and combined land warfare, national security policy formulation, and defense management and materiel acquisition competencies. (This recommendation was not approved for inclusion in the implementation plan.)

(15) USAWC develop and adopt an instructional methodology designed to promote a more direct and duty-related student involvement in the learning process and to require demonstrated competence in command, staff, and executive management skills such as abilities to apply analytical techniques, conceptualize, organize, plan, delegate, and contribute to the overall formulation and/or execution of strategic and tactical decisions.

(16) DA recognize and support the unique faculty requirements of the USAWC.

(17) USAWC develop a short mobilization course to support the requirements of total mobilization or some unforeseen order of magnitude expansion.

b. Battalion and Brigade Precommand Courses.

(1) US Army Training and Doctrine Command (TRADOC) conduct a front-end analysis of all battalion and brigade command positions for which commanders are centrally selected to determine the skills and knowledge required.

(2) TRADOC, based on the "front-end" analysis, design and institute tailored precommand programs for combat arms, combat support, combat service support and training units to include preattendance study materials and self-administered diagnostic tests.

(3) DA direct that attendance at precommand courses be mandatory for all centrally selected battalion and brigade commanders.

(4) The U.S. Army Military Personnel Center, (MILPERCEN) assign command designees to the division, corps or post where they will eventually command as soon as possible after command selection.

(5) TRADOC develop a shortened, single-site precommand refresher course for battalion and brigade commanders under a full or total mobilization scenario.

c. Continuing Education and Training for General Officers.

(1) DA establish an Officer Personnel Management System, (OPMS) related coding system for each general officer position so that selection and assignment can be rationalized to these coded positions. (This recommendation was not approved for inclusion in the implementation plan.)

(2) General officer assignments be stabilized for a minimum of 2 years.

(3) DA direct an analysis of all general officer positions to determine the skills and knowledge required in each for use in developing relevant continuing education and training programs for general officers.

(4) USAWC individually tailor inter-assignment transition training and education modules for each general officer upon his reassignment as appropriate.

(5) DA direct participation of general officers, as required, in USAWC - conducted inter-assignment transition program.

(6) Chief of Staff of the Army conduct quarterly executive update seminars for Reserve and Active Component general officers and designees. Attendance mandatory once annually for Active officers, invitational for Reserve Component. (This recommendation not approved for inclusion in the implementation plan.)

(7) Annual Brigadier General Designee Conferences conducted by DA be continued and improved to include, on a trial basis, executive development laboratories for all Active Component brigadier general designees.

(8) Chief of Staff's Weekly Summary be improved and supplemented as required to keep general officers accurately informed in a timely manner.

(9) DA direct USAWC to coordinate the periodic review, summation and analysis of pertinent publications so that each general officer can be kept current with relevant professional literature.

(10) Major Army command (MACOM) commanders be encouraged to institute periodic command/management workshops.

(11) USAWC develop and manage an Army-wide Tactical Command Readiness Program (TCRP) for use by field commanders at the corps level and above.

4 Appendixes

1. Senior Service Colleges with 13 Inclosures
2. Battalion and Brigade Precommand Courses with 3 Inclosures
3. Continuing Education and Training for General Officers with 3 Inclosures
4. Transition to War

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 1

SENIOR SERVICE COLLEGES

TO ANNEX F

SENIOR OFFICER EDUCATION AND TRAINING

I. THE CURRENT SYSTEM

A. Senior Service College Selection.

1. The objective of the current Senior Service College (SSC) selection system is to identify those officers who are "best qualified" to attend SSC by virtue of their potential value to the Army, their ability to absorb and profit from the educational experience, and their potential to contribute to the learning experience of their SSC class. The SSC selection system is concerned with all aspects of the process whereby Army officers are selected for:

a. US Senior Service Colleges --

Army War College
Naval War College
Air War College
National War College
Industrial College of the Armed Forces

b. Equated Foreign Colleges --

British Royal College of Defense Studies
Canadian National Defense College
French Ecole Superieure de Guerre
Inter-American Defense College

2. The SSC selection board is convened by DA with the specific mission to select 328 (FY 78) officers who are best qualified for the 328 spaces available to the Army during the following period without regard to grade, sex, race, component, source of commission, or availability. Additionally,

the board develops, by order of merit, an alternate list of 400 officers for use in replacing any principals who are unable to attend. For non-OPMD managed specialties, the maximum number of selectees is U.S. Army Medical Department - 8, Chaplains - 1, and Judge Advocate General - 3, with alternates numbering 3, 2, and 2 respectively.

3. Specific guidance to the SSC selection board takes cognizance of the fact that the Officer Personnel Management System (OPMS) philosophy and concept of dual specialty qualification are still relatively new. In consideration of the generalist philosophy which prevailed in the past, present-day boards are instructed against overemphasizing the type of professional development, be it specialized or generalized, but rather emphasize the officer's overall manner of performance and potential for outstanding service. Eligibility for selection to SSC requires that the officer be a graduate of, or have equivalent credit for, attendance at a command and staff level college.

B. Assignment to Specific Colleges.

1. Of the 335 Army officers who were selected in FY 77 to attend US SSC in AY 78, 192 attended the Army War College (USAWC), 61 the Industrial College of the Armed Forces (ICAF), 38 the National War College (NWC), and 22 each the U.S. Naval and Air War Colleges.

2. In accordance with the findings and recommendations of the DOD Committee on Excellence in Education, each of the service colleges and the two joint service colleges provide specific education in accordance with their respective mission. For the USAWC, ICAF and NWC these mission-specific tasks are described as:

Army War College -- Land Warfare
Industrial College of the Armed Forces -- Defense
Management and Materiel Acquisition
National War College -- National Security Policy
Formulation

3. Until recent years, assignment policies were such that personnel managers had considerably more flexibility in the placement of Army SSC selectees into the most appropriate of the five colleges. This was significant in that it enabled personnel managers to consider each selectee's educational background, past experience, unique capabilities, and probable future utilization

as well as known and projected Army requirements. These factors could then be used in determining the most appropriate college for a particular individual.

4. Practically all assignment actions are now constrained to one degree or another as a result of DOD pressure on the Services to reduce costs associated with permanent change of station (PCS). However, it is the understanding of this Study Group that the Services have a measure of flexibility in formulating specific policies which govern PCS moves within their respective Service.

5. Current Army policy which governs the assignment of SSC selectees to specific colleges places strong emphasis on minimizing PCS costs and in effect, imposes serious constraints on the authority of personnel managers to assign SSC selectees in the most logical and, over the long term, cost-effective manner.

6. This study recognizes that Army policy governing the assignment of SSC selectees to specific colleges takes into account the need for Army procurement specialists and comptrollers to attend the Industrial College of the Armed Forces, and that the guideline for filling Army quotas to ICAF is to fill 75 percent of them with officers assigned to logistics specialties. However, the dominate thrust of Army policy in this area is to minimize PCS costs. Therefore, it is predictable that personnel managers will react according to what they believe to be the spirit and real intent of such policy with the result that assignment of SSC selectees to specific colleges may be based more on geography than on the basis of any other consideration.

C. Postgraduate Assignment and Utilization.

1. Generally, there are no definite plans for the postgraduate assignment of officers at the time they enter a senior service college. Most officers begin the academic year without the benefit of even a general idea of their next assignment, e.g., with troops in Europe, DA Staff, OJCS, Reserve Components, U.S. Forces Command, or within TRADOC.

2. Normally, postgraduate assignment instructions are issued before the end of March, or about 3-4 months prior to the end of the course. There is very little evidence of planning for the long-range utilization of SSC graduates, each of whom represents an investment of more than \$50 thousand for that level of education.

3. The practice of delaying the determination of postgraduate assignments until late in the academic year and the absence of planning for the long-range utilization of SSC graduates is questionable under the generalist philosophy of professional development. Under the current concept of OPMS, such practices will become increasingly questionable, both in the minds of the officers concerned, and by critics of the military education system.

4. In 1976, the US Army War College (USAWC) gathered the necessary data and conducted a thorough analysis of all assignments of all resident course students who graduated from that institution during the years 1971 through 1975. The results shown in Tables 1 and 2 below are categorized by duty (Table 1) and level (Table 2). These are not assignment patterns for any one particular class, but represent the percentage of significant assignment changes (1370) for all Army graduates of the resident USAWC course (800) during the 5 year sample. As an example, Table 1 shows that 8 percent of all assignments received by graduates during the 5 year period were in the field of personnel.

ARMY USAWC GRADUATE ASSIGNMENTS, 1971-1975
--DUTY--

<u>Duty</u>	<u>Percentage</u>
¹ Command	19
Education-Training	17
Operations-Force Development	17
Special Staff	9
Personnel	8
Tactical Staff	5
Reserve Components	5
Research and Development	4
Logistics	4
Attache-MAAG	3
Communications-Electronics	3
Project-Product Management	2
Comptroller	2
Intelligence	2

Table 1

¹ Includes all 05 and 06 commands including transportation terminals, hospitals, laboratories, depots, arsenals, engineer districts, and positions as installation, deputy installation, or community commanders.

ARMY USAWC GRADUATE ASSIGNMENTS, 1971-1975

--LEVEL--

<u>Level</u>	<u>Percentage</u>
DOD, JCS, Sec Army	8
DA Staff	17
TRADOC-FORSCOM-DARCOM	7
Unified Commands and NATO	8
Command and Unit Staff	25
Staff and Faculty--Service Schools	15
<u>1</u> Other	20

Table 2

¹
 The wide variety of assignments comprising the 20 percent labeled as "Other" prevents grouping in meaningful categories. Included in this percentage are assignments to Engineer Districts, ROTC, Recruiting, Project Managers, Attache, etc.

D. Senior Service College Curricula.

1. US Army War College.

a. Two major segments comprise the USAWC curriculum: The Common Overview during which a wide variety of topics of study are prescribed, and the Electives and Studies Phase which permits individual tailoring of course work. The final week of course work is devoted to a National Security Seminar -- a forum in which distinguished leaders of government discuss their views on issues of importance to the nation's security and welfare with students and faculty of the USAWC, and invited civilian guests from across the country.

b. The Military Studies Program is a voluntary program which starts early in the year and provides an opportunity for students to conduct in-depth research on specific issues or problems which are derived from a variety of sources. Additionally, students may participate in certain on-going studies being conducted by the college's Strategic Studies Institute. A unique opportunity exists for a small number of students to participate in the Oral History Program, an effort designed to produce a historical record based on interviews with retired senior officers and former government or DOD officials.

c. A model of the USAWC resident curriculum for AY 78 is attached as Inclosure 1. A listing of USAWC electives is attached as Inclosure 2.

2. National War College.

a. The National War College academic program is a graduate level course in the field of politico-military affairs. The 10-month course contains 2 major elements: a Prescribed Course Program and an Elective Studies Program.

b. The Prescribed Course Program focuses on a variety of major issues likely to affect the national security of the United States during the next decade. The central theme explores the relationships among human motivations, society, and the nation-state and examines the conduct of national security affairs in the context of factors which shape international politics.

c. The Elective Studies Program is designed to complement the central theme of the NWC by permitting each student to arrange a program which responds to his or her individual needs and satisfies his or her preferences. The range of electives is broad, and includes tutorial research and writing, tutorial reading, and many specialized courses. In addition, NWC strongly endorses cross registration for elective courses with ICAF.

d. A model of the NWC resident curriculum is attached as Inclosure 3. A listing of the NWC and ICAF electives is attached as Inclosure 5.

3. Industrial College of the Armed Forces.

a. The ICAF academic program involves senior level courses of study and associated research in the field of resource management in the interest of national security. The program is designed to prepare selected military officers and senior career civilian officials for positions of high trust and responsibility in the Federal Government. The 10-month course contains two major elements: a Core Program which essentially is the same for all students and an Elective Program wherein the student is encouraged to attune the ICAF learning experience to his or her particular needs.

b. The theme of the Core Program is a general to specific approach to management of resources for national security purposes. Initial units address issues of significance to top level national security managers and examine the domestic and international environment within which national security decisions are made. Subsequent units address resource management in a global, industrial, economic, and defense context in that order. The focus of all studies is upon developing perspectives and enhancing analytical abilities essential for effective decision-making.

c. The Electives Program covers a substantial variety of courses which are offered in all three of the college's major disciplines: economics, management, and analytical techniques. In addition to ICAF electives, ICAF students have full access to the elective courses offered by the National War College.

d. A model of the ICAF resident curriculum is attached as Inclosure 4. A listing of the ICAF and NWC electives is attached as Inclosure 5.

4. Air Naval, and Foreign War Colleges.

In view of the fact that the majority of Army officers attend either the Army War College or the two colleges of the National Defense University, this study limits its observations regarding curricula to these three colleges. The study views the reciprocal exchange of students among the senior colleges of the various services and allied nations as being mutually beneficial and supports the continuance of such an exchange.

E. Observations Regarding Curricula.

1. The tendency of most curriculum planners is to add far too many subjects to a course. Since every member of the curriculum board has his favorite subject, it is often easier to engage in old fashion political "log-rolling" than in rigorous exclusion. Too frequently the result is curricula that offer considerable breadth, but fall short of an indepth, profound learning experience for the student, especially in those disciplines in which senior field grade and general officers subsequently will be expected to demonstrate a high degree of professional competence. Moreover, the curricula of the various senior level colleges must be adaptable to changes in policy.

doctrinal concepts, and technological advances which require the introduction of new instructional material. To accommodate the introduction of new material, it is essential that subjects having a lower priority be eliminated to preclude either overcrowding the curriculum or overburdening the students, or both.

2. A review of the U.S. Army Command and General Staff College (USACGSC) curriculum and the learning experience featured by that institution reflects, in comparison with the curricula of the 1960's and early 1970's, a much sharper focus on battalion/brigade and division levels, and much less instructional emphasis on corps and larger unit operations. It is anticipated that the current focus on battalion/brigade and division level operations will continue into the foreseeable future.

3. Conversely, the traditional approach to the study of land warfare at the USAWC has been one of emphasizing, from both historical and contemporary viewpoints, the application of military force as an element of national power: a broad perspective of land warfare. Admittedly, this assessment is a gross oversimplification and takes no cognizance of threat analysis, strategic studies, strategy development, force structuring, and many other important, relevant and, therefore, necessary subjects. The point at issue is, however, that a disconnect of significant proportion exists in the continuity of joint and combined land warfare instruction between the USACGSC and the USAWC. At the heart of this breach lies the Army's largest tactical organization on the contemporary battlefield -- the corps, its associated support, and its interaction with echelons both above and below it.

4. The problem outlined above is compounded further by the absence of current, published doctrine for the corps and higher echelons, to include associated support doctrine, that is consistent with the doctrine promulgated by FM 100-5, Operations. Notwithstanding the fact that the publication of corps level doctrinal manuals enjoys a very high priority within the TRADOC, this shortcoming will continue into the 1979-81 time frame.

5. The disconnect in continuity of joint and combined land warfare instruction that exists between the USAWC and the USACGSC has been recognized and is being addressed by the

Commandants, staff, and faculty of the two institutions. USAWC input to this study indicated that, over the next 2 years, the greatest change which will occur in the curriculum will be in the area of the conduct of combat operations -- joint and combined land warfare. Already, curriculum changes in recent years have increased the emphasis on military plans and operations. Also, planning is in progress to increase the wargaming capability at the college. The USAWC is taking advantage of progress already made in this field by the U.S. Army Combined Arms Center; by the wargaming facility which supports the Commander-in-Chief, U.S. Atlantic Fleet and the Naval War College; and of the support and advice of the Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS), DA.

6. The central theme of the National War College academic effort is to develop individual and group judgements on national security issues. The charter of the NWC places the focus of its academic effort on high level (national) joint and combined policy formulation, planning and implementation of strategy. Stated objectives of the NWC reflect no academic effort devoted to the doctrinal aspects of joint and combined warfare operations, which would serve to prepare graduates for their respective and integrative service roles under wartime conditions.

7. The central theme of the ICAF academic effort is on the management of resources for national security purposes, but with virtually no indication of academic effort devoted to logistical sustainment of joint forces under wartime conditions.

F. Pedagogy.

1. All senior service colleges pursue an interdisciplinary approach to education and use a wide variety of instructional methods. The "seminar group" is considered fundamental to the methodologies used by the colleges. It is the principal forum for exchanging ideas, addressing broad problems and preparing group reports. These 12-16 man groups work under the direction of a faculty instructor who performs an active teaching role, serves as a source of knowledge, and furnishes educational guidance to the students.

2. Learning at the SSC is attained by reading, study, research, and contemplation; attendance at lectures, participation in discussions; preparation of written studies

and oral presentations; and, by a critical evaluation of all subject matter

G. Observations Regarding SSC Pedagogical Approach.

1. Curriculum boards continue to schedule large numbers of lectures and to require few, if any, written exercises regarding the lecture, leaving the difficult process of conducting increasing numbers of student discussion groups to faculty members who may not be specialists in the subject matter discussed and sometimes inexperienced at the exceedingly difficult art of eliciting a truly fruitful discussion from a student group.

2. The current practice of calling discussion groups "seminars" is misleading. Seminars are associated with research; to misuse the term is to betray a lack of awareness and at the same time to blur the distinction between two very different kinds of activities. However, the discussion group can become a superb teaching mechanism in the hands of a skillful instructor. Carelessly handled, it can degenerate into a "bull session" and thereby waste the scarcest resource of any learning institution -- time.

3. The study recognizes the importance of the impressive lecture series sponsored by each college which brings to the students many of the nation's leading authorities in the fields of government, management, leadership, and military strategy. These lectures and follow-on question and answer sessions with the lecturer serve to broaden the students' perspective and provide them deeper insight into many national and world issues. The study takes issue, however, with many of the follow-on sessions involving unstructured student discussions of the material covered earlier in the lecture. Too often these sessions serve only to consume valuable time which could be devoted to more relevant and challenging activities. This is a soft area which should be examined more critically by curriculum planners who are under the constant pressure of finding time for the introduction of new, high priority instructional material.

H. USAWC Faculty.

1. Over the years, the USAWC has enjoyed the priority of having high quality officers assigned to its faculty. At the same time, however, many of these officers have not had the requisite credentials based on educational and training experience, to qualify them fully to instruct in specific

disciplines dictated by the curriculum. Additionally, rapid instructor turnover and faculty instability have adversely affected the quality of instruction. The College has initiated positive measures to correct this situation.

2. The experience, relevant credentials and teaching ability of each faculty member are evaluated and compared with the exact prerequisites of the specific teaching position to which he or she is assigned. This is necessary because each teaching position requires different qualifications expressed in terms of applicable graduate degree, OPMS specialty, previous experience in the field, levels of assignments, proven performance, demonstrated teaching ability, and personal qualities.

3. Faculty membership is determined through a careful and deliberate screening of a pool of highly qualified candidates. This group is composed of individuals identified by the College from its sources, and those from Army-wide resources which are recommended by the U.S. Army Military Personnel Center (MILPERCEN). Final selection of faculty members is made by the Commandant following action by the academic board and the Commandant's personal interview with the candidates.

4. The following annual milestones are a significant part of the faculty selection, utilization and development program.

a. The faculty slate for the forthcoming academic year is developed and approved in accordance with the policies and procedures outlined in the program document.

b. The degree requirement for each position is reviewed. A request for necessary changes is forwarded to the Army Educational Review Board.

c. Job descriptions and prerequisites are reviewed and restated. The position worksheets are used in selection process.

d. The college provides MILPERCEN with a list of former students who qualify as potential instructors.

e. A long range personnel loss and acquisition plan is maintained and is keyed to obtaining a more fully qualified faculty prior to 1980. The plan is reviewed and revised annually.

f. Grade restrictions of faculty positions have been modified to permit otherwise qualified non-SSC graduates and junior officers to compete for faculty assignments. Additionally, those individuals are offered the opportunity to earn USAWC diplomas. Individuals who attain SSC graduate status through this program accrue the same career and promotion credit as graduates of the resident course.

g. The Commander, MILPERCEN has agreed to the following program for faculty stability and tenure.

(1) Indefinite Tenure: Indefinite tenure or tenure until retirement, i.e., similar to the permanent associate professor program at the U.S. Military Academy.

(2) Five-Year Tenure: About 15 personnel with particularly rare expertise will be provided faculty tenure for 5 years.

(3) Non-tenured Positions: 3 year stabilized tours will be provided all other faculty members.

5. There is a continuing need for a limited number of the faculty to attend civilian institutions for periods of up to 1 year and thereby update or upgrade their qualifications in areas directly related to faculty teaching and research duties. Regulations governing civilian school attendance essentially preclude approval of USAWC faculty requests for such schooling because of limitations based on length of service; most faculty members are too senior in terms of service to qualify. The College has requested the Officer Personnel Directorate (OPD) to grant an exception to regulations on the basis that most personnel selected would be tenured, which would assure the use of their acquired knowledge over a protracted period. The College has requested OPD to consider assigning personnel to the faculty who have participated in the Military Fellowship Program at the Council of Foreign Relations, the Brookings Institution Federal Executive Fellowship Program, and the Department of State Senior Seminar in Foreign Policy. Further, it has been suggested that USAWC faculty members be considered for participation in these programs and be reassigned to the faculty upon completion.

I. Reserve Component Officers.

1. The USAWC offers Reserve Component (RC) officers several courses of study designed to prepare them for senior command and staff positions within the Active Army, their respective components, and throughout the military force structure. Specific courses in which RC officers participate include: the 10-month Resident Course, the 2-year Corresponding Studies Course, and the 2-week Senior Reserve Component Officer Course.

2. Over the past 2 years, each of 16 student seminar groups in the resident course has had a RC officer as a group member. There were eight Army National Guard (ARNG) and eight U.S. Army Reserve (USAR) officers in the resident class of 1977, and a similar number in the resident class of 1978. Additionally, there are two RC statutory tour officers at the College. One is the Army National Guard Adviser and the other the Army Reserve Adviser to the Commandant. Both officers are further assigned to the Department of Corresponding Studies and participate fully as faculty members, to include serving as faculty instructors during the resident course. Also, there are representatives of the Army National Guard and Army Reserve in the Strategic Studies Institute (SSI). These two officers provide RC input for studies conducted by the Institute and are serving a 2 year Active Duty for training tour.

3. The Corresponding Studies Course is the principal means for providing Reserve Component officers a SSC education. Since its origin in 1968, the course has produced 1,093 graduates: 521 USAR, 109 ARNG, 461 Active Army, and 2 civilians.

4. The Senior Reserve Component Officer Course involves the participation of 16 ARNG officers, 16 USAR officers, and 1 representative each from the Navy, Marine Corps, and Air Force Reserve.

5. Thus, each year about 250 Reserve Component officers participate actively in the variety of courses offered by the USAWC.

J. The Attack on the Current System.

1. DOD Committee on Excellence in Education (COEE).

In its 1975 study of SSC curricula, the COEE reported that senior service colleges "...do not represent a level of sophistication, authority, and recognized expertise which substantiates a separate and discrete entity to each college...." Rather than the "obvious" consolidation option, the COEE endorsed instead a sharpened mission-specific focus with a one-third core curriculum common to all SSC, two-thirds mission-specific at respective college.

2. Office of Management and Budget (OMB) Issue #17.

a. In the summer of 1977, OMB formulated an issue paper on costs associated with military training, "OMB Issue #17. The issue paper developed and considered four alternatives which, in the area of professional development education, ranged from a continuation of the current training program to a reduction of 75 percent in professional development education expenditures.

b. In its analysis of the issue, OMB indicated that "...the need for individual Army, Navy and Air Force War Colleges should be reviewed in order to evaluate the opportunities for consolidation of these institutions." The alternative "tentatively recommended" by OMB involved a reduction of professional development education expenditures by 50 percent, to be achieved through course elimination, consolidation, course length reduction, and through increased use of correspondence courses and self-studies.

3. DOD Decision Package Set (DPS) 040.

a. In the fall of 1977, DOD reviewed professional development education and developed two alternatives which were designed to reduce costs associated with senior service colleges. These alternatives were outlined in DPS 040.

b. Using essentially the same information as the COEE, DPS 040 recommended the opposite approach: "consolidation of the four Senior War Colleges at a single site as a National Defense University...reduce workloads resulting from increased nonresident student participation and the development of a common core syllabus...with elective programs for service-unique requirements."

c. The Secretary of Defense approved an alternative to the primary recommendation which directed the Army and Air Force to decrement their intermediate and senior college student populations by 15 percent in FY 79.

d. It is significant that the OSD analysis indicated that "...a review of individual...colleges reveals not only common goals in the education of officers, but also many similar courses which relate to military strategy, national security policy, and leadership in the military environment."

4. It is of profound significance that the SSCs have been consistently unable to demonstrate to either the COEE, OMB, OSD analysts, or civilian critics outside the DOD that there is a substantial difference in the various curricula and thus, a clear and firm requirement for separate colleges. Until such differences can be demonstrated to analysts from outside the Service Departments, it is predictable that similar attacks on the system will continue in the near-term future.

II. THE ARMY'S SENIOR SERVICE COLLEGE NEEDS

The Army's requirements for SSC graduates should be based firmly on a rigorous position analysis of all colonel and higher positions. Prior selection and subsequent utilization of graduates should be rationalized to this analysis, existing or projected position vacancies and, of course, the demonstrated performance and potential of the officer concerned. The SSC curricula should likewise be rationalized to this analysis with particular emphasis on the projected rank and primary professional responsibility of the majority of graduates. The SSC experience must be an integral part of the professional development continuum, with particular attention paid to its relationship to USACGSC. SSC educational methodologies must at once be of sufficient breadth to cover an adequate array of dissimilar subjects while at the same time ensuring an effective learning environment through vigor and depth of student involvement. By the same token, SSC faculty must be of sufficient quality individually and collectively to teach the requisite depth and breadth of subject matter. Finally, the USAWC must be able to contribute effectively to any Army mobilization or expansion scenario.

A. Position Analysis.

1. Only those Army officers whose projected utilization in executive management positions at levels requiring mastery of certain capabilities should attend any SSC. Among these are the ability to:

a. Manage diverse activities at a high level of responsibility.

b. Make effective decisions in areas of marginal personal technical competence.

c. Function effectively in interagency, interactivity, interservice, or international environment.

d. Provide effective senior level functional management in peace and war.

e. Use new, senior-level managerial skills, knowledges and abilities.

2. In addition, the officer's projected utilization should be further refined to orient on one of the mission-specific tasks of the SSCs which the vast majority of Army officers currently attend:

USAWC - Joint and Combined Land Warfare

ICAW - Defense Management and Materiel Acquisition

NWC - National Security Policy Formulation

3. It follows that while all colonel level Army positions may not require these special capabilities acquired at an SSC, there are numerous such positions in which the incumbent must perform duties imparted by definitive "training" or highly specialized educational methodologies, but for which SSC is not a requirement. For example: (Also, see Inclosure 6.)

a. Higher orders of specialization (R & D, Project manager; Provost Marshal; Comptroller).

b. New levels of functional command/control (Brigade and Equivalent Level Command).

c. Special skill additions (Attache; PAO; Community and Installation Commander/Manager; DPCA, DIO, RFAE).

d. Updating specialist skills (ADP; professional peculiar -- JAG; MD; Chaplain).

4. There are many colonel positions which require primarily broad experience and mature judgment in the exercise of routine staff or management functions at any level, or significant expertise in a given specialty. No further training or education is indicated for the colonel incumbent in such positions.

5. A limited analysis of all Army positions, colonel through general, using the categories of criteria identified in para b above, yields 957 SSC requirements at the colonel level and 430 among general officers. Based on currently offered curricula, the analysis further suggests that 58 percent should attend a service-oriented college (USAWC, Air, or Naval War College); 42 percent the National Defense University (22 percent NWC; 20 percent ICAF). After factoring, the analysis supports an annual SSC input of 295 Army officer students (see Inclosure 7).

6. Quantitatively, the current system fails to meet the Army's needs only in the national security policy formulation area, where there is a shortfall of about 24 annually.

7. Although 95 percent of serving general officers are SSC graduates, and analysis of general officer positions supports this figure (Inclosure 7), only one of seven USAWC graduates historically achieves general officer rank (see Inclosure 8). Thus, the focus of the SSC experience should be primarily on producing graduates who will make their major professional contribution as colonels. The specific needs of those officers who do achieve general officer rank should be met through an institutionalized program of continuing education and training (see Appendix 3).

8. Although these requirements and projections for colonels and generals are based on a peacetime structure, the Army's mobilization requirements are also met (see Appendix 4). Development of a much larger pool of highly qualified colonels than is needed in the peacetime structure is a particularly wise investment for the Army to underwrite in view of the

documented force multiplier effect that sound general officer leadership adds to wartime operations.

9. A credible and thus defensible requirements base for Army SSC graduates must be established. The limited analysis conducted in connection with this study can and must be improved upon. To that end, the RETO staff nominated such an effort to the USAWC as a special research project for the Military Studies Program. The nomination was accepted and a group research team was organized from the Class of '78. The 1978 effort was devoted to the development of a research methodology, the formulation of a research plan, and the beginnings of a data base. An outline of the USAWC Research Plan is attached as Inclosure 9. The research project will be completed by a similar research team organized from the Class of '79. It is anticipated that the final product will be of considerable value to ODCSPER and MILPERCEN.

10. Having thus decided how many and who will attend which SSC and why, it then becomes all the more incumbent on the Army's Senior Service College to focus squarely on its profession-unique responsibility -- joint and combined land warfare.

B. SSC Selection.

1. Current DA policy which governs SSC eligibility criteria requires completion of either the USACGSC resident course or non-resident course, or constructive credit for USACGSC attendance. Under the proposed RETO system, wherein practically all officers who meet the time-in-service criterion for SSC will have completed either the USACGSC course or the Combined Arms and Services Staff School, existing DA policy would be inappropriate. Under the proposed system, completion of the Combined Arms and Services Staff School would qualify an officer for subsequent consideration for SSC selection.

2. The educational qualifications of SSC selectees have risen rapidly over the past decade (60 percent of AY 1977-78 selectees hold advanced degrees). Based on this fact and the Services continuing inability to provide all deserving officers an SSC experience, the Deputy Secretary of Defense directed, (on 2 Jun 76) that the services develop procedures for granting constructive credit to officers with certain educational backgrounds and professional experiences. On 15 October 1976 the DA ODCSPER outlined procedures for MILPERCEN, to identify and grant constructive credit to "exceptionally

qualified officers." However, to this date, DA has not granted constructive credit for SSC attendance. Thus, procedures have been established, but the Army has not elected to award constructive credit for SSC.

3. DPS 040 directed the decrement of some 27 deserving Army officers who would otherwise have attended the USAWC in FY 79. Rather than arbitrarily eliminating those who were lowest on the list of officers selected for attendance, a more rational (from the perspective of the Army's needs) and a less arbitrary (from the officers' viewpoint) method is activation by the selection board of the Army's extant criteria for granting exceptionally qualified selectees constructive credit for SSC in lieu of actual attendance. Such board action would, if effected, allow decrements to be taken from among those officers who are least in need of further education of this type irrespective of their position on the overall list of those selected.

C. Curriculum Based on Mission.

1. In one of his last speeches before retiring as the Army Chief of Staff, General Fred C. Weyand expressed the philosophy that; "The Army is many things to many people, but basically it is an organization whose mission is to fight." Reflecting for a moment on the General's observation will serve to remind us of our most fundamental mission. To put it another way -- if the Army's leaders and its soldiers can do a great many things exceedingly well, yet are unable to acquit themselves competently either in battle or in support of combat operations against forces which are hostile to this nation and its allies, then everything else could be for naught.

2. The founder of the USAWC, Elihu Root, put its mission both succinctly and timelessly: "Not to promote war but rather to perseve peace by adequate and intelligent preparation." (emphasis added) Deterrence of war, currently the primary strategic objective of this nation is largely dependent on how demonstrably adequate are the combat preparations of the nation's fighting forces at every level.

3. It follows that every Army policy or program, every curriculum developed in support of training and education, every resource that is expended, and every key decision must be conditioned by clear understanding that the Army's mission is to fight.

4. This terribly unsophisticated statement of purpose carries with it many awesome responsibilities for the officer corps in both peace and war. These responsibilities include the training, morale and discipline of soldiers which, when properly combined, equate to a combat effective force. Responsibilities range from the company commander who provides for the request and issue of ammunition for his unit's annual arms qualification to the more senior officers at DA level who are responsible to insure that the Army's total requirements for ammunition are adequately planned, programmed and budgeted, to the senior officers within the Department of the Army Materiel Development and Readiness Command who have the responsibility to insure that ammunition is manufactured, procured, and distributed to that company commander in a timely manner.

5. Thus, as a simple illustration of a crucial point -- although the range and level of responsibility of some positions often separates the officer from direct contact with troops who are either in training or in combat, the absence of a well-designed, integrated war-fighting system (or a poorly run good system) will have a profound effect on the soldiers who function at the business end of the Army's mission.

6. It is of paramount importance that the USAWC learning experience achieve a clear and inextricable fusion to the Army's basic mission -- to fight, and all that this mission implies across the full range of senior officer responsibilities within the Army. If the learning experience can accomplish this much and no more, it has achieved its basic objective. Conversely, if the learning experience provides much more but produces only a vague and loose connection with the Army's basic mission, it has failed to achieve the basic objective.

7. Further, in today's Army, the lieutenant, captain and major can, unlike their counterparts of the 1930's, actively practice an approximation of most combat skills in an existing troop unit structure. For the higher level combat related skills, resource constraints militate against gathering together enough of these forces, except in rare instances, to approximate actual conditions. Thus, it falls to the USAWC to create an education and training environment in which these skills can be mastered vicariously.

8. Introduction into the USAWC curriculum of subjects such as tactical doctrine and weapon systems employment is appropriate and timely. In this age of technological advancement, it is not only significant but intellectually most challenging that no less than 40 new weapon/equipment systems will be introduced into the Army's inventory over the next 10 years which, if (but only if) allocated and employed so as to maximize their aggregate potential, will achieve a sorely needed force multiplier effect. It is profoundly disturbing to the thoughtful professional that no body of doctrine exists either for the employment or the sustainment of Army forces at the corps echelon and above, and that currently there is no provision for systematically inculcating senior Army officers with such doctrinal concepts even if they did exist. Emergency action procedures, readiness conditions, and deployability postures as they apply to the various levels of responsibility are appropriate for careful study and analysis by professionals.

9. Are the Army's senior field grade officers properly equipped to manage effectively the enormous problems associated with the strategic deployment of Army forces, especially into a hostile, base-based environment? How much experience does today's average logistics manager have in either the overseas shipment or the in-country distribution of millions of tons of equipment, supplies, munitions, and fuel? What problems are associated with the task of providing a steady flow of qualified personnel replacements from the Continental United States to deployed forces that are actively engaged? How competent are senior Army officers in matters such as command relationships, joint/combined command and control systems, integrated all-source intelligence systems, airspace management, joint air-ground operations system and numerous other components of the overall war-fighting system? The point by now may be clear -- probably no more than pitifully few senior officers can establish a clear interrelationship among the many components of the war-fighting system, and thereby contribute to its operation through a high degree of competence in their respective positions of responsibility, and do so under the pressures of a blistering paced war.

10. These are difficult, intellectually demanding voyages into largely uncharted waters. Developing and expanding the capacity of the Army's most select group of senior field grade officers, many of whom eventually will rise to positions of top level leadership, providing them the

conceptual skills and direction so that they can serve an integrative function within the entire war-fighting system is by no means a minor challenge for either the individual or the institution.

11. In the pursuit of such a challenge, deference to views which may be expressed, or to considerations which may be proffered by representatives of civilian academe is neither expected nor necessary. While it is commendable that a military institution of learning might compare favorably, in terms of educational excellence, with accredited civilian colleges and universities, such must not become a primary motivating factor among the military institution's staff and faculty. Should this occur, the relevance of the institution's curriculum to the Army's basic mission would, over time, tend to fade. While maintaining the primacy of the land warfare curriculum orientation, it can and should be expected that the USAWC learning experience further officer development by broadening his intellectual horizons, expanding his executive dimensions, reinforcing his moral and ethical values, and by strengthening his commitment to the profession of arms and to the nation of people he serves. The richness of the USAWC experience should also include adequate opportunity for self-development through the pursuit of graduate level studies, a physical fitness program, family activities and association with old and new friends in a pleasant social atmosphere. But, when the officer leaves the College, he must be prepared to fight -- for that is his mission.

12. There is an added benefit to the primary focus on joint and combined land warfare. So long as the USAWC so concentrates, it can claim to operate within its acknowledged professional competence, the expertise of the Army officer. This is his metier; here he can claim to be the authority.

13. In sum, the USAWC is described as "the senior professional school" of the Army. A profession is defined as a calling requiring clearly defined and specialized knowledge, technical and ethical standards, intensive preparation and life-long career commitment. It is intrinsic to a profession that only qualified professionals can determine its goals, standards, and define the USAWC's mission in terms which fall clearly within the confines of Army professional competence. And further, it must define that mission with such precision that the College's Staff and Faculty find in it firm guidance when shaping the curriculum.

D. Continuum of Joint and Combined Land Warfare Instruction.

1. The USAWC learning experience must properly complete the continuum of education and training in joint and combined land warfare as officers progress through the system of schools, colleges, and assignments from the less sophisticated to the more complex nature of the discipline. Specifically, a continuity and proper balance of land warfare instruction is required between the USACGSC and the USAWC.

2. The precise determination of how to close the existing breach in continuity between the USACGSC and the USAWC curricula is being addressed by the commandants of the two institutions. It is in general terms, therefore, that this study endeavors to develop recommendations for policy as it pertains to officer education in the discipline of joint and combined land warfare. For example, however, it is not intended that the USAWC learning experience stop short of broadening the officers' overall perspective of joint and combined land warfare which accrues to placing it in the context of national goals and objectives. Nor, on the other hand, is it envisioned that formal classroom drill in the techniques of preparing tactical plans and orders, and instruction in the fundamentals of offensive and defensive tactics, and basic forms of maneuver would occur at the USAWC. These skills may properly lie within the USACGSC curriculum purview. There may be a case, however, for a self-evaluated diagnostic and a self-study refresher program for some students whose previous education or experience has not adequately prepared them in such basic skills.

3. The requirement is relatively straight forward -- effective long-term curriculum coordination between USACGSC and USAWC and a clear establishment of the USAWC joint and combined warfare mission and objectives. From these will emanate the priorities for instructional resource allocation (the most precious of which is time) as well as the necessary emphasis to ensure first rate professional competence in the art and science of joint and combined land warfare in each USAWC graduate.

4. To fulfill the Army's wartime needs at the SSC level, Army officers attending the National Defense University as well as the USAWC must have the benefit of curricula, at least a portion of which provide indepth treatment to the:

- a. Joint Operations Planning System.
- b. Integrated command, control and communication system.

c. Strategic deployment of US Forces from CONUS to an overseas operational environment.

d. Integrated, all-source intelligence system, and the manner in which the system supports operational requirements of joint and combined forces.

e. Problems, capabilities, and concepts associated with the allocation and integrated employment of modern weapon systems to include nuclear, chemical and electronic.

f. Sustainment of operating forces to include the overseas shipment, in-country distribution, and management of supplies, munitions, fuel, and equipment.

g. Mobilization, training, overseas replacement, evacuation, hospitalization, and wartime management of personnel resources.

h. Management of the air-land battle.

E. Adjustment of SSC Curricula.

1. Several actions which would serve to accommodate many of the Army's SSC needs are within the purview of the Army education and training system. Other actions lie within the purview of DOD and, if initiated, must be requested by DA.

2. Revised mission and objective statements, together with broad guidelines for curriculum structure, provided by DA to the USAWC would serve to expand the scope and increase the depth of joint and combined land warfare instruction offered SSC selectees who attend the USAWC. An example of a revised mission statement and list of objectives, which have been coordinated with the USAWC as part of this study, is attached as Inclosure 12.

3. To accommodate the shortfall in meeting Army needs within the NWC and ICAF curricula, the Army, working through the JCS, could apprise the President, NDU, of the Army's requirements and request consideration of appropriate curricula adjustments. In the interim, as its own joint and combined land warfare curriculum expands and improves, the USAWC should prepare and make available to Army students at NDU and the other service SSC an exportable instructional module to assist them in achieving the necessary competency. These

modules should be designed as a combination of nonresident and resident instruction representing the equivalent of from 4 to 6 weeks academic effort. The nonresident segment of the instructional module should be forwarded to each Army selectee well in advance of the academic year. The resident segment should be conducted by Army faculty members at the various institutions during a 2-3 weeks preparatory phase, i.e., just prior to the beginning of main course activities. This effort will serve to ensure that Army students attending NDU, sister service colleges, and foreign service colleges are thoroughly cognizant and representative of relevant doctrine concerning the land warfare component of joint and combined operations.

4. Should the NDU curricula continue to fall short of its qualitative needs, the Army should retain the option to withdraw all Army students from NDU. This course of action recognizes the current and projected capacity of the USAWC to provide, through tailoring, for the specific needs of Army officers destined for service in assignments directly related to either joint and combined land warfare, defense management/ materiel acquisition, or national security affairs. Further, it envisions that general or specific assignment instructions could be made available to both the student and the USAWC in time to support an extensive assessment and counselling process for each student prior to the actual commencement of course work.

a. Based on FY 78 totals, 99 Army officers previously attending NWC and ICAF would, under this alternative, attend the USAWC, raising the student level there to 317 annually. Although some increase in staff, faculty and facilities would be necessitated by this contingency, the USAWC can accomplish the expanded academic mission.

b. A curricular model at Inclosure 13 portrays a possible method for accomplishing the task of educating all Army SSC students at the USAWC. A common overview is provided and, as is presently the case, some subjects would be more closely identified to one of the three mission-specific disciplines than to the others, but pertinent to the broad-gauged education necessary for all. The advanced studies portion will provide a vehicle for additional tailoring and emphasis according to the specific discipline. Also, original research in an area or on a subject pertinent to a specific discipline can be conducted concurrently with the common overview and the advanced studies.

F. Curriculum Planning and Pedagogy.

1. A valid educational experience must provide for both breadth and depth. It is no less than pedagogical nonsense to race lightly over the surface of a vast array of subject matter without pursuing any in depth. A hasty survey of a large number of topics will introduce, alert, familiarize, and foster awareness but little else. At some point, preferably in those areas of crucial importance -- land warfare and fighting the air/land battle, for example -- the course should be structured to require real depth, a profound analysis, demanding, intense application, sustained and rigorous thinking on the part of the student.

2. The research seminar is a proven instrument. Properly used, it can upgrade significantly the quality of research papers produced by students. Moreover, the research seminar does not have to be a dry, uninspiring process for the action-oriented Army officer. As an adaptation for a military setting, the entire process could be encompassed in the framework of applied research in the environment of an operational scenario with members of the class performing in designated staff roles and, concurrently, conducting related and meaningful research along with others in their respective specialty fields.

3. Under such an adaptation, research reports -- both oral and written -- would be of significant interest to other members of the class/staff. For example, an officer with Specialty Code 54 (Operations and Force Development) who might be designated as a joint task force J3 for an exercise would be especially interested in a particularly difficult problem involving the interface of joint service command and control communications, as research by the J6 staff Specialty Code 25 (Combat Communications-Electronics Specialist). Throughout this process, faculty members would have a continuing flow of oral and written reports available as instructional tools to improve the students' capability of expression (see also Inclosure 10).

4. If the College is to maximize the learning which takes place and thus justify the support of those who influence control of the "purse strings", it must contrive a better mix of learning methods from the arsenal of alternatives available. One way to approach the problem is to experiment with an entirely arbitrary weighting of relative effort and then plan the curriculum accordingly.

5. It is envisioned that the curriculum would concentrate on joint and combined land warfare where the Army has a unique need for graduates and a unique expertise to teach. Based on observations presented earlier, it is envisioned that the curriculum would be limited to a carefully controlled list of subjects having the highest priority, and that the college would ruthlessly trim out the "might be good to have" subjects and activities in favor of the "clearly essential."

6. A methodology which is more conducive to student internalization of instructional material would cause the students to become more directly involved in the pursuit of logical solutions to complex and frequently unclear problems associated with joint and combined land warfare; require of the students profound analysis with sustained and rigorous thinking; invoke from the students a demonstration of what they have learned by means of written or oral assignments, exercises, and simulations; and include an evaluation of students' performance for purposes of reinforcement and feedback. This is hard work; but it produces the tough-fibered reasoning the Army should require of those who aspire to senior positions and general officer.

7. In 1975, UP AR 350-1, DA officially adopted the concept of performance oriented instruction. Most officers entering SSC in the 1980's will have had considerable experience with this method of learning. It can be anticipated that SSC students will expect, and appropriately so, that the learning environment formed by the college will embrace the three principal advantages of this methodology: Active involvement by students in the learning process; clearly stated objectives of the educational effort being undertaken; and because of the first two advantages, a reduced level of student uncertainty and frustration with the process of learning.

8. This methodology supports the development and use of corps and higher level simulations and wargaming to include application in an institutional learning environment as well as in support of a Tactical Command Readiness Program (TCRP) for division and higher level field commands. (See Inclosure 3 to Appendix 3 for a discussion of the TCRP.)

9. Two cautionary notes are in order regarding instructional methodology. First, any attempt at short-term, radical reorientation of the goals and methods of a military

learning institution (such attempts have been made within the past 15 years) runs the unacceptable risk of completely destroying the faculty and overloading the student body to the extent that what should be a vigorous but reasonable academic experience turns into misery for all concerned. Little is either taught or learned. Second, the transition from the traditional method of instruction (emphasis on teaching) to modern instructional methodology (emphasis on learning) has been time consuming (in being to one degree or another since 1960), and intellectually painful. Fortunately, institutions endeavoring to begin the transition now can learn from the experience at other institutions and can take advantage of the research which many civilian educators have devoted to this specific area during the past 20 years. The key to the process of making the transition is indepth faculty preparation. Basically, the task is one of reversing attitudes and perceptions which have been internalized over a lifetime. Theorists in the field of communication point out that attitude change in an adult is a most difficult undertaking. The transition at issue extends beyond moderate change in attitude; it involves a complete reversal of thinking, and therein lies the importance of faculty indoctrination, obviously not a short term process. These cautions highlight, and this study recognizes, that there exist many difficult tasks associated with making curriculum and methodology transitions. Evolution rather than revolution is counselled.

10. As an adjunct to this study, an Army officer attending the 1977-78 Class of the Naval War College completed a special research project in which he examined the derivation of objectives for the higher orders of learning. A report of that research effort is attached as Inclosure 11.

G. USAWC Faculty.

1. The USAWC initiatives to improve faculty acquisition, qualification, development and tenure will, when realized, meet the needs of the institution. With regard to tenure, it appears that the existing agreement between MILPERCEN and the USAWC is operative and subject to very little improvement. The criteria for faculty selection are sufficiently broad, and appropriately so, to accommodate personnel requirements associated with changes which might occur in the mission, objectives and curriculum.

2. Planned increases in the use of simulations and wargaming as they apply to military planning and operations warrant the development of a program designed to provide selected faculty members an opportunity to gain fresh experience with and deeper insights to the specific needs of field commands. In this regard, periods of duty with units and headquarters, e.g., III Corps and U.S. Readiness Command, could serve such a purpose.

3. A major impact on the USAWC faculty would be that of developing and conducting a program designed to indoctrinate its members in the theory and concepts of modern instructional methodology, with emphasis on the derivation of behavioral objectives for the higher orders of learning. In this connection, it is again emphasized that such an effort should be approached on a mid- to long-term basis, but started deliberately and soon.

H. Wartime Expansion. (See Appendix 4.)

III. CONCLUSIONS

A. Selection.

1. The current SSC selection system is generally adequate to the Army's needs. However, DPS 040 directed a decrement of 27 deserving Army officers who otherwise would have attended SSC in FY 79. Rather than arbitrarily eliminating those officers who are lowest on the selection list, the board should be instructed to recommend constructive credit in lieu of attendance to those officers who meet the established criteria, irrespective of their relative position on the selection list.

2. Under the proposed concept for a Combined Arms and Services Staff School, completion of the USACGSC course no longer would be an appropriate criterion for SSC eligibility.

B. SSC Assignment and Graduate Utilization.

1. The Army's requirements for SSC graduates should be based on a rigorous position analysis of all colonel and higher positions.

2. The projected utilization of SSC graduates should be the predominant factor in determining the specific SSC to which selectees will be assigned.

3. RETO analysis of all colonel through general officer positions in the Active Army supports a requirement for a total of 2,362 SSC graduates, or a production of 295 each year. Of the annual requirements, 172 should be oriented on their respective Service or integrative roles in joint and combined operations (Service SSC -- Army, Air Force, Naval); 64 on national security policy formulation (NWC), and 59 on the management of national resources for defense (ICAF).

4. Determining position requirements for SSC graduates is viewed as establishing the basis for a pool of qualified officers as opposed to providing a pipeline to specific assignments.

5. The interrelationship of position analysis, selection, curricula, and subsequent utilization is viewed as the Army's best defense against the recent as well as any future budget-cutting-through-consolidation attacks on the SSC system. The Army should be prepared to argue that its system of selection, assignment of selectees to mission-specific curricula, and utilization is designed specifically to meet these identified requirements.

C. Quantitative Requirements.

Quantitatively, the current system fails to meet the Army's needs only in the national security policy formulation area, where there is a shortfall of about 24 annually. Since the USAWC historically has provided graduates to fill such positions, this shortfall can be met by tailoring an appropriate number of designated USAWC attendees' curricula accordingly.

D. Qualitative Requirements.

1. There are qualitative curricular deficiencies associated with each of the SSC. Specifically at issue is the degree to which current USAWC, NWC, and ICAF curricula adequately prepare graduates to perform their respective and integrative service roles under wartime conditions.

2. The Army education system currently provides inadequate indoctrination of students in concepts for the employment and sustainment of joint and combined forces at echelons above the division.

3. Very few Army officers are qualified in doctrinal concepts as they apply to joint and combined operations at corps and higher levels.

4. Doctrinal manuals for the employment and support of large units, e.g., echelons above the division, are presently under development with publication target dates ranging from FY 1979 to FY 1981. Continued DA emphasis on and support of this effort is essential.

5. The USAWC can with a moderate increase in resources, effect the necessary curriculum adjustments to meet the Army's needs for increased joint and combined land warfare instruction so that its graduates can perform their respective and integrative roles under wartime conditions.

6. The NDU does not meet the Army's requirements for graduate competency in national defense joint and combined integrative functions under mobilization or wartime conditions.

7. A requirement exists for the Army, working through the JCS, to apprise the President, NDU, of existing shortfall and to propose appropriate adjustments to the curricula which would serve to fulfill Army requirements. In the interim, as its own joint and combined land warfare curriculum expands and improves, the USAWC should make available to Army students at NDU as well as the other service SSC a preparatory instructional module (4-6 weeks equivalent) to be completed in a combined nonresident and resident mode under the active aegis of Army faculty members at the respective SSC.

8. Should the NDU curricula continue to fall short of the Army's qualitative needs, an option should be retained to withdraw Army students from NDU.

9. Withdrawal of Army students from NDU would raise the student level at the USAWC to 317 annually; result in a more substantial increase in staff, faculty, and facilities; and would require the USAWC to tailor its curriculum to accommodate instructional requirements in three primary disciplines: Joint and combined land warfare, defense management and materiel acquisition, and national security affairs. The USAWC is capable of accomplishing the expanded academic mission.

E. Curriculum and Pedagogy.

1. The current mission statement and supporting educational objectives assigned to the USAWC by DA do not adequately reflect a mission-specific orientation toward the conduct of joint and combined land warfare.

2. Curriculum design and content are properly the responsibility of the Commandant, USAWC.

3. The methodology currently prescribed by AR 350-1 is more conducive to student internalization of instructional objectives than are the more traditional methodologies.

4. A requirement is indicated for more extensive research in the derivation of behavioral objectives for the higher orders of learning.

5. The transition from traditional to modern instructional methodology requires intense research and extensive staff and faculty preparation which should be approached as a long-term (several years) effort.

6. USAWC plans for expanding its simulation and wargaming capabilities are consistent with requirements to improve the competency of senior Army officers in the application of doctrinal concepts for large (corps level and above) combat formations. Implementation of these plans will require DA support.

F. Staff and Faculty.

1. The existing USAWC faculty selection, utilization and development program, together with the continuing support of MILPERCEN, are adequate to support USAWC faculty requirements.

2. Moderate increases would be necessary to support additional academic effort in the area of joint and combined land warfare and an expanded simulation and wargaming capability.

3. A more pronounced impact on the USAWC staff and faculty would be caused by the withdrawal of Army students from NDU.

4. The Army's policy (AR 351-16) of granting equivalent SSC credit to qualified staff and faculty members will promote continued USAWC faculty improvement by encouraging non-SSC graduates who are otherwise highly qualified to compete for faculty assignments.

G. Wartime Expansion.

1. The current production rate of SSC graduates among both the Active Army and Reserve Components is sufficient to accommodate full mobilization requirements for Army colonels and general officers.

2. A requirement is indicated for a short (4-6 weeks) mobilization course at the USAWC to support requirements of total mobilization or some unforeseen order of magnitude expansion.

IV. RECOMMENDATIONS

A. Selection.

1. Selection boards be instructed to designate for constructive credit those exceptionally qualified SSC selectees who meet established criteria, irrespective of their relative position on the selection list.

2. SSC eligibility criteria be modified to recognize as eligible those officers who are graduates of the Combined Arms and Services Staff School.

B. SSC Assignment and Graduate Utilization.

1. DA conduct an analysis of all positions authorized for Army colonels and general officers (including those serving outside the Army) to establish specific SSC level education requirements by curriculum orientation (Service, NWC, or ICAF).

2. DA identify, through position analysis, requirements for short TDY training/developmental courses oriented on specific assignment preparation for colonels. Courses identified should be attended either in lieu of, or as a supplement to, SSC.

3. DA policy governing SSC selection and assignment to specific SSC courses of instruction be modified to

accommodate a criterion that is based primarily on Army requirements and individual development needs which would take priority over course designation based on the geographical location of the officer at the time of selection.

4. Long-term postgraduate utilization of Army SSC selectees be determined by DA and disclosed to officers before they begin the academic year at a SSC, and their immediate postgraduate assignments be announced early in the course of study.

C. Qualitative Requirements.

1. DA expedite the development and publication of doctrine for combined arms and logistic operations above the division echelon to include joint and combined operations in a coalition warfare environment.

2. DA recommend to the Joint Chiefs of Staff a revision of National Defense University curricula so as to be more responsive to the Army's need for graduates who can perform their respective and integrative service roles under wartime mobilization and operational conditions.

3. In the interim, USAWC prepare and make available to Army students at NDU and the other SSC a preparatory instructional module to assist them in achieving the necessary joint and combined land warfare competency.

4. If the revision proposed in para 2 above proves impractical, withdraw Army SSC selectees from NDU to attend USAWC, and tailor the USAWC curriculum to meet the Army's identified needs for SSC graduates in joint and combined land warfare, national security policy formulation, and defense management and materiel acquisition competencies.

D. Curriculum and Pedagogy.

1. The mission statement and objectives assigned to the USAWC be revised by DA to establish an increased instructional emphasis on the Army's wartime mission: the integrative aspects of joint and combined land warfare operations.

2. The Commandant, USAWC, develop a curriculum based on stated Army requirements, mission and objective statements as well as structural guidance provided by DA.

3. Commandants, USAWC and USACGSC, continue the close coordination necessary to achieve the required measure of continuity between the two levels of instruction.

4. USAWC develop and adopt an instructional methodology designed to promote a more direct and duty-related student involvement in the learning process and to require demonstrated competence in command, staff, and executive management skills such as abilities to apply analytical techniques, conceptualize, organize, plan, delegate, and contribute to the overall formulation and/or execution of strategic and tactical decisions.

5. DA support the development and fund the requirements of an increased simulation and wargaming capability at the USAWC to support student instructional objectives and increased command and staff readiness of Army operational forces.

E. Staff and Faculty.

1. DA recognize and support the unique faculty requirements of the USAWC.

2. USAWC and MILPERCEN continue to apply the provisions of AR 351-16 which governs the granting of equivalent SSC credit to qualified staff and faculty members.

F. Wartime Expansion.

USAWC develop a program of instruction for a short (4-6 weeks) mobilization course designed to accommodate possible requirements for SSC graduates that exceed the numbers needed for full mobilization.

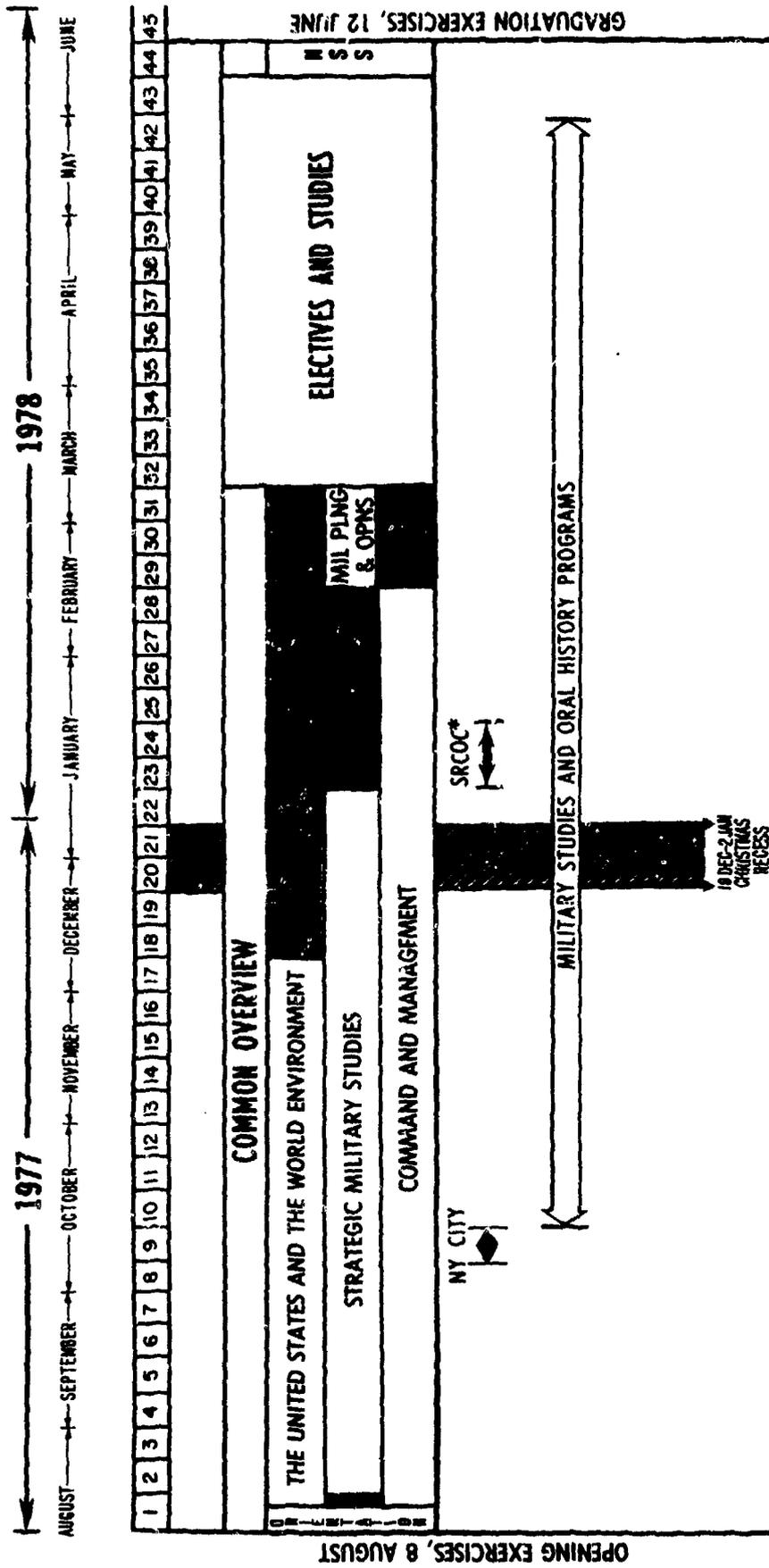
13 Inclosures

1. USAWC Curriculum Model
2. USAWC Electives
3. NWC Curriculum Model
4. ICAF Curriculum Model
5. NWC/ICAF Electives
6. TDY Specialized Short Courses
7. SSC Position Analysis
8. General Officer Analysis by
SSC Experience
9. USAWC Research Plan for
SSC Position Analysis
10. Elements of Land Warfare
11. Behavioral Objectives
12. Proposed USAWC Mission Statement and
Objectives
13. USAWC Curriculum Model (3-Track)

Inclosure 1

US ARMY WAR COLLEGE
CARLISLE, PENNSYLVANIA

RESIDENT CURRICULUM — ACADEMIC YEAR 1978



*SENIOR RESERVE COMPONENT OFFICER COURSE

USAWC ELECTIVES

Command in Europe
Contrasts in Command
Training, Readiness and Tactical Command
The American Soldier
Communications -- The Fundamental Basis of Leadership
Effective Human Relationships
Leadership, Command, and Ethics
Military Applications of Psychology
Organizational Effectiveness (OE)
Airpower Principles and Applications
Command of Major Units in Land Warfare
Joint and Combined Operations
Joint Operations Planning System (JOPS)
Military Operations in the Pacific
Military Command Control
Problems in Land Warfare: The Defense of Central Europe
Problems in Land Warfare: Warsaw Pact Strategy, Plans and Operations in
Central Europe
Analytical War Gaming
Force Planning
Technology and Strategy in Wars of the Twentieth Century
Advanced Military Strategy
Campaign Strategies
Changing Nature of Modern Warfare
Maritime Strategy and Operations
Nuclear Strategy, Policy, and Planning
Arms Control: An Element of National Security
Strategic Issues of World War II
The Utility and Application of Military Forces in Peace and War
The Vietnam War
War Initiation; War Termination -- Historical Fact or Fallacy
Advanced Automatic Data Processing
Organization Theory and General Management
Fundamentals of Automatic Data Processing
Installation Management
Management Information Systems
Managerial Decisionmaking
Business Management
Personnel Management
Industrial Operations Management
Logistics Management
Project/Program Management
Research, Development, and Acquisition Management
Analytical Techniques of Management I
Analytical Techniques of Management II

Inclosure 2

USAWC ELECTIVES, CONT'D

Basic Statistics and Probability
Cost Analysis
Simulation and Modeling
Economic Issues in National Security
The Media and the Military in a Free Society
Politico-Military Dimensions of National Policy
The Role of Congress
Social Issues and the Urban Crisis
Contemporary Issues in United States Foreign Policy
International Relations in the Contemporary Political-Military Environment
War and International Law
Africa: Problems and Promises
China as a World Power
Foreign Policy in Southeast Asia
Latin America: Power Structures and the Current Scene
Middle East Political Dynamics
The Power Potential of the Developing Nations
Soviet Power and Policy
Third World: Dynamics of Social Change

TDY, SPECIALIZED SHORT COURSES CURRENTLY AVAILABLE TO COLONELS

1. Defense Language Institute.
 - Foreign Language
 - "Gateway" to Germany
2. Civilian Contract (14 Universities).
 - Advanced Management Training
3. Defense Systems Management College - Fort Belvoir.
 - Defense Systems Management Course
 - Project Manager
 - Installation Financial Management
 - Executive Project Manager Refresher
4. U.S. Army Engineer School - Fort Belvoir.
 - Director of Facilities Engineering (SFAE)
5. Department of the Army Inspector General - Washington, D.C.
 - Inspector General Orientation
6. Defense Institute for Security Assistance Management - Wright-Patterson AFB.
 - Core Course
 - Overseas Course
 - Senior Officers Course
7. Judge Advocate General School - Charlottesville, Virginia.
 - Senior Officers Legal Orientation
8. U.S. Army Armor School - Fort Knox.
 - Senior Commanders Orientation Course
9. U.S. Air Force Air University - Maxwell AFB.
 - Professional Military Comptroller Course
10. U.S. Army Administration Center - Fort Benjamin Harrison.
 - Military Comptroller Course
11. U.S. Army Logistics Management Center - Fort Lee.
 - Director of Industrial Operations
 - Army Installation Management
 - Defense Procurement Management
 - Defense Disposal Executive Workshop
 - Operations Research/Systems Analysis Executive Course
12. DOD Computer Institute - Washington Navy Yard.
14. U.S. Army Branch Schools and Command and General Staff College.
 - Brigade Command Course

Inclosure 6

SENIOR SERVICE COLLEGE POSITION ANALYSIS RESULTS

<u>Totals</u>						
<u>06 Positions</u>	<u>Service(%)</u>	<u>National(%)</u>	<u>ICAF(%)</u>	<u>Total SSC(%)</u>	<u>Other(%)</u>	<u>06 Rqmts Total</u>
4251	568 (13.4)	227 (5.3)	162 (3.8)	957 (22.5)	872 (20.5)	1829 (43.0)

<u>06-010 Positions</u>	<u>Service(%)</u>	<u>National(%)</u>	<u>ICAF(%)</u>	<u>Total SSC(%)</u>	<u>Other(%)</u>	<u>06-010 Tot Rqmts</u>
4692	797 (17.0)	311 (6.6)	279 (5.9)	1387 (29.5)	883 (18.8)	2270 (48.4)

<u>Colonels - OPMD</u>							
		<u>Service(%)</u>	<u>National(%)</u>	<u>ICAF(%)</u>	<u>Tot SSC(%)</u>	<u>Other(%)</u>	<u>06 Rqmts Total</u>
Total Pns	3300						
Unanalyzed	-702	106	47	24	177	122	299
Analyzed	2598	393	173	87	653	453	1106
		499(15.1)	220(6.7)	111(3.4)	830(25.1)	575(17.4)	1405(42.5)

<u>Colonels - Non-OPMD</u>							
		<u>Service(%)</u>	<u>National(%)</u>	<u>ICAF(%)</u>	<u>Tot SSC(%)</u>	<u>Other(%)</u>	<u>06 Rqmts Total</u>
AMEDD	761						
JAGC	108						
CHAP	82						
Total	951	69 (7.2)	7 (.6)	51 (5.4)	127(13.4)	297(31.2)	424(44.6)

TECHNIQUE

1. Position by position analysis of 3487 (less 187 THS) OPMD colonel positions to include ARNG and USAR. Separate analysis of 951 non-OPMD colonel positions.

2. Criteria for SSC - Those capabilities which were most likely to be provided by generalized "educational" methodologies as in current or projected SSC curricula. For example:

- Management of diverse activities at a high level of responsibility.
- Decision making in areas of marginal personal technical competence.
- International, interagency, interactivity, interservice relationships.
- Senior functional management in peace or war.

- Positions requiring all or most of the senior "executive dimensions:" communication, sensitivity, leadership, delegation, problem solving, planning, and organizing.

3. Criteria for some "other" course at the colonel level -- those capabilities most likely imparted by definitive training or highly specialized educational methodologies. For example:

- Higher orders of specialization (R&D, project manager, provost marshal, comptroller).

- New levels of functional command/control (brigade and equivalent commander).

- Special skill additions (attache', PAO, community and installation commanders/managers, DPCA, DIO, DFAE).

- Updating specialist skills (ADP, professional peculiar - JAG, MD, Chaplain).

4. For those colonels whose duties require primarily broad experience in the exercise of routine management functions at any level, or primarily to exercise expertise in his specialty field(s), no further training or education was recommended.

5. For those OPMD positions (702) which could not be analyzed due to insufficient information, it was assumed that the ratios developed in the analyzed positions would apply.

6. Including general officers (separate analysis attached) there are a total of 1387 positions where a requirement for SSC qualification is indicated. Factoring, considering an average of 6 years (DOPMA) time in grade from colonel to brigadier general; 8.1 years of active service after SSC graduation; 3 assignments after SSC graduation yields:

- Total number of SSC graduates required: 2362 or 295 per year.

- Of the annual requirement, 57.7 percent is for Service (Army, Air Force, or Navy) oriented; 22.2 percent for NWC, and 19.9 percent for ICAF.

7. Currently, there are 2608 SSC graduates, colonel through general, serving on active duty. After receiving the 15 percent decrement, the AY 1978-79 class size is 301.

SSC POSITION ANALYSIS, GENERAL OFFICERS

CATEGORY	DESCRIPTION	NUMBER				TOTAL	SSC
		GEN	LTG	MG	BG		
POLICY/STRATEGY	INTERNATIONAL POLITICAL/MILITARY CG	2		2		4	NWC
	NATIONAL GENERAL STAFF (DIA, JCS, OSA, JOINT, COMBINED, OSD)		5	5	11	21	NWC
	ARMY - GENERAL STAFF	2	5	15	17	39	SVC
	INTERNATIONAL POL/MIL STAFF	1	5	1	10	17	NWC
	ATTACHE'/MAAG/MILGROUP			3	4	7	NWC
MANAGEMENT/ADMIN	DIRECTOR, MANAGER, STAFF - LOGISTICS/RESOURCES		2	7	6	15	ICAF
	CG/DCG INSTALLATION/ACTIVITY						
	LOGISTICS/RESOURCES	1	2	10	15	28	ICAF
	CG/CMDT/CHMN/DEAN EDUC/DOCTRINE	1	3	5	9	18	ANY
	DIRECTOR, MGR, STAFF MGT/ADMIN			6	11	17	ICAF
	CG/DCG MANAGEMENT/ADMIN ACTIVITY			6	2	8	ICAF
OPERATIONS/TACTICS	GROUND COMBAT FORCE COMMANDER/DEPUTY	3	8	23	38	72	SVC
	CG/DGC, INSTALLATION/ACTIVITY	1	4	11	4	20	SVC
	ARMY GENERAL STAFF			18	14	32	SVC
	JOINT/COMBINED GENERAL STAFF		1	5	9	15	NWC
	RESERVE COMPONENTS			3	3	6	SVC
	CG/DCG RESEARCH/TEST/DEV ACTIVITY			12	6	18	ICAF
SPECIALTY MATERIAL	MILITARY SPECIALTY RELATED STAFF OFF		1	2	11	14	SVC
	PROFESSIONAL SPECIALTY STAFF OFF			2	2	4	SVC
	(MD, JAG, CIV ENGR, CH)		1	1	4	6	ICAF
				4	2	6	OTHER
					2	2	NWC
	PROFESSIONAL SPECIALTY RELATED			4	7	11	ICAF
	COMMANDER/DCG			3	2	5	OTHER
	MILITARY SPECIALTY RELATED CG/DCG						
	ACTIVITY/INSTALLATION			3	7	10	SVC
	PROJECT MANAGER			1	7	8	ICAF
	CG/DCG SPECIALTY TRAINING ACTIVITY			13	13	26	SVC
	DIV ENGINEER/DIR CIV WORKS			4	8	12	NWC
		SSC TOTALS					223
						111	ICAF
						78	NWC
						18	ANY
						11	OTHER
	GENERAL OFFICER TOTALS	11	37	169	224	441	

GENERAL OFFICERS BY SSC EXPERIENCE

SSC	PERCENT OF '78 SSC SELECTEES ATTENDING (N=337)	PERCENT OF CURRENTLY SERVING BG (N=220)	PERCENT OF BG SELECTS 71-76 (N=355)	PERCENT OF CLASS TO MAKE BG 71-76	CURRENT BG	- NUMBER OF GRADUATES -							TOTAL 71-76
						71	72	73	74	75	76		
USAWC (192)	58	54	50	15	119	34	29	29	32	23	31	178	
NWC (40)	12	13	22	32	29	17	17	15	6	9	13	77	
ICAF (58)	17	20	17	18	45	17	7	5	8	19	6	62	
USAFWC (22)	6	3	5	13	7	5	6	3	0	1	2	17	
USNAVWC (22)	5	4	5	13	8	7	2	3	2	2	1	17	
FOREIGN (3)	1	1	1	11	2	0	0	0	2	0	0	2	
NONE	-	5	1	-	10	0	1	0	0	1	0	2	

Inclosure 8

F-1-VIII-1

US ARMY
SENIOR SERVICE COLLEGE POSITION VALIDATION
STUDY

ACADEMIC YEAR 1978 AND 1979



STUDY CONCEPT AND PLAN

5 May 1978

Inclosure 9

F-1-IX-1

US ARMY SENIOR SERVICE COLLEGE

POSITION VALIDATION STUDY

STUDY PLAN

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1. INTRODUCTION.

a. **GENERAL:** This study is in support of an overall Army officer education analysis being coordinated by MG Harrison under the title of "Review of Education and Training for Officers" (RETO Study). The majority of the effort represented by the study is being executed by the students of the United States Army War College from Classes of AY 78 and AY 79.

b. **BACKGROUND:** Senior Service College graduate requirements are not a new subject. The two most significant efforts found in a chronological file are listed at the top of table 1. Numerous memorandums between USAWC and the DA staff and between the DCS's at DA are available and reflect a long history or serious concern about SSC population and training. AR 614-102 governs our SSC graduate users; however, the regulation provides little other than a means of presenting basic demand to MILPERCEN. The literature available indicates that the greatest reason for demand is a "quality cut" and that the size of the existing population has mostly to do with plant capacity. All in all, the history of SSC analysis and actions is illuminating, however, not encouraging. The design of this study has been strongly influenced by the historical review with the intent of overcoming previous inadequacies.

TABLE 1

BACKGROUND

- HAINES BOARD 1966
- DCSPER MECO STUDY 1971
- USAWC/DA MEMORANDUMS
- DA STAFF MEMORANDUMS AND ACTIONS
- AR 614-102 - CURRENT AND PROJECTED COLONEL REQUIREMENTS (RCS MILPC-25)
- ASSIGN 80% OF DEMAND
- DEMAND IS QUALITY CUT
- PLANT CAPACITY IS PRODUCTION REQUIREMENT
- TRAINING AND UTILIZATION ARE EMOTIONAL SUBJECTS

2. STUDY TASK.

a. **PROBLEM:** Table 2 states at the top the basic issue to be supported by the analysis. The basic problem has been further defined by three subproblems. These subproblems were derived from our literature search and consultations with experts of the subject area. The double lined portion is sort of "noun nomenclature" for each. The first subproblem is the key effort for the study group while the last two will rely extensively on factors and policy from DA and MILPERCEN.

TABLE 2

PROBLEM

DETERMINE THE US ARMY'S CURRENT REQUIREMENT FOR ACTIVE ARMY O-6 SENIOR SERVICE COLLEGE (SSC) GRADUATES.

SUBPROBLEM:

1. DETERMINE WHICH REQUIRED US ARMY COLONEL (O-6) POSITIONS OF THE US ARMY, DOD, AND OTHER GOVERNMENT AGENCIES JUSTIFY BEING FILLED WITH A SSC GRADUATE (VALIDATED SSC POSITION).
2. DETERMINE THE US ARMY'S REQUIREMENT FOR SSC GRADUATES TO ADEQUATELY FILL NON-SSC POSITIONS REQUIRING THE PROFESSIONAL COMPETENCE AND QUALITY OF THE SSC GRADUATE (SSC SUSTAINING REQUIREMENT).
3. DETERMINE THE PARAMETERS OF ANNUAL ATTRITION AND PRODUCTION REQUIREMENTS FOR SSC GRADUATES (ANNUAL ACTIVE ARMY SSC STUDENT REQUIREMENT).

b. **OBJECTIVE:** The primary and secondary objectives are listed on table 3. The primary objective is the basic justification for the work. The analysis will also generate useful data to provide substantive material to support the secondary objectives that will be of benefit to the Army.

TABLE 3
OBJECTIVES

PRIMARY

- CONCLUDE A DEFENSIBLE SSC GRADUATE REQUIREMENT FOR THE US ARMY.

SECONDARY

- PROVIDE INSIGHTS USEFUL IN GUIDING USAWC CURRICULUM.
- INFORM SELECTED PRINCIPAL HEADQUARTERS OF THE UTILITY DERIVED FROM THE CURRENT SSC CURRICULUM.
- DEVELOP A RECOMMENDED CONCEPT TO SUSTAIN A VALID SSC REQUIREMENT.

c. SCOPE:

(1) There are many ways to study the subject SSC. Table 4 illustrates the range of study possibilities. One basic pair of alternatives is whether to study a FORCE REQUIREMENT or TRAINING REQUIREMENT; each with many suboptions. The block on table 4 that is checked and double lined is the scope analyzed by this study.

(2) The study effort has boundaries and some of them are of considerable interest to many people. The FY 79 budget cycle brought the first stub of table 5 into prominent focus and to a limited degree this effort will contribute to future debate on the subject. The study does not review the environment of the reserve components, an area of strong potential interest. The last two stubs are aspects of the RETO Study under General Harrison and not addressed by this analysis.

TABLE 4

SCOPE ALTERNATIVES

● FORCE BASE REQUIREMENT: ✓

DA CIV GS13 or BETTER	NATIONAL GUARD (0-6) REQ 797 AUTH 858	ACTIVE ARMY (0-6) REQ 4336 AUTH 4086	(FY 77) ARMY RESERVE (0-6) ASSN 3378	MOBILIZATION REQUIREMENT + ?
--------------------------------	--	---	---	------------------------------------

● TNG BASE REQUIREMENT (AWC):

●● ALL FORCE BASE PLUS

	<u>FY 78</u>
- AIR FORCE	16
- NAVY	5
- MARINE CORPS	6
- OTHER GOVT CIV'S	10
- INTL FELLOWS	6

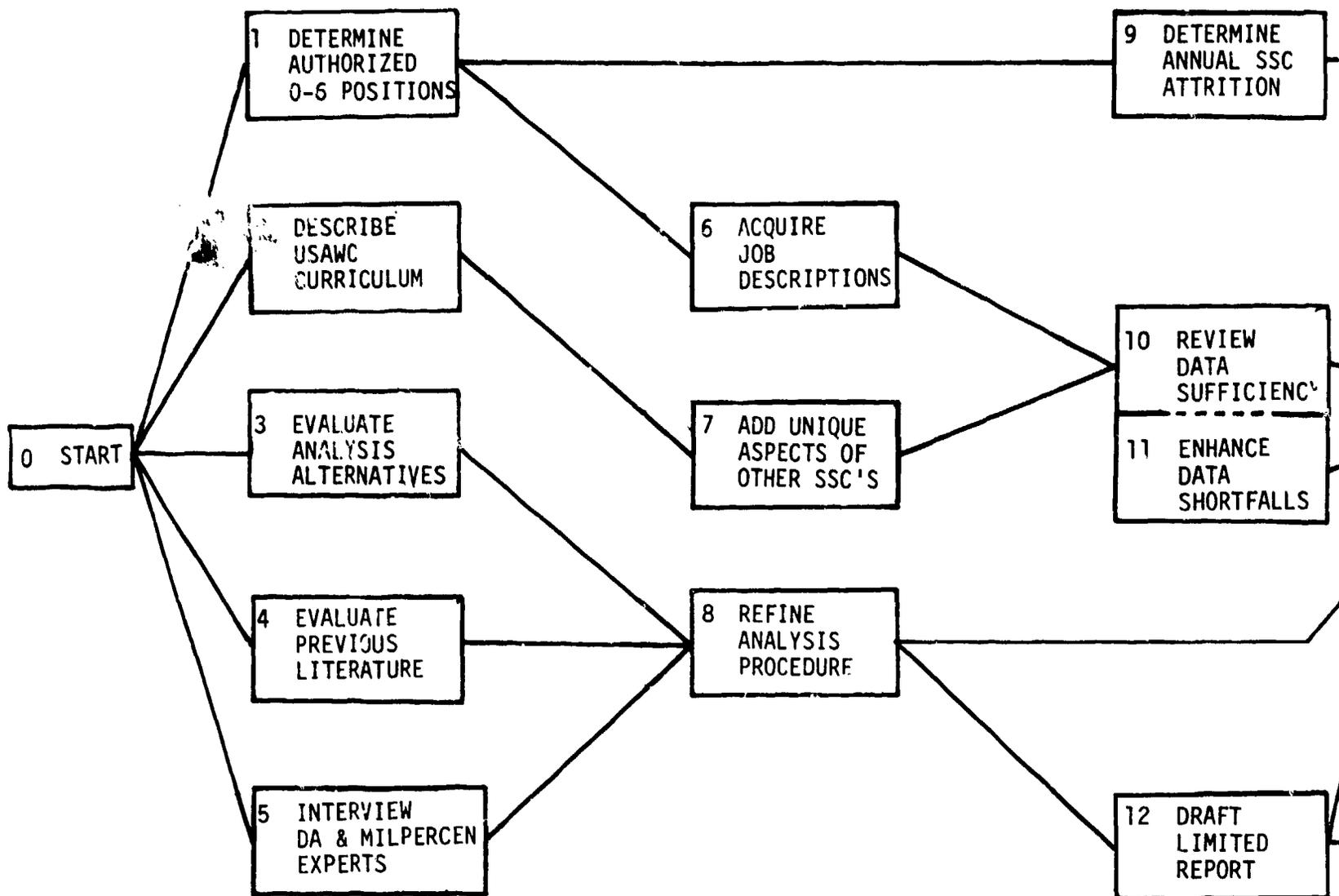
QUESTIONS:

- ACTIVE ARMY US TOTAL FORCE
- CURRENT FORCE US MOBILIZED FORCE
- TRAINING REQUIREMENT US FORCE REQUIREMENT
- RESIDENT
- NONRESIDENT
- AWC OR OTHER
- ART OF THE POSSIBLE (DATA BASE)
- PRACTICAL (RESULTANT NUMBERS)
- FOLLOW-ON OR PARALLEL EFFORT

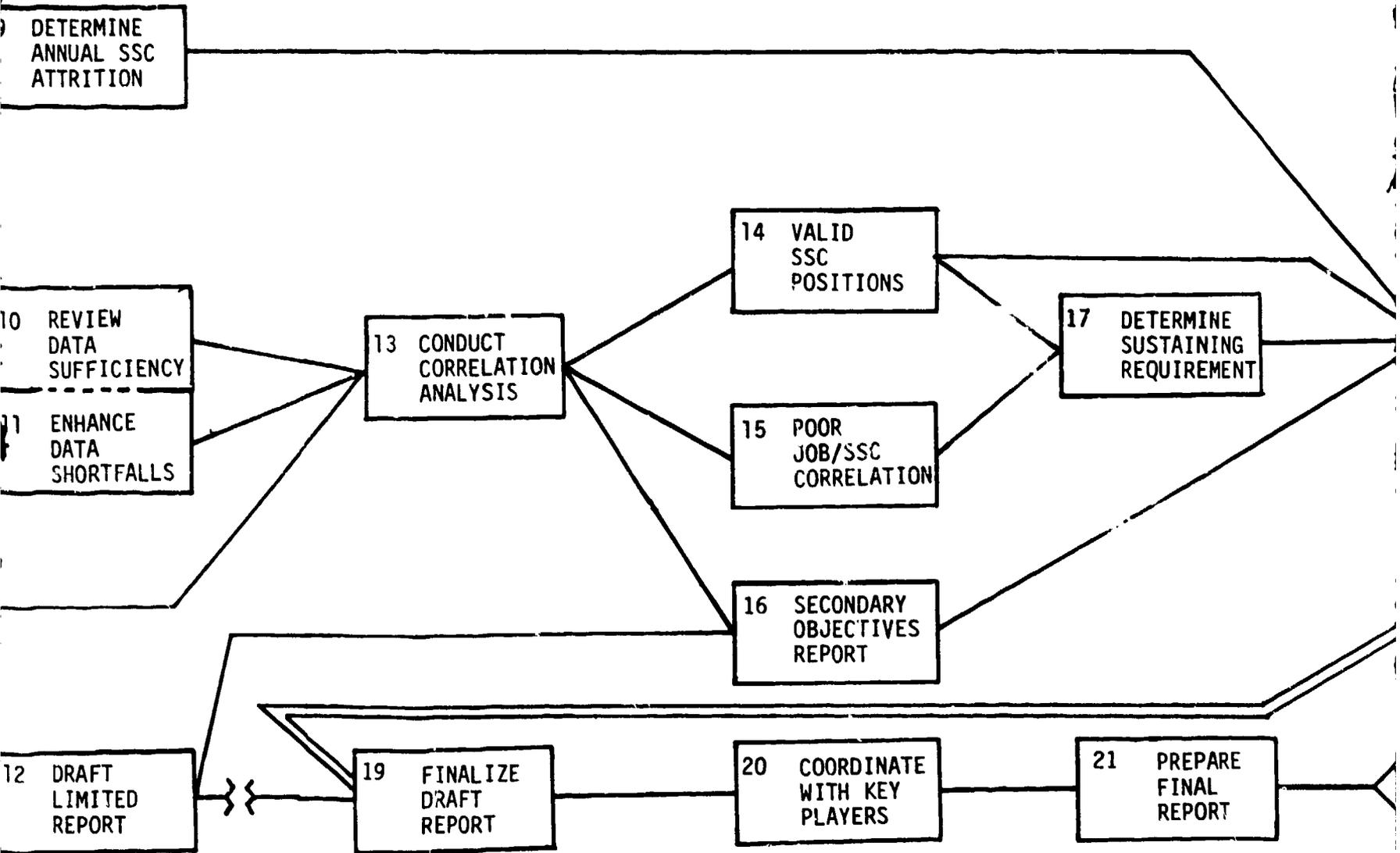
TABLE 5

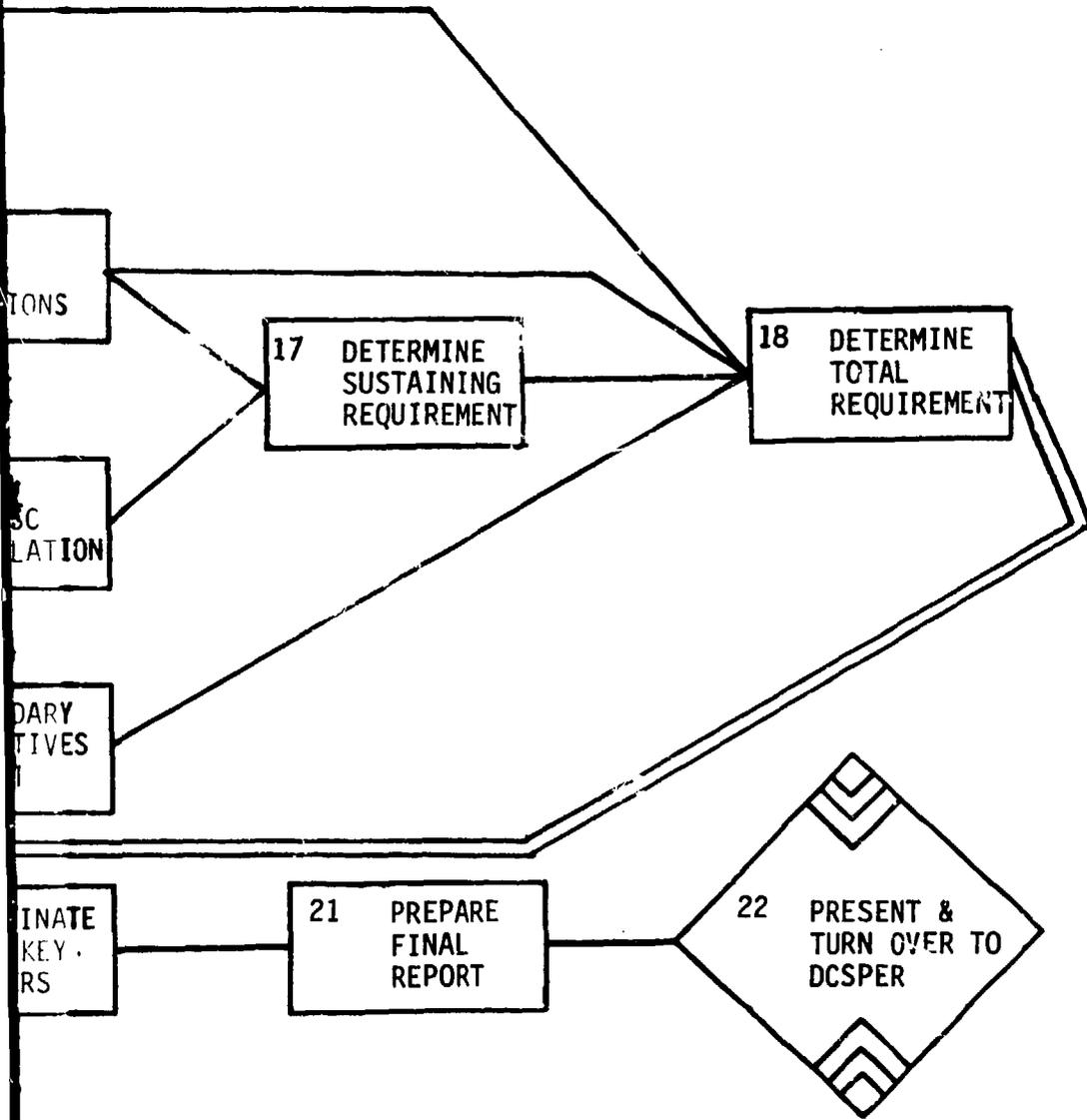
WHAT NOT DOING

- JUSTIFY SSC'S
- NON-ACTIVE ARMY FACTORS
- O-5 (LTC) UTILIZATION
- CRITIQUE CURRENT CURRICULUM
- CORRELATE SSC TO OTHER EDUCATION AND TRAINING



F-1-IX-10





(2) Twenty-two Specific Methodology Events (Numbers Correspond to Figure 1):

1 Determine O-6 Positions - Obtain a listing of the current required and authorized active Army O-6 positions from DA ODCSPER.

2 Describe USAWC Curriculum - Collate the "Learning Objectives" established by the USAWC curriculum and recorded in the course directives (see figure 2). Three sample "Learning Objectives" are recorded in table 10. The USAWC elective phase objectives will also be collated with the core curriculum.

FIGURE 2

COURSE DIRECTIVE

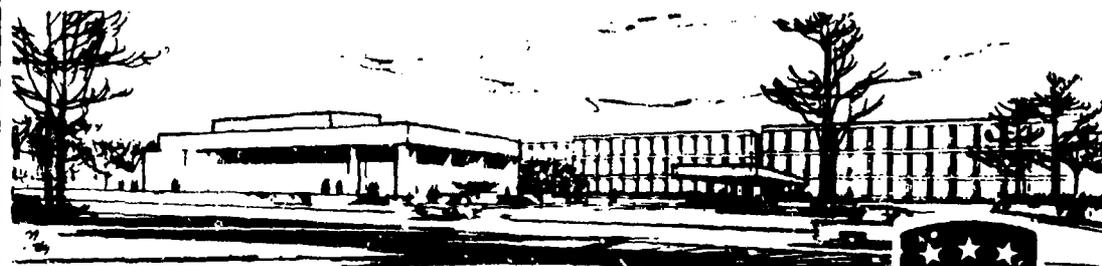
DIRECTIVE

ACADEMIC YEAR 1978

MILITARY STRATEGY, PLANNING, AND OPERATIONS

**STRATEGIC MILITARY
STUDIES**

**PHASE II
MIDRANGE US MILITARY STRATEGY**



US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013



12 OCTOBER - 9 DECEMBER 1977

F-1-IX-12

TABLE 10

SAMPLE "LEARNING OBJECTIVE" STATEMENTS

TO BECOME FAMILIAR WITH THE MANAGEMENT OF ARMY RDA AND THE PROCEDURES WHICH ARE DYNAMICALLY EVOLVING TO DETERMINE REQUIREMENTS, ALLOCATE FUNDS AND SCIENTIFIC RESOURCES, DEVELOP MATERIAL, AND EVALUATE RESULTS.

TO UNDERSTAND THE ROLE OF FORSCOM IN MANAGING THE READINESS OF ACTIVE ARMY, RESERVE, AND NATIONAL GUARD UNITS.

TO DETERMINE THE MOTIVATIONS BEHIND BROAD CONTEMPORARY NATIONAL POLICIES AND REDEFINE THESE MOTIVATIONS AS THE NATIONAL PURPOSE OF THE UNITED STATES.

3 Evaluate Analysis Alternatives - Review analytical approaches capable of accomplishing the analysis and select the one that most effectively meets the objectives and can be supported by available data.

4 Evaluate Previous Literature - Review documents in USAWC/DCSPER/MILPERCEN of the subject area. Develop adequate historical perceptions to facilitate a sound analysis concept and avoid analysis pitfalls of previous work.

5 Interview DA and MILPERCEN Experts - Update and round out knowledge acquired by the literature search. Begin to acquire background data necessary to continue the study and establish a sound analysis procedure.

6 Acquire Job Descriptions - Obtain through the efforts of resources of DA DCSPER all 0-6 job descriptions, each having adequate

detail to conduct the analysis. The job descriptions found on OER's are generally inadequate; however, those on manpower survey documents and requisitions of other government agencies are superior and generally adequate. Examples of these latter two types are illustrated on tables 11 and 12. Where gaps exist the command or agency must be requested to fulfill the need.

TABLE 11

SAMPLE JOB DESCRIPTION -- MANPOWER SURVEY

DIVISION CHIEF: MONITORS AND IS RESPONSIBLE FOR THE CONDUCT OF ALL STUDIES, FDTE EFFORTS, AND TOE FOR WHICH USAIS HAS PROPONENCY. ADVISES THE DIRECTOR, COMBAT DEVELOPMENTS, AND ASSISTANT COMMANDANT, USAIS, ON ALL MATTERS PERTAINING TO FORCE DEVELOPMENT AND THE STATUS OF ONGOING OR OPERATIONAL/TROOP TESTS. CONSOLIDATES COMMENTS OF THE OTHER DIRECTORATES WITHIN USAIS AND FORMULATES THE INFANTRY SCHOOL POSITION BASED UPON THE RESULTS AND REPORTS OF VARIOUS EVALUATIONS, STUDIES, AND TESTS CONDUCTED BY THE DIVISION. MONITORS ALL COMBAT DEVELOPMENT ACTIVITIES AND ATTENDS SELECTED MEETINGS, REVIEWS, IPRS AND CONFERENCES NECESSARY TO MAINTAIN EXPERTISE ON VARIOUS PROJECTS OF INTEREST WITHIN THE INFANTRY COMMUNITY. PROVIDES CONTINUOUS GUIDANCE TO PROJECT/ACTION OFFICERS AND IS RESPONSIBLE FOR ESTABLISHING PRIORITY OF EFFORT WITHIN THE FDTE AND TOE AREAS, TO INCLUDE COORDINATION WITH TCATA, CDEC, CACDA, TRADOC, FORSCOM, AND OTHER HEADQUARTERS.

TABLE 12

SAMPLE JOB DESCRIPTION -- REQUISITION

EXECUTIVE OFFICER, DSAA: ASSISTS, ADVISES, REPRESENTS AND SUPPORTS THE DIRECTOR AND DEPUTY DIRECTOR, DSAA. ASSISTS DSAA IN IMPLEMENTING MAJOR SECURITY ASSISTANCE PROGRAMS ON A GLOBAL BASIS. IN THIS CAPACITY THE INCUMBENT WORKS DIRECTLY FOR AND IN THE OFFICE OF THE DIRECTOR, DSAA. ASSISTS THE DIRECTOR IN CARRYING OUT OFFICIAL AND SOCIAL RESPONSIBILITIES OF HIS POSITION. PROVIDES LIAISON BETWEEN THE DIRECTOR AND ISA STAFF OFFICES, THE SERVICES, DEPT OF STATE AND THE JOINT STAFF ON ALL MATTERS ASSIGNED BY THE DIRECTOR, DSAA AND ON SUBSTANTIVE MILITARY SALES MATTERS, AS REQUIRED. PERFORMS SUBSTANTIVE FUNCTIONS THAT THE DIRECTOR DETERMINES ARE BEST PERFORMED IN HIS IMMEDIATE OFFICE RATHER THAN BY OTHER ELEMENTS OF THE STAFF. SUPERVISES PERFORMANCE OF OFFICE STAFF BOTH MILITARY AND CIVILIAN.

7 Add Unique Aspects of Other SSC's - Compare collated learning objectives of USAWC with the curriculum objectives of NWC, ICAF, NAWC and AWC to determine and add unique instruction. The final list will then be broken into functional areas, such as INTELLIGENCE, to facilitate the later correlation with the job descriptions. The list of functional areas that the curriculum learning objectives will be aligned with is attached as appendix A.

8 Refine Analysis Procedures - Collate the knowledge acquired from events 3, 4, and 5 to develop the best practicable analysis concept and procedure.

9 Determine Annual SSC Attrition - A key factor relating to the active Army annual production need is the attrition of graduates from the O-6 force. This factor will have to be a data element provided through DCSPER from MILPERCEN.

10 Review Data Sufficiency - Review all data for completeness, accuracy, and suitability to support the correlation analysis procedure.

11 Enhance Data Shortfalls - Obtain by special effort or analysis improvements deemed necessary by results of event 10. This may include, for example, revised job descriptions or adjusted "Learning Objective" rollout.

12 Draft Limited Report - This is essentially the STUDY PLAN which will be an appendix to the final report. Data in study plan will, however, be prominent features of the final report, i.e., problem, objectives, scope, etc.

13 Conduct Correlation Analysis - Table 13 illustrates the actual analysis event. By comparing job descriptions with the curriculum rollout, we will record, as indicated on the bottom of the chart, the numerical number of the learning objectives which contribute to the job. Those objectives with unusually strong correlation will be underlined. Judgment must prevail--but we hope to enhance the judgment by setting up evaluation teams as illustrated by table 14. Appendix B lists the planned description and composition of the analysis teams.

14 Valid SSC Positions - The accumulation of all active Army O-6 positions judged as having duties significantly enhanced by the SSC curriculum. The positions will be recorded as to applicable position numbers and include the justification causing correlation. The final report will also include a DCSPER printout annotated with the correlated positions in addition to the individual justification sheets.

TABLE 13

JOB DESCRIPTION -- SSC CURRICULUM

CORRELATION EVENT

● PSN TITLE: <u>XXXXXXXX</u>	● SSC CURRICULUM
● JOB DESCR: <u>XXXXXXXX</u> <u>XXXXXXXXXXXXXXXXXX</u> <u>XXXXXXXXXXXXXXXXXXXX</u> <u>XXXXXXXXXXXXXXXXXXXX</u> <u>XXXXXXXXXXXXXXXXXXXX</u>	1. <u>XXXXXXXXXX</u> 2. <u>XXXXXXXXXX</u> 3. <u>XXXXXXXXXX</u> X. <u>XXXXXXXXXX</u> XX. <u>XXXXXXXXXX</u>

3, 14, 28, 34, 63, 84, 85, 87, 140, 178, 194

- JUDGMENT IS UNAVOIDABLE AND CRUCIAL
- JUDGE WHICH OBJECTIVES ARE CORRELATED
- JUDGE WHEN CORRELATION IS ADEQUATE TO JUSTIFY SSC.

TABLE 14

EVALUATION TEAMS

EVALUATE WITH FUNCTIONAL TEAMS OF 2 OR 3 STUDENTS--

- | | |
|-------------|---------------|
| ● LOGISTICS | ● DA STAFF |
| ● JAG/MC | ● TRADOC |
| ● EUR CMD | ● INSTL STAFF |
| ● FORSCOM | ● ETC. |

15 Poor Job/SSC Correlation - These positions are part of the baseline necessary to accomplish event 17. Also, a sensitivity analysis will be conducted on these positions as an aspect of event 16, Secondary Objectives Report.

16 Secondary Objectives Report - This document will record, as an appendix, the conclusions and recommendations relating to the secondary study objectives:

- Insights useful in guiding USAWC curriculum.
- Concept to sustain a valid SSC requirement.

The other secondary objective--inform selected principal headquarters of the utility derived from the current USAWC curriculum--will be accomplished during event 20, Coordinate With Key Players.

17 Determine Sustaining Requirement - This will be a factor or number correlated with both SSC validated positions and non-validated positions that accomplishes the following: "SSC graduates needed temporarily in a non-SSC position for the good of the service or agency . . . may hold other special qualifications." The study group will review this factor and its justification, and include appropriate comments in the final report.

18 Determine Total Requirement - This event will include two elements. One will be the active FORCE REQUIREMENT resulting from the combination of the validated SSC 0-6 positions and sustaining requirement. The other element will be the annual production requirement resulting from comparing the Force Requirement with Annual Attrition.

19 Finalize Draft Report - Documentation of the results and recommendations of the total effort previously described. The format will include an executive summary and briefing charts with associated narrative.

20 Coordinate With Key Players - This event will be pursued to enhance the study's completeness and credibility. The final draft will be presented to selected principal players and comments obtained will be incorporated into the study results or reflected separately if the group feels they should not affect the recommendations. This event will not be a concurrence event, but rather an opportunity to comment. The concept is reflected on Table 15. A proposed list of the headquarters to be visited is attached at appendix c.

21 Prepare Final Report - Review the results of events 19 and 20, incorporate acceptable comments and prepare inclosure reflecting comments from event 20 not utilized in the final recommendations. Complete report to include an Executive Summary and narrated briefing.

TABLE 15

VALIDATION/COORDINATION

- AWC STUDENT BRIEFING TEAM(S)

- PRINCIPAL PLAYERS
 - HQDA/MILPERCEN
 - FORSCOM
 - TRADOC
 - USAEUR
 - ETC.

- PRESENT DRAFT REPORT

- ACCEPT COMMENTS

- INCORPORATE OR REPORT DIFFERENCES

- COMMENTS NOT CONCURRENCES

22. Present and Turnover to DA DCSPER - Arrange a formal presentation/briefing of the study's findings and recommendations to interested members of the DA staff and provide the final report to DCSPER for action.

(3) Methodology Summary: These twenty-two brief event descriptions represent a combination of efforts completed, underway, and to be started. Refinements within events not yet accomplished can be expected and addition of other events is possible. The critical thread necessary to hold this effort together is accurate job descriptions. The next most significant factor is the proper design of, and time available to, the validation/crosswalk teams. The historical/literature review has determined that these events are crucial if the study is to accomplish the primary objective; thus, this methodology requires considerable time and effort.

4. SUMMARY.

a. **FUTURE:** The results of this effort appear to be potentially significant to both HQDA and the USAWC. An estimate of manhours necessary to properly execute the methodology would be a significant number; however, the literature search and interviews conducted indicate that the effort is well justified. There also seems to be good reason for the Army to consider additional investigations into factors not considered here. The environment of Reserve Component requirements; USAWC resident training population; and the future scope, form and role of the Nonresident Course appear to be just a few of the opportunities deserving investigation.

b. **REALISTIC:** Any significant event such as this study can raise as many questions or problems as it answers. In recognition of this factor, the study group will develop a list of "potential pitfalls" that will accompany the report. To some limited degree, these potential challenges will be analyzed for sensitivity and appropriate comments made. An example of topics is included at table 16.

c. **STUDY GROUP:** Appendix D lists the principal players at the USAWC from the Class of AY 78. A student study chairman from the AY 79 class has been contacted and other potential student members are being identified by the AY 78 study group.

TABLE 16

POTENTIAL PITFALLS

- MAY REDUCE ASSIGNMENT FLEXIBILITY
- COULD LEAD TO SSC SELECTION BY OPMS SPECIALTY
- JOB DESCRIPTIONS MAY NOT BE ADEQUATELY REPRESENTATIVE
- MAY HAVE TROUBLE CORRELATING HIGHLY TECHNICAL POSITIONS/BRANCHES, I.E., JAG AND MEDICAL
- DOES NOT HANDLE RC'S OR ARMY CIVILIANS WHO ATTEND THE USAWC
- COULD AFFECT SSC SELECTION WINDOW

Appendix:

- A. Functional SSC Curriculum Titles**
- B. Functional Analysis Teams**
- C. Final Draft Coordinating Agencies**
- D. Class of FY 78 Study Group**

FUNCTIONAL SSC CURRICULUM TITLES

1. PPBS/ZBB
2. Intelligence and Security System
3. Logistics
4. US Forces
5. Allied Forces
6. Research, Development and Acquisition
7. National Issues
8. US Government
9. Economics
10. Command and Leadership
11. Operations and Force Development
12. DOD and Other Agencies
13. Training
14. Mobilization
15. Strategy
16. International Issues
17. Management
18. Force Posture Assessment
19. Miscellaneous

PROPOSED FUNCTIONAL ANALYSIS TEAMS

Title

- DA Staff
- Other DOD Agencies
- TRADOC
- FORSCOM
- USAREUR
- Pacific
- Logistics
- RDA
- CBT CMD
- CS & CSS CMD

APPENDIX B

F-1-IX-22

FINAL DRAFT COORDINATING AGENCIES

- HQDA
 - DCSPER
 - DCSOPS
 - PA&E

- MILPERCEN

- ALL MACOM'S

- OTHERS AS REQUESTED

PRINCIPAL PLAYERS

CMD GP MONITOR

BG Robert C. Gaskill

FACULTY MONITOR

COL Jethro J. Davis

STUDENTS - AY 78

LTC(P) Wayne C. Knudson *

COL Ralph J. Powell

LTC(P) Michael F. Spigelmire

LTC William A. FitzGerald, Jr.

LTC J. H. Binford Peay, III

LTC Gordon R. Sullivan

LTC Rodney D. Wolfe

AY 79

To be determined

* Chairman

ELEMENTS OF LAND WARFARE

1. A logical way to examine and study land warfare is as a set of interacting and mutually supporting elements. These elements, outlined below, pertain to all levels of military organization and may be viewed in the abstract when studying the art and science of warfare. They are, among others:

- Command, Control, Communication (C³)
- Intelligence
- Engineer
- Fire Support
- Air/Ground
- Air Defense
- Electronic Warfare
- Maneuver Forces
- Combat Service Support

2. Each element can and must be defined and understood as a complex of men, equipment, and procedures designed to perform an essential function. In some cases this complex may be a unit, a weapon system, or it might be a system -- a method of operating.

3. These elements do not engage with and destroy the enemy; however, the units and weapons that comprise them do. How effective our tanks, infantry, artillery, attack helicopters, and other weapon systems are is dependent on how well they are melded into a cohesive entity whose total destructive power generated against the enemy is greater than the sum of the parts. In almost all cases these elements act in concert and are interdependent with other Services and even Allies.

4. When separating land warfare into its component parts, it is possible to dissect each element, study its strengths and weaknesses and formulate recommendations to increase operational effectiveness at the level being analyzed. As an example, one might dissect C³ and examine the national command structure and how that structure influences unified and specified commands, joint task forces, or the corps. The issue of increases in automation of C³ (TOS as an example) and the impact on standardization as it effects coalition warfare warrants in-depth study as well as any number of other issues which lend themselves to study in the C³ area.

INCLOSURE 10

F-1-X-1

5. For instructional purposes, this approach can be used effectively to study current organizational and operational concepts and doctrine to determine adequacy of equipment and adequacy of that body of doctrine governing its employment at any echelon. As an example, given the Soviet/Warsaw Pact threat, the doctrine to counter that threat (now being written for the corps), and applicable environmental considerations, one can establish a base:

Doctrine
Environment
Threat

One can now array the elements of land warfare with respect to this base:

C ³	INTEL	ENGR	FIRE SUPT	AIR/GRD	AIR DEF	EW	MANEUVER	CSS
Doctrine								
Environment								
Threat								

6. Such a construct can be used by the student to study any specific element of land warfare. Using intelligence as an example, one may desire to study the intelligence implications of promulgated doctrine. This process allows one to extract the intelligence component of land warfare as a semi-discrete element and assess it. This assessment becomes very logical and causes one to consider all aspects -- enemy and US doctrine, equipments, operational needs and, finally, what capability is on hand to satisfy those needs.

7. A brief example: The student, after making a detailed study of the threat facing a corps, the threat's normal doctrine, and the existing operational environment, can determine what information/intelligence is required for the corps commander to make rational decisions. These indicators may be, for example, intensified enemy reconnaissance, forward movement of ADA, major units moving to assembly areas and so forth. Once these indicators are established the student can then review the corps intelligence assets, the system that employs the assets, and assess the ability of that overall system to satisfy the need to detect these indicators. The student may determine that the capability exists and our doctrine is correct, or he may determine that the capability has shortcomings which make the doctrine impractical in application. Situations may thus call for additional intelligence capabilities, different means of handling and dissemination, or possibly articulating a doctrine consistent with actual capability.

8. The whole process has been greatly oversimplified in this brief discussion. It is much more involved. However, by approaching it in this manner, the student is forced into great depth and is made to study rigorously the threat, US doctrine and equipments, identify shortfalls, and thus provide valuable inputs both to the doctrine and combat developments process. The student may also wargame much of this. This process does not necessitate formal classroom drills on the techniques of preparing plans and orders or instruction in the fundamentals of offensive and defensive tactics or the basic forms of maneuver. It does identify potential problem areas and causes the student to postulate solutions. While the academic merits are substantial, the operational merits are equally so, in that student study efforts lead to improved combat effectiveness and the development of a well thought out body of operational knowledge for corps and higher level operations.

BEHAVIORAL OBJECTIVES:
THE DILEMMA OF EMPIRICAL ADEQUACY
BY
H.B. MURRAY, LTC, U.S. ARMY
MAY 1978

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EXECUTIVE SUMMARY

This research project was conducted at the request of the Chairman, Review of Education and Training for Officers, U.S. Army, Washington, DC.

An analysis of behavioral objectives as instructional strategies and as aids in curriculum design is conducted by describing the theoretical arguments for their use and by comparing the conceptual frameworks of the most widely used models. Because the logic of the proponent literature so compellingly favored the use of behavioral objectives, the strong theoretical arguments are contrasted against the reality of the empirical evidence. Although the use of behavioral objectives was proven to enhance learning in a limited number of studies, the empirical evidence did not demonstrate a congruent advantage for their use, nor did the findings confidently delineate the conditions under which behavioral objectives should be used. However, the overall significance of the empirical findings must be mitigated by the conceptual and methodological weaknesses attributed to the available research. Because the results presented in the experimental literature were, to a significant degree, both inconclusive and contradictory, the value of behavioral objectives should perhaps not be assessed solely on empirical grounds. The strong rational and functional arguments in favor of behavioral objectives

could best be improved by suggesting that behavioral objectives be considered one of several educational tools available to the military educator. With credible, empirically derived knowledge concerning the advantages and limitations of behavioral objectives and the conditions under which they can be used most effectively, military curriculum designers and instructors could then rationally determine whether or not this tool is likely to be useful in their own particular educational situation.

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CHAPTER I

INTRODUCTION

It has often been argued that organization is the hallmark of effective military teaching. The appropriate arrangement and sequencing of educational materials appears to influence not only what military students learn but also their perceptions of the usefulness and importance of what is to be achieved, either as specified or unspecified goals. Therefore, procedures which enhance educational organization are likely to facilitate the learning of meaningful material. By providing the student with a useful perspective of what lies ahead in a course of instruction, a framework can be conceptualized from which subsequent learning can be arranged and related. In curriculum development, particularly in the military, the design and use of teaching materials is directed toward facilitating the introduction of new and unusual situations and knowledge. The preface to the teaching to come has usually been accomplished by the use of an introductory statement or preinstructional strategy.

For several years the Army has been attempting to state accurately and unequivocally the educational objectives of officer education and training programs and to describe the criteria of acceptable performance. Recently, there has been an increasing interest in defining the objectives of

teaching and learning in terms of observable performance at the higher levels of the Army's education system. Since learning must be planned, rather than haphazard, so that the diversity of talents among individuals can be enhanced while concurrently providing for institutional socialization, the instructional design must be based upon the knowledge of how human beings learn. There are several types of human capabilities: intellectual skills, cognitive strategy, verbal information, motor skills, and attitudes, that are typically acquired in an educational environment. Because any or all of these human capabilities occur in subject areas such as international relations, military tactics, management, language and science, it is contended that the determination of what capabilities are to be learned is a function of defining needs, goals, and finally the specific behavioral objectives.

Although still controversial, the philosophical basis for behavioral objectives has been discussed and debated for many years, but scholarly empirical research has emerged only within the last decade. The extent to which the empirical research supports the use of behavioral objectives in facilitating the learning process is a key question.

As the research for this project progressed it became evident that general agreement was lacking, not only within the military but also within the education community, concerning the utility of behavioral objectives as instructional

strategies or in curriculum design. Everyone seemed to have a different idea of what behavioral objectives were and how good ones were developed. For these reasons, among others, I elected to structure the final product as described below.

Since this paper is directed more toward the military instructor than the professionally trained instructional technologist, I thought it necessary to first present a theoretical overview concerning the derivation of behavioral objectives. In addition, Chapter II describes the conceptual framework of two of the most widely used paradigms: the Mager and the Gagne-Briggs Models.

Because the logic of the proponent literature was so compellingly in favor of the use of behavioral objectives, it was necessary to contrast the strong theoretical arguments for their use against the reality of the empirical evidence. Chapter III presents a review of the available empirical research from the perspective of three separate surveys of the literature.

Proceeding from the theoretical and empirical aspects of the research to practical contemporary application, Chapter IV contrasts the derivation of behavioral objectives at two intermediate military educational institutions: the Air Command and Staff College and the Army Command and General Staff College. Chapter IV, while detailed in the comparative phase, does not examine the measurements of effectiveness at either institution.

Chapter V is a synthesis of the theoretical, empirical and practical aspects of the behavioral objective dilemma.

This project began as a study of the derivation of behavioral objectives at the higher orders of learning; however, because the subject of behavioral objectives in general is both complex and controversial, the higher end of the behavioral continuum is not considered in isolation. Explicitly described in the models and implicit throughout the paper is the assumption that the literature provides the conceptual framework for the derivation of both lower order and higher order objectives.

Because of the pragmatic constraint of available time, five weeks for research and preparation, the scope of this paper has been necessarily restricted as indicated.

For the purpose of this paper, performance objectives, behavioral objectives, and learning objectives are considered to be synonymous terms.

CHAPTER II

THE DERIVATION OF BEHAVIORAL OBJECTIVES

Perspective

Instruction is done to assist students in the learning process and it should be done responsibly. When a teacher considers the ramifications of the application of learning principles to instruction, there is no better question to be asked than: What is to be learned? Learning must be planned, rather than haphazard, so that each student will come closer to the goals of optimal use of his or her talents and their integration with the physical, professional and social environment. Also, diversity among individuals must be enhanced while concurrently providing for, in the case of the military, institutional socialization.

Instructional design must be based upon knowledge of how human beings learn. In considering how an individual's abilities are to be developed, it is not enough to state what they should be; one must examine closely the question of how they can be acquired. Instructional materials need to reflect not simply the intellect of the author but how the student is intended to learn such knowledge. Accordingly, instructional design must take into account the learning conditions that need to be established in order for the desired effects to occur.¹

Theories of learning have identified a number of conditions for learning, and some of these are controllable by the procedures of instruction. Older theories emphasise particularly the external conditions for learning, embodied in the principles of contiguity, repetition and reinforcement. Modern theories add to these the internal conditions that arise within the learner. These internal states are made possible by the recall of previously learned material from the learner's memory. An act of learning is, therefore, greatly affected by these internally generated processes. In particular, new learning is influenced by the recall of previously learned information, intellectual skills, and cognitive strategies. The varieties of learned capabilities, and the conditions for their learning, constitute the basis for instructional planning.²

There are several different kinds of human capabilities that are typically learned in educational institutions: intellectual skills, cognitive strategy, verbal information, motor skills and attitudes.³ Because any and all of them can occur within each subject area such as science, social studies, mathematics and language, the basic action that must be taken in determining what capabilities are to be learned is one of defining needs, goals and finally the specific behavioral objectives.

The literature generally agrees with the principle that instruction should be planned from the top down and that general needs and goals should be defined before more specific objectives are developed; however, until recently there were no organized methods to serve as guidelines for the instructional designer in accomplishing this task.

Briggs points out that, for a brief workshop of two days, there perhaps would be one general goal and 10 specific objectives; for a course of instruction lasting 12 weeks, there would possibly be three general goals and 30 specific objectives; and for an entire curriculum, there could be dozens of goals and hundreds of objectives.⁴

Since there was no standard method of organizing the objectives of a course of instruction or an entire curriculum in a particular subject or skill area, Briggs developed what has become known as the Six-Level Method. This method consists of (1) needs analysis, (2) goal definition, (3) life-long objectives, (4) end-of-course objectives, (5) unit objectives, and (6) specific behavioral objectives.⁵

In needs analysis the resultant curriculum product must be capable of being defended on the basis of statements of the reasons why the intended population of learners need that particular content and method of instruction.⁶ In the military profession, one method of conducting a needs analysis is to incorporate a job content analysis.

The goal definition should be consistent with the curriculum product developed by the needs analysis. Goals can be stated in behavioral terms so that assessment can be addressed directly to the goals, or the goals can be stated in non-behavioral terms, leaving the assessment of goal attainment to a separate evaluation, or the goals can be expressed in non-behavioral terms with the intent of assessing goal achievement at either the level of unit objectives or specific objectives.⁷

In stating life-long objectives the long term purpose of the course must indicate clearly the total program aspect of the instruction in the subject or skill area. If a single course in typing is to be sufficient for the learner to obtain employment as a typist, the objective should be stated in such terms. In contrast, other courses may only be segments of an overall educational program. For example, if a course in algebra is the initial course in a degree granting program in mathematics, that specific intent should be made clear.

End-of-course objectives serve to distinguish those performances which are expected at the end of the period of instruction. They also serve to facilitate the development of unit and specific objectives.⁹ Briggs believes that after the end-of-course objectives have been compiled, one should next prepare the final examination, if there is to be one. This

back-to-back inspection of the objectives and the examination provides a comparison between objectives and assessment criterion.¹⁰

Unit objectives are most often used to indicate the importance of sequencing instructional units. These objectives may or may not be stated in behavioral terms and their use generally depends upon the duration and/or complexity of the instruction being organized. Some instructional designers may not utilize unit objectives because the structure of the course may be adequately described by using only end-of-course objectives and a series of specific behavioral objectives.¹¹

As previously stated, once the learning goals have been established, either by a job content analysis or by the process of consensus, the next step is to further define the goals in detail by clearly specifying the desired performance or behavioral objectives. The total process is one of working from the top downward; broad goals are first defined, and then more specific objectives, arranged in a layering sequence with respect to the duration, content and complexity of the intended instruction. The "Six Layers" of goals and objectives end with the development of specific behavioral objectives.¹²

The Composition of Behavioral Objectives

The usual distinction between goals and objectives is dependent on the level of generality of the specific statement

and its intended purpose. Goals are indicative of educational outcomes of a general nature that are long-range.¹³ Objectives are statements of specific desired outcomes that are short range and are considered most effective when stated in behavioral terms, so as to clearly describe what behavior should be displayed by a student, as a result of instruction, to demonstrate mastery of the objective. Behavioral objectives generally delineate the terminal products or terminal performance of instruction in terms of observable, measurable behavior.¹⁴

Before writing behavioral objectives the instructional technologist, curriculum developer or teacher must study the statements of goals and determine under what circumstances and to what degree the student can achieve this goal. The key question is: "How can it be determined that a student has achieved the particular goal?"¹⁵ A properly developed objective will provide a precise description of the student's achievement upon mastering the learning implied by the goal statement.

By comparing the two most popular models--the Mager Model and the Gagne-Briggs Model--the formulation of behavioral objectives can be effectively demonstrated in understandable terms.

Mager Model

Robert F. Mager has been credited with producing the first generally accepted set of instructions concerning the

writing of instructional objectives. Since the original book, Preparing Instructional Objectives, was published in 1962, other works have been written; however, according to Kibler and Bassett the contribution of Mager is evident in that subsequent models and approaches have, for the most part, continued to include the basic components of his model.¹⁶

In the Mager Model the objective is "...an intent communicated by a statement describing a proposed change in a learner--a statement of what the learner is to be like when he has successfully completed a learning experience."¹⁷

Mager recommends the use of three components in composing such descriptions:

First, identify the terminal behavior by name; you can specify the kind of behavior that will be accepted as evidence that the learner has achieved the objective.

Second, try to define the desired behavior further by describing the important conditions under which the behavior will be expected to occur.

Third, specify the criteria of acceptable performance by describing how well the learner must perform to be considered acceptable.¹⁸

Kibler and Bassett have interpreted Mager's three components as follows:

- (1) identify the action the learner will be taking when he has achieved the objective (e.g., to write, to speak);
- (2) describe the relevant conditions under which the learner will be acting (e.g., 'without the use of references'); and
- (3) specify how well the learner must perform the action (e.g., '100 percent correct').¹⁹

To Mager a meaningfully stated objective is one that effectively communicates the author's intent. The most useful statement is one that excludes the greatest number of possible interpretive alternatives.²⁰ In order to demonstrate how to reduce the ambiguity of action words or phrases and to reduce the number of alternative interpretations, Mager provides a contrasting list of words:²¹

Words Open to Many Interpretations

to know
to understand
to really understand
to appreciate
to fully appreciate
to grasp the significance of
to enjoy
to believe
to have faith in

Words Open to Fewer Interpretations

to write
to recite
to identify
to differentiate
to solve
to construct
to compare
to list
to contrast

According to Mager it is acceptable to include such words as "understand" and "appreciate" in an objective statement; however, the statement will not be explicit enough to be useful as a behavioral objective until there is an indication of how the sampling of the "understanding" and "appreciating" will be accomplished. It is imperative that the individual writing objective statements describe clearly what the student will be doing when he has achieved the instructional intent.²²

Even though the terminal behavior has been unequivocally imparted to the student by the use of appropriate action statements, the specifying of the terminal act alone may not

be enough to preclude misunderstanding. In order to state performance objectives that convey the exact intent of the author, Mager indicates that it is advantageous to describe the conditions that will be imposed upon the student when he is demonstrating his mastery of the instructional objective.²³

The following are examples of the conditions, limitation and restrictions that could be incorporated into the text of a behavioral objective:

Given a problem of the following class...
Given a matrix of intercorrelations...
Without the aid of references...
With the use of notes and references...
Without the aid of an electronic calculator or
other mechanical calculating device....²⁴

Mager proposes that four questions should be asked in order to identify the important aspects of the desired terminal behavior:

1. What will the learner be provided?
2. What will the learner be denied?
3. What are the conditions under which you will expect the terminal behavior to occur?
4. Are there any skills that you are specifically NOT trying to develop? Does this objective exclude such skills?²⁵

Kibler and Bassett suggest that, within the context of the Mager Model, the following three considerations would be useful in determining the conditions under which the learner will be expected to demonstrate achievement:

1. Specify the information, tools, equipment, source materials, and anything else that will be available to students to help them perform the terminal behavior required of the objective.
2. Specify the information, tools, equipment, source materials, and anything else the student cannot use when demonstrating the terminal behavior.
3. List as many of the actual conditions as possible under which the student might be expected to demonstrate the terminal behavior in a real-life setting, and try to include as many of them in the objective as possible.²⁶

Pragmatically, the writer of objectives should describe enough relevant conditions for the objective to imply clearly the variety of test items appropriate for sampling the specified terminal behavior.

In the Mager Model the last component of an objective statement is measurement criterion. Once a student has been informed of what he is to do and the conditions under which he must achieve the instructional objective, he should, according to Mager, be informed as to what the acceptable level of performance will be.²⁷ By specifying at least the minimum acceptable performance level for each instructional objective, there will consequently be a performance standard against which the instructional program can be evaluated. Additionally, the curriculum developer, instructional technologist and teacher will have a means to determine if the educational programs are successful in achieving the instructional intent.

The criterion of successful performance or minimum acceptable skill can be stated in various ways; for example, by specifying the time limit (if a time limit is intended), the minimum number of correct responses that will be acceptable, the number of principles that must be applied in a given situation, or the number of principles that must be identified.²⁸

The following list of performance standards extracted from Instructional Objectives and Evaluation provides some alternative forms of specifying the measurement criterion component of an objective relative to the Mager model:

Minimum Number:

- "...must list four steps..."
- "...write all ten words presented accurately..."
- "...distinguish three main ideas..."

Percent or Proportion:

- "write (spell) accurately 100 percent of the 10 words presented..."
- "list 80 percent of the verbs appearing in a 200 word message..."

Limitation of Departure from a Fixed Standard

- "must be within five decibels of..."

Distinguishing Features of Successful Performance

- "...the radio plays within a one-day period..."
- "...all balls on the paper are colored red..."²⁹

There are many ways of specifying excellence of performance; however, it is not always possible to specify a criterion with as much detail as desired. Nevertheless, Mager maintains that even if an objective's author feels something cannot be measured adequately, a concerted effort should be made in trying to develop an appropriate method for measurement.³⁰

In summary, an objective statement in the Mager Model is a collection of words or symbols describing an educational intent which communicates what the learner will be doing when demonstrating the desired level of achievement and how the instructor will know that the intent has been accomplished. Stated in another manner, behavioral objectives effectively describe terminal behavior, when these statements identify and name the over-all behavioral acts, define the conditions under which the behavior is to occur and lastly define the criterion of acceptable performance.

The following behavioral objective statement is an example of a higher-order behavioral objective requiring synthesis behavior or creative activity on the part of the learner:

The student is to be able to prepare an analysis of any three of the five management cases given him at the time of the examination. This analysis should attempt to discuss the cases according to the principles developed during the course, and the student must show evidence of having considered each problem from at least two theoretical points of view by restating these in his own words. References and notes may be used, and up to four hours may be taken for completing the three case analyses.

_____ behavior (tasks)
----- criterion (standard)
_____ - conditions

Gagne-Briggs Model

The Gagne-Briggs Model does not differ in any critical respect from the Mager Model. The description of the components of their operational definitions of objectives are related to those of other authors in the field. There are, however, differences in the manner in which they distinguish verbs of action from verbs used to identify the "learned capability" implied by the observed behavior.³¹

Gagne and Briggs describe a precise objective as one which facilitates the observation of another person and includes a number of components which describe the situation in which the action takes place, the limits within which the performance will be expected to occur, and the kind of human performance involved. The last requires that the kind of human capacity which is to be inferred from the observed performance must also be described.³²

The specific components of the model are:

1. Action. What observable act will the learner be doing (e.g., analyzing, comparing, creating)?
2. Object. What is the learner expected to produce as a result of the performance (e.g., analysis, composition, painting)?
3. Situation. An objective must specify the features of the situation. What are the circumstances in which the learner must demonstrate performance (e.g., given five case studies, given the details of an event, given a conceptual framework)?

4. Tools and Other Constraints. How must the action be carried out and what are the limits, if required, to the performance (e.g., using available references, without the use of texts and within one hour, using the medium of water colors)?
5. Capability to be Learned. The inferred kind of human capability must be stated. What is the learned capability that the action gives evidence of having been acquired (e.g., classifies, generates, originates)?³³

According to Kibler and Bassett the five part model differs from Mager's Model in three ways, the most important variance being the distinction that Gagne and Briggs make between verbs which identify the observable action the learner is performing and the verbs which identify the learned capability which may be inferred from the action. The second difference concerns Gagne and Briggs' inclusion of a component referred to as the "object of the performance." While the object is obviously present in the Mager Model, it is not separated from the action verb. The third difference is the exclusion of a specification of performance criteria in the Gagne-Briggs Model. They argue that assessment procedures should be considered later in the instructional design process.³⁴

As in the Mager Model the choice of verbs in the definition of objectives is of critical importance in avoiding ambiguity. The purpose of an objective statement is to communicate unequivocally and reliably so that two

literate people will agree that a specific instance of an observed performance is or is not an example of the performance described by the objective. It is basic to the formulation of objectives that verbs be chosen which accomplish the primary purpose of unequivocal and reliable communications.³⁵ In the Gagne-Briggs Model, there is the important distinction which was alluded to previously concerning the use of two kinds of verbs in a complete definition of an objective; these are the action verb and the verb which identifies the learned capability.³⁶

The consistent theme throughout the literature concerning the writing of behavioral objectives is that the primary requirement of an objective is that it precisely convey the instructional intent of the curriculum designer, instructional technologist and teacher. The concern for instructional integrity or communicative precision apparently led Gagne and Briggs to argue that action verbs alone were too imprecise because they did not denote the learned capability which the learner had acquired.³⁷

According to Gagne and Briggs, action verbs are unambiguous when they reliably communicate observable performances; beyond this criterion, however, no further distinctions appear feasible. From the total set of verbs in the language there are, of course, many which communicate action precisely. However, an action verb does not in itself identify the intellectual skill involved in a specific performance.³⁸

In the section entitled "Describing Human Capabilities," Gagne and Briggs identify the words that can be used as the major verb of an objective statement. The purpose of these words is to communicate the kind of human capability one expects to be learned, as it may be observed in the performance exhibited by the student.³⁹ Five types of intellectual skills are presented under the heading of human capabilities: (1) discrimination, (2) concrete concepts, (3) defined concepts, (4) rules, and (5) higher order rules. Five rather abstract verbs that permit inference about behavior are designated to describe these intellectual skills: (1) discriminates, (2) identifies, (3) classifies, (4) demonstrates, and (5) generates.⁴⁰ (see Table 1.)

The authors concede that statements resulting from the use of the human capability verbs have a formal character that can sometimes be unduly cumbersome. However, distinctions are necessary and the use of the five prescribed words for intellectual skills has the effect of preserving the desired operational characteristics.⁴¹

Referring again to Table 1, the major verbs suggested for cognitive strategy, information, motor skill, and attitude are in order: "originates," "states," "executes," and "chooses."

The verb "originates" implies the kind of intellectual process that is considered to be involved in tasks requiring

TABLE 1
 VERBS TO DESCRIBE HUMAN CAPABILITIES
 WITH EXAMPLES OF PHRASES INCORPORATING THEM

<u>CAPABILITY</u>	<u>VERB</u>	<u>EXAMPLE</u>
1. Intellectual Skill Discrimination	Discriminates	- discriminates by matching French sounds of "u" and "ou"
Concrete Concept	Identifies	- identifies by naming the root, leaf and stem or representative plants
Defined Concept	Classifies	- classifies, by using a definition, the concept family
Rule	Demonstrates	- demonstrates, by solving verbally stated examples, the addition of positive and negative membranes.
High-Order Rank (Problem Solving)	Generates	- generates, by synthesizing applicable rules, a paragraph describing a person's actions in a situation of fear
2. Cognitive Strategy	Originates	- originates a solution to the reduction of air pollution by applying the model of gaseous diffusion.
3. Information	States	- states orally the major issues of the Presidential campaign of 1932
4. Motor Skill	Executes	- executes backing a car into a driveway
5. Attitude	Chooses	- chooses playing golf as a leisure activity.

Source: Robert M. Gagne and Leslie J. Briggs, Principles of Instructional Design (New York: Holt, Rinehart and Winston, 1974), p. 85.

problem solving or thinking. Internally organized capabilities or cognitive strategies imply a sequence of mental operations which permit a learner when confronted with a novel task, without a familiar context, to search for applicable rules and information, formulate a general type of solution, and finally attempt to apply the solution.⁴²

In the information domain the major verb "states" communicates the kind of human capability that can be observed in some performance exhibited by a student. The verb "executes" implies the capability of a highly organized motor skill which can be observed by means of a particular performance. And lastly, since an attitude is a human capability that influences individual choice of action, the major verb is "chooses."⁴³

Gagne and Briggs emphasize the need to carefully choose action verbs suitable for describing both the learned capability inferred from the observed performance, and the nature of the performance. However, in order to reduce ambiguity, the nine human capability verbs are standard in the model.⁴⁴

In summary, the Gagne-Briggs Model advocates the use of a five component guide to facilitate the writing of unambiguous statements of objectives for varying instructional needs. A precise behavioral objective within the context of the model facilitates the observation of another person and includes the components which describe the situation

in which the action takes place, the limits within which the performance will be expected to occur, and the kind of human performance involved.⁴⁵ The five components are:

1. Situation
2. Learned capability
3. Object
4. Action
5. Tools or other constraints.⁴⁶

It is the opinion of Kibler and Bassett that the Gagne-Briggs Model is the most complete in the field and has the added advantage of reflecting an operational linkage to the research concerning human capabilities.⁴⁷

The following behavioral objective statement is an example of a Gagne-Briggs higher-order objective requiring synthesis behavior or creative activity on the part of the learner:

Given a general statement of the scope and sequences of topics, concepts, or unit objectives for a college course in International Relations, the student will generate the appropriate student objective in each of the five domains of learning, by writing such objectives, to include all five elements for each objective, within a one-week period.

The same objective statement is presented as component parts of the model: ⁴⁸

<u>Objective</u>	<u>Element of Objective</u>
a. Given a general statement of the scope and sequence of topics, concepts, or unit objectives for a college course in International Relations	a. Situation
b. the student will <u>generate</u>	b. Learned Capability (problem-solving)
c. the appropriate student objectives in each of the five domains of learning	c. Object
d. by writing such objectives	d. Action
e. to include all five elements for each objective within a one-week period.	e. Tools, Constraints and Special Requirements

CHAPTER III

EMPIRICAL RESEARCH

A review of the literature concerning objectives indicates that the philosophical basis for behavioral objectives has been discussed and debated for many years but that scholarly empirical research has emerged only in the last 10 years. The extent to which empirical support exists for the use of behavioral objectives in facilitating the learning process is subject to controversy. Empirically, the experimental literature does not appear to demonstrate a consistent advantage in the use of behavioral objectives.¹ However, before proceeding, it must be pointed out that several scholars who have recently reviewed the available experimental literature concluded that many of the studies cited contain numerous theoretical and methodological weaknesses.²

Survey of the Research

Survey 1

J.P. Byers, et al., provides the most comprehensive summary of the current state of empirical findings concerning behavioral objectives. Over 150 experimental articles, theses and dissertations were examined with the intent of, among other things, producing a theoretical rationale for the prediction of the positive effects of behavioral objectives on learning.

There appear to be four particularly key areas of concern for the curriculum designer, instructional technologist or teacher with respect to the use of behavioral objectives. These are the interrelationship between the student's possession of objectives and subsequent learning; the student's possession of objectives and learning efficiency; the form in which the objectives are stated and subsequent learning; and the teacher's possession of objectives and subsequent student achievement.³

Because of the rather extensive portion of the contemporary educational literature devoted to either praising or damning the use of behavioral objectives, I anticipated that there would be an extensive body of empirical knowledge that would serve to specify the conditions under which behavioral objectives could effectively be used to enhance the learning process. Regrettably, as the conclusions of the Byers, et al., study indicate, careful examination of the empirical literature did not produce either consistent or particularly confident results concerning the effectiveness of using behavioral objectives.⁴

Did the possession of behavioral objectives by students aid in the learning process?

Investigation of the effects of student's possession of behavioral objectives on learning provides not conclusive findings, but current results favor the preliminary observation that no differential effects on learning can be attributed to students' use of objectives.⁵

With only 30 studies, of the 71 examined in this area, reporting that the use of behavioral objectives improved learning significantly, the research did not clearly support the use of behavioral objectives.⁶ However, Kibler and Briggs, commenting on the same findings, contend that the "...prevailing logic of instructional systems design suggests that students provided with performance objectives should demonstrate superior learning...."⁷

Does the form in which the objectives are stated aid in subsequent learning?

While inconclusive, investigation of the effects of objective form (specific versus general statements) suggest there are no differential effects on student learning attributable to the way in which objectives are stated.⁸

Again the research is inconclusive because, of the 13 studies reviewed in which the form of the objective served as the independent variable, only four reported that students provided with objectives written in behavioral terms achieved meaningfully higher scores. The remaining studies reported no significant difference between the use of specific or general objectives.⁹ One of the apparent problems in examining the studies was the lack of information provided by the authors concerning the operational definitions for specific and general objectives. Once more, Kibler and Bassett maintain that, although the empirical data is inconclusive, there are logical grounds for the continued use of behavioral objectives.¹⁰

Did the possession of behavioral objectives by teachers aid in subsequent student achievement?

While inconclusive, present investigations suggest that it may make little difference whether or not teachers possess objectives.¹¹

Even though there appear to be sound reasons for providing teachers with behavioral objectives, of the seven studies examined in which the teachers' use of objectives served as an independent variable, none provided evidence indicating that there were significant effects on student achievement.¹² Although the research indicated that student performance did not increase as expected as a function of providing teachers with objectives, Kibler and Bassett maintain there was certainly no debilitating effect on student achievement.¹³

Did the possession of behavioral objectives by students influence learning efficiency?

While inconclusive, investigations of the effects of behavioral objectives on efficiency of learning (in terms of time) suggest that whether students are provided with objectives is not an influential factor on the time required for learning.¹⁴

One of the ostensible advantages for providing behavioral objectives was because it was felt that students would be assisted in directing their efforts towards behaviors necessary for mastery of a given course of instruction. However, of the 11 studies in which time was a dependent

variable, eight studies reported no difference in learning time between students provided behavioral objectives and those not provided objectives, while only three studies reported that the use of objectives meaningfully reduced learning time.¹⁵ Although the expectation was not realized, it is the opinion of Kibler and Bassett that "...reason favors an expected increase in learning efficiency with the use of objectives...."¹⁶

Survey 2

In a 1976 review of the experimental literature, J. Hartley and I. K. Davis examined those studies which considered the effect of deliberately teaching students, and/or teachers, how to utilize behavioral objectives as aids to learning or teaching. Paradoxically, no significant advantage was reported in the available research literature concerning the training of students in the use of objectives; however, the training of teachers in the use of objectives was found to enhance subsequent student learning.¹⁷ This could become a key contemporary issue, because there are prominent scholars in the field of instructional technology who believe that the primary use of behavioral objectives should be in curriculum and course design.

Hartley and Davis use teaching strategies, task characteristics, and learner characteristics as variables to summarize their review of the research literature concerning behavioral objectives.

Teaching strategies: Objectives would seem to work best when they are salient to the instructional task. Several studies have demonstrated a greater recall of prose material when instructional objectives are used by the subject as directions to learn specific subsets of material. The research also suggests that disclosing objectives to students prior to traditional types of teaching is more advantageous than disclosing them prior to nontraditional teaching situations like programmed instruction, computer-assisted instruction, etc. It would seem that the closely structured nature of carefully developed materials tend to make objectives - like pretests - superfluous, whereas the explicitness of objectives prior to more loosely formed and more dynamic material help them to serve as useful "organizers."

Task characteristics: ...Behavioral objectives do not appear to be useful, in terms of ultimate post test scores, in learning tasks calling for knowledge and comprehension. On the other hand, objectives do appear to be more useful in higher level learning tasks calling for analysis, synthesis and evaluation. Furthermore, objectives appear to reduce the requirement for reasoning in some tasks, and they sometimes have an interfering effect on tasks calling for problem solving skills.

Learner characteristics: ...Students of middle ability...appear to profit more from being given behavioral objectives than students of higher or lower ability. Furthermore, it would seem that the possession of objectives can reduce anxiety.... Male students from a high socioeconomic background achieved significantly more when given objectives than students from other backgrounds or of the opposite sex....More independent and less conscientious students would appear to benefit more from perspective and structure that objectives can give to a task.¹⁹

It would appear, according to Hartley and Davis, that the possession of behavioral objectives by a student does have a beneficial effect on learning, but the consequence is less meaningful than many advocates claim. Interestingly,

the level of education did not appear to affect the effectiveness of behavioral objectives, nor did the length of the period or course of instruction. Also, the topic or type of subject matter such as the physical or social sciences did not seem to be a factor. The result of the Hartley-Davis survey would therefore indicate that behavioral objectives are useful pre-instructional strategies which perhaps could best be used in situations requiring that the student be explicitly informed of the task. Additionally, the use of objectives appears to be most appropriate when prefacing extended periods of instruction which typically have a dominant overall structure.²⁰

Survey 3

To this point a large number of claims have been made in arguing the cases for and against the use of behavioral objectives. Of these claims, two are of particular interest and are the subject of a review of the research literature by R. F. Milton.

Not only are these claims repeated time and again, but they are apparently in direct conflict. Milton points out that those who support the use of behavioral objectives, such as Gagne and Mager, typically espouse that "...behavioral objectives clearly indicate to students what is required of them, and as a result student performance improves."²¹ In contrast, those who challenge the effectiveness of behavioral objectives, such as Arstine and Raths,

characteristically state that "...behavioral objectives discourage students from expanding their horizons by encouraging them to confine their learning to specified objectives."22

Since in the final analysis it is an empirical question as to whether or not behavioral objectives are of educational value, Milton presents the evidence in support of the two conflicting claims and also provides possible explanations for the contradictory evidence.

Do behavioral objectives in the possession of students improve learning performance?

A number of studies have described research which lend support to the claim that providing students with behavioral objectives improved learning, however Milton's review indicates that a substantial number of research efforts did not demonstrate improved student performance. A meaningful point here though, is the fact that in none of these instances did the availability of behavioral objectives appear to detract from student performance.²³

In an attempt to explain the anomalies, Milton again reviewed the various studies. He noted in one experiment in which the availability of behavioral objectives had had no apparent effect, that the instructions were presented to the students in written form and could have actually been ignored. The point is that it is not sufficient to simply provide the objectives; the students must necessarily

be aware of them.²⁴ A follow-up study, in which it was noted whether or not the control group read the objectives provided, concluded that so long as students were aware of the behavioral objectives, student performance was enhanced.²⁵

Milton also suggests a number of additional conditions under which behavioral objectives might be ineffective:

- a. If the objectives are not sufficiently clear (too general) or too ambiguous to be of particular assistance.
- b. If the objectives are of extreme facility or difficulty. (The readability of instructional material may often be related to this condition.)
- c. If the instructional material is not structured in such a way as to ensure that the specified objectives (and related test items) can be mastered (e.g., instructional material not sufficiently relevant).
- d. If students are so highly motivated that they are likely to master the objectives regardless of whether or not they are specified. (The degree to which the instructional material interests the student is likely to relate to this condition.)²⁶

Do behavioral objectives in the possession of students discourage them from expanding their intellectual horizons?

Unfortunately, there are few studies available for review which adequately address the complex nature of the question, and those that do present findings that appear contradictory.

One study concluded that the use of behavioral objectives enhanced student performance in relation to specified objectives without adversely affecting or distracting from incidental learning performance relative to unspecified objectives within a lesson.²⁷ Another similar study reported that the use of behavioral objectives enhanced student performance relative to specified objectives, but in contrast to the previous study, incidental learning, relative to unspecified objectives was adversely affected.²⁸ A third study concluded, as the previous two had, that the use of behavioral objectives enhanced intentional learning; however, in contrast to the previous findings concerning unspecified objectives, incidental learning was actually enhanced by the use of specified behavioral objectives.²⁹

Other pertinent studies describe the effects of the placement of questions (assuming questions serve the same function as behavioral objectives) within the text of a lesson. Generally, the learning of relevant information was enhanced by the use of inserted questions, post-questions being more effective than pre-text questions. Also it was reported that incidental learning tended to be improved by the use of post-questions but not by the use of pre-questions, which in some cases reduced incidental learning.³⁰

From these contrasting studies it is interesting to note that behavioral objectives inserted prior to a related text appear to act as "orienting stimuli" and serve to

focus the student's attention toward the relevant material, thereby enhancing relevant learning while ostensibly depressing incidental learning. Conversely, behavioral objectives presented immediately after the related text appear to operate as "reinforcing stimuli" without adversely affecting the incidental learning that has already taken place.³¹

As Milton's review of the research indicates, a variety of conditions determine whether or not behavioral objectives improve relevant learning and adversely affect or enhance incidental learning. This complex situation is exacerbated by an apparent tendency of problem oversimplification by those who adamantly support or oppose the use of behavioral objectives.

Empirical Effect

As previously stated, the extent to which empirical support exists for the use of behavioral objectives in facilitating the learning process is the subject of continuing controversy. While behavioral objectives have been shown to specifically facilitate learning in a limited number of studies, the empirical evidence does not generally demonstrate a consistent advantage for their use, nor do the findings confidently delineate the conditions under which behavioral objectives should be used.

It appears, then, in an attempt to improve the efficacy of behavioral objectives, proponent educators have inadvertently encouraged the use of objectives beyond their

empirically determined value. However, the significance of a great many of the findings must be mitigated by the conceptual and methodological flaws attributed to much of the available research.³² Since much of the experimental literature presented inconclusive results and the remaining studies were often diametrically contradictory, it would, perhaps, not be prudent to judge the value of behavioral objectives solely on empirical grounds.

CHAPTER IV

INSTITUTIONAL COMPARISON

Ideally, the identification and definition of behavioral objectives serve as important steps in the design of instruction by providing guidelines for the development of instruction, and for devising measures of performance that facilitate the determination of whether or not course or curriculum objectives have been satisfied. The instructional intents are frequently formulated as a set of purposes for a course; these are then further refined and finally transformed to operational terms by the process of defining the specified behavioral objectives. These behavioral objectives then serve as a basis for evaluating the success of instruction by describing the planned outcomes of the intended instruction.

Throughout this paper the theoretical importance of stating instructional objectives as learning outcomes and of defining each objective in terms of observable student behavior have been emphasized. The procedures for preparing, selecting, and utilizing behaviorally defined objectives have been described using both the Mager and Gagne-Briggs Models. Selected examples of course design from the Air Command and Staff College and the Army Command and General Staff College will be presented to demonstrate contemporary variations in usage of behavioral objectives at the higher echelons of military education.

Air Command and Staff College

Of the two military educational systems examined, the Air Command and Staff College, located at Maxwell Air Force Base, Alabama, currently has the most comprehensive behaviorally-designed curriculum.

The example will present, in order, the College's mission, its overall instructional goals, the Command and Management Department's area objectives, and the Command and Management Department's Command and Leadership phase objectives, followed by the specific behavioral objectives developed for a particular lesson within the phase and area cited above.

The most general component is the mission statement which was derived from a "needs analysis" that incorporated a field grade officer job content analysis.¹

Mission: The mission of the Air Command and Staff College is to develop the professional knowledge and skills of selected field grade officers to prepare them for the assumption of increasing responsibility, both on the staff and in command.²

The definitions of curriculum goals are consistent with the product of the "needs analysis," the mission statement. Goals are, in this instance, expressed in non-behavioral terms with the intent of assessing goal achievement at the level of unit or specific objectives.³

COURSE GOALS:

COMMON STAFF SKILLS:

1. To further prepare staff officers to reason logically, solve problems effectively, communicate clearly and organize effectively for executive decision.
2. To develop an understanding of the organization, policies and programs through which the Air Force functions.
3. To develop field grade officer leadership and management skills.

SPECIFIC STAFF SKILLS:

4. To develop Air Command and Staff graduates with skills for employing aerospace forces against the background of historical and contemporary perspectives on warfare.

SPECIALIST SKILLS:

5. To expand an officer's knowledge of a functional specialty and increase his aptitude, insights, and analytical skills within that discipline. This indepth instruction must serve to increase an ACSC graduate's effectiveness within his area of specialization and reduce the transition time required in his next assignment.

BROADEN KNOWLEDGE OF THE AIR FORCE:

6. To develop and emphasize knowledge consistent with action officer, mid-level supervisor, and unit command responsibilities.

BROADEN VIEW BEYOND THE AIR FORCE:

7. To develop an understanding of the world environment as it affects the Air Force officer's knowledge and application of skills and to increase his sensitivity to the national security process.

RESEARCH:

8. To research, document findings and provide insight and recommendations to the DOD/Air Force on functional topics.⁴

The goal definitions are followed by area and phase objectives which are closely related to the "end-of-course" and "unit" objectives used by Briggs to describe the Six-Level-Method of organizing the objectives of a course or curriculum.⁵

The area or "end-of-course" objectives distinguish those performances which are expected at the end of the period of instruction. They also assist in the development of unit and specific objectives.

...Area 2: Command and Management

Objective: At the end of this phase the student should be able to:

1. Apply selected nonquantitative decision making techniques in deriving solutions to management problems (supports Goal 1).
2. Comprehend the use of selected quantitative techniques as aids in interpreting analytical studies (supports Goal 1).
3. Comprehend the structures and purpose of existing DOD/AF staffs (supports Goal 2).
4. Apply field grade officer leadership skills in the Air Force environment (supports Goal 3).
5. Apply field grade officer management skills in the Air Force environment (supports Goal 3).
6. Comprehend logistics support to Air Force operations (supports Goal 4).
7. Comprehend the impact of current Air Force programs and policies on mid-level supervisors and commanders (supports Goal 6).
8. Comprehend the impact of national attitudes and policies on Defense Resource allocations (supports Goal 7).⁶

The phase or "unit" objectives are used primarily to indicate the importance and sequencing of instructional units. At the Air Command and Staff College, phase objectives are stated in general behavioral terms.⁷

...Phase 2: Command and Leadership

Objective: At the end of this phase, the student should be able to:

1. Comprehend the impact of attitudes of Air Force people on the leader.
2. Comprehend leadership characteristics which enhance effective and proper exercise of authority and responsibility.
3. Apply leadership techniques in a simulated command and staff situation.
4. Comprehend directives, policies, and programs pertinent to command and staff leadership.⁸

The development of objectives in the present example has evolved from an overall mission statement of the institution from which consistent educational goals were derived. These broad goals were further refined in terms of the major curriculum subject areas by stating general area behavioral objectives. Subsequently, objectives were developed which delineated the general behavioral performance requirements for the particular sub-course or phase of instruction. The final step involved the stating of specified behavioral objectives for a specific lesson.

M30303-2S Group Problem Solving - Nominal
Group Technique

Objectives:

1. Apply the Nominal Group Technique in a problem-solving scenario.
 - 1.1 Explain the steps of the Nominal Group Technique (NGT).
 - 1.2 Explain the situations in which NGT is appropriate.
 - 1.3 Participate as a group member in an NGT exercise.⁹

...

The instructional system design techniques used by the Air Command and Staff College focus on objective statements that accurately indicate instructional intent and desired student performance. Unmanageable lists of specific learning tasks are avoided by writing objective statements which are general enough to provide guidelines for teaching without overly constraining the instructional process, yet specific enough to accurately state the behavior that students are expected to demonstrate when the objectives have been satisfied.

It is interesting to note that although the specific behavioral objectives used by the Air Command and Staff College are intended to specify the desired learning outcome, they were not intended to infer that incidental learning was not expected. Curriculum evaluation found that, in some cases, information that was not directly related to a

specific behavioral objective was ignored in the process of satisfying what were perceived as being only terminal objectives. In theory, the curriculum designers had intended that the specified behavioral objectives would serve not only as terminal indicators but would also concurrently act as enabling objectives to stimulate incidental learning.¹⁰

Army Command and General Staff College

The U.S. Army Command and General Staff College, located at Fort Leavenworth, Kansas, is in a period of transition concerning the use of behavioral objectives. At the time of this writing, however, the four departments had implemented a program that emphasized the stating of instructional objectives as learning outcomes and intended student performance indicators.

At the Army Command and General Staff College, in contrast to the Air Command and Staff College, it is more difficult to trace the path of curriculum design from the institutional mission statement to the specific lesson behavioral objectives. The example will present, in order, the College's mission, its functions, the Management course description, and the Management and Force Development sub-course goals, followed by the specific behavioral objectives developed for a particular lesson within the sub-course cited above.

At Fort Leavenworth the mission statement has also been derived from a "needs analysis"; however, to date no serious job content analysis has been conducted.¹¹

Mission: The mission of the Command and General Staff College is to provide instruction for officers of the Active Army and Reserve components, worldwide, so as to prepare them for duty as field grade commanders and principal staff officers at brigade and higher echelons.¹²

Although not as extensive as the goals stated for the Air Command and Staff College, the instructional goals at Fort Leavenworth, stated as functions, are consistent with the institutional mission statement.

Functions:

The College will perform the following functions:

- a. Prepare officers to -
 - (1) Command battalions, brigades and equivalent-sized units in peace of war.
 - (2) Train these units to accomplish their assigned mission.
 - (3) Employ and sustain weapon systems to optimize their effect in the conduct of combined arms operations.
 - (4) Serve as principal staff officers from brigade through division to include support commands, and as staff officers of higher echelons, including major Army, joint, unified, or combined headquarters.
 - (5) Manage manpower, equipment, money, and time with maximum efficiency. ...¹³

In this instructional scheme, function statements or general instructional goals are followed by course description

and sub-course goals. This procedure is in contrast to the instructional system design techniques of the Air Command and Staff College in which progressively more well defined end-of-course (area) and unit (phase) objectives pragmatically follow the general instructional goals.

Course 2 - Management

Upon completion of this course the student will have acquired a body of knowledge pertaining to the procedures, methods, and techniques of Army resource management sufficient to enable its use. Included are several analytical techniques, supported by automation, which enable the commander/manager to more efficiently and effectively manage his resources in consonance with current tactical and logistical doctrine. The student will acquire a basic understanding of the process by which Army force requirements and the supporting financial/manpower requirements are determined. Selected case studies are used to enable the student to apply the techniques of resource management within fiscal constraints, to develop force alternatives, and to evaluate tradeoffs and performance....¹⁴

In behavioral terms the preceding statement has little apparent value in distinguishing those performances which are expected of a student at the end of a course of instruction.

Subcourse goals for the Management and Force Development sub-course are stated more in terms of a course description in combination with general non-behavioral objectives.¹⁵

Management and Force Development Subcourse goals:

This subcourse is designed to give the student a knowledge of resource management, force development, operations research/systems analysis, automatic data processing management information

systems. The student will understand the process by which the Army force structure is determined and the development of the requirements for the associated financial and manpower resources; use selected analytical techniques to solve management problems; and understand selected automatic data processing management information systems.¹⁶

The identification and definition of performance objectives are important steps in the design of instruction. The design process, however, should begin, as previously stated, by establishing the learning goals either by job content analysis or by consensus. Ideally, the next step is to further define the goals in more detail by accurately stating the general objectives. The final step is to develop the specified behavioral objectives. The total process is one of working from the top downward.¹⁷

The terminal learning objectives, as they are called at Fort Leavenworth, appear to have been developed in isolation and not as part of an overall instructional systems design.

Lesson 10. Economic Analysis

1. Terminal Learning Objective

- a. Task: Explain economic analysis terms.
Condition: Given specified terms; from memory...
Standard: Brief explanation of five specified terms...
Reference: ...

- b. Task: Explain the components of the economic analysis process.
Condition: Given the same components of the economic analysis process; from memory...
Standard: Brief explanation of any three of seven components...
Reference: ...
- c. Task: Identify economic analysis components.
Conditions: Given a brief economic analysis problem scenario and the seven components of the economic analysis process.
Standard: Brief explanation of all components contained in the scenario...
Reference: ...
- d. Task: Recommend a decision.
Condition: Given a brief economic analysis problem scenario and a DOD discount factor table.
Standard: Decision supported by application of discounting sunk cost, residual/terminal value and life cycle cost computations without procedural/logic error...
Reference: ... 18

By specifying the task, condition, and standard, the preceding technique does clearly indicate instructional intent and expected student performance in both lower and higher order skills. However, over the period of an entire course, the process of repeatedly referring to what appear to be a cumbersome, simplistic and perhaps overly explicit series of tasks, conditions and standards could possibly constrain both the instructional and learning process.

The development of objectives in the Command and General Staff College example did not appear to be an evolutionary process. There was no apparent sequential flow from the

mission and functions statements to the process of developing specific behavioral objectives for particular sub-course lessons. There was an apparently abrupt transition from the broad goals to specific behavioral objectives that fosters the impression that the process of developing behavioral objectives was directive in nature and not an original component of the overall instructional system design at the college.

Contrast

There is a distinct difference between the two institutions' use of behavioral techniques. The Air Command and Staff College has an educational system which is designed to incorporate the principles of behavioral techniques from top to bottom. There are conspicuous and progressively more specific linkages from the institutional mission statement down to the specified behavioral objectives of a particular lesson. These progressive linkages appear to be missing at the Army Command and General Staff College.

Simplistic and overly explicit objectives are avoided at the Air Command and Staff College by the considered development of objective statements which are general enough to provide instructional guidelines without unduly constraining the process of teaching. They are also specific enough to clearly state the behavior the student is expected

to demonstrate. While, at the Army Command and General Staff College, the specification of tasks, conditions, and standards does clearly indicate instructional intent and expected student performance for a specific lesson; nevertheless, there appears to be a problem with the overspecification of objectives. As previously stated, this could, over a period of time, constrain both the instructional and learning processes.

The following outlines provide a condensed perspective of the two contrasting models. In the first outline notice how the objectives are sequentially derived from the top down and are supportive from the bottom up.

ACSC

Mission (institutional)

Goals (educational goals)

Area objectives (end-of-course objectives), (directly support one or more of the goals).

Phase objectives (unit objectives), (directly support one or more of the area objectives).

Lesson objectives (specific behavioral objectives), (directly support one or more of the phase objectives).

CGCS

Mission (institutional)

Functions (goals)

Course descriptions

Sub-course goals

Lesson objectives (specified behavioral objectives)

CHAPTER V

THE SYNTHESIS OF THE ARGUMENT

Behavioral objectives, in the purest sense, are deliberately designed to facilitate learning and to engender expectation toward the educational task. They are, perhaps, best considered as an attempt to improve both the quality and effectiveness of teaching. It is argued, in Chapter II, that by setting out what the student is expected to achieve, results can be brought more into line with expectations. Ostensibly, in order to inform the instructors of what is expected of them and to communicate what a student should be able to do at the completion of the learning tasks, great care must be exercised in defining and writing objectives as unambiguously as possible.

Mager suggested that an objective, at a minimum, should identify the kind of behavior that will be accepted as evidence that the objective has been achieved, define the important conditions under which the behavior is expected to occur, and specify the standard which will be used to determine whether this performance is acceptable.¹ To Gagne and Briggs a precise behavioral objective facilitates the observation of another person. It includes the components which describe the situation in which the action takes place, the limits within which the performance will be expected to occur, and the kind of human performance involved.²

As a result of the work of educators such as Mager and Gagne, a whole technology of writing objectives has evolved, replete with competing classifications and taxonomies, which, has, if nothing else, perhaps inspired instructors to think about what objectives mean.³ There are authors who maintain that "...at the root of the behavioral objective movement... is the elementary notion of operationalism, which replace the intangible phenomena such as 'understands' with a more tangible phenomena that can be observed and measured."⁴

Theoretically, behavioral objectives have a number of different functions. They can serve in various ways as guides to teaching and curriculum design, as well as guides for analysis and evaluation. Additionally, they have an important professed role as preinstructional strategies, in which they stimulate learning. Ostensibly, behavioral objectives give direction to learning through their introductory role, by providing an overall learning set for what is to follow.

Ideally, instruction should be planned from the top down, and general needs and goals should be defined before more specific objectives are developed. Once the institutional needs have been derived and broad educational goals are developed, the next step is to further define the goals in terms of more specific objectives. The final step is to accurately specify the desired behavioral performance outcome.⁵

In the process of developing progressively more specific objectives, care should be taken to avoid long lists of specific learning tasks, particularly at advanced levels of education. Gronlund has indicated that behavioral objectives must be general enough to provide instructional guidelines, without unduly constraining the instructional process, while at the same time specific enough to accurately indicate expected student performance. "This approach provides for the inclusion of learning outcomes of all types and at all levels - ranging from the simplest to the most complex."⁶

Since all educators do not view effective teaching as being dependent on predetermined, specific, behaviorally defined objectives, scholars have both praised and damned the use of behavioral objectives as instructional strategies and as aids in curriculum design. The controversy was by no means settled by the findings provided in the contemporary empirical literature. The research has actually not kept pace with the proliferation of behavioral objective usage. In an attempt to improve the efficacy of behavioral objectives, proponent educators appear to have inadvertently encouraged the use of objectives beyond their empirically ascertained value.⁷

There are strong, prevailing, theoretical arguments within the literature that promote the logic of using behavioral

objectives; however, an enervating controversy persists concerning the extent to which empirical support exists for the application of behavioral theory to the learning process. If, as the preponderance of the research has suggested to date, the use of behaviorally defined objectives is not a critical variable in the learning process, what is critical needs to be defined. Although behavioral objectives have been proven to categorically enhance learning in a limited number of studies, the empirical evidence did not demonstrate a congruent advantage for their use, nor did the findings confidently delineate the conditions under which behavioral objectives should be used.

As indicated in Chapter III, the overall significance of the empirical findings must be mitigated by the conceptual and methodological weaknesses attributed to the available research. Because the results presented in the experimental literature were, to a significant degree, both inconclusive and contradictory, the value of behavioral objectives should perhaps not be assessed solely on empirical grounds.

Until empirical evidence is available in which confidence can be ascribed, there are strong rational and functional arguments that have been presented in the literature which promote the use of behavioral objectives in the instructional system design process. However, these rational arguments

in favor of behavioral objectives could best be ameliorated by suggesting that behavioral objectives be considered one of several educational tools available to the military educator. With credible, empirically derived knowledge concerning the advantages and limitations of behavioral objectives and the conditions under which they can be used most effectively, military curriculum designers and instructors could then rationally determine whether or not this tool is likely to be useful in their own particular educational situation.

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4. Leslie J. Briggs, ed., Instructional Design, Principles and Applications (Englewood Cliffs, Educational Technology, 1977), p. 99.
5. Ibid., pp. 101-109.
6. Ibid., p. 101.
7. Ibid., pp. 101-102.
8. Ibid., pp. 102-103.
9. Ibid., pp. 103-104.
10. Ibid., p. 105.
11. Ibid., pp. 107-109.
12. Ibid., pp. 109-110.
13. Gagne and Briggs, Principles, pp. 76-77.
14. Briggs, pp. 54-55.
15. Ronald E. Bassett and Robert J. Kibler, "Writing Performance Objectives," in Leslie J. Briggs, ed., Instructional Design, Principles and Applications (Englewood Cliffs: Educational Technology, 1977), p. 63.
16. Ibid., pp. 52, 63-64.
17. Robert F. Mager, Preparing Instructional Objectives (Palo Alto: Fearon, 1962), p. 3.
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19. Bassett and Kibler, p. 64.
20. Mager, pp. 10-11.

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22. Bassett and Kibler, p. 65.
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46. Bassett and Kibler, p. 72.
47. Gagne and Briggs, Principles, p. 97.
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2. Ibid., pp. 1-13; James Hartley and Ivor K. Davies, "Preinstructional Strategies: The Role of Pretests, Behavioral Objectives, Overviews, and Advance Organizers," Review of the Educational Research, Spring 1976, V. 46, No. 2, pp. 239-259; Leslie J. Briggs, ed., Instructional Design, Principles and Applications (Englewood Cliffs, Educational Technology, 1977), pp. 80-87.

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5. Ibid., pp. 6-7.

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32. Byers, pp. 1-13; Hartley and Davies, pp. 239-259; Briggs, ed., pp. 80-87.

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2. U.S. Air Force, Air University Catalog, Air University, Maxwell Air Force Base, Alabama: 1977-78, p. 14.

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16. U.S. Army, Draft, "Management and Force Development," Advance Sheet, P212-1," Command and General Staff College, Fort Leavenworth, Kansas: April 1978, p. L1-1.

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U.S. ARMY WAR COLLEGE
PROPOSED MISSION AND OBJECTIVES

MISSION

To conduct senior level courses of study in the art and science of joint and combined land warfare; to further the process of developing and preparing senior field grade officers of both Active and Reserve Components for service in command and staff positions requiring the management of diverse activities at increasingly higher levels of responsibility during peace and war; to manage postgraduate program for general officers that is designed to facilitate their smooth and efficient transition into different spheres of activity; and to conduct strategic studies on the nature and use of U.S. Armed Forces and formulate strategic concepts in support of U.S. National objectives.

OBJECTIVES

1. To increase general military knowledge by:

-- providing concentrated study of joint and combined warfare to include historical aspects of warfare and the evolution of current U.S. military strategy.

-- broadening the student's knowledge of the Army's role within constitutional government as it pertains to supporting national security policy and objectives.

-- preparing the student to contribute effectively to force planning and structuring, strategic deployment and tactical employment of joint and combined forces with emphasis on the conduct of the air-land battle by corps and larger force organizations.

-- increasing student knowledge of Army readiness, management, modernization and future technology.

2. To develop special military skills by:

-- planning for the employment of joint and combined forces in world-wide and diverse scenarios through the use of war games, simulations, and special projects.

Inclosure 12

F-1-X11.1

-- providing selected students with a deeper understanding of the ingredients of national security and the associated intellectual tools to deal with national security policy formulation in an increasingly complex policy environment.

-- participating in a series of advanced courses which focus on Officer Personnel Management specialties to include combat, combat support and combat service support.

3. To reinforce personal development by:

-- improving skills in command and management to include strategic decisionmaking, analytic techniques, personnel and resource management, leadership and executive development, and communication.

-- providing intellectual challenge, expanding conceptual skills and promoting habits of independent judgment, objective analysis, and adaptability.

-- encouraging self-analysis and adherence to high ethical standards.

4. To advance the body of knowledge on joint and combined warfare by:

-- providing student and faculty programs of research, study, symposia, and publication directed toward the raising, maintaining, and employing of U.S. military force as an instrument of national defense policy.

SCOPE OF PRESENT USAMC PROGRAM AS FOUNDATION FOR DEVELOPMENT OF THREE DIFFERING STUDY DISCIPLINES

Inclosure 13

Counseling and Orientation	COMMON OVERVIEW Strategic Military Studies, Plans, Operations Command, Leadership and Army Resource Mgt Nat'l and Internat'l Security Studies	ADVANCED STUDIES Land Warfare Resources Management Nat'l, Internat'l Affairs, Regional Studies	N S S
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MILITARY STUDIES PROGRAM

LAND WARFARE

COMMON OVERVIEW

- Evolution of Military Strategy
- Formulation of Military Strategy
- Force Structuring
- Current Defense Planning in Operational Theaters
- Contingency Plans
- Politico-Military Simulation
- War Games
- Tactical Command and Management of Army Resources

ADVANCED STUDIES

- Command & Control
- Leadership
- Military Planning and Operations
- Force and Capabilities Planning
- Military Strategy

Detailed Subject Titles are shown at Inclosure 1.

DEFENSE MANAGEMENT AND MATERIEL ACQUISITION

COMMON OVERVIEW

- Management of Defense Resources
- Five-Year Defense Program--Federal Budget Cycle--PPBS
- Contemporary Issues in Personnel, Logistics, Research and Development, and Systems Acquisition
- Management Tools, Techniques, and Systems to Facilitate Decisionmaking in Resource Management and Allocation
- Concept of National Power as Applied to the United States

ADVANCED STUDIES

- Force and Capabilities Planning
- Management Systems
- Logistics & Personnel Management
- Research Development and Acquisition
- Operations Research/Systems Analysis

Detailed Subject Titles are shown at Inclosure 2.

NATIONAL SECURITY POLICY FORMULATION

COMMON OVERVIEW

- Concept of "National Power" as Applied to the United States
- US Domestic Issues, Influencing Formulation of National Priorities and Application of National Power
- The Evolving International System
- Military Force in the International System
- Issues and Trends in the Major Regions of the World

ADVANCED STUDIES

- Military Strategy
- National Affairs
- International Affairs
- Regional Studies

Detailed Subject Titles are shown at Inclosure 3.

MODEL FOR ACADEMIC PROGRAM ENCOMPASSING THREE DISCIPLINES

COMMON OVERVIEW

Study Plans and Counseling	Strategic Military Studies, Plans, Operations Command, Leadership, Army and DOD Resources Mgt Nat'l and Internat'l Security Studies
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ADVANCED STUDIES

Defense Mgt and Materiel Acquisition National Security Policy Formulation	Land Warfare
--	--------------

N S S

INDIVIDUAL/GROUP RESEARCH PROJECTS

Future curricular development:

- Continuity with CGSC
- Battle Management
- War Gaming

Future curricular development will focus more on mission-specific subjects now presented at Industrial College of the Armed Forces (ICAF).

Future curricular development will focus more on mission-specific subjects now presented at National War College (NWC).

1-1-1-1-1

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 2

BATTALION AND BRIGADE PRECOMMAND COURSES

TO ANNEX F

SENIOR OFFICER EDUCATION AND TRAINING

I. PURPOSE. To review the concept and content of the Army's existing battalion and brigade precommand training program; review and analyze alternatives to the current program; propose a program that addresses requirements of 1980-1990.

II. BACKGROUND, ALTERNATIVES, DISCUSSION. See Inclosure 1.

III. PROPOSED PROGRAM. Tailored Precommand Course.

A. TRADOC perform an initial front-end analysis of all centrally selected battalion and brigade command positions to determine precise job requirements. Follow-on modifications can be made upon completion of TRADOC's formal front-end analysis.

B. Combat Arms - A four phase program.

1) Phase I - Self-study at home station, culminating in a self-administered diagnostic examination.

2) Phase II - Training and Maintenance at applicable Branch School (10 training days).

3) Phase III - Battle Captains Course, plus terrain walk and a tactical exercise without troops (TEWT) (8 training days) at Fort Leavenworth.

4) Phase IV - Command Development Course with minimum of 2 days legal orientation (training days) at Fort Leavenworth.

C. Combat Support and Combat Service Support Arms - A four phase program.

1) Phase I - Self-study at home station, culminating in a self-administered diagnostic examination.

2) Phase II - Branch School Course - length and subject matter determined for specific type commands based on job task analysis.

3) Phase III - U.S. Army Administration Center (USAADMINGEN), U.S. Army Logistics Center (USALOGCEN), or U.S. Army Combined Arms Center (USACACEN) as appropriate. Length and subject matter for specific type commands based on job task analysis.

4) Phase IV - Command Development Course with minimum of 2 days legal orientation (6 training days) at USALOGCEN, USAADMINGEN, or USACACEN as appropriate.

D. TRADOC training Commands - A three phase program.

1) Phase I - Self-study at home station, culminating in a self-administered diagnostic examination.

2) Phase II - Branch School Course, at the school that is proponent for the type training unit being commanded. Length and subject matter determined based on front end analysis.

3) Phase III - Command Development Course with minimum of 2 days legal orientation (6 training days) at appropriate coordinating center (USACACEN, USAADMINGEN or USALOGCEN).

NOTE: Course lengths are notional for planning purposes. Actual course lengths must be determined based on front-end analysis.

E. Other commands having unique requirements such as depot, district engineer, etc., must have a program specifically tailored to requirements as established by front-end analysis.

F. In cases where prior experience has qualified an officer in certain aspects of the job, the officer should attend only that specific training needed. Specific requirements should be determined based on a diagnostic examination and consultation with the MILPERCEN assignment officer.

G. In cases where it is possible, efforts should be made by MILPERCEN to assign command selectees to the field ("ready-rack" positions) at the earliest possible date.

H. Costs

1) Combat Arms TO&E: \$9,776.00 per student, for a total annual cost of \$2.3 million.

2) Combat Support/Combat Service Support: \$6,084.00 per student, for a total annual cost of \$1.6 million.

3) TRADOC Training Commands: \$4,332.00 per student, for a total annual cost of \$400,000.

4) Language training for U.S. Army Europe (USAREUR) bound commanders is not costed as this is a separate program allied to, but not part of, the precommand course.

5) Total annual cost: \$4.3 million.

6) See Inclosure 2 for detailed cost breakout.

I. U.S. Army Reserve and Army National Guard impact - see Inclosure 3.

J. Implementation Plan

1) TRADOC continue development of the proposed combat arms Command Qualification Course for implementation in FY 1978 with the following changes:

a) Eliminate the final "qualification" examination.

b) Change the course title to "Combat Arms Precommand Course."

c) Schedule as required in coordination with MILPERCEN (TDY enroute instead of TDY and return).

d) Modify Battle Captains Course instruction to include field exercises such as terrain walks and TEWTS.

2) TRADOC commence a front-end analysis of all 05 and 06 centrally selected command positions in FY 1978.

3) TRADOC redesign the Combat Arms Course as required and design and implement programs for Combat Support/Combat Service Support, and training unit commands based on the front-end analysis. Implementation to take place in FY 1984.

3 Inclosures

1. Background, Alternatives, Discussion
2. Estimated Costs
3. U.S. Army Reserve and National Guard Precommand Course Impact

BACKGROUND, ALTERNATIVES, DISCUSSION

I. BACKGROUND.

A. An officer, by virtue of his past formal education, training and on the job experience, should be well prepared to command without attendance at a precommand course. The battalion command selectee has served for some 14 to 17 years and has attended an advanced course and other resident military schooling. The brigade command selectee has served for some 18 to 24 years and has greater life and military experiences. A detailed review of recent command selectees, however, reveals that they have been away from troops for a considerable period of time. The lieutenant colonel has been away 5-6 years on the average, and the colonel 4-5 years on the average. Two things must therefore be recognized. One, is that the majority of near term prospective commanders last served with troops in Vietnam or in the sustaining base in the late 1960's or early 1970's -- in any event, a different Army from that to which they will now go to command. Secondly, during this same period, major weapon systems and tactical doctrine. Consequently, the need exists to update prospective commanders in these and other areas, plus provide refresher training in highly perishable skills such as legal, maintenance, etc.

B. The need for precommand training is also recognized by foreign armies. In the German Army, battalion and brigade commanders have a precommand course, however, the tenure of command is such -- 4 plus years -- that the annual requirement is very low. When the need arises, a course is organized and the Chief of Staff provides specific guidance on the course content. The Israeli Army regularly conducts a 9 week battalion precommand course. This is the most rigorous of any course examined, requiring the command selectee to pass 12 examinations/evaluations, the first of which is a 4 hour diagnostic test that evaluates the first week of instruction and the student's pre-attendance self-study program. The remaining evaluations are performed by a small academic staff and experienced colonels who guide and instruct students during an FTX phase. Command selectees failing these evaluations are not given commands.

C. In recognition of the need for precommand training, CG TRADOC proposed to the CSA, during January 1977, that a 3-week precommand program for combat arms battalion and brigade

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commanders be established. This proposal was approved in April 1977 and a TDY enroute precommand program for Infantry, Armor, Field Artillery, Air Defense Artillery and Engineer colonels and lieutenant colonels selected to command TO&E units was initiated. This program was structured as follows:

- o How to fight - 1 week - Fort Leavenworth
- o How to train - 1 week - Branch School
- o How to maintain - 1 week - Fort Knox

In addition to this program many combat arms commanders also attend the 5-day Senior Commanders Legal Orientation Course (SOLO). Those assuming command in USAREUR receive theater specific training at Vilseck, Germany and are also required to take the 6-week Gateway to Germany Language Program at the Defense Language Institute. Thus, the TDY required for combat arms commanders ranges from 4 to 10 weeks. With the exception of the USAREUR language training, the program has been voluntary with attendance based on available funding and release from the losing organization. Implementation of programs for combat and combat service support commanders have been held in abeyance pending evaluation of the combat arms program. As a result, combat and combat service support officers have no formal program and thus set up their own individual program in coordination with the MILPERCEN assignment officer. These officers usually avail themselves of the Senior Commanders Orientation Course (SCOC), the Senior Commanders Preventive Maintenance Course (SOPM), the SOLO Course and a visit to their proponent school. A 3-day course exists for corps support command (COSCOM) and division support command (DISCOM) Commanders at the USALOGCEN. While this is the only combat service support course having a curriculum tailored to actual needs it does not encompass the broader need for a command development phase as outlined by the Chief of Staff and discussed below.

D. During August 1977, the CSA directed that an additional week, devoted to the human side of command, be added to the precommand course. Fort Leavenworth was directed to add this -- a "Command Development" week -- to their instruction thus increasing the course to 4 weeks in length.

E. TRADOC has continued to study the problem of precommand training and on 3 February 1978 staffed a proposed new program to the major field commands. This program, designated the Command Qualification Course (CQC), consists of five phases.

o Phase I - self-study at home station (6-12 months lead time). This self-study package is designed for the specific type command the officer is going to. It includes a self-administered diagnostic examination, all required study and reference materials, and a copy of the final qualification examination.

o Phase II - Training and maintenance conducted at the branch school (10 training days). This phase focuses on training management, systems specific maintenance management, and the systems approach to organizational development. The diagnostic results are used to tailor instruction during this phase.

o Phase III - Battle Captains Course at Fort Leavenworth (5 training days). This portion covers threat and U.S. tactics plus an introduction to and use of war game simulations.

o Phase IV - Command Development Course at Fort Leavenworth (4 1/2 training days). This portion covers organizational effectiveness, legal orientation and administrative support systems.

o Phase V - Comprehensive Qualification Examination at Fort Leavenworth (1/2 training day). This is an open book examination using an examination identical to that provided in the officer's self-study packet.

Unlike the initial program which is run on a monthly basis TDY enroute, this 4 week program would be run quarterly on a TDY and return basis. This proposal still addresses only the TO&E combat arms officer. Again, programs for combat support and combat service support are held in abeyance pending evaluation of this program.

F. Both the existing program and TRADOC's latest proposal are steps in the right direction. Both however, address the needs of only about 50 percent of all centrally selected battalion and brigade commanders. As yet, a front-end analysis has not been performed on command positions and by virtue of that, all command selectees are given the same training. As a minimum, all commanders must know what soldier's manuals and ARTEPs are and be able to manage and execute the programs associated with them. They also must know what has been taught to their subordinates and be able to pick up training where the institution left off. They must know what management systems are in operation and be able to use and direct these systems.

They must be able to design and execute a training program which will insure that their organization can employ the tactical doctrine concepts on the modern battlefield. They must be proficient in the technical aspects of their respective commands whether it be weapon systems for the Armor battalion commander or installation management for the depot commander. While each commander needs these skills and knowledge, the degree to which he must understand and be proficient in each differ greatly. So too, for the unique skills. The Armor brigade commander must be more proficient in the control and direction of battle and the allocation of resources, while his battalion commanders will be much more deeply involved in the actual fighting of the battle. Only when each command position has been thoroughly analyzed can a program be properly designed and implemented.

G. Having reviewed the need for precommand training, and the existing and proposed programs one is led to a number of alternative approaches to insure that the incumbents in these critical positions are fully qualified when they assume command and do not use the command itself as a training aid.

II. ALTERNATIVES.

- A. No precommand course.
- B. One mandatory course for all designated commanders.
- C. TRADOC proposal - Command Qualification Course (CQC).
- D. Separate precommand courses for battalion commanders and brigade commanders.
- E. Tailored precommand courses.

III. DISCUSSION.

A. No precommand course. Elimination of the precommand course is not a reasonable alternative. Normal evolutionary changes in doctrine, methodology and systems that take place during the times that command selectees are not serving with troop units require some form of update training. Additionally, some perishable skills and knowledge require refresher training for the command selectee before he assumes command.

B. One mandatory precommand course for all commanders.
This alternative does not meet the needs of all commanders. The present command refresher course orients on preparation of the TO&E maneuver unit commander and is not necessarily cost effective for the training requirements of the combat support, combat service support, or training unit commander. Too often these commanders augment their precommand training with "catch as catch can" special requirements training with varying degrees of effectiveness, costs and time.

C. TRADOC proposal - Command Qualification Course (CQC).
The TRADOC proposal is a definite step in the right direction because it corrects deficiencies in the current program, incorporates recent CSA directives, and addresses special training needs for all commanders. The proposal does contain some objectionable features that require further consideration and/or study. Each salient feature of the TRADOC proposal warrants further consideration.

1) Mandatory attendance. This is a necessary feature of any meaningful precommand course. Currently only 90 percent of combat arms TO&E command selectees attend the existing precommand course. Appropriate emphasis on precommand preparation cannot be attained on a "selective" or "available" basis.

2) TDY and return basis. This alternative places undue hardship on the command selectee and his current unit. Such a proposal will require an extended absence from his current unit, possible assignment of a temporary replacement, and split responsibility and loyalty between the old unit and the new command. A TDY enroute basis affords a "clean break" from the old unit and totally orients the officer's attention on preparation for the command assignment. Current regulations allow the family to remain in government quarters for a period of 180 days so family turbulence affects both TDY alternatives equally.

3) Conducted on a quarterly basis. Conduct of the precommand course on a quarterly basis may not provide the necessary assignment flexibility to meet unprogrammed requirements. Specialties with higher annual turnover rates may require precommand courses on a monthly or bimonthly basis, whereas requirements of those units with lower turnover rates may be met on a quarterly or semi-annual basis. A new Army policy of notifying alternate selectees by letter, plus MILPERCEN's ability to project probabilities of alternate assignment may

eventually lead to quarterly programs as MILPERCEN's ability to program attendance improves. Further study is needed in this area to achieve maximum resource utilization while meeting Army requirements.

4) Self-study at home station. A self-study package tailored by type command with a self-administered diagnostic examination will contribute significantly to the preparation of commanders. Such a program will highlight areas of weakness and guide the officer to a more concentrated self-study effort allowing him to achieve greater benefits from the resident portion of the program.

5) Course content and length. A 4-week resident course may be excessive. The 2 weeks at the branch school may be required by the TO&E combat arms commander, but the TDA unit commander may require only 1 week. Before the course length can be determined for all type units, a detailed front-end analysis must be conducted to determine skills and knowledge required of the various type unit commanders. An analysis of the RETO data indicates several areas of common skills and knowledge for all commanders which could best be presented at a centralized location. The specialty specific skills and knowledge should be presented at branch schools and/or USACACEN, USAADMINCEN, USALOGCEN as required. USAREUR has challenged the amount of time devoted to participation in wargames during the precommand course. Simulations and wargames are effective and commanders need to know what they are and how they can be used to train subordinate commanders and staff. The TO&E maneuver unit commander should achieve experiences that he would not otherwise receive prior to taking command such as terrain walks, battle analyses, CPXs, and/or TEWTs. There is no substitute for actually going out on the ground and as such this type instruction should be added to the Battle Captains Course. Course length can be determined after course content requirements have been established.

6) Qualification examination. A qualification examination, or certification for command, implies an objective far beyond the capability of any course of instruction. This implies that personnel selected by a DA board are not qualified to command, but will be qualified after attending the Command Qualification Course and passing the qualification examination. For the near future, qualification must be based on the officer's training

and education, duty experiences, manner of performance and potential prior to selection by a DA board. All connotation of "qualification" must be removed from the objectives of the near term precommand course. Future implementation of a training, education and assignment system oriented on specific specialty qualification criteria may lead to eventual implementation of a command qualification program. As such, this proposal warrants further consideration. In the future, as officers progress in a system that incorporates specific specialty qualification criteria the additional requirement of command qualification may be wholly acceptable.

7) Language training. For those overseas commands requiring language proficiency the TRADOC proposal includes attendance at the Defense Language Institute (DLI). Commanders designated to command units in USAREUR should continue to attend DLI enroute. Designated commanders already assigned to USAREUR should receive the language training in USAREUR.

D. Separate precommand course for battalion and brigade commanders. Commanding a brigade is different from commanding a battalion. The brigade commander is involved to a much greater extent in the allocation of resources and the control and direction of the battle. While the battalion commander does this also, he fights the battle to a greater extent. The brigade commander cannot, however, effectively command unless he is fully competent in the employment of his battalion task forces. The brigade command selectee must have this training. The differences then between the two commanders lie primarily in the scope of required skills and knowledges. The RETO analysis and supporting data indicate that the majority of skills are common to both. The front-end analysis will further define these commonalities and any substantive differences. The final program should accommodate these requirements by conducting a joint battalion/brigade program with tailored electives to cover the differing requirements. In this way, the Army's requirements are met and the intangible value of the battalion command selectees learning from the brigade command selectees, who have already commanded battalions, and the exchange of ideas between officers of different branches is not lost. Additionally, if separate courses were to be established, the lower density of brigade command selectees attending a separate course would dictate fewer courses being conducted annually and would impact adversely on meeting the Army's brigade command assignment requirements.

E. Tailored precommand course. To meet the Army's requirements the command course must be tailored to specific needs by type command. Using the best aspects of the current command refresher course and the TRADOC Command Qualification Course the Army should develop a precommand course based on the results of a detailed front-end analysis of each command position to determine the skills and knowledge required of each commander. Once the requirements have been determined, then the course content, methods of instruction, groupment of type commands, electives programs and course length can be determined. Common skills and knowledge required of all commanders can be presented at one location, whereas unique skills and knowledge can be presented at branch schools or integrating centers. Each program should include a core curriculum and an electives program to better meet the needs of the commanders involved. Needs of commanders, in general, are determined by the front-end analysis and the specific needs of the individual officer by the results of a diagnostic test. For some special command positions it may be determined that the best method of preparing an officer to command is a series of previous assignments in that specialty area. Precommand courses should be conducted when required on a TDY enroute basis.

F. Early assignment of command selectees to the field. In many cases, command selectees could be assigned early to the division, corps, or post where they will eventually assume command. This is particularly appropriate for those scheduled to assume command near the end of a particular list -- usually 1 year from the date the list is announced. Once at the field location, there are many jobs the officer could be placed in that would allow him to re-orient on the troop environment. Such jobs range from brigade executive officer, or assistant DPT/G3, to special assistant to the division commander. After a period of incumbency in such a job, the officer would take the self-administered diagnostic, the results of which will determine how much resident training is required. As an example, if the officer were given a job requiring daily activity in the maintenance area or daily involvement in training management it may allow a reduction in the amount of time the officer needs to devote to these subjects in the Command Course. The branch school phase might thus be shortened. Using the assignment process in this way would reduce the overall cost of the program through reduced or shortened attendance, and would assist the field by providing quality officers for a longer period of time.

ESTIMATED COSTS

I. Current Command Refresher Course.

A. Combat Arms TO&E

	COSTS PER STUDENT *			TOTAL ANNUAL COST (mil)
	<u>OM&A</u>	<u>MPA</u>	<u>TOTAL</u>	
Branch School (5 days)	\$ 478	\$1,802	\$2,280	
SOPM (5 days)	447	1,002	1,452	
Combined Arms Center (10 days)	<u>824</u>	<u>2,980</u>	<u>3,804</u>	
TOTAL	\$1,749	\$5,787	\$7,536	

Expected annual attendance (240) \$1.8

B. The current command refresher course only pertains to TO&E combat arms. A program for combat support/combat service support and training commands is to be established pending evaluation of the combat arms program. For purposes of cost analysis it may be assumed that the institution of these additional training programs would cost essentially the same as the proposed alternative. Total cost of the current program when fully implemented, based on the above assumption, is \$3.8 million per year.

II. Tailored Precommand Course.

a. Combat Arms TO&E

	COSTS PER STUDENT *			TOTAL ANNUAL COST (mil)
	<u>OM&A</u>	<u>MPA</u>	<u>TOTAL</u>	
Branch School (10 days)	\$ 954	\$3,504	\$4,460	
Combined Arms Center (14 days)	<u>1,144</u>	<u>4,172</u>	<u>5,316</u>	
TOTAL	\$2,100	\$7,676	\$9,776	

Expected annual attendance (240) \$2.3

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	COST PER STUDENT *			TOTAL ANNUAL COST (mil)
	<u>OM&A</u>	<u>MPA</u>	<u>TOTAL</u>	
B. <u>Combat Support/Combat Service Support</u>				
Branch School (5 days)**	\$ 478	\$1,802	\$2,280	
Coordinating Center (10 days)**	<u>825</u>	<u>2,980</u>	<u>3,805</u>	
TOTAL	\$1,302	\$4,782	\$6,084	
Expected annual attendance (265)				\$1.6
C. <u>TRADOC training Commands</u>				
Branch School (5 days)**	\$ 478	\$1,802	\$2,280	
Coordinating Center (6 days)**	<u>562</u>	<u>1,490</u>	<u>2,052</u>	
TOTAL	\$1,040	\$3,292	\$4,332	
Expected annual attendance (89)				<u>\$0.4</u>
TOTAL ANNUAL COST				<u>\$4.3</u>

*Basic cost data and expected enrollment provided by DCSRM and DCST, TRADOC respectively.

**Estimated course length assumed for cost analysis.

U.S. ARMY RESERVE AND NATIONAL GUARD PRECOMMAND COURSE IMPACT

I. U.S. ARMY RESERVE (USAR)

A. The battalion and brigade command selection and designation process for the USAR is markedly different from the process used by the Active Force. A centralized command selection process is employed, however, it is not a USAR wide system. Individuals chosen for command normally compete for selection only with officers in a given geographical radius of the command's actual location.

USAR officers normally average 33 months in command as opposed to the 18 to 24 months for the Active Force. USAR officers also tend to move into command much quicker after notification of selection than do their active counterparts, making it more difficult to schedule them into the Active Precommand Course prior to assumption of command. USAR officers often find it difficult to participate in training for 4 consecutive weeks due to civilian job constraints. The USAR commander is required to spend 2 weeks with his unit while the unit is on active duty for training. USAR officers may be able to attend the command course during one 4-week active duty training period or they may take the course in 2-week increments -- as an example, 2 weeks at the branch school during one active duty period and 2 weeks at the coordinating center at some other time. In any event, USAR commanders are required to attend as they need the training afforded by these courses for the same reasons as their active force counterpart. This applies especially to training unit commanders who assume the majority of the Army's basic and advanced individual training during a full mobilization period.

B. The numbers involved in sending reservists to the active program are shown here:

- o Combat Arms - Approximately 23 brigade and battalion commanders annually.
- o Combat Support - Approximately six brigade and battalion commanders annually.
- o Combat Service Support - Approximately 29 brigade and battalion commanders annually.
- o Training Commands - Approximately 49 brigade and battalion commanders annually.

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C. The costs associated with instituting this program are shown here:

*COST PER STUDENT

	OM&A	MPA	TOTAL	TOTAL ANNUAL COST (THOUSANDS)
1) <u>Combat Arms</u> Expected Annual Attendance (23)	\$2,100	\$7,676	\$9,776	224
2) <u>Combat Support/Combat Service Support**</u> Expected annual attendance (35)	\$1,302	\$4,782	\$6,084	212
3) <u>Training Commands**</u> Expected Annual attendance	\$1,040	\$3,292	\$4,332	212
				—
			TOTAL ANNUAL COST	648

*Basic cost data provided by DCSRM, TRADOC for active duty officer; expected enrollment provided by OCAR.

**Implementation of these programs, and estimated course length is assumed for cost analysis to be the same as used for the active duty precommand course (see Inclosure 2).

II. ARMY NATIONAL GUARD (ARNG)

The command selection and designation process for ARNG brigade and battalion commanders is also different from the active force. As in the USAR, selection is on a geographical basis, however, all selections must be made from within the same state. Officer personnel/career management is the function of each state governor, executed by his state adjutant general. The ARNG officer normally spends his career within the same state and in many cases the same major unit.

ARNG battalion commanders and their staffs currently attend a weekend exercise on the Combined Arms Tactical Training System (CATTS) at Fort Leavenworth. Since May, 1976, 42 battalions (756 officers) have participated. Brigade commanders and staffs attend a 1-week refresher course at Fort Leavenworth. Since the inception of this program in October 1975, each of the 21 separate brigades, 24 divisional brigades, a 13 Armored Cavalry regiments have attended once. The commanders and staffs of these units are scheduled for a second refresher during FY 78.

In addition, several combat support and combat service support battalions, group and brigade commanders and staffs get an intensive training experience during the Annual Logistics Exercise (LOGEX) at Fort Pickett, VA, for 13 days each Spring. Since 1974 there has been a great increase in the number of ARNG units participating in Readiness Command (REDCOM) FTX's and JTX's. The training benefit of these exercises in the areas of joint operations and combined arms operations is immense.

In addition to the above programs, ARNG commanders should be required to attend the appropriate active duty precommand course prior to assuming command or as soon as possible thereafter.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 3

CONTINUING EDUCATION AND TRAINING FOR GENERAL OFFICERS

TO ANNEX F

SENIOR OFFICER EDUCATION AND TRAINING

The case for an institutionalized program of continuing education and training for the Army's general officers (GO) can be made from at least four perspectives: the persistent perception at many levels that there are "problems" in the Army's GO leadership; selective analysis of extant industrial and educational management development philosophies; the programs and attitudes of sister Services, and armies of other nations; the views of the corps of general officers themselves.

Beginning with the latter, of fifty-four GOs responding in the RETO interviews (see Inclosure 2) to a direct question regarding the need for a program of continuing education for GOs, thirty-eight said there was a need. As an unsolicited aside, nine generals argued that proper selection and assignment are more important than subsequent education and training in any event. The GOs commenting supported two types of continuing education/training - TDY enroute between assignments and/or annual updates at a suitable location. They favored short sessions which were tailored to individual GO needs or to specific areas of Chief of Staff, Army (CSA) concern. Possible subject areas for such education/training most often mentioned were: management - financial, installation, resource, personnel, maintenance, logistics, training; combat skills - current doctrine and battle management; community command and community relations; specialty related technical proficiency; media and public relations; ADP and information systems; foreign language; precommand refresher; weapons systems, and organizational effectiveness/organizational development. (A complete list of suggested areas is at Table 1, Tab B, Inclosure 2.)

Further, in the RETO and other GO interviews conducted within the past 5 years, nearly all spoke of major distractors and hinderances to their job performance. For example, there are assertions by the GOs that they are: overscheduled, overcommitted and overworked; given little time for reflection; underinformed by the Army's leadership concerning key issues, yet are expected

on occasion to articulate these; improperly assigned, generally in an ill-timed manner; and, given little or no interassignment preparation, or relaxation time.

As perceived by outsiders studying how generals are selected, assigned, and trained as well as what they do and how, it appears that:

- The Army and its various executive leadership positions contribute to the personal and professional development of the corps of general officers as they pass through them, rather than an understood obverse--major contributions by the corps of GOs to the organization, the Army, and the nation.

- GOs are poorly managed by multiple and improper assignments.

- GOs are underspecialized and inexpert in many key positions.

- Many are simply "senior bureaucrats" who have lost, or never had, the battlefield skills expected of a general.

- They are unable or unwilling to delegate authority to the next (O6) executive level even though the lore of the selection process suggests that at the time of selection, the difference between selects and non-selects for BG is often both infinitesimal and subjective.

- GOs are not really managers or leaders at all, but merely conduits of information, since they have, or take, too little time for reflection.

- They are overcommitted to the trivial; underemployed on the important.

As viewed by at least one senior Army GO, the Army's corps and division commanders are most deficient in precisely those skills in which they should have expert proficiency -- land combat command of their assigned forces.

Finally, as viewed by some senior civilian leaders, senior Army officers are relatively ineffective at the top echelons of the federal government as compared to their other service peers because they are:

- Lacking in breadth, depth.

- Unable to think or reason abstractly.

- Unwilling to articulate constructive criticism.
- Unable to look ahead and perceive the need for change.
- Ineffective at articulation of problems/solutions in a national perspective due to excessive personal, institutional or service loyalty.
- Trapped by "info papers" and "action officers" who become their primary means of communication.

A cursory review of current organizational development philosophy also strongly argues for a level of continuing education well beyond the Army's existing effort. A theoretical underpinning has long been thought useful to "action-oriented" people. Moreover, insofar as a "front-end analysis" of what a general officer does is possible, or desirable, it suggests a tremendous range and depth of dissimilar skills and responsibilities. The GO may, in peace or war, be expected to perform in policy/strategy; management/administration; military diplomacy or operational/tactical positions. In any of these roles he "personifies the Army image" and may be asked to articulate Army views, publically testify before Congress, deal with the media, and associate with senior federal civilian officials. Meanwhile, he must remain cognizant of his legal and administrative responsibilities to the organization, as well as his personal, managerial and leadership roles vis a' vis his superiors, peers and subordinates.

Rephrasing Henry Mintzberg's thesis in The Nature of Managerial Work, general officer activities and roles can be grouped into 3 categories and 10 observable roles:

- Interpersonal relationships (symbolic head; liaison; leader).
- Information processing (monitor; disseminator; spokesman).
- Significant decisionmaking (entrepreneur; crisis manager; resource allocator; negotiator).

Recognizing the depth and breadth of these requirements, industrial management programs are usually characterized by an overall development philosophy, much of which can have relevance to the Army's needs:

- The executive development responsibility is a shared one between the individual, the institution, and commanders.

- Leadership at all levels, particularly the senior leadership, must be committed to and involved in the development system.

- A favorable organizational climate and value system which supports development must exist.

- The development process should be a long term system which integrates various subsystems and requires a blend of individual effort, formal schooling, and on-the-job responsibilities which link experiences with training and development.

- In addition, the system must include:

-- Changing emphasis from specialist to generalist as one moves upward in the hierarchy.

-- A contingency approach to training strategies.

-- A long term, detailed evaluation plan.

-- Personnel policies which maximize utilization of trained resources,

For their part, university level educators agree that the following issues relating to executive education are among the most important:

- The same skills, attitudes and personal characteristics which generate exceptional performance and which function effectively at lower and intermediate levels are often those which dictate failure at the upper organizational levels.

- Off the job executive educational experiences should be spaced throughout a career. The life span of technical education is 5-7 years.

- The timing of such interventions is optimally after the executive has had short exposure to a new position rather than before he or she attains it.

- Action oriented people (executives) find it difficult to move from specific problem solving to the theoretical underpinning for doing so.

- The conceptual skills required at the executive level are best developed in an academic environment.

- A long-range view is necessary because actions taken in executive development may take 5-15 years for full payoff.

The universities base their programs on several assumptions regarding the business executive which are equally applicable to senior Army officers:

- The executive rarely has time to reflect on his work life and his performance as a manager.

- The executive has little or no time on the job to acquire competence in or an appreciation for other functional areas outside his own.

- The higher the executive moves within the firm, the more cognizant he must become of the organization's external environment.

Unlike its business and industry counterparts, there is no lateral entry possibility into these senior Army positions. Further, due to the possibility of some form of mobilization, the Army is faced with a major consideration not confronted by civilian executive development systems. It must constantly prepare a larger pool of individuals than it is likely ever to be able to promote to these positions. Since this preparation may not be as extensive or specific as might otherwise be desired, it is reasonable to assume some portions of it may necessarily occur after selections are made, rather than before.

Although neither the Navy nor the Air Force has a formal continuing education/training program for its flag rank officers, there is evidence to suggest that considerable weight is given to previous experience and specialization in their management and assignment. In addition, the Navy requires its O6 and above-surface command designees to attend a 16-week training course in ship-board material and steam engineering prior to assumption of command. Once in command, these and other senior commanders and their staffs are regularly required to participate in fleet war games like CINCLANT's Tactical Command Readiness Program. The Air Force Chief of Staff's personal involvement in the USAF equivalents of the Army's General Officer "Weekly Summary", and the Brigadier General Designee Conference, reflects a commitment of USAF senior leadership noted as crucial by civilian executive

development experts. Both Services have emphasized the importance of effective management by their senior leaders, and both have supported 1-to 3-week courses for their general officers, designed to improve their application of modern management techniques.

A cursory examination of officer professional development programs of Israel, the Union of Soviet Socialist Republics, the United Kingdom, Canada and the Federal Republic of Germany reveals no more emphasis on general officer continuing education than now exists in the U.S. Army. However, it is noteworthy that in each of these armies the last formal educational experience (National Defense College, or equivalent) is much more selective than that in the U.S. and occurs after the officer is a general or is virtually assured of becoming one.

CONCLUSIONS.

Clearly then, there exist several components to any successful GO development system, only some of which are within the rubric of continuing education, training, or professional development. Obviously, selection of the right man for the right reasons is crucial. In fields where GO specialization is needed, it is infinitely easier to select a qualified specialist than it is to impart to a "good man" the necessary specialist skills. By the same token, when the system selects "conformists" who "compromise at the lowest common denominator," or conservatives who "play it safe" because they do so with "energy" and "dedication," it cannot expect to achieve the leadership of innovators and prudent risk takers it may need at the highest levels to deal effectively with today's problems. Management, particularly assignment of the right man to the job for the right reasons and the optimum length of time is a basic determinant, the violation of which can never be fully redressed by any system of continuing education. So long as the tenure of any GO in any job remains outside the zone of optimal productivity (18 months to 4 years), both the individual and the institution will suffer commensurately.

However, since no selection or assignment system is likely to achieve perfection, and since most GOs will serve from 6 to 10 years beyond their last formal schooling, a system of GO continuing education warrants serious consideration. The system adopted ought to possess at least three aspects responsive to distinct GO needs -- transitional (interassignment refresher), orientational (updating, with accurate, timely, useful information), and developmental (theoretical and practical skills relevant to GO-specific duties and responsibilities). Any new system should also

seek to maximize the use of existing programs, resources, systems and facilities.

The following detailed proposal is designed to meet each of those needs.

A. PURPOSE: To provide for the continuing education, training and development of the Army's general officers on an integrated, systematic basis beyond the senior service college (SSC) experience.

B. FEATURES:

- An integrated system of management position planning.
- Identification, selection and assignment through systematic assessment of capabilities compared to validated Army requirements.
- Complementary on-the-job, extra-institutional and TDY management development education and training.
- Institutionalized interassignment transition preparation.
- Periodic orientational updates and interactions for all general officers with special emphasis on BG designees.
- MACOM specific periodic orientation/training where required.

C. GENERAL: This proposal supports the recognition of general officer specialization in the selection and assignment process. GO positions should be coded where possible with relevant OPMS specialties or combinations thereof. Beyond the current instructions to selection boards, it is recommended that limited experimental use be made of executive development laboratories for newly selected brigadier generals (see Annex O). The relatively recent specific assignment experiences of the officer (O5-O7) should be given special weight in his assignment. For example, an officer who had served previously in ODCSOPS should be returned there as a general, if at all possible. GOs should habitually remain stabilized in their assignments for 18 months to 2 years, with up to 4 years being the optimum tour length.

All GOs, regardless of experience or background would be considered for interassignment transition training/education based on the specific needs of the officer concerned. In addition,

all GOs and BG designees would be requested by the CSA to participate in a 1-week executive update seminar once each year. MACOM commanders would be encouraged to establish command specific, Senior Commander/Manager Workshops as necessary to augment these Army-wide programs.

D. INTERASSIGNMENT TRANSITION:

1. PURPOSE: To provide to each general officer the specific skills and knowledge needed to perform in a new assignment with maximum effectiveness from the outset.

2. PROPONENT: U.S. Army War College (USAWC) in direct coordination with DCSPER (GOMO), TRADOC and other MACOMS.

3. FEATURES:

- Based on consultations between GOMO /USAWC and the officer concerned, using whatever diagnostic assistance is available, GO would be provided necessary TDY time and funds to participate.

- Education/training as needed, when needed, where it can be most effectively presented.

- Time variable -- 2-6 weeks optimum range.

- USAWC, by maintaining cognizance of entire Army-wide and civilian contract course availability would assist GO in tailoring a program to his specific transition needs.

- USAWC would ensure the timely mailing of whatever preparticipation study, diagnostic or reading materials were necessary.

- USAWC proponenty envisions responsibility for development, content, quality control of all possible courses, briefings, tutorials, contacts, and orientations, regardless of actual physical location of activity.

- Reliance on deputy commanders to assume necessary duties during GO assignment underlaps.

4. GENERAL: This proposal envisions that the USAWC, in close coordination with the Army at large, would supervise the development at the most suitable locations, of specifically tailorable, individualized instructional modules across a broad range of subject areas. Close coordination with MACOMS will ensure that specific position related training for key jobs is made available. USAWC expertise, experience and resources (SSI, library, NRI, student body, lecturers) will also support a significant theoretical, educational, and developmental component, in addition to the specific orientational aspects of job transition. The proposal provides a logical follow-on to and further supports the USAWC as the Army's institutional preparation ground for GOs. It would likewise build and enhance a USAWC reputation as the Army's professional and doctrinal center.

The proposal is responsive to GO expressed feelings that job transition should largely be the responsibility of the GO concerned. No attempt is made to delegate that responsibility---it remains the program of the officer concerned. However, the Army provides him both resources (time, funds) and expert assistance.

5. MODULES/METHODOLOGY: The range of specific instructional modules and methodology possibilities is practically limitless. Key features are the potential for individualized, tutorial-type directed acquisition of skills and knowledge tailored to the specific needs of the officer concerned in relation to the position to be filled. Instructional modules might include, inter alia:

Command Refresher
Installation Management
Project Management
Joint/Combined/International Staff
Specialty Related - Skills; Weapons Systems
Public/Community Relations
Foreign Language
ADP and Information Systems

The potential for instructional methodology is also vast:

- Civilian contract -- education, business, industry.
- OE transition modelling between incumbent and replacement.

- Directed readings or tutorials with identified experts in the field.

- Visitation models (i.e., 2-3 day "birddog" of GO in like position to that of student GO).

- Instructional Technology - video/audio tapes.

- Self-paced Criterion Referenced instruction.

- Visits, tours, briefings---military specialty schools, civilian educational institutions, businesses, industry.

E. PERIODIC MANDATORY EXECUTIVE UPDATE SEMINARS:

1. PURPOSE: Orientalional---to insure that each of the Army's general officers, regardless of seniority or position, is kept accurately informed by the Army's leadership (CSA; Sec Army) as to current Army policies, programs, plans, and problems. Developmental---to provide the time and forum for selective education or training in one or more areas of specific general officer concern.

2. PROPONENCY: Office of Chief of Staff, Army, or an executive agent directly responsible to CSA.

3. FEATURES:

- Conducted quarterly; mandatory once annually for all active GOs, 06(P). Reserve Components by invitation---not mandatory.

- Suitable, live-in location in Washington Metropolitan area away from press of daily routines (i.e., Xerox Training Center).

- 12-14 hour schedule for 5-6 days to include:

-- Seminars with Sec Army, CSA, Army Staff principals, selected Congressmen, ASDs.

-- Choice of optional, self-paced, hands-on, study modules (see Table 1, Tab B, Inclosure 2 for example subject areas).

-- Briefings (including feedback from MACOMS).

-- Athletic, socialization, OE activities.

- In lieu of current Brigadier General Designee Conference; new active duty O7, O6(P) to remain 1-2 additional weeks for further developmental modules and orientational visits.

- Coordinated with efforts to improve and supplement existing GO orientational programs - Chief of Staff's "Weekly Summary;" professional literature and reading lists.

4. GENERAL: This portion of the overall general officer education and training proposal addresses itself primarily to the orientational; and secondarily, to the developmental needs of the GO. It is favored by a majority of those who responded to it as a specific proposal. Moreover, many recent GO interviews have revealed that they feel themselves to be generally underinformed in subject areas where, by virtue of their rank and station, they are often expected to be knowledgeable enough to express themselves. In addition, particularly among junior GOs, there is a feeling of being left out, of inadequate opportunity to learn generalship from their superiors, or interact with their peers; of not being treated as members of the leadership team.

For these reasons, the "core" of the week-long curriculum would be devoted to orientational, interactive, organizational developmental and socialization activities. However, it is also envisioned that each participant would be able to select from among several relevant instructional modules, one or more which would be responsive to his developmental needs in a variety of subject areas. Modules offered could also be directed by the CSA based on his assessment of GO needs. A wide variety of instructional methodologies is possible. The key factor, however, is removing the action-oriented executive from his super-charged environment for several days of expertly guided reading, reflection and discussions in subject areas worthy of his consideration.

5. Orientalional Methodologies: Integral to this proposal is the necessity to improve and streamline the regularized flow of information from the Army's leadership to its subordinate executives. The Chief of Staff's Weekly Summary is crucial to this effort. As viewed from the user in the field, there are several ways in which the Weekly Summary could be improved:

- Provide frank, forceful, personalized guidance direct from CSA on key policy issues. Weekly Summary belongs to CSA, not his staff.

- Supplemented by extension packages of additional professional interest (reading lists; relevant reprints; audio/video tapes; CSA questionnaires to solicit views).

- Publish on an as-needed basis only---not driven by weekly "deadline" but by timeliness of need to get important word to field.

- Executive newsletter (Kiplinger) format; cryptic style, better editing.

- More timely, especially for junior GOs. Each GO, regardless of rank, position, should get his own copy.

Beyond the Weekly Summary, there are numerous other Army and DOD publications (e.g., Parameters, Military Review, Commanders Digest) of professional interest to GOs. The USAWC, acting as an executive agent for the CSA, should screen these publications as well as other foreign and domestic scholarly and professional journals (e.g., Foreign Affairs, Journal of the RUSI, Naval Institute Proceedings, New Republic). On a monthly basis, the USAWC would select, reproduce and distribute to all GOs three to four of the most important of the screened articles from these journals. In addition, USAWC would be responsible for providing all GOs a periodically updated reading list which would reference and precis all professional articles and books of particular GO reading interest. Finally, the USAWC as part of its corresponding studies and interassignment transition responsibilities, would be able to provide to GOs useful readings in a wide variety of subject areas upon request.

F. MAJOR COMMAND SPONSORED PERIODIC SENIOR COMMANDER/MANAGER WORKSHOPS:

1. PURPOSE: To supplement the Army-wide continuing education and training programs for GOs, these periodic workshops would insure senior executive cognizance and expertise tailored to areas of specific major command concern.

2. PROPONENCY: Major command commanders.

3. FEATURES:

- Conducted periodically, as needed.

- Optimum length 3-5 days, isolated locations, live-in environment.

- Required for all GOs, selected O6, O5 participants.
- Coordinated with Army-wide programs. Participation on request by DA representatives.
- Tailored subject areas using advanced educational technologies:
 - ITV/audio tapes.
 - Computer simulations and computer assisted wargames to ensure tactical command readiness.
 - Seminars with senior commanders; interaction.
 - Simulated or actual terrain marches.
 - Tactical exercise without troops (TEWTS).
 - Self-paced, criterion referenced instruction.

4. GENERAL: Especially for a command like USAREUR where particular needs differ significantly (Community Command; Inter-alliance Activities), this supplementary proposal has considerable merit. For those commands which need to be assured in some cost-effective manner of a high degree of tactical combat readiness, expanded use of computer assisted simulations and wargames by senior commanders and their staffs have proven to be a particularly appropriate methodology (see Tactical Command Readiness Program outlined at Inclosure 3). Such programs create an environment in which the command's leadership can effectively turn away from its peacetime activities to test its wartime skills and decisionmaking qualities.

G. CONTINUING EDUCATION/TRAINING FOR RESERVE COMPONENT OFFICERS:

1. PURPOSE: To insure that the special continuing education, training and professional development needs of the Army's Reserve Component (RC) GOs are met, while at the same time supporting the "One Army Concept" of viable interrelationship between Active and Reserve Components.

2. PROPOSERS: Chief, National Guard Bureau and Chief, U.S. Army Reserve.

3. FEATURES:

-- Continue existing informal programs of special applicability to Army's 325 RC GOs:

-- Senior Reserve Component Orientation Course (SRCOC), an annual 2-week course at the USAWC.

-- Annual one week refresher for separate ARNG brigade and division commanders.

-- NATO Orientation Tour Europe (NOTE); twice annually for one week.

-- Participation for up to one week in:

---Professional update courses at service schools.

--- LOGEX.

---Policy and promotion boards, study groups, commanders conferences, and steering groups.

---NGB management conferences.

---State Adjutants General conferences.

---Senior Reserve training division/brigade commanders conferences.

-- Defense strategy seminars at National War College.

- Participate by invitation in active component quarterly executive update seminars. Mandatory only for RC BG designees or O6(P), (first week). Non-mandatory for all other RC GOs.

4. GENERAL: Continued participation by RC GOs in current informal, ad hoc, short term programs is well suited to their special needs and restricted availability. However, by combining all (AC and RC) GOs for annual orientations, cost savings and a new degree of cohesion between the two components will be realized.

3 Inclosures

1. Bibliography
2. General Officer Interviews in Support of RETO Data Collection
3. Tactical Command Readiness Program (TCRP)

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Inclosure 1

GENERAL OFFICER INTERVIEWS IN SUPPORT OF RETO DATA COLLECTION

1. Purpose. The Officer Training and Education Review Group (RETO) has, as a part of its charter, the task of recommending whether or not the Army should provide a program of continuing education/training for general officers, and if so, what form such a program should take.

2. Background.

a. To obtain data addressing the need or lack thereof for a general officer continuing education/training program, a decision was made to interview selected general officers. To determine which general officers to interview, three RETO officers selected at random a group who represented all ranks, a wide range of previous experience and a variety of present duties. The list, thus compiled, consisted of 58 general officers. Of these, 54 were actually interviewed representing 12 percent of all general officers. A list of generals interviewed and their duty position at the time of interview is at Tab A.

b. To facilitate the conduct of the interviews, an extensive list of questions was prepared. This list was coordinated within RETO and from it, 11 questions were chosen as being of primary importance (Appendix A, Tab B). Nine additional questions were selected for use by the interviewer should time permit (Appendix B, Tab B).

3. Methodology.

a. Three officers from Team E, RETO conducted the preponderance of the interviews. Team members normally tried to schedule 1 hour for each interview. In some case only 15 minutes was available while in others, the interview lasted in excess of 1 hour. The average interview time was 30-40 minutes.

b. In the majority of cases, the set of 11 questions was provided to the general officer a week or so prior to the scheduled interview. At that time, it was either explained to the general concerned, or an appropriate staff member, that these questions were provided so that the general could focus his thoughts on the areas with which RETO was concerned. It was further explained that by providing these questions, no attempt was being made to solicit only comments restricted to these issues -- in fact, comments on any area of concern to the interviewee were actively sought.

Inclosure 2

F-3-II-1

c. Interviews normally commenced with a short explanation of the RETO charter, followed by a transition into the first question. In many cases, after answering this question, the general officer addressed issues of more specific concern to him. In these instances, the interviewer encouraged the digression, returning to questionnaire items as appropriate. In the course of the interviews, the 11 primary questions were usually addressed. A great wealth of additional information on a wide variety of issues was also surfaced. In the majority of cases, time was not available to address the nine additional questions. For this reason, responses to this supplemental questionnaire were erratic and limited. Responses to the interview in general and to specific questions were uniformly frank and open. Those general officers assigned to USAREUR were provided both sets of questions and responded to them in writing.

d. Following each interview, a memorandum was written by the interviewer based on notes taken during the interview. These memoranda represent a distillation of the interviewees' comments and are not verbatim transcripts. Since the interviewees were not provided a copy of their interview memorandum, it was decided that these reports should not be circulated outside the study group.

4. Discussion.

a. At the completion of 50 interviews, the Army Research Institute (ARI) was requested to analyze them and provide RETO a report. This report, at Tab B, is a comprehensive treatment of the interviews, and presents data which fully substantiate the need for a program of general officer continuing education/training. The report further provides a great deal of substantive information which represents the views of general officers in a wide range of subject areas.

b. During the time ARI was analyzing the data and preparing the report, four additional interviews, which had been previously scheduled, were conducted. These have been subsequently reviewed in the context of the ARI report. The views expressed are consistent with the conclusions drawn from the complete analysis.

GENERAL OFFICER INTERVIEWS IN SUPPORT OF RETO DATA COLLECTION

1. As part of the RETO data collection effort, 54 general officers were interviewed to obtain a sample of general officer opinions on a number of wide ranging issues. The breakout by grade is shown here:

General	6*
Lieutenant General	4
Major General	24
Brigadier General	20

*Includes 2 retired Generals

2. Those general officers interviewed, and the duty position and grade held at the time of interview are listed below:

GENERAL

Gen Maxwell Taylor, Retired
Gen William E. DePuy, Retired
Gen George S. Blanchard, Commander in Chief, USAREUR
Gen John J. Hennessey, Commander in Chief, REDCOM
Gen Frederick J. Kroesen, Commanding General, FORSCOM
Gen Donn A. Starry, Commanding General, TRADOC

LIEUTENANT GENERAL

LTG Harold R. Aaron, Deputy Director, Defense Intelligence Agency
LTG David E. Ott, Commanding General, VII Corps.
LTG Edward L. Rowny, JCS Representative of SALT Talks
LTG Volney F. Warner, Commanding General, XVIII Abn Corps.

MAJOR GENERAL

MG Calvert P. Benedict, Commanding General, 1st Infantry Division, Fort Riley, KS
MG Richard E. Cavazos, Commanding General, 9th Infantry Division, Fort Lewis, WA
MG John M. Gerrity, ADCSOPS for Joint Affairs, ODCSOPS DA
MG Charles K. Heiden, Commander, USA MILPERCEN
MG Robert C. Hixon, Chief of Staff, TRADOC
MG William J. Livsey Jr., Commanding General, USA Infantry Center
MG Jack V. Macknull, Commanding General, JFK Center for Military Assistance,
Fort Bragg, NC
MG Guy S. Meloy III, ADCSOPS, FORSCOM

TAB A

F-3-II-A-1

MAJOR GENERAL

MG Louis C. Menetrey, Deputy Commander, Combined Arms Center, Fort Leavenworth, KS
MG James H. Merryman, DCSCD, TRADOC
MG Henry Mohr, Chief, Army Reserve
MG William L. Mundie, Commanding General, USADMINCEN
MG William B. Richardson, Director, Requirements, ODCSOPS, DA
MG Roscoe Robinson Jr., Commanding General, 82d Abn Division, Fort Bragg, NC
MG Charles C. Rogers, DCSRUTC, TRADOC
MG John W. Seigle, DCST, TRADOC
MG John K. Singlaub, Chief of Staff, FORSCOM
MG Lee E. Surut, Director, Strategy Plans and Policy, ODCSOPS, DA
MG Arthur H. Sweeney Jr., DCSLOG, FORSCOM
MG Richard H. Thompson, ACSI, DA
MG Maxwell R. Thurman, Director, Program Analysis and Evaluation, OCSA
MG William L. Webb Jr., Commanding General, 1st Armored Division, USAREUR
MG LaVern E. Weber, Chief, National Guard Bureau
MG Robert G. Yerks, Commandant, USA War College

BRIGADIER GENERAL

BG Albert B. Akers, Assistant Commandant, USAFAS, Fort Sill, OK
BG Richard D. Boyle, ADC(S), 82d Abn Division
BG Tom H. Brain, Commanding General, USA Security Assistance Center, Director, Security Assistance, DARCOM
BG Mary E. Clarke, Director, Womens Army Corps.
BG Richard G. Fozakerley, DCSCOMP, FORSCOM
BG Robert C. Gaskill, Deputy Commandant, USA War College
BG Eldor F. Honeycutt, ADCSOPS, FORSCOM
BG Phillip Kaplan, DCSPER, FORSCOM
BG Lynwood B. Lennor, Deputy Director, Strategy, Plans and Policy, ODCSOPS, DA
BG James J. Lindsay, Chief of Staff, XVIII Abn Corps.
BG Fred K. Mahaffey, Assistant Commandant, USAIS, Fort Benning, GA
BG Loyd P. Rhiddlehoover Jr., ADC(O), 82d Abn Division
BG Jere W. Sharp, Director, Procurement and Production, DARCOM
BG Howard F. Stone, ADC(O), 9th Infantry Division, Fort Lewis, WA
BG Joseph R. Ulatoski, ACSI, FORSCOM
BG Ernest A. Vuley Jr., Director, Materiel Management, DARCOM
BG Carl E. Vuono, ADC, 1st Infantry Division, Fort Riley, KS
BG Jack A. Walker, ADC(S), 9th Infantry Division, Fort Lewis, WA
BG Donald G. Weinert, Chairman, Real Property Management System (RPMS) Study Group, OCE
BG John W. Woodmansee Jr., ADCSCD, TRADOC

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Career
Progression

Research Problem Review 78-3

GENERAL OFFICERS' VIEWS ON CONTINUING EDUCATION/UPDATING
PROGRAM FOR GENERAL OFFICERS

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April 1978

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Behavioral and Social Sciences

Research Problem Reviews are special reports to military management. They are usually prepared to meet requests for research results bearing on specific management problems. A limited distribution is made-- primarily to the operating agencies directly involved.

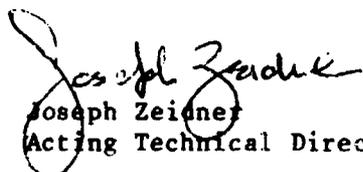
TAB B

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FOREWORD

The Review of Education and Training for Officers (RETO) Study Group, as part of its mission from the Chief of Staff of the Army (CSA), has the task of recommending whether the Army should provide education and training to the general officer, and if so, in what form. To this end, members of the Study Group interviewed 50 general officers November 1977 through January 1978. The Army Research Institute for the Behavioral and Social Sciences (ARI) was asked to provide technical advisory service in summarizing and presenting the general officers' responses. ARI's Career Development and Soldier Productivity Technical Area was responsible for compiling the present report, as a corollary to continuing research in career progression and manpower systems management, under Army Project 2Q762717A766.

This report summarizes the considered opinions and recommendations of general officers in a qualitative manner (based on the officers' own words).


Joseph Zeidner
Acting Technical Director

GENERAL OFFICERS' VIEWS ON CONTINUING EDUCATION/UPDATING PROGRAM FOR
GENERAL OFFICERS

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GENERAL OFFICERS' VIEWS ON CONTINUING
EDUCATION/UPDATING PROGRAM FOR GENERAL OFFICERS

EXECUTIVE SUMMARY

To help determine the need for a continuing education/update training program for general officers, 50 general officers were interviewed. The interviewed generals offered many recommendations and solutions to anticipated problems, which they believed would be encountered if the Army instituted a General Officer Education and Training Program. Nearly all respondents gave reasons for their replies, solutions to the problems they mentioned, and recommendations on those topics where they thought a change should be made. The attitudes and recommendations summarized here are the result of combining all similar responses.

The views expressed are the composite views of all the interviewed general officers. No interpretation or conclusions, other than those provided by the respondents, are meaningful in this particular analysis. The comments/recommendations, therefore, are presented in the report without any attempt to weight or evaluate them.

GENERAL OFFICER EDUCATION/TRAINING/UPDATING PROGRAM

Need

Although most general officers have a good educational (and training) background, some have a definite need for additional education/training in specific areas. Many jobs have specific requirements where a general officer could well use a few days of refresher training or updating. The respondents felt that selection to become a general officer carries one through a threshold. New brigadier generals gain not only prestige but responsibility and look for guidance in areas not previously their concern.

Content

Areas mentioned most frequently in which generals must be competent and yet often have had little previous education or experience are resource, installation, and financial management - high level management of all types. Updating can be a need in many areas where technology or methods change rapidly (ADP, simulations); where the officer has been serving outside the area; or on unique jobs which require special skills (NATO, JCS). Generals want real experts to lead the sessions, either civilian or military depending upon the subject matter.

Format

The seminar or one-to-one format is preferred for the updating. Briefing and classroom learning are not considered as valuable, because the officers feel that they gain the most benefit from informal discussions with subject matter experts and with other generals. Not all officers should attend the same "courses." Each officer knows what is needed and is capable of choosing the correct courses as soon as the requirements of the next position are known.

Some general officers already have established a tailored updating, using a combination of visiting specific headquarters and attending short courses. It is possible that sufficient courses are now available from Army, DOD and civilian sources, which could be used with DA and MACOM seminars or visits, to provide a "menu" program to each general officer. A listing of available courses with locations and dates, provided it is kept current, would be a valuable aid and could perhaps be in the Weekly Summary.

If new seminars are developed, the general officers want them led by acknowledged experts in the field and given in a setting other than the Pentagon.

Problems

The problem most frequently mentioned is TIME. Reassignments often have shortfuse reporting dates; it is almost impossible to leave the job after reporting; there is hardly time for reflecting on and solving problems of the moment, and impossible to find the extra time desired for additional reading, studying, planning, and thinking. A partial solution can be provided by strong support from the Chief of Staff of the Army (CSA) on the need for updating time.

A number of respondents believe that the need for additional education and training, and to a large extent updating, is actually caused by incorrect selections/assignments. If general officers could be used in the area for which previous education, training and experience have equipped them, less additional learning would be needed. One respondent expressed confidence that the logical extension of OPMS is to the generals, obviating the need for updating. Certain special jobs (NATO, JCS) would still require some specific updating, but such jobs are relatively few.

Introducing/Implementing a Program

Whatever the format of a program, whether mandatory or not, and however the content is determined, several respondents expressed a concern that general officers could be insulted or have their egos damaged. They hoped the Army (especially the CSA) would establish a non-threatening manner of determining needs and introducing and implementing the update training.

CHIEF OF STAFF OF THE ARMY (CSA)

The prevailing sentiment which comes through from all 50 respondents is that the general officers want to be a part of the Chief of Staff's management team. They want to know what the important issues are and what his position is. They would welcome supplying input to help in arriving at an Army position. Recognizing that individually they do not have all the solutions, collectively they want more communication with the Chief of Staff, his principal staff heads, and major commanders. Additionally, they feel that no continuing education program for general officers can be successful without the CSA's strong support and direction. General officers will not take the time from their jobs to attend updating sessions unless the CSA emphasizes the importance of the program--perhaps even makes a certain amount of attendance time mandatory. They believe that sessions on certain topics or issues, not necessarily all, will be more valuable if the CSA and other high-level staff members actually attend and provide expertise.

The respondents believe that an Education and Training Program for General officers cannot succeed unless the CSA provides positive support by:

1. Accepting personal responsibility for the content and format of the updating and actively participating in the program planning.
2. Directing appropriate agencies to accept that the general officer will spend time getting prepared before arriving.
3. Alternatively, directing that the general officer will be given an appropriate length of time for updating following a certain period on the job.
4. Generating a greater sense of each general officer being a part of the CSA's management team by:
 - (a) Personally attending and directing seminars on appropriate topics, and informally providing his opinions while soliciting the general officers opinions on important current issues.
 - (b) Using the Weekly Summary to provide more issue-oriented Army Policy statements.
 - (c) Using high-level staff members for both of the above, as a supplement, not a replacement for him.
5. Stressing, in guidance to selection boards, the importance of participating in a continuing self-development program.

WEEKLY SUMMARY

The respondents look upon the Weekly Summary as a communication from the CSA to them that at present is not as effective as it could be. They would like to receive individual copies rather than have one passed around a headquarters. They want it limited to "hot" items; they recommended: Eliminate the "cold intelligence" already read in the Black Book or news media. Make it personal, condensed like "Kiplinger Letter," include input from staff heads if really hot. Give four-star commanders a chance to insert items. Do not publish weekly unless there is something to say. In brief, generals have too much to read already.

OPMS

OPMS is not especially liked by the respondents but they accept the fact that OPMS does exist and will "probably work out in the long run." The majority of their complaints on this topic are about the implementation of OPMS. Another problem is that they worry that some effective younger officers may get discouraged and leave the Army or will not be recognized and could, therefore, be inadvertently forced out.

BACKGROUND AND PURPOSE

The Review of Education and Training for Officers (RETO) Study Group has, as a portion of its mission, the task of recommending whether the Army should provide education and/or training for the general officer, and if so what form it should take. In support of this goal, 50 general officers were interviewed November 1977 through January 1978.

Development of the interview formats and conduct of the interviews were accomplished by Colonel Bobby B. Porter, Lieutenant Colonel Frank A. Partlow, Jr., and Major William G. Carter III of the RETO Study Group.

The Army Research Institute (ARI) provided Technical Advisory Service to the RETO Study Group in analyzing the summaries of the interviews and responses.

PROCEDURE

The time available for the interviews ranged from 15 minutes to two hours. Although most interviews lasted less than one hour (30-40 minutes were the most common lengths), the respondents presented a wealth of material within their time constraints. The interviews were written up later by each interviewer from his notes. In addition, some general officers provided written comments.

While the interviews were not structured per se, a list of 11 questions (Appendix A) was furnished each general officer prior to the interview as a guide for thinking/planning purposes, and for the interview itself. A second list of nine questions (Appendix B) was brought to the interview as additional discussion material if time permitted. Officers assigned in Europe received both sets of questions and provided written responses in lieu of an interview. Appendix C lists additional topics introduced by 10% or more generals during the interviews. These closely related topics were developed to allow full coverage of the respondents' conversations.

The total number of respondents was only 50. Since many general officers introduced additional topics, and time constraints precluded most respondents from answering every question, it was decided that a "qualitative", rather than a "quantitative", report was appropriate. Qualitative is defined for this report as:

(a) Although the highest-ranking officers' views may be the result of more experience, the lowest-ranking general officers have had at least 20-25 years of commissioned service and impact caused by this survey will have the greatest impact on them. That is, no responses from general officers of any one rank are considered as being "most important." (b) The "flavor of the responses" is desirable, e.g., what reason did the general officer give for the viewpoint expressed? (c) All responses to the questions are important, not just those for which some minimum number responded, and (d) additional topics introduced by the general officers are also important and should be reported on.

Two analysis teams were formed, the documents were read by a member from each team, and at least one member of each team read all of them. As a guide to the final analysis, tabulations were made of the responses and of the reasons for the responses. Each team wrote a preliminary draft of the report as they interpreted the data. The teams then met together, compared the two sets of results and resolved any differences.

When appropriate, some quantitative data is provided - percentages or numbers. It should be remembered that a majority view is not necessarily more correct than a minority view. Additionally, quotes are used to express a viewpoint in the respondent's own words and give the flavor of the content. Quotes (comments) are written as the interviewer recalled them and are not necessarily exact, as many were taken from summaries based on notes made during the interview.

The number of officers responding to any one question should not be interpreted as a differentiation of interest or importance between the questions. The first question asks the respondents to voice their views on the need for a continuing education/update training program for general officers. As part of the reply, the respondent often answered some of the specific questions that appear later in the lists or introduced new topics. In most cases the interviewers did not have time to request answers to many of the Appendix A questions, or any of the Appendix B questions. The interviewers did not ask the Appendix C questions specifically.

RESULTS

The consensus of the general officers interviewed is that additional education/training/updating is needed and should be provided by the Army. The preferred format is informal, tailored specifically to the needs of each general officer, and offered at a time and place convenient for the individual. It should take the form of discussions, seminars, and related reading rather than briefings or lectures. (As this seems to be considered "updating", this report will usually refer to updating.) As the amount of required reading for all general officers is already so heavy, any additional reading or updating must be balanced by easing the pressure in some other area or be directed by the CSA personally.

SPECIFIC QUESTIONS AND RESPONSES

The topics in this section are responses to the questions previously mailed out to the general officers (Appendix A) or are closely related topics commented on during the discussions (topics 2, 3, 4, 6 and 10 from Appendix C). The main thrust of the interviews was in the direction of questions from Appendix A..

Item 1. What are your views, in general, on the need for a continuing education/update training program for general grade officers?

Response: Three-fourths (38) of the respondents felt that there was some need for either updating general officer knowledge, providing further education in certain areas, or training in specific skills. One-fifth (10) believed none was needed; the remaining two officers did not have a response to this question recorded. One senior general made the specific point that his brigadier general: "re given an orientation course (which he thinks is a good one), but, at the same time, we do nothing for 2-, 3-, 4-star generals." Other typical comments from those in favor of an updating program were:

- One cannot quarrel with the need for continuing education as there is much to know and little time to learn it.
- Whatever the costs of this training it is well worth it, considering the tremendous volume of money for which general officers are responsible.
- Impossible to be a "generalist" in every area without help.
- Would like to believe not needed, however he and contemporaries have trouble dealing with...
- We assume, by definition, because someone is a general, he knows everything -- nothing could be further from the truth.
- The experiences of general officers are not uniform.
- Responsibility lies with the general officers themselves to maximize existing opportunities to attend civilian short courses and visit service schools and headquarters.

Of the 10 officers who responded in the negative, two suggested that careful selection and assignment of general officers would negate any need for a continuing education program. A general officer who did not believe updating was necessary commented:

- A luxury we cannot afford.

Some generals did not believe that further education/training/ updating should be needed, but a later comment from one of the same officers reflected areas in which generals must be updated if training and experience have been inadequate. Comments from those who feel a need may possibly exist are:

- For the problems a general faces, a generalist knowledge is good enough...provided he already has a fine grasp of staff operations and the business side of the Army.

--If this analysis (RETO survey) shows an understanding of modern training methodology to be a shortcoming among generals, action should be taken to provide update training.

Regardless of their personal attitude toward a need for an updating program, respondents raised practical questions as to how the program would be implemented. None seemed to feel that a structured, formal, schoolroom-oriented program would be acceptable. As one general put it, "the crux of the matter is how to decide what would be needed." The major concerns were: time available for the program; whether the updating would take the form of formal instruction, seminars, or one-to-one; whether attendance would be mandatory; and who would determine the content.

Five officers commented that brigadier generals are too busy to have time to do any reflection. They are busy putting out brush fires and reacting rather than thinking or planning ahead. Some means must be devised to provide them time to reflect, think, and discuss, both with their contemporaries and with senior generals, what the major issues are in the Army today, what they are likely to be in the future, and what some of the possible solutions should be. If the CSA were to give the program strong support, the generals would be better able to make time available.

Although only two of the generals felt that formal school attendance would be the correct format for them, some of the others did mention that there were a few topics which might be better covered in a seminar, perhaps even a classroom atmosphere, e.g., ADP. The respondent who stated, "develop individual skills through intensive individual work" and the one who said, "best method of learning management is solving real life, relevant problems" (he was discussing updating, not OJT) reflect the attitude of a large majority of these general officers.

Five generals preferred seminars because they felt a need for an informal exchange of ideas among other generals of all grades. Of those, three felt that the instruction should include time for frank, informal discussion of the major issues facing the Army today. One respondent pointed out that "subsequent selection lists would be watched to see whether officers voicing opposing views were included." Two emphasized the importance of informal discussions if the CSA and other high level persons should attend (one stated he had never met the current CSA and would like to). One took a diametrically opposed view: general officers, especially junior ones, might feel too constrained by the presence of the CSA.

Opinions varied as to whether the advanced education should be strictly business or include time for socialization. While some said there must be some social contact among general officers in a relaxed atmosphere, others said that special courses must be extremely demanding and not social.

Eighteen generals assumed the use of seminar or classroom techniques and requested non-mandatory attendance for all except "core" sessions, with the general making the selection according to perceived needs. One supporting opinion was: "I doubt the ability of the Army to figure out what each general officer needs," with the opposite opinion "must be made mandatory; otherwise response will be limited." Only two felt that any program should be mandatory, but several felt that the CSA should give it strong support. It was suggested that the CSA could recommend attendance, demonstrate an interest, and direct that selection boards take cognizance of officer participation rather than make attendance mandatory.

Half (25) of the general officers said they were in favor of the "tailored" or "menu" approach; in other words, let the officers shop for the courses which they think would be beneficial. Most comments regarding this particular topic were to tailor courses to the individual officer's needs because time on the job is too valuable for generals to tear themselves away.

General officers also commented that the courses must be short and direct and possibly consist of a core of instruction for all officers attending, with additional tailored courses available.

Two related topics were introduced and discussed by almost half of the general officers.

General Officer Assignment/Selection (Appendix C, item 9). This new category was created because two who answered NO on the need for education/training/updating gave the general officer assignment or selection policy as their reason. Seven additional officers felt that the need for updating was the fault of the assignment/selection policy rather than the education/training system, making a total of nine respondents who feel the selection and assignment process could or should be improved. Some comments:

- Selection and assignment of the right people to the right job obviates any need for additional education or training.
- Selection process constitutes sufficient preparation.
- The selection process is the first place to improve general officer education and training.
- We should select/retain generals who do not need massive infusions of updating to prepare them for current or new jobs.

Several comments were related to length of time a general spends in an assignment:

- ADCs should spend one year as ADC-S and one as ADC-O to get a picture of all functional areas of responsibility.
- General officer commanders must be left in command longer.

One suggested:

-The system should not try to make a troop commander out of someone who isn't.

Generalist vs Specialist (Appendix C, item 3). Three generals defined three types of general officers (specialist, staff, and troop commander) or two types (innovators and mechanics) and stated that cross-fertilization is needed because each type needs to know about the others. Seven generals commented that both generalists and specialists exist and are needed. Four officers commented that generals should be generalists. Typical comments expressing opposing views were:

-Must have both. I'm an unregenerate generalist and thank God for specialists.

-In reality, most general officers are "generalists".

Item 2. Since there is no "transient" or "overhead" account in general officers, what is the trade-off between arriving on the job later (length of course of instruction) and learning while on the job?

Response: Of the general officers, 21 believed that any necessary updating must be obtained before arriving. They felt it was worth the resulting underlap. Their reasons were varied. Typical comments are:

-Arriving on the job later gives the command a chance to breathe between general officer assignments.

-Learn/refresh/reinforce those skills needed to be effective when he gets the flag.

-Once in the driver's seat it is almost impossible to get away.

Nine felt that a newly assigned general officer should report to his new job and learn something of the problems before deciding what schooling he would like to have, and then tearing himself away for short periods to attend training, wherever it is available, on areas in which he feels weak. Comments included:

-If the officer is required to leave his assignment to attend special training, a good staff should be capable of running the headquarters for short periods of time in his absence. If this is not the case, then there is something wrong with our training of staffs.

Four officers believed that OJT is all that is needed. Supporting comments were:

-A staff of qualified officers supports general officer positions.

-Most generals pick up the information they need with no problem.

Other comments somewhere between OJT and training enroute were:

- Earlier availability of generals to fill positions is most important.
- Prepare enroute. Then determine where shortfalls are for additional updating wherever available after serving on job.

Item 3. Who should have proponency for general officer continuing education/training?

Response: There was clearly no consensus on this question, especially as some mentioned that they did not really care. From the discussions, the generals seemed much more interested in content and format than in proponency, so long as the CSA is actively involved. From 23 general officers responding, eight different proponent agencies were suggested. Some mentioned more than one possible proponent.

The suggested proponent agencies were:

Agency	Number of Respondents
DA	4
CSA	4
DCSPER (GOMO)	7
AJC	4
DCSOPS	2
MACOM	2
CSA & TRADOC	1
CSA & AWC	1

Item 4. Where should general officer courses be conducted?

Response: As in the replies on proponency, the officers gave the impression that location was less important than content and format, and some named several acceptable locations. Eleven responded that the appropriate location was related closely to the combination of content and format. Simulated war games probably could be held at the Army War College or Command & General Staff College. Small group seminars could be held at a facility modeled after the Xerox Training Center or Arlie House, and one-on-one might be Headquarters TRADOC or a Branch school.

Five responses favored the Washington area, and all of these were careful to state "not the Pentagon." Four suggested the AWC, with replies of "regionally" and "away from the officer's normal place of work" the least frequently mentioned.

One officer made a strong case for "decentralization" by saying, "the general officer should go to the source of the expertise needed" and "don't need a centralized course of instruction with overhead to keep current." Two officers suggested that advanced education/updating be contracted out to civilian education centers, e.g., Harvard or Carnegie-Mellon.

One officer felt that the specialized training should be taken to the general officers rather than have the officers come to the training. Another felt that you shouldn't just send individuals (and he wasn't speaking only of general officers) to school but you should bring the school to the command or send whole portions of the command to the school. This officer has used such a technique in his own headquarters. The personnel manager of a large plant mentioned to him that if you expect to uplift an institution or office by sending one man to school you will be disappointed. It is very hard for one man to surface new concepts, because a certain degree of hostility exists within the organization against the man simply because he was singled out for a perceived reward. The plant manager recommended either taking a whole office to school or bringing the school to the office. Based on this discussion, the general had a Defense school come to his headquarters. He then shut down one entire office and had them attend a very concentrated 2-week course. Subsequent to the course that office outperformed all others in the headquarters. He later had a group from a university come in with similar results.

It was also suggested that the updating be conducted regionally such as in USAREUR and in Korea and in the Continental Army areas.

Some suggested that updating should be a "round robin" affair where general officers would move from one place to another, similar to the courses now provided for lieutenant colonels and colonels who are about to assume command.

Item 5. What are the most important traits an officer must have which can be developed or enhanced in a professional development system? What product do we want?

Response: This question did not specify whether these were traits for general officers or traits for all ranks of officers. There was a wide range of responses to each of these interpretations of the question. Two respondents were of the opinion, "By the time an officer makes general, whatever traits he has are fixed." Some areas of expertise were discussed as desirable traits that are better considered as subject areas in which general officers should be proficient. These "traits" are not discussed here, therefore, but in the context of areas in which general officers need education/training/updating. Following is the list of those traits mentioned more than once and the number of officers who mentioned them.

Integrity	4
Ability to Conceptualize (or solve complex problems)	4
Leadership Style	3
Moral Courage	3
Self-improvement	3
Committed to Organization	2

Additional topics suggested were: to have an active intellect, to be aware of matters important to the profession, to have the combat ethic, an ability to anticipate problems, judgment, to set the example, to have credibility, to have sensitivity to other human beings, to have forcefulness, do the immediate job well. Still others listed: to have the personal touch, to have a sincere interest in the job at hand, to keep his eye on the ball, to train soldiers and squads like a football team to be experts in their jobs, to have a sense of timing, to be objective.

Item 6. Should the current Brigadier Generals' Orientation Conference allow for selection of courses to support the next assignment, or cover the broad aspects of being a general officer?

Response: When questioned on the desirability of making the General Officer Orientation Conference (GOOC) selective or covering the broad aspects of being a general officer, 15 respondents preferred the broad course. Two would like to see the course tailored to individual needs, while six would like to see a core course attended by all new brigadier generals with selective courses available based on their varied assignments.

GOOC -- ADDITIONAL COMMENTS (Appendix C, item 10). Seven officers felt that the course, when they attended, needed modification; five who attended the short course felt that it needed lengthening, greater depth, and to be kept out of the Pentagon.

--Those who have Pentagon assignments are frequently expected to do their jobs between attending conferences for the orientation.

Two officers felt that it was a waste of time; that generals already knew before they were promoted most of the topics covered in the conference. One felt that management courses should be included in the curriculum. (It is our understanding that the short three to five day orientation attended by most of the respondents has been lengthened to three weeks, now includes extensive material on resource management and is not now in the Pentagon.) Some officers felt that there was no time for general officer designates to have open discussions with one another. Additionally, some felt that there was no time for informal social meetings where they could discuss things of mutual interest in an informal atmosphere. Most looked forward to a personal meeting with the Chief of Staff of the Army.

Item 7. To what extent should simulations and war games be used in general officer education and training?

Responses: The 24 responses to this question fell into three categories. The first category (two respondents) was that while simulations and war gaming are fine, they are more appropriate to personnel below the rank of general. These felt it was fine in a school environment or for assigned staff to enhance skills and teamwork. The second type of

response was that simulation would be fine for some generals. Seven felt it would be very useful for tactical commanders and staffs but perhaps not so useful or relevant to those in other MACOM's, e.g. DARCOM. The most frequent (15) category of responses was that simulations held a great deal of potential for the future as an educational and training tool. Typical comments from these officers were:

- As a minimum all general officers should be familiar with the simulations and war games currently available in the inventory.
- Has a great deal of potential for general officer and unit training.
- Will help the general officer remain current and improve command and control skills.
- Very cost effective due to limited exercise funds.

Item 8. It is important that the methodology of performance-oriented instruction/training and the current concept of training management be directed properly from the top echelons of field command. How would you assess the overall level of understanding and application of these concepts among the general officers serving with the Army in the field?

Response: The respondents were nearly equally divided in their responses to this question. Ten expressed the view that while they, and perhaps their commands, had a reasonable understanding of the methods, they were not so certain about others. Nine felt that their fellow generals didn't understand the methods well enough and had more to learn. There was a current of opinion that those who actually worked with the troops were knowledgeable but others, further removed, weren't up to speed.

Some of the comments were:

- Nobody is focusing on the real problems of training, and the soldier meeting high standards. These are and have been the Army's problems all along.
- No matter how you advertise it, or how you organize it, training is essentially a matter of emphasizing soldier skills, testing the soldier on those skills, then developing a training program that develops unit proficiency.
- We must have training evaluation.
- Various service schools might hold a "general officer day" at the school at which time general officers would be brought up to date on subject matter for which that school has proponency.

Item 9. Do you feel competent to counsel your junior officers on their professional development under OPMS?

Response: Of the generals, 23 responded directly to this question. On the first count it seemed as if 65% said YES and 35% said NO. Looking at the YES replies, however, only six of 15 were an unqualified YES. Four stated they had a much better background than most in comments such as the following:

- Had three assignments at MILPERCEN.
- Gave many briefings about OPMS when it was instituted.
- As one of only two female general officers, I have an unusual number of requests for counseling.

Five qualified their YES reply with statements such as:

- To extent any of us really understands these programs.
- Would refer officer to MILPERCEN for answers to detailed questions pertaining to various specialties.
- Asked about best approach to an alternate specialty, advised a young officer to go to Washington and get expert advice there.

If the five "Yes, qualified" responses are considered as "No, not completely" and percentages recomputed, we find that the YES drops to 43% with 57% saying NO or not completely.

Typical comments from the eight generals who do not feel competent to counsel on OPMS are:

- OPMS is still evolving. I have a better handle on it than a year ago but am still uncomfortable and somewhat frustrated.
- Junior officers know more about OPMS than do the senior ones.

Additional Comments on OPMS (Appendix C, item 5). More general officers (26) responded with their thoughts on OPMS as a system, than answered the question on competence to counsel on OPMS. The comments are almost all negative, either towards the system or as it has been implemented.

Comments on OPMS as a system:

- OPMS should be completely revised.

- OPMS does not manage officers well; I prefer the old system of grooming those officers who show promise.
- I have no feel for specialty fields. I hope the field commanders know more, as none of the general officers on my staff know much about OPMS.
- Deeply concerned about the long-term erosion of the combat ethic among our officers caused by OPMS. It offers opportunities for career aspirations that didn't exist before. OPMS should try to retain its good features and protect the combat ethic.
- Too many officers working for "big system in the sky", not for immediate boss.
- The field now has little impact on personnel management.
- Those who get ahead under OPMS like it, those who don't, don't like it.
- The Army's needs must drive the personnel management system rather than have the system drive the needs.
- OPMS is here, it's the young officers' system and it will probably work out okay. The same is true of EPMS.

Comments on specialty aspects of OPMS:

- Doesn't like the specialist aspect.
- Questions specialist aspect--more interested in what the man is made of rather than the nature of his specialty.
- Proliferation of OPMS related courses makes the time officers spend in school excessive.

Comments on MILPERCEN:

- MILPERCEN is its own worst enemy. MILPERCEN desk officers are not attuned to OPMS.
- Captains should not be told that they are dead if they don't do this or do that.
- MILPERCEN implementation of OPMS is poor.
- MILPERCEN has too much to say about an officer in the system.
- I'm not too impressed with the sort of counseling I hear second-hand coming out of MILPERCEN.

Comments on career future of younger officers:

- The officer system is too restrictive. The pass-over rate is too high. We are discouraging too many officers.
- We need to preserve quality over quantity.
- Officers who have commanded successfully will have a decided edge over other officers for a long time to come.
- Need to convince the officer corps that attainment of the grade of lieutenant colonel and colonel is an indication of a successful career in today's Army as opposed to teaching that one must become a general officer in order to feel that he has been successful.
- The logistic specialties should be rewritten. It is very difficult to hold out a promising future to officers from some of the old technical service branches in the new OFMS specialties.

Other comments:

- Experience on DA selection boards leads me to believe the system is not well understood Army-wide.
- Our command and promotion lists should not be published in advance. This is particularly true of the command list where "non-selected" officers feel as if they are automatically categorized as second team.
- My command has a second-rate staff because it is DA and MILPERCEN policy to move colonels and lieutenant colonels upon termination of their command assignment into a Military Region or into the Recruiting Command.

Item 10. One concept for general officer continuing education/update training would involve a DA-sponsored program conducted on a periodic basis, e.g., quarterly or semi-annually, at a suitable location. The curriculum would involve a relatively wide range of subjects from which attendees could select those in which they have the greatest need for update training. It is envisioned that each iteration of the program would be conducted over a 5-day period. What are your views on this concept?

Of those who gave their views on this concept of education/training, 23 agreed with it. The seven negative replies were of this nature:

- Not cost-effective to pack general officers off to school all of the time.
- Dictates of jobs preclude breaking away for any additional conferences.

A few refrained from either agreeing or disagreeing and offered comments such as:

--Might help, though I question its necessity.

--Whatever form of general officer update training/education we opt for, we must be very careful not to create a common mold.

Of those who concurred, 12 offered a desired change, usually in the frequency; five suggested "annual." Three said they hoped or expected the CSA to be there, as well as other very high-level persons, as CSA personal interest would be required to have officers made available to attend. Two others comments were:

--It would be useful to have the assistant division commanders assembled to discuss mutual problems and solutions; or to have all division commanders assemble; rather than to have a wide range of grades of officers with divergent interests all attending the same conference on the same subjects.

--More than at any other grade, general officers learn from other general officers.

The officers seemed to feel that group discussions rather than lectures or briefings should be the mode, that opposing views should not be squelched. One officer commented:

--Attendees would watch subsequent selection lists to see whether those who had voiced radical views were included.

Some suggested that possible topics for the conference should be circulated among potential attendees so they could indicate topics in which they had the greatest interest.

Item 11. The CSA uses the Weekly Summary as one means of keeping general officers abreast of current issues and, where appropriate, the Army's position on the issues. Do you feel this is adequate, or should there be other initiatives designed to accommodate the needs of general officers in the field, e.g., periodic extension packages, providing the latest thoughts on a variety of subjects developed by the SSCs?

Response: Thirty-three respondents commented on the Chief of Staff of the Army's Weekly Summary. As to whether it is adequate in its present format, or needs some type of periodic supplement, the respondents were divided. Nearly all, regardless of their opinion of adequacy, had suggestions for improvement.

There were two predominant themes:

a. The first (8 respondents) was that the CSA Weekly Summary should be personalized; they felt that the items covered should be geared to the Chief of Staff of the Army's personal concerns as opposed to a rehash of world affairs.

Some comments are:

- Always read the "hot stuff".
- Each principal staff officer on the DA staff should make a personalized contribution if he has some currently controversial or worthwhile item.
- Senior commanders such as the commanding general in USAREUR, Eighth Army, FORSCOM, etc., should have an opportunity to inject items.
- As currently constructed, 80% applies to international affairs available in news media.
- A typical item which should have been included would be the Department of the Army Inspector Generals' views, e.g. the investigation of property loss which could assist officers in other commands in avoiding some of the problems.

These respondents also want the Army's position on such items as "do we want to return to a draft or not?" and "do we want to take more females into the Army?" These are items about which general officers are queried in their commands and in civilian communities, and while generals have personal opinions, they do not know what the official Army position is. The gist of the opinion was that this should be something personal from the high-level policy makers to all general officers to bring them abreast of the current issues in the Army today.

b. The second major theme expressed the view that the Weekly Summary was a good medium through which the CSA could create for the reader a sense of being part of the Chief of Staff's management team. They would like to know what the Chief of Staff wants and they wish to help him make it understood in the Army and in surrounding communities. Generals are interested in what the Chief of Staff has to say. If limited to "hot items" as opposed to routine topics which staff officers fill, the summary would be a much more widely read document. One officer commented that the Weekly Summary should list those short courses which the CSA thought would be of interest to general officers. Four felt that views of general officers on key Army issues should be sought and worked into the Weekly Summary.

There were seven negative remarks about the timeliness and value of the intelligence sections. Some said there was nothing in the intelligence portion that they hadn't read in a current newspaper, news magazine, or the Black Book. Another compared the intelligence portion to "yesterday's mashed potatoes." These officers felt that the intelligence information was better handled through other channels.

Three feel that each should receive a personal copy. A comment by a senior general was that each should have his own copy; he felt pressure to move it on. In a similar vein, a less senior officer felt it took too long (7-10 days) to reach him. One felt:

—The Army War College thoughts on a variety of current issues would be a good idea.

Many felt that short-liners or a format similar to the "Kiplinger letter" would be more appropriate than the current format so as not to deluge them with reading material. Another stated:

—We talk about the total Army but we have a lot of gaps and the Weekly Summary is one of them - Reserve Component general officers should get a copy.

ADDITIONAL TOPICS INTRODUCED BY INTERVIEWERS

Nine additional questions (Appendix B), not furnished in advance, were addressed to some respondents during personal interviews when time and circumstances permitted. Few interviews reached this point. The first question received responses from the majority only because it tied in as a follow-on to the need for education/update training.

The majority of interviewed officers were asked "In what areas are the general officers serving under you least prepared?" (Appendix B, item 1). Some of the respondents had no generals serving under them. Of those who did, the large majority were very careful to state that their answer included themselves so that they were talking about all general officers, not their particular staff. Thus, the responses reflect replies to Appendix C, item 2, rather than the question as originally stated.

The 33 general officers who believe they or their peers need updating feel that some need updating in several areas. Otherwise there would not have been 43 different responses; all officers suggested more than one area. Many anticipated these results and specified that any updating given should be based on requirements of a specific next-or-current assignment.

—The shotgun approach just wouldn't be effective and would waste a lot of time.

—Develop individual skills through intensive individual work.

Three general officers mentioned that an individual should be skilled in both public speaking and writing before attaining the rank of brigadier general. If not, they should be the first ones for training.

The subject areas mentioned more than once are listed in tabular form in Table 1. As indicated, the greatest dearth of understanding is in management--installation, resource and financial management, followed by civilian personnel and modern training methodology.

Table 1

SUGGESTED AREAS FOR GENERAL OFFICER EDUCATION/UPDATING

	Number Suggesting Specific Sub-Areas	Number Suggesting Broad Areas
Management (Professional, High-Level, Techniques, Methods, Tools)		20
Financial (Budget, PPBS)	8	
Installation	11	
Resource	8	
Maintenance	2	
Training	1	
Civilian Personnel & Regulations		6
Modern Training Methodology		6
Community Command (Support, Relations Management)		4
Logistics		6
Tactical		4
Tactics	3	
Tactical Doctrine (FM 100-5)	3	
Readiness	1	3
Combat	1	
Logistics	1	
Communication/ADP		3
Communications	1	
ADP	3	
Military Justice		3
Procurement		2
Interpersonal Relations		2
Organizational Effectiveness		2
Military History		2

Other subject areas mentioned were:

- Understanding of NATO operations
- Language (when going overseas)
- Enemy Intelligence
- Combat Developments
- R&D
- JOPS
- Strategy
- Conceptualization
- Club Operations
- Handling labor unions

One respondent made the specific request that the Army not teach formal classes in "world affairs and military strategies," while another commented, "We (the Army) have no strong voice (in establishing national policy for the strategic application of forces) because we don't teach strategy... Involvement is influence and in the joint arena we are no longer involved."

Tactics and other areas in which officers have practiced and studied their entire careers do not receive mention as frequently as do those management responsibilities which fall into their laps at the colonel or general officer level. In addition, generals assigned to certain positions have a sudden need for various other information/updates, e.g., USAREUR officers must be capable of handling community command responsibilities and would be helped by learning/refreshing the German language.

How to determine what would be relevant instruction (Appendix B, item 2), was discussed by 14 generals. Six felt a diagnostic test with a self-evaluation feature would be useful. Yet, they implied that it probably would not be easily accepted. One comment was:

--CSA must set the atmosphere: generals have to be big boys, put their pride in their pockets and admit not knowing everything.

The four who specifically opposed diagnostic tests felt that these tests would be insulting or they worried that confidence in generals would be eroded if statistics were ever leaked. Four felt that the best means of identifying requirements was by asking the incumbent, either by questionnaire or interviews. One felt:

--Skillfully conducted civilian interviews would acquire the information needed.

Other suggestions were:

--Task each major commander to look at the specific general officer jobs they have and recommend....

--Would be most helpful if the actual duty requirements for every general officer's position in the Army could be documented.

The seven other questions in this list were asking about the relevancy of specific topics which might be covered by an updating program. Each is discussed separately.

Of the 15 general officers (less than one-third of the respondents) who were asked whether updating for officers assigned to field positions was needed, thirteen replied YES. A typical comment was:

--A general officer should have a good refresher course before taking command of a division of corps if the officer has been away from troops for a period of time.

Two said that on-the-job training was sufficient. Alternatives suggested were:

--This could be placed into a TRADOC weekly.

--MTTs should precede new equipment to train users on how the equipment is to be used.

--Training packages be exported from the Army War College for this purpose.

The eight asked to address whether general officers were competent to cope with rapid deployment split evenly as to whether the level of competence is adequate or inadequate. A comment was made that "it is improving." Another commented that although many may be inadequate, it is probably not necessary for all and it is better to prepare them on a case-by-case basis.

Of five comments solicited on need for updating for unified and specified command and staff designees, four said YES, one said NO. Comments included:

--Those who need the training should attend the Armed Forces Staff College.

--One week of special schooling for those officers assigned these jobs would be sufficient.

Of eight respondents five said YES and three said NO to whether or not instruction in community, press and other media relations is needed. Some comments were:

--A case history approach to instruction might be useful.

--These matters could properly be included in the general officers "charm school."

--A guide for media relations be provided to all general officers so that they could then use their own good judgment.

When questioned as to the role of MACOM commanders in general officer education, these five comments were made:

- Newly assigned general officers should spend a day or two with a major command staff when first assigned for a thorough orientation.
- A four star general officer should head a seminar occasionally for newly assigned officers in order to acquaint them with his command policies.
- Seminars should be used to pass information down from higher headquarters.
- The major commander should handle MACOM orientation through counseling and advising his subordinate officers.
- Senior general officers should take every opportunity, especially while on trips, to talk with junior general officers.

Of those who addressed the question, there was no consensus as to whether updating for USAREUR should be treated as an add-on or separately. A major point in the comments of the two generals in USAREUR who were asked this question was the importance of the community command responsibilities in Europe. Other points mentioned were: need to understand management, language instruction, and the problems caused by the geographic dispersion of their commands. Special topics singled out are: CS3, SIDPERS, SAILS, Military Justice Administration, Personnel Administration, readiness reporting and property accountability.

Ten respondents said YES, the other six said NO to whether periodic workshops would be worthwhile within a command to bring senior management people up to speed. Comments included:

- It might be appropriate for DARCOM and TRADOC but not for DA and FORSCOM.
- It could be handled with a suggested reading list.
- The seminar should be small and include such things as Military Justice Administration, the current Army situation in Europe and regular Army support of reserve components.
- Bringing mayors or city managers in to discuss problems and recommend solutions with general officers who become installation commanders would be an effective means of equipping these officers to carry out their responsibilities in similar positions.

ADDITIONAL TOPICS INTRODUCED BY GENERAL OFFICERS

During the course of the personal interviews many general officers offered alternative solutions to those posed by the questions they were asked. Some also commented on the Army officer education program for colonels and below. This section of the report summarizes those views.

All of the general officers who said NO to the need for an updating program also offered their versions of an alternative procedure that would obviate the need for the program (Appendix C, item 1). Four felt that it was the responsibility of each general to maximize existing opportunities. Sample comments were:

—Self-education on their own initiative is a legitimate expectation of all general officers.

—Officers must accept the burden of doing most of it. There is more than enough study material available.

In other words, these respondents felt that general officers are capable of analyzing their own need for additional education and seeking out that education either through their own reading or through attending courses to bring them up to speed wherever those courses exist.

Three general officers felt that although material and courses are available, it is difficult to find the details of what, where and when. They suggested that the Army should help the officers who have a desire to extend and broaden their education or update existing capabilities by:

—Providing a packet of information (especially job requirements) to aid in transition to next job.

—Sending them to the AWC between assignments, to take a diagnostic test, then let them go wherever they need to for updating.

—Providing a publication including suggested schools appropriate for general officers.

Several other alternatives were also offered. Most of these were expected not as a single alternative but as part of a package that included several or were combined with the self-improvement program outlined above. Typical comments were:

—More commander's conferences. Were the leadership of any large corporation to assemble only once a year for a very short period, that corporation would soon be in trouble.

—Command chain has responsibility for updating.

—Make non-resident instruction package available.

—Participate in learned societies.

—CSA issue research list and assign written papers to general officers.

—Establish an OER comment on self-improvement.

—Learn on the job. Performance is always a learning experience.

- There should be an active learning center for general officers for self-study. It should include some free and social time and some time to discuss among themselves what current problems are. It should not be degree-producing but similar to those offered by civilian institutions (e.g., Harvard and Carnegie-Mellon) management courses.
- Stop making work for each other, subtract from workload, what's left will be done more efficiently.
- Prepare and publish a list of all the acronyms that have emerged in just the past two or three years, update it annually so that an officer will not be ignorant of much of the esoteric language used in a new assignment.
- Reinstitute the CSA suggested reading list.
- Have general officers go to available two or three-day workshops with experts on reading and writing skills.

Many comments were made which were not applicable to general officers, but to education/training for officers in lower grades. Going up from the lowest rank we find comments such as:

- Support Active Duty Training Program ("3rd LT") for USMA and ROTC cadets, but would like to see a front-end analysis of its effect on soldiers.
- Am against eliminating or deferring the Basic Course.
- Lieutenants from Infantry Basic are more technically proficient today than any other lieutenant group in our history.
- No Army school is worth anything beyond the Advanced Course.
- Army does good job in training technicians in Basic and Advanced Schools; fairly well in management in C&GSC.
- Management should be taught at USMA and to ROTC cadets and again at the Command and General Staff College and at the Army War College, but not at the Basic and Advanced Courses where officers are taught to be technicians in their branch specialities.
- The Basic Course as now given to Army officers should prepare platoon leaders for their jobs while the Advanced Course should prepare company commanders.
- There is a gap in officer education between schools. We need a system to promote professional growth between schools. There is both a problem of how to accomodate the forgetting curve and a problem of how to remain current.

--Lieutenant Colonels, prior to assuming command, should be certified in those areas in which they must be proficient under stress in order to command battalions effectively.

--There is a tremendous knowledge gap between the LTC and COL levels.

--Graduate schooling should provide a background for long-term development, not just be job oriented.

--LTC/COL/GO too often enter training jobs with a void.

--Deplore lack of Army COL's and above in JCS. It is shunned as a dead end.

--Teach installation management to damn good colonels and have them be base (post) commanders for four years. Air Force does it right.

--LTC's should be considered for inclusion in continuing education program for general officers.

Some comments were not applicable to junior officers' education/training but on how to help the general officer perform better. Those were:

--Bright people, regardless of rank should be given the toughest, most challenging jobs by the decisionmakers.

--Bring in junior officers (to seminars) to discuss major Army problems from their viewpoint, without attribution, so that the generals can learn what some of the problems are at a lower level.

In addition to considering the AWC as a possible proponent or location for a continuing education program for general officers, there were 10 generals who criticized AWC as it exists or made suggestions for improvement. Some comments were:

--Has no effect on combat division's function.

--AWC is out of touch with the rationale behind certain (general officer) assignments and capabilities: a general officer must have on the job (referring to AWC as a possible proponent of an updating program)

--"Soft time" exists - should orient on Army mission related subjects.

--Critical of degree to which AWC addresses doctrine and land combat.

Comments on suggested subject matter were:

- Installation management
- Brigade/Division command
- Doctrine above the division level
- Bring in city managers and mayors to explain resource (installation) management as it applies to the civilian sector.
- Study high-level aspects of war.
- Military history should be stressed.
- AWC should be one-third resource management, one-third strategy and one-third battle management; battle management is the complex orchestration of battle at higher echelons.

On the combined subjects of AWC and C&GSC, we find these comments:

- The Army should go to the university concept. Combine C&GSC and AWC and bring the entire school system under one proponent.
- (The proponent of this research on General Officer Education and Training) should be prepared to define the relationship between C&GSC and AWC.

In addition to the comments from previous sections which mention C&GSC, several other topics were mentioned by 10 generals.

Comments on C&GSC student population included:

- Short session for all, full year for one-fourth of Majors.
- Short session for all, top 10% should stay on for rest of year.
- This 10% should be those brilliant young officers who are to provide the staff and general officers who will run the Army for the next 10 to 20 years.

Comments on what should be taught:

- Conceptualization, even though difficult
- Develop truly general staff officers
- Research, write and brief on solutions to real issues
- Teach at division level

--Remain squarely on preparation for battalion command

--Remain Army's senior tactical school

Comments on cutting or combining:

--Try not to hit C&GSC too hard on personnel and budget cuts

--Soft spot in training system

--C&GSC graduate still requires AFSC before joint or combined assignment

--Strongly opposed to consolidation of C&GSC and SSC and to reduction in number of students or length of courses. The best way to destroy the Army is to cut the heart out of our educational system.

All eight of the general officers who mentioned the CSA's recommended reading list felt that it should be reinstated.

These are typical comments:

--To keep officers updated...good solid reading lists.

--CSA selected reading list should be revised and reinstated.

--Also export to general officers highly professional papers, books, or other reading material on important topics such as economics, foreign relations, philosophy, management, etc.

--Buy books and mail them out for general officer reading

Other comments which impinge on the RETO study rather than on general officer continued education are listed below:

--Have reservations about the new OER. Who is going to instruct company commanders on how to establish objectives for lieutenants?

--Favor the SQT. However, the written portion is too heavily weighted. Many soldiers have either too low a reading skill to interpret the questions or they don't know how to take tests. As a result they receive low scores which means we are not necessarily qualifying or promoting the best soldiers.

--Doctrinal changes should come from the bottom up rather than from the top down if they are to be understood and implemented.

--We must channel the best talent through command positions so that when they reach general officer status they will be competent as generalists.

- Oppose a command or professional staff core elite.
- The doctrine of active defense is not understood.
- We simply don't have a very well-educated (in high-level management) general officers - not nearly as good as the Navy and Air Force, and we should be better than them.
- Recent budget decisions will tend to drive options for officer education and training rather than RETO options driving the budget.

APPENDIX A

QUESTIONS ON GENERAL OFFICER EDUCATION & TRAINING WHICH WERE
FURNISHED EACH OFFICER PRIOR TO THE INTERVIEW SESSION

A-1. What are your views, in general, on the need for a continuing education/update training program for general grade officers?

A-2. Since there is no "transient" or "overhead" account in general officers, what is the trade-off between arriving on the job later (length of course of instruction) and learning while on the job?

A-3. Who should have proponency for general officer continuing education/training?

A-4. Where should general officer courses be conducted?

A-5. What are the most important traits an officer must have which can be developed or enhanced in a professional development system i.e., what product do we want?

A-6. Should the current Brigadier Generals' Orientation Conference allow for selection of courses to support the next assignment, or cover the broad aspects of being a general officer?

A-7. To what extent should simulations and war games be used in general officer education and training?

A-8. Beginning in the early 1960's, a modern methodology for instruction/training has evolved within the Army. The methodology is referred to as performance oriented instruction/training, or sometimes as criterion referenced instruction/training. In support of the methodology, a concept for improving military training management has emerged and has been promulgated to the field in the form of Training Circular 21-5-7. The Army Training and Evaluation Program (ARTEP), a training concept based on performance-oriented instruction/training, was adopted by the Army in 1975, UP AR 350-1. Also, skill qualification testing (SQT) for individual soldiers is based on the methodology of performance-oriented training. It is important that the methodology of performance-oriented instruction/training and the current concept of training management be directed properly from the top echelons of field command. How would you assess the overall level of understanding and application of these concepts among the general officers who are serving with the Army in the field?

A-9. Do you feel competent to counsel your junior officers on their professional development under OPMS?

A-10. One concept for general officer continuing education/update training would involve a DA-sponsored program conducted on a periodic basis, e.g., quarterly or semi-annually, at a suitable location. The curriculum would involve a relatively wide range of subjects from which attendees could select those in which they have the greatest need for update training. It is envisioned that each iteration of the program would be conducted over a 5-day period. What are your views on this concept?

A-11. The CSA uses the Weekly Summary as one means of keeping general officers abreast of current issues and, where appropriate, the Army's position on the issues. Do you feel this is adequate, or should there be other initiatives designed to accommodate the needs of general officers in the field, e.g., periodic extension packages, providing the latest thoughts on a variety of subjects developed by the SSCs?

APPENDIX E

ADDITIONAL QUESTIONS ASKED BY THE
INTERVIEWER IF TIME WERE AVAILABLE

B-1. Based on the mission of your command/organization and your assessment of the overall situation therein, in which areas, if any, do you feel the general officers serving under you are least prepared (by means of formal schooling, experience, and/or self-study) to address the wide variety of issues and requirements confronting them?

B-2. How do we determine what instruction would be most relevant for the general officers? Diagnostic tests? Interviews?

B-3. Considering recent advances in weapons system technology and the consequent impact these have had, and are still having, on doctrine at all levels which governs the employment of joint and combined forces on the modern battlefield, would an update course in modern weapons systems and employment concepts for the air-land battle be of value to general officers who are either serving in or destined for assignments in the field?

B-4. An improved capability for the strategic deployment of Army forces was established as a goal by the Secretary of the Army and the Chief of Staff. What is your assessment of the overall level of competence among the Army's general officers to cope with the intricacies of a rapid strategic deployment of a major (corps level or larger) Army force?

B-5. Should special courses be available for unified and specified command and staff designees?

B-6. Is instruction needed on community relations and how to deal with the press and other media?

B-7. What role should the MACOM commanders play in general officer education and training?

B-8. Is USAREUR different enough to require distinctly different courses or just add-on modules?

B-9. At least one major command conducts periodically (about six, 1-week courses per year) a senior commander/manager workshop that is oriented squarely on the mission of that command. Instruction is criterion referenced and is designed to increase the level of competence of senior commanders/managers (COL and above) in those skills and disciplines that are related directly to the command's mission and functions to include installation management. Would such a workshop be worthwhile for your command, assuming that the administrative requirements were programmed and adequately funded?

APPENDIX C

ADDITIONAL TOPICS INTRODUCED BY THE GENERAL
OFFICERS DURING THE INTERVIEWS

- C- 1. Alternatives to a formal, continuing education or update training program which were presented by officers who (1) believed no program is necessary or (2) believed that there should not be a need for one, even though they feel the need exists.
- C- 2. Areas in which general officers feel they or their fellow generals may need education/training/updating.
- C- 3. Comments about the General Officer Assignment/Selection Policies.
- C- 4. Does the Army need only generalists, or must some of the general officers be generalists and some be specialists?
- C- 5. Comments by general officers about officers in the ranks of lieutenant through colonel.
- C- 6. Comments on OPMS, other than answering question A-9 on competency to counsel junior officers on OPMS.
- C- 7. Comments about the Army War College, other than as a proponent of, or location for, a general officer program (Questions A-3 and A-4).
- C- 8. Comments about the Command and General Staff College.
- C- 9. Comments on CSA recommended reading lists.
- C-10. Additional comments about the General Officer Orientation Course (GOOC), other than answering question A-6 on whether GOOC should focus on broad aspects or be next-assignment specific.

TACTICAL COMMAND READINESS PROGRAM (TCRP)

1. Background.

a. Personal observations forwarded to the Army Chief of Staff by some of the Army's more senior general officers indicated a requirement for some form of warfare-oriented program that would be geared to the needs of senior (colonel and above) tactical commanders -- a program designed to update them in the various components of the overall war fighting system, and to upgrade their individual and collective capabilities in the serious business of battle management, with emphasis on large-scale joint and combined operations conducted in a coalition warfare environment.

b. Except for the precommand course attended by battalion and brigade level commanders, the Army has no program that is designed specifically to shape and maintain the skills of senior tactical commanders to include general officers.

c. Such a program has been developed, however, by the Commander-in-Chief, US Atlantic Fleet (CINCLANTFLT) and is referred to as the Atlantic Fleet Tactical Command Readiness Program. During the course of this study, the RETO staff examined in detail the various elements of the Navy's program with view toward a possible adaptation of the program to fulfill similar needs existing in the Army.

2. Description and Assessment of the Navy's Program.

a. The primary objective of the program is to upgrade the readiness of senior officers (O6 and above) who are most likely to be in command of significant naval force elements in complex operational situations.

b. The program involves seminar gaming (concept development based on actual contingency situations), self-paced programmed instruction (an 8-12 hour self-study exercise completed over a 4-6 weeks period and covering items such as doctrinal concepts, command relationships, command and control, integrated all-source intelligence systems, logistics, and threat forces), and interactive wargaming (computer-supported war game conducted in a dedicated facility at the Naval War College). The program is aimed at a population of 35 flag/general officers in the Atlantic Fleet and 115 Navy captains and Marine colonels who are in operational command positions.

Inclosure 3

F-3-III-1

c. The interactive war games involve the participation of joint forces to include player representatives from Tactical Air Command, Strategic Air Command, Military Airlift Command, and US Forces Command. For example, headquarters elements from XVIII Airborne Corps and the 82d Airborne Division routinely participate in their role as Army Forces, Atlantic Command (ARLANT).

d. To relieve an already overburdened staff from the administrative tasks involved in the development and publication of scenarios, programmed instructional materials, control plans and gaming rules, CINCLANTFLT contracts the services of a Washington-based consulting firm. The consulting firm operates under the personal direction and conceptual guidance provided by CINCLANTFLT.

e. During the course of this study, members of the RETO staff have studied the program in depth, reviewed programmed instruction and examination materials, interviewed participants from all services, visited wargaming facilities, and observed an interactive war game in progress. The initial RETO assessment of the program was that it serves well the purpose and goals established by CINCLANTFLT, i.e., to upgrade the readiness of senior officers assigned to that command. Further, initial assessment of the program indicated a definite potential for adaptation to similar Army needs.

3. A Proposed TCRP for the Army.

a. Purpose: A training program designed to keep senior tactical commanders (colonel and above) abreast of major operational considerations in the deployment and tactical employment of major Army and supporting forces in both contingency and general war situations.

b. Need: In recent years, the military services have become increasingly constrained in the amount of resources which can be devoted to field exercises, especially large-scale maneuvers. Such resources include time, fuel expenditures, equipment depreciation, and maneuver rights, which translate into dollar expenditures against the budget. According to a recent study completed by the Strategic Studies Institute, the future is likely to bring a continuation of this basic trend, especially in the area of constraints on fuel expenditures. In view of the reduced opportunity for field experience, it is appropriate to examine other training methods which can, to some extent, make up for these lost opportunities. Methodologies employed in the TCRP have as a central feature the use of wargaming to provide what might be categorized as "synthetic command experience." It is emphasized, however, that the use of wargaming for training does not replace the need for

field exercise experience. Rather, wargaming complements and supports command post and field training exercises by increasing the effectiveness of the command elements, thereby serving to reduce the amount of lost time and motion during the more resource intensive training modes.

c. Concept: The following program design features are the foundation of the TCRP concept.

(1) Participation in the program should be repetitive -- not one time -- to ensure that the requirement to consider tactical command of combat forces receives appropriate and continuing emphasis alongside other demands on the time of senior officers.

(2) Program materials should be progressive in both complexity of substantive matters addressed and in the imposition of time constraints within which the participant is required to take action. The purpose of this design feature is to allow for differences in expertise among senior officers in the various functional areas which impact on combat effectiveness (e.g., fire support, air defense, electronic warfare, logistics intelligence, communications, etc.).

(3) Emphasis should be placed on exercising the individual commander by limiting the amount of staff support available to him during the interactive war game. The TCRP is not viewed as a replacement in any way for the clearly important requirement for complete staff training, but rather as a complementary in that improved abilities of individual commanders would make complete staff and commander training that much more effective.

(4) Such a program is likely to be evolutionary in character as experience suggests modification of planned instruments or introduction of new program elements which are judged to enhance the achievement of program objectives and acceptance by a sophisticated population of participants.

(5) High command level sponsorship and personal involvement on the part of the ranking commander are essential to the successful achievement of program objectives.

(6) The overall program design should take advantage of advances in wargaming techniques and procedures which have emerged over the past several years from within the Army as well as from the other military services.

d. Long-range Implementation: The USAWC is in the process of expanding its simulation and wargaming capabilities; a process which will extend through the FY83 time frame. As part of this effort the USAWC has maintained continual contact with the computer-supported wargaming facility at the Naval War College which supports the CINCLANTFLT TCRP. Unlike the Navy, however, the USAWC intends to direct its initial effort in the area of computer-supported wargaming to student application in an institutional learning environment. Once the computer-supported wargaming capability becomes more fully developed to include a higher experience factor in this particular area among the USAWC staff and faculty, it is envisioned that a computer-supported wargaming capability will be developed to support the requirements of senior tactical commanders in the field. The RETO staff supports this approach.

e. Near-term Implementation: Over the past several years the US Army Combined Arms Center (CAC) has been engaged in reviving and improving the concept of manual wargaming. The large-scale games, e.g., WAR EAGLE -- a corps level war game which is still under development, are appropriate for adaptation to the TCRP concept, but conducted in a manual mode. A major advantage of this approach is that the TCRP would be exportable to the using command's location. Should an Army adaptation of the TCRP concept prove to be a useful training methodology for shaping and maintaining the skills of senior tactical commanders, a manual program could be developed at relatively low cost and implemented in the near-term future. As with other new concepts, it would be appropriate to conduct a pilot cycle of the Army-oriented TCRP and evaluate its usefulness as a training methodology; its potential for expansion to a more sophisticated, computer-supported mode; and its acceptability to senior commanders in the field. A concept for the conduct of a pilot cycle follows:

(1) Under the overall cognizance of DCSOPS, DA, the game developer (consulting firm) under the direction of a CONUS-based game sponsor (corps commander) and the monitorship of the Army's program sponsor (USAWC (recommended)) will:

(a) Develop a political-military scenario, selected by the game sponsor, which describes a period of increasing world tensions leading to a major power confrontation followed by armed conflict. The scenario will be based on an actual contingency plan.

(b) Develop tactical programmed instructional material designed to examine specific areas of Army planning and operations at the brigade/division/corps levels. The material will be designed for self-paced use by individuals and, with appropriate modification, as a time-constrained examination to be administered by the game sponsor.

(c) Develop interactive war game documentation, including modification of the rules of the CAC-developed game "FIRST BATTLE" for use in a war game which requires minimum support personnel for player personnel from brigade to corps levels. The game will be designed to accommodate about 15-20 players at a time. An appropriate operations order, developed in accordance with player planning actions, will be part of this document.

(d) Provide technical assistance to the game sponsor during the conduct of the interactive manual war game.

(e) Develop evaluation materials and techniques to assist the program sponsor in evaluating program effectiveness.

(2) The game sponsor will:

(a) Select an actual contingency plan for which his command is responsible and provide the game developer broad guidance from which an appropriate scenario can be developed.

b. Specify and/or approve the training objectives to be achieved during the exercise.

c. Review and approve programmed instruction and examination materials prior to publication.

d. Designate senior tactical commanders (colonel and above) as players.

e. Arrange for the participation of supporting force representatives, e.g., Commander, Air Force Forces, including appropriate control personnel. (Air Force liaison officers attached to the command usually can perform the necessary controller functions.)

(3) The program sponsor will:

(a) Function as the overall coordinator and monitor of the TCRP.

(b) Provide an interface between the consulting firm (game developer) and other military agencies, activities, and using commands.

(c) Advise and assist the DA contracting officer representative (COR) in formulating and monitoring contractual terms with the consulting firm.

(d) Evaluate program effectiveness in terms of: relevance to actual job requirements; realism (force capabilities, weapons system effects, logistics, threat force tactics and capabilities, etc.); resource expenditures and savings as compared to other training methods, e.g., the FTX and CPX; instructional value; acceptance by participants; potential for Army-wide application; potential for modification and application in the service college curriculum; and potential for validating operational concepts to include communications, strategic deployment, intelligence, personnel, logistics, and tactics.

(e) Submit recommendations to Headquarters, DA regarding further development of the program to include sponsorship, management, budgeting, and other resource implications.

(4) ODCSOPS, DA, has designated a contracting officer representative who will act in that capacity through the pilot cycle of the TCRP.

(5) Commander, III Corps, agreed to the conduct of a TCRP pilot cycle at Fort Hood, Texas, during calendar year 1978.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

APPENDIX 4

TRANSITION TO WAR

TO ANNEX F

SENIOR OFFICER EDUCATION AND TRAINING

The Army War College (now, USAWC) and the Army Industrial College (now, ICAF) suspended operations in June, 1940, and did not resume until after World War II. According to DA Pamphlet 20-212, History of Military Mobilization in the U.S. Army 1775-1945, discontinuance of these courses was the greatest weakness of the WWII school program as planned and executed. "The shortage of officers trained for high staff and command assignment became acute before the first year of the war was over." The essential error in judgment was overvaluing the pressing current need for officers at the expense of an eventual need for officers better trained for higher staff levels.

With that exception, the WWII mobilization effort in officer education and training was most successful, primarily through reliance on short, intensive training courses with specific command and staff ends in view. In addition, it was found desirable to provide special courses for the officer cadres of divisions which were being formed.

Despite this evidence, there are currently no plans for mobilization courses at the USAWC or for the battalion and brigade level precommand programs.

USAWC

The current USAWC Resident and Corresponding Studies Programs are producing annually from 90 to 100 graduates among Reserve Component officers. The redundancy factor of roughly 2:1 necessary to maintain the required number of SSC graduates in key positions, and to accommodate other personnel requirements, results in about one-half of all active Army colonels being SSC graduates. These two factors have combined to create a pool of SSC qualified colonels which is in excess of the Army's needs to mobilize fully the current twenty-four division force structure.

In the event of total mobilization or some unforeseen order of magnitude expansion, it is envisioned that a short (4-6 weeks) mobilization course for individual senior field grade and general officers of both the Active Army and Reserve Components would be established. Such a course should focus squarely on doctrinal concepts governing the tactical employment, sustainment, and command and control of corps level organizations in the joint and combined arena.

It is anticipated that the Tactical Command Readiness Program (Inclosure 3, Appendix 3) once developed and refined, would have considerable applicability to headquarters elements of Reserve Component organizations, or to the command group and principal staff of new divisions as they were being formed. The USAWC could incorporate the TCRP methodology into a two-week Tactical Command and Mobilization Course designed to develop vital wartime skills and command group teamwork between a division commander, his deputies, chief of staff and principal staff officers.

Precommand

To support the current force structure, RETO recommends establishment of precommand programs for battalion and brigade commanders of combat arms, combat service support and TRADOC training units. The proposed combat arms and combat service support courses are 4 weeks in length, the TRADOC training unit course, 3 weeks. The current annual training requirement for all of these courses is 594, with attendance programmed monthly on a TDY enroute basis.

In the event of either full or total mobilization, proposed precommand courses can be reduced from 4 weeks to two by eliminating all instruction except that directed specifically at combat operations and conducted at a single TDY site, depending on the type unit to be commanded. Commencing this course of reduced length each two weeks at each of the three single sites available (Fort Leavenworth, Fort Benjamin Harrison, and Fort Lee) yields an expansion capability in excess of 2,000 battalion and brigade command designees annually. Even considering the projected significant increase in casualties at these command levels caused by the lethality of the modern battlefield, these numbers would be sufficient to support total mobilization for a long term conflict.

General Officers

Current SSC graduate production is sufficient to the Army's full or total mobilization needs for general officers, although promotions from among the large pool of qualified colonels would be required as the force expanded. In view of the individualized nature of the envisioned interassignment transition program for general officers, no special wartime transition program is indicated. General officers would be expected to participate as necessary in existing USAWC programs throughout the wartime expansion period, to include the added Mobilization and Tactical Command and Staff Courses earlier outlined, where appropriate.

Conclusions

1. The current production rate of SSC graduates among both the Active Army and Reserve Components is sufficient to accommodate full mobilization requirements for Army colonels and general officers.
2. Requirements are indicated for short Mobilization and Tactical Command and Staff Courses at the USAWC to support total mobilization or some unforeseen order of magnitude expansion.
3. A requirement is also indicated for a shortened, single-site precommand refresher for battalion and brigade commanders under a full or total mobilization scenario.

REVIEW OF EDUCATION AND TRAINING FOR OFFICERS

GLOSSARY OF TERMS

Academic Year (AY) - A period normally encompassing two semesters or the equivalent. Ensuing vacation period or summer session is not normally included.

Active Components (AC) - Identifies that portion of the Army serving full-time duty in the Active military service of the United States.

Additional Skill Identifier (ASI) - An identification of specific skills which are required to perform the duties of a position, but are not related to any one particular specialty. Also, an identification of the additional skills possessed by an officer.

Advanced Professional Development Course (APDC) - The electives program for the U.S. Army Command and General Staff College

Air Force Institute of Technology/Logistics Support (AFIT/LS) - An advanced level school system maintained by the Air Force to meet service-related educational requirements. Logistical Support refers to the School of Systems and Logistics.

Alternate Specialty - A second specialty, in addition to an officer's primary specialty, which is designated at the completion of the officer's 8th year of Active Federal Commissioned Service for professional development and utilization.

Army Linguist Personnel Study (ALPS) - A study of the Army's language needs (both officer and enlisted) published in January 1976.

Army Medical Department Personnel Support Agency (AMEDDPERSA) - A field operating activity of the Office of The Surgeon General. PERSA executes the responsibility of The Surgeon General for AMEDD officer career management.

Army National Guard Officer Candidate School (ARNG-OCS) - Schools conducted by most states to produce commissioned officers for the Army National Guard.

Army-wide Support Jobs - Army-wide support jobs are those jobs (duty positions) that are not related at all, or only remotely related, to the specialty to provide its fair share of officers for the overall operation of the Army. These positions are extremely important to the day-to-day performance of the Army's mission and to the officer's professional growth but do not contribute to building the officer's

technical competence in the specialty. Examples of these positions might be ROTC PMS, some training center jobs, some installation staff jobs, or recruiting duty.

Branch Immaterial Officer Candidate Course (BIOCC) - One of the major sources of line officer accessions into the Army. Precommissioning training is provided without regard for branch or specialty.

Branch Related Specialty - A specialty whose principal functions are the responsibility of a particular branch established under AR 10-6.

Career Officer - An officer appointed in the Regular Army or a U.S. Army Reserve officer in voluntary indefinite status.

Combined Arms and Services Staff School (CAS³) - A school to train all majors of the Active and Reserve Components for service as field grade staff officers with the Army in the field, in peace or war. Establishment of the school was recommended by the Review of Education and Training (RETO) Study Group.

Combined Arms Tactical Training System (CATTS) - A wargaming simulation used in the U.S. Army Command and General Staff College.

Committee on Excellence in Education (COE also COEE) - A blue ribbon ad hoc group convened to oversee education in DOD.

Complementary Specialties - Specialties that, when paired, function well together to derive the maximum benefit from an officer's skills and experience. Specialties may complement each other because of similar skills requirements. Two specialties may be complementary because the utilization rates or position requirements of one are the inverse of the utilization rates or position requirements of the other at the various grades. Certain accession specialties may pair well with an advanced entry specialty because it is a natural progression in that particular field. All of the above or combinations of the above, should be considered when determining those specialties that complement a particular specialty.

Computer Assisted Map Maneuver System (CAMMS) - A wargame simulation aided by automation is used for instruction and contingency planning.

Continuing Health Education (CHE) - Education designed to sustain the knowledge and skills of health care professionals. Usually short courses or job experiences required on an annual basis.

Control Specialty - A means to account and validate for officers by specialty. It is the specialty in which officers are requisitioned and assigned, against which they are accounted, and in which they join the organization which initiated the requisition.

Core Jobs - Core jobs are those jobs (duty positions) that are at the heart or "guts" of a specialty and require the officer to perform tasks, on a day-to-day basis, that make use of this knowledge and expertise in the specialty. Therefore, core jobs are central to professional development in the specialty, i.e., they provide the skills and knowledge, through on-the-job training and experience on a daily basis, that are needed to build the officer's technical competence in the specialty at each grade level. As an example, for the Armor captain these jobs might be company command, bn staff, asst bde S3, service school instructor, combat/training developer, etc.

Corresponding Studies Program (CSP) - The nonresident instruction provided by the U.S. Army War College.

Course of Instruction (COI) - A training management document which specifies the purpose, prerequisites, content, duration and sequence of instruction for formal resident and nonresident courses.

Decision Package Set (DPS) - A group of documents used to describe policy matters under consideration, provide an evaluation with alternatives and insure that various staff act in harmony or agreement in carrying out decision.

Defense Language Institute/Foreign Language Center (DLI/FLC) - Located at Monterey California, it provides language skills training for DoD personnel.

Dual Specialty Development - The concept of officer professional development and utilization in which the objective is for each officer to gain and maintain proficiency in a primary and an alternate specialty.

Enlisted Personnel Management Directorate (EPMD also EPD) - An element of U.S. Army Military Personnel Center. EPMD executes DA responsibility for enlisted personnel management.

First Year Graduate Medical Education (FYGME) - All graduates of schools of medicine must spend their first year after graduation in an internship or its equivalent.

General Officer Management Office (GOMO) - An element of the Office, Chief of Staff, Army which provides management for O-6(P) and higher grade officers.

General Officer Orientation Conference (GOOC) - A course provided to officers selected for or recently promoted to general officer.

Graduate Medical Education (GME) - Post medical profession degree education provided in specialty (residency) or subspecialty. All medical school graduates spend their first year after graduation on Graduate Medical Education Year 1 (GME-1) previously known as internship.

Health Professions Scholarships Program (HPSP) - Program provides assistance to students enrolled in an approved school of medicine, osteopathy, veterinary medicine or optometry. Service obligation is incurred.

Independent Student Research (ISR) - A grouping of hours in the curriculum of the U.S. Army Command and General Staff College for individual study and contingency participation in study projects.

Instructional Television (ITV) - a means for presenting instruction to learners.

Master of Military Arts and Sciences (MMAS) - U.S. students of the U.S. Army Command and General Staff Course, upon application and acceptance participate in a degree granting program.

Method of Instruction (MOI) - The means for presenting instructional material to learners.

Military Education (ME) - The systematic instruction of individuals in subjects which enhance their knowledge of the science and the art of war.

Military Personnel, Army (MPA) - A category of funds consisting generally of individual pay and allowances.

Military Qualification Standard (MQS) - A systematic officer education and training program recommended by Review of Education and Training for Officers Study Group. MQS provides a framework for officer education and training that links resident schooling, self-study and on the job experience. MQS provides for orderly and progressive training and qualification for each officer.

National Defense University (NDU) - The National War College and Industrial College of the Armed Forces comprise NDU. Located at Fort McNair, Washington, D.C.

Naval Post Graduate School (NPGS also NPS) - An advanced level school providing graduate and baccalaureate degrees in various disciplines required by the U.S. Navy.

Nonresident Instruction (NRI) - Any training not conducted in residence including that provided through correspondence/extension courses developed and approved by a military service to meet a specific training requirement of that service for career development or skill acquisition/progression.

Officer Advanced Course-Reserve Components (OAC-RC) - An advanced course designed for presentation to Reserve Components officers.

Officer Basic Course-Reserve Components (OBC-RC) - A basic course designed for presentation to newly commissioned Reserve Component officers.

Officer Candidate School-Reserve Components (OCS-RC) - A precommissioning training program designed for Reserve Components.

Officer Personnel Management Directorate (OPMD also OPD) - An element of U.S. Army Military Personnel Center. Specialty managers (assignment officers) and professional development officers execute the DA responsibility for OPMS managed officers.

Officer Professional Development - The development of the professional attributes and capabilities of the Army officer to meet the needs of the Army through planned assignments and schooling.

On-the-job-experience (OJE) - A training process whereby knowledge and skills are acquired through performance of duties.

Organizational Effectiveness Training Center (OETC) - A training facility located at Fort Ord, CA, part of U.S. Army Training and Doctrine Command, which provides instruction in organizational effectiveness.

Personnel Structure and Composition System (PIRSACS) - An automated program based on force structure and composition used for personnel requirements and estimates.

Primary Specialty - One of two designated specialties in which an officer will receive professional development and utilization.

Professional Development Courses (PDC) - The core of the curriculum for the U.S. Army Command and General Staff College is referred to as PDC.

Professional Development System (PDS) - A system for the development of professional attributes and capabilities of Army officers to meet the needs of the Army through planned assignments and schooling.

Professional Military Education - Education pertaining to the body of professional knowledge common to all Army officers, such as leadership, military history, management, etc.

Projected Specialty - The personnel manager's recommendation of the most appropriate specialty for an officer's next assignment which will be consistent with Army requirements and further the officer's professional development.

Related Jobs - Related jobs are those jobs (duty positions) that require the performance of tasks that draw on the knowledge, skills and experience from the specialty at that grade, but they do not normally require the officer to exercise these skills on a day-to-day basis. Related jobs do, however, serve to increase the officer's technical

competence in the specialty while contributing to his professional growth. Examples might be reserve components advisor, specialty related training center positions, some DA/MACOM staff officers, readiness region positions, some installation staff positions, etc.

Related Specialties - Specialties that require many of the same skills and knowledge. Complementary specialties are generally also related specialties, but the reverse statement is not necessarily true. For instance, if two closely related specialties both have few field grade position requirements then they probably would not be a compatible pairing and hence, not complementary.

Review of Education and Training for Officers (RETO) - The study group which conducted this study and prepared this report. The group was established in August 1977 within the Office of the Chief of Staff, Army to develop policies and programs for professional education and training of officers which meet Army requirements and individual career development needs. The study was completed on 30 June 1978.

School Year (SY) - A period normally encompassing approximately nine months associated with longer permanent change of station courses. The year in which training is begun.

Senior Officer Preventive Logistics Course (SOPLL) - A course designed to provide senior officers refresher training in command management of logistics program.

Senior Officer Preventive Maintenance Course (SOPM) - A course designed to provide senior officers refresher training in command management of preventive maintenance program.

Specialty - A grouping of duty positions whose skill and job requirements are mutually supporting in the development of officer competence to perform at the grade of colonel in the specialty.

Specialty Education - Education pertaining to the knowledge and skills associated with an officer's primary or alternate specialty.

Specialty Skill Identifier (SSI) - An identification of specific position skill requirements within a specialty and the corresponding qualifications possessed by commissioned officers.

Special Staff Jobs - Special staff jobs are those jobs (duty positions) that generally do not relate directly to the specialty and may be somewhat out of the organizational mainstream but provide an opportunity to expose the officer at that grade to a perspective that he would not otherwise receive. The importance of these positions is that the officer gains a set of experiences that are beneficial to broadening his capabilities as an officer and hence, enhancing his usefulness to the Army. Examples of these jobs might be aide-de-camp, protocol officer, race relations officer, special study groups and projects, etc.

Special Study Projects (SSP) - A grouping of hours in the curriculum of U.S. Army Command and General Staff College for individual and group projects.

Tactical Command Readiness Program (TCRP) - A program designed to insure that tactical commanders, O6 and above, are both current and competent in the application of doctrine and procedures governing the strategic deployment, tactical employment and sustainment of Army and supporting forces under combat conditions.

Tactical Exercise Without Troops (TEWT) - War games and simulations often assisted by automation are conducted without troops.

U.S. Army Material Development and Readiness Command (DARCOM) - A major command of the Army providing research development, acquisition of material.

Uniform Services University of Health Sciences (USUHS) - A university organized under Department of Defense to provide a comprehensive education in medicine to select young men and women who demonstrate potential for, and commitment to, careers as medical corps officers in the Uniformed Services, Located in Bethesda, MD.